Perception, Content and Conceptual Engagement

Is there any non-conceptual content?

Tae-Kyung Kim

PhD

University of York

Philosophy

March 2015

Abstract

This thesis aims to compensate for the defects in the forms of conceptualism which John McDowell (1994a) and Bill Brewer (1999) hold: it does this by analysing the conceptual structure of the content of experience using colour experience as the central case.

First, the root of the debate between conceptualism and non-conceptualism, as I shall argue, is the different notions of *concept* and *experience* used by the two sides. The non-conceptualists' notion of a concept, or conceptual capacity, has been defined very narrowly, satisfying very restricted conditions, whereas their notion of experience is much wider and more flexible, ranging from a subpersonal state to a personal level. By contrast, conceptualists are quite open to broad notions of a concept, or conceptual capacity, but seem to define the content of experience as belonging only to the personal level.

Second, in order to build a bridge between these two different notions of both concept and experience respectively, I will argue that three major types of conceptual capacities can operate in experience. I call this 'conceptual engagement'. I then suggest that we need to consider two perspectives on colour experience: namely, the *functional* and the *expository*. The former concerns 'how experience physically works', whereas the latter concerns "what experience has." Both perspectives will prove useful for explaining perceptual content at the sub-personal and personal level. This distinction is required because what we call the 'content' of experience does not belong to just one particular stage of experience.

Last, as a final supplementation of previous conceptualism, I will consider the discrimination abilities involved in perception as being themselves a type of conceptual capacity. At this point, I will adopt the notion of receptivity as used by McDowell (1994a), but deny that a conceptualist is committed to spontaneity being involved in receptivity. I will further propose that understanding discriminative abilities as perceptual receptivity could prepare the ground for taking over perceptual contents into the contents of thought. I will argue that perception could be passive and conceptual, hence separate from spontaneity.

Contents

List of Tables

List of Charts

Acknowledgements

This thesis is the product of almost four years of work that would not have been possible without the help and support of many different people in many different places.

I am deeply grateful to my supervisor Professor Tom Stoneham, who has been an extremely generous supervisor. Working through multiple drafts of each chapter, he has improved every page of the final product. Tom is an excellent teacher and philosopher, and I have learned immeasurable amount both from his expertise and from his guidance. I give my deepest thanks to him for his generous commitment to my research.

I have been very happy to have Dr Keith Allen on my TAP member. I have benefited from numerous discussions with him. He gave me helpful suggestions and comments on my work. I warmly thank him for his help both in shaping my idea of conceptualism, and in developing the dissertation.

I have also benefited from many conversations with postgraduate students in the philosophy department at the University of York. I especially thank Filippo Contensi, Daniel Molto, Dom Shaw, Helen Bradley, Elisabeth Thorsson, Robert Davies, Ema Sullivan-Bissett, Daniel Gustaffson, and Niels Klenner for conversations and comments about my dissertation chapters. I also thank several audiences at CAPP 2013 in Hertfordshire, 9th International Symposium of Cognition, Logic and Communication in Riga, 8th Annual International Conference on Philosophy in Athens, Swedish Congress of Philosophy in Stockholm, SOPhiA 2013 in Salzburg, and White Rose Philosophy Forum where I presented my work.

In addition thank you to Dr Leo Werneke who always guides me to consider life from a philosophical point of view. I also thank you to Professor Chanhong Min and Professor Deukryong Kim who inspired me to have a dream of a philosopher since I was an undergraduate student in Korea.

My warm thanks go out also to my dear friends outside the profession, Jisoo Kim,

Wonkyu Lee, Yongsung Lee, Hajooon Lee, Seongmin Ha, and Beomsik Seo who have kept my spirits up especially.

Finally and most importantly I would like to acknowledge my family, my parents, Yong-Sung Kim and Dong-Bun Chun, and my brother Tae-Hoon Kim, my wife, Jiyoon Yang and my son, Hugh Kim. Without their continuous beliefs, supports, and encouragement in this research, I would never have succeeded.

Author’s Declaration

I hereby declare that I have read and understood the University of York's regulations on plagiarism and academic misconduct. I undertake that all of the material presented for examination within this thesis is my own work, and that it has not been written in whole or in part by any other person but myself. I also confirm that any references to other published or unpublished works by any other person or people have been acknowledged and dully credited within this study.

Introduction

I look out of the window and I see white clouds under the blue sky. I also see the glow of autumn leaves. I experience the coloured world outside the grey window frame. I also experience the late autumn of 2014.

Whilst looking out of the window, I receive varied colour information about the world that I see and distinguish, that is to say, I experience the coloured world through my vision. However, my experience beyond the window obviously does not only embody the response of my visual cells to the world.

What information do I get from my visual senses? What does the world that I see look like —as opposed to what I judge it to be like? The substance of these questions may be revealed by considering the well-known debate between Fodor (1984; 1988) and Churchland (1988) about informational encapsulation of perception. Fodor believes that the empirical evidence shows that perceptual systems are encapsulated and formulates the hypothesis of modularity. Informational encapsulation means that they provide information for the cognitive system but they are unaffected in their operation by any information held in the cognitive system. Perceptual input systems delivered to brains such as neuro signaling are separated from our cognitive system, so perceptual information is encapsulated from our cognitive capacity.

What Fodor argues is that our perceptual input system is entirely independent of our previous knowledge or experience in the process of delivering the visual information to our brains. Moreover, it is impregnable to higher cognitive states such as desires, beliefs, expectations, etc. even though perception sometimes allows access to some background knowledge (Cf. Raftopolous 2009: 269-271). That is, perception is informationally isolated from our cognitive capacities. For example, when we know that we are experiencing an illusion and thus form the belief that things are not as they seem, our belief does not banish the illusion.

Fodor, however, argues that observation is theory-neutral because "two organisms with the same sensory/psychology will quite generally observe the same things, and hence arrive at the same observational beliefs, however much their theoretical commitments may differ" (Fodor 1984: 120). In this respect, Fodor believes that perception seems to be a different type of process from a cognitive process whilst conceding that observation could be a type of cognitive process.[1]

By contrast, Churchland (1988) argues that perception is not isolated since cognitive states could affect perception. Observation involves top-down processes and there is a substantial amount of information in the perceptual stage of vision that is obviously bottom-up and theory-neutral. One reason for this is that although there could be some perceptual information such as purely given sensation, this is quite useless in that it cannot be used for any "discursive judgment" (Raftopolous 2009: 271) because a mental state with such information is not a semantically contentful state. Raftopolous argues that only observational judgments are semantically contentful states because they have a content, which can be considered as an outcome of a conceptual framework.[2] The

[1] This does not mean that Fodor concedes the relativistic theories of philosophy of science saying that observation is theory-dependent. Rather, he believes that perceptual analysis has access to our previous knowledge or theories that are relevant to processed perceptual information, not just to the theory that is inherent in the system (Cf. Raftopoulos 2009: 269-270).

[2] However, Raftopoulos (2009) argues that both Fodor and Churchland are wrong because vision is neither fully encapsulated nor fully theory-laden. But he seems to be more closely Fodorian because the perceptual states on which observations are based result from entirely bottom-up processing. Perceptual learning, for instance, is no argument for theory-ladenness because it entails only data-driven changes. Perceptual states do not seem to be independent of a subject's experiences, but they are independent of her theory. Therefore it is possible that we can see others perceptions without knowing their theory. This idea has an obvious outcome for the anti-realist position on science, which is supposed to follow from the theory-ladenness of perception. This will

interesting point in both Fodor and Churchland is that perception involves any kind of content, but their concepts of content are different. According to Fodor's concept of content, such as information, the notion of perceptual content is defined widely. By contrast, if we would take only Churchland's notion of perception, namely semantically contentful states, then cognitive states, e.g., personal level experience, could have perceptual content.

The important point is that these arguments all seem to be closely related to what we normally call 'content of perceptual experience'. We know that we may not have a perceptual experience without a perceptual system. If this is right, then what do we experience when we perceive something? What does 'perceptual experience' really mean? For instance, when we have a visual experience of a scarlet rose, the content of experience may be described in various ways that we know, such as a red flower, 18-1658 TPX of the Pantone colour list, this scarlet, that rose, and so on. Which of these, if any, captures the visual experience *as it is* for the subject? These are all questions about the content of perceptual colour experience.

There are two different views about the content of experience, assuming that experience has content. One is that the content of perceptual experience is conceptual, whilst the other is that the content of perceptual experience is non-conceptual. In general, the theory that the content of perceptual experience is entirely conceptual, like the content of a propositional attitude or belief, is called 'conceptualism'. The idea that the content of perceptual experience could be non-conceptual is called 'non-conceptualism'.

Conceptualists, particularly McDowell (1994a) and Brewer (1999), claim that the content of perceptual experience must be conceptual in order to be a reason for a belief, e.g. my visual experience of the white clouds is the reason for my belief that there are white clouds outside the window only because both experience and belief involve the concept *cloud*. Non-conceptualists deny this for several reasons. Among them, I will focus on the following non-conceptualist arguments, because, not only do they show that

---

be more discussed in chapter IV.

most non-conceptualists have very different notions[3] of concepts and experience from conceptualists, but they also highlight the traditional conceptualists' preoccupation with the operation of conceptual capacities, even in passive perceptual mechanisms. Through examining these arguments for the contents of colour experience and rebutting them, I will defend the key idea of conceptualism, but also argue for the need to modify it in certain ways.

The following are the non-conceptualist arguments from the contemporary and scientific literature that I will examine:

1. Conceptually unsophisticated creatures such as animals and human infants can enjoy a perceptual experience, seemingly without possessing or entertaining concepts in the same way as human beings (Peacocke 1983 and 2001; Hurley 1998).
2. The content of experience, in particular colour experience, can be defined by its physical cause and the perceiver's visual mechanism (Tye 2000; Byrne and Hilbert 2004) independently of the perceiver's possession of concepts.
3. There could be non-conceptual contents at the early visual stage that are cognitively impenetrable (Marr 1982; Pylyshyn 1999; Lamme 2003 and 2004; Raftopoulos and Müller 2006; and Raftopoulos 2009).
4. We can see more shades of colours than we have concepts of colours (Evans 1982).

My discussion of these objections will indicate that non-conceptualists wrongly hold that the content of experience refers to a particular stage of experience. I will argue that content, rather, is the product of the processing of all the stages of experience. As such, I

[3] I will claim neither that the conceptualists' perspectives on concept and experience are entirely right nor that the non-conceptualists' perspectives are entirely wrong. Rather, this study is intended to show (1) that the debate between conceptualism and non-conceptualism starts from these different perspectives of concept and experience and (2) that we need to consider the two perspectives on experience in order to satisfy both conceptualists' and non-conceptualists' perspectives on concept and experience.

will argue that there could be a certain type of conceptual engagement, which should be one of three major types of conceptual capacities that conceptualists propose, in the processes of colour experience. Hence, I suggest that the non-conceptualists have to consider whether they have overlooked the possibility of conceptual engagement within stages.

As well as discussing the above non-conceptualist arguments, I will also consider whether traditional conceptualism provides an adequate response to them. I start by looking at three major types of conceptual capacities in experience through briefly examining McDowell's and Brewer's idea of conceptualism. I then suggest that the conceptual character of experience has to be considered in terms of the two perspectives on experience: the functional and the expository. Distinguishing between the two perspectives may help to build a bridge between two camps.

The reason for considering the two perspectives on experience is that not only do many non-conceptualists have a particular tendency to believe that an enabling condition of perception defines the content of experience (or, they believe that non-conceptual contents could exist at a particular stage of perception), they also understand the possibility of perception as something different from having an experience. Due to this tendency, it is important to point out there are two perspectives on experience that we need to consider in evaluating questions of conceptual character of experience. I will investigate how the conceptual character of experience could be confirmed by considering the two perspectives on experience.

As such, the main focus of this dissertation is on how the *content* of perceptual experience is constituted, how we can consciously access it, and why we need to consider the two perspectives in order to access the content of each stage of perceptual experience. This will raise two key questions: (1) whether the content of our perceptual experience is entirely conceptual in the two different perspectives on perceptual experience, and (2) how conceptual capacities work to constitute and to engage the contents of colour experience, and particularly whether perceptual content could be utilised in the content of thought by using perceptual demonstratives.

After examining these two issues, this study proposes that we need to consider whether discriminative abilities are a conceptual capacity which could produce conceptual thoughts about that perception. This is the main difference between the existing theory of conceptualism and the improved conceptualism that I want to develop.

This thesis is not intended to offer an escape route to the philosopher who wanders alone in the dark maze of the dispute between the conceptualist and the non-conceptualist, rather it aims to offer a small torch that allows us to identify the non-conceptualist's trap that we must avoid in the maze.
This thesis proceeds as follows:

Chapter I begins by briefly examining the relationship between perceptual contents and the conceptual character of experience. In so doing, it focuses on the common assumptions involved in the traditional conceptualist's view of contents, concepts, and experience. This chapter firstly considers what a perceptual content is on the traditional picture of conceptualism. Secondly, this chapter argues that philosophers are led to non-conceptualism when they define 'concept' too narrowly, specifically, having it depend on a particular condition, whilst adopting a very wide notion of experience. This, I suggest, is the main reason for the conflict between conceptualism and non-conceptualism. For an effective resolution to the conflict, this chapter considers three types of conceptual capacities suggested by the conceptualists, particularly McDowell and Brewer, because it seems that the claim 'content of experience is conceptual' does not mean that perceptual content is conceptual, rather it basically means that perceptual content may be engaged with any of the three types of conceptualities. I call this 'the conceptual engagement'. This chapter then explores two types of perspective on experience.

Chapters II to IV investigates whether the new approach to the non-conceptualists' arguments is compatible with the two perspectives on experience.
Chapter II critically examines an argument that there could be a non-conceptual content of experience if it is true that conceptually unsophisticated creatures like animals or human infants can enjoy perceptual experience. This type of argument, which shares a similar idea with the non-conceptualism that Peacocke (1983 and 2001), Hurley (1998)

and, particularly, Bermùdez (1995 and 1998) defend, is strongly dependent on empirical results from physiology, neuro-physiology and comparative psychology, and suggests that there is strong evidence that such creatures have perceptual contents without possessing concepts that adult humans have. If this is true, then it provides strong practical examples of non-conceptualism. This chapter argues that the proponents of this type of non-conceptualism seem to believe that a content of experience is a mere physical reaction to objects. This may lead us into the trap of treating an enabling condition of perception as a condition that constitutes the content of experience. This study points out that we have to distinguish between an enabling condition for perception and a condition for constituting the content of experience. The distinction of the two perspectives on experience will help us to see why an enabling condition for perception may not show what *is* in the conceptually unsophisticated creatures' perceptual states.

In connection with Chapter II, Chapter III considers colour physicalism, which is one of the most popular theories of colour in recent years. Some physicalists, Byrne and Hilbert (1997 and 2003) in particular, believe that colour experience is necessarily related to the physical properties of a coloured object, and that the content of colour experience can be explained in physical terms. This account might prompt two claims. The first is that colours are mind-independent properties of material objects. The second is that the content of colour experience is determined by physical causes. If these are right, then they might support non-conceptualism as well as the non-conceptualist's claim that we will examine in Chapter II. While the non-conceptualists considered in Chapter II treat an enabling condition for perception as a condition for constituting the contents of experience, and attempt to confirm the non-conceptual character of experience through a non-human creature's perception of colour constancy, the colour physicalists we turn to in Chapter III try to apply the same method to the content of human experiences. If this attempt is successful, then it provides even more weight to the non-conceptualist's position. This chapter critically examines this idea, along with the example of 'colour variation'.

Following on from the discussion in Chapters II and III, Chapter IV begins by examining the notion of non-conceptual character of experience in the work of recent

philosophers and psychologists, namely Dretske (1981), Marr (1982), Block (1995), Pylyshyn (1999), Lamme (2003 and 2004), Raftopoulos and Müller (2006), and Raftopoulos (2009), who hold that we need to divide perceptual experience into two different stages in order to prove the non-conceptual content of experience.

The first stage, which they call 'the early visual system', is correlated with an enabling condition of perception, which would be shown when we take the 'the functional perspective' on experience; and the second stage, what they call 'late vision', where the subject of perception is able to identify the object of perception, i.e., the perceptual information obtained by the early visual system, is related to what I call 'the expository perspective' on experience.

According to them (especially, Raftopoulos and Müller 2006), if a perceptual state or an experience has contents provided by a subject's visual (mechanical) system, which cannot be cognitively penetrated, then that state or experience has non-conceptual content. However, if the content of a state or an experience is provided by a system that is cognitively penetrable, then that state or experience has conceptual content. So, the presence or absence of cognitive penetration determines which of these two stages a content falls into and serves as a criterion of the conceptual content and the non-conceptual content of experience.

The reason for taking the above philosophers' accounts into the discussion of this thesis is to clarify that it is which part of the visual stage the philosopher thinks (primarily) constitutes the perceptual experience. As such, the distinction of these two stages also shows why we should consider the two perspectives on experience.

By examining the arguments of these philosophers (especially Raftopolous's 2006 and 2009), this chapter shows that they fail to prove the non-conceptual content of experience. It then becomes clear how information obtained by vision (including a subpersonal state) can be *conceptualized* in personal level of experience through this distinction. In addition, this difference leads to the issue of whether the contents in an early visual system really could exist, or at least how we can prove their existence without any conceptual engagement.

Chapter V more clearly identifies the fundamental component of non-conceptualism by examining the fineness of grain argument and demonstrative concepts. I will mainly discuss the three objections to the demonstrative concept approach that non-conceptualists give, such as the problems of indeterminacy, the conditions for possessing demonstrative concepts, and the causal relationship between the use of perceptual demonstratives and experience. In particular, we will look at the contributions of Peacocke (1998a and 1998b), Kelly (2001a and 2001b), and Heck (2000). We will then consider the discriminative ability involved in perception as a conceptual capacity. The result of this chapter is to propose the key idea of my own 'improved conceptualism', which is that perception could provide inferential thoughts, even though it activates without any conceptual engagement, so that we may access the content of perception conceptually. This is the key claim of the version of conceptualism that this thesis defends.

The concluding chapter consists of two parts: (1) a summary of the conclusion of each chapter, and, (2) an additional explanation of why the content of experience could be constituted conceptually even though there is no conceptual engagement when perception happens, using the two examples suggested by Crane (1992) and Heck (2000).

In (1), I reiterate the problem of non-conceptualism and restate the basic idea of advanced conceptualism.

In (2), this study briefly considers the examples of 'the waterfall illusion' (Crane 1992) and 'a stick in water' (Heck 2000).

Both suggest that perception could happen without any conceptual engagement, but agree that a conceptual capacity is required to form a belief. If so, it is fully possible that there could be perceptual content that is not engaged with any type of conceptual capacity, but we are able to form a perception-based belief even though it is not conceptually engaged. Hence it is possible that the contents of our beliefs could be different from the contents of perception, i.e., there could be perceptual contents that cannot serve as reasons for perceptual belief. However, this fact implies neither the non-conceptual content of experience nor the impossibility of conceptual engagement. Rather, we could have inferential thought elicited from perceptual discrimination separately

from perceptual belief at the same time. Therefore, there could be a possibility that perceptual contents can be grasped by a subject's possession of a concept in inferential thought.

This dissertation tries to show that this type of conceptualism is successful in confirming the conceptual character of colour experience; that it could build a bridge between conceptualism and non-conceptualism; and finally that it may play an important role in future research regarding the various perceptual experiences that are not considered here.

Chapter I. Experience and its Content

We know what we experience when we undergo that experience. Knowing what we experience roughly means that we know what is conveyed to us by experience, viz. we know the contents of experience. Talk about what we experience is thus understood as talk about the contents of experience. This chapter mainly focuses on the debate between conceptualism and non-conceptualism about the content of experience. The basic idea of conceptualism is that content of experience must be conceptual, and that this is so in order to be a reason for belief (McDowell 1994a; Brewer 1999). Non-conceptualists deny this.

Both camps basically agree with the representational view of experience[4] which states that the content of a mental state is the way it represents the world as being (Cf. Toribio 2007: 445; Nes 2011: 11). Conceptualists such as McDowell and Brewer maintain that the way a subject represents the world must be specified using her possession of concepts, while non-conceptualists such as Peacocke, Heck, and Crane, claim that there are ways of representing the world without deploying, or entertaining, any concepts that the subject possesses. Because of this, the non-conceptualist claims that the content of experience is not entirely conceptual, and that it is hard to see how perceptual content can be a reason for belief.

[4] Many philosophers, particularly those who advocate non-conceptualism, raise a question about how conceptualism plays out in the relational view of experience or in naïve realism, according to which veridical perceptual experience immediately acquaints subjects with aspects of mind-independent reality. They state (Cf. Campbell 2002, Fish 2009, Schellenberg 2011 and Speaks 2015) that no conceptualist gives an adequate treatment of problems raised by these views. They believe that conceptualism is only applicable to the representational view of experience, and to the personal level of experience. I acknowledge this point, but this is not germane to the subject of this thesis. So, I do not argue for the relational view of experience.

The main reason for the debate between the two camps, I suspect, is that they are using different notions of *concept* and *experience*. Although most conceptualists are open to the notion of a concept encompassing a contextual aspect, they define experience only as the product of all the stages of experience. Non-conceptualists, by contrast, have a tendency to define concepts very narrowly, but their notion of experience is wider (from the subpersonal to the personal level) than the conceptualists. This thesis will not argue in any depth for one of the alternative notions over the other; rather it will try to satisfy both camps' demands of the conceptual character and non-conceptual character of experience derived from their different notions of concepts and experience.
For this reason, I will first examine why the conceptualists think that the content of experience is wholly conceptual. I will argue that there can be three major types of conceptual capacities that could be engaged with perceptual content in the conceptualists' theory of perception.

Second, this chapter suggests that there are two perspectives on experience that we have to consider in evaluating the conceptual character of experience. These are the functional perspective and the expository perspective. The former concerns 'how it works', whereas the latter concerns 'what it has'. This distinction does three things. First, it helps us to see what motivates conceptualism or non-conceptualism; second, it builds a bridge between conceptualism and non-conceptualism; and third, it prepares the ground for the main claim of this thesis, namely that there could be conceptual engagement in every level of experience

I can now put my cards on the table. First, I accept so called 'state non-conceptualism' according to which perception could occur without any exercise of conceptual capacities: for example, both human and non-linguistic animals can enjoy perceptual experience without deploying or entertaining any concepts at all (Peacocke, Hurley, and Bermùdez *et al*.). Perception is fundamentally dependent on perceptual mechanisms rather than a perceiver's conceptual capacity, hence the representational contents of perception could be independent from a perceiver's conceptual capacities. As such, there could be non-conceptual character within perception. Nevertheless, subjects are able to consciously

access perceptual contents. [5]

Second, in order to evaluate the conceptual character of experience, we must be able to access to the contents of experience: we may know that an animal has a perceptual experience without knowing *what* it experiences. That is to say, we can evaluate whether the content of experience is conceptual *only if* we are able to access the representational content of experience. Not only does this accessibility confirm the existence of perceptual content but it also shows how a subject could engage with perceptual information obtained by perceptual mechanisms using concepts that the subject possesses. Hence this accessibility implies a possibility of conceptual engagement in the whole process of experience. In order to evaluate the conceptual character of experience then, we should do two things: first we should acknowledge that perceptual contents must exist in the perceiver's experience; and second, that the confirmation of the existence of perceptual content is possible *only if* a perceiver is able to consciously access it.

On this basis, I would expect that we would see *conceptual engagement* in the process of evaluating the conceptual character of experience. From this, I advance a position that motivates conceptualism, namely that the content of perceptual experience, and even perception, could be affected by conceptual capacities, even though existing versions of conceptualism allow for the non-conceptual character of perception.

The main discussion of this chapter lays the groundwork for a type of conceptualism that has not previously been considered by McDowell and Brewer.

---

[5] This idea is suggested by Ned Block (1995). He divides consciousness into two types: *phenomenal consciousness* and *access consciousness*. Phenomenal consciousness is what we call experience, that is "the phenomenally conscious aspect of a state is what it is like to be in that state" (Block 1995: 227). In contrast, A-consciousness is kind of "availability for use in reasoning and rationally guiding speech and action" (*ibid*). I consider these two types of consciousness in order to develop the idea of conceptual engagement in explaining personal level of experience.

I-1. Why is the Content of Experience Conceptual?

The claim that experience has conceptual content is intimately related to representationalism according to which experience has a certain sort of representational content, i.e. content that represents the world as being a certain way.[6] The question of whether experience has conceptual content of experience is thus the question of whether or not its representational content is conceptual.[7] The main reason for holding conceptualism about the representational content of experience is that perceptual

[6] Shoemaker presents the following account. He says, "[…] the ways are simply properties things appear to us to have. Appearing a certain way is (it is natural to suppose) appearing to *be* a certain way, and *being* a certain way is having a certain property" (2006: 461). On this view, the representational content of experience entails that perceived objects have certain properties. Shoemaker (2000 and 2006) calls this representation of appearance (phenomenal) properties.

[7] However, philosophers who hold austere relationalism or naïve realism, such as Campbell (2002), Travis (2004), Brewer (2006), Fish (2009), *et al*., do not agree with the representational view of experience (Cf. Schellenberg 2011). According to them, the content of experience is not representational, rather it is a type of relation between a subject's perceptual state and mind-independent properties of objects. However, I will not discuss this view in depth because the relationalist's view of experience is fundamentally not in competition with representationalism; hence most relationalist theories of perceptual content apply "only to accounts of perceptual content on which perceptual relations to the world play no explanatory role" (Schellenberg 2011: 714). It thus seems that personal level experience is not considered in the relationalist's argument. Of course, I agree that perception itself is sometimes relational, particularly at the occurrence of perception. Yet, what we call experience is both relational and representational, i.e., experience involves both features simultaneously. Hence, the content of experience is not defined by only one feature of experience, viz. when we discuss the content of experience, we have to discuss both features.

contents provide reasons for empirical beliefs (McDowell 1994a; Brewer 1999). Indeed, the world which is a target of perceptual belief or judgment is the empirical world. Perceptual beliefs about the empirical world are formed by the contents of our experience of the world. There are two main related arguments on this view.

First, it is argued that perceptual content must match with belief content if we are able to believe what we see. On this view, beliefs have conceptual content because what we believe is that things are 'so and so' and 'thus and thus' (Cf. Crane 1992: 6). If experience shares the same content with its belief, then experience must be constituted by conceptual content. That is to say, if the main reason for forming an empirical belief is some empirical content, then experience must have conceptual content because both belief and experience have the same content.

Second, a conceptualist such as John McDowell pays more attention to the relation between beliefs and experience rather than just arguing that experience has the same content as the beliefs that it produces. McDowell's conceptualism starts by avoiding the problem of 'the Myth of the Given' in traditional empiricism raised by Wilfred Sellars. Sellars' diagnosis of the failure of empiricism is that the mere causal impingement of the external world upon the senses does not supply justification for beliefs about the world; rather only if perceptual experience had a belief-like conceptual structure, could it rationally justify such beliefs. McDowell agrees with Sellars that experience has conceptual content since that is how it forms a reason-giving relation to thoughts.

I-1.a. The Capacity of Spontaneity

McDowell's elaboration of the above idea is that experience is a joint product of 'receptivity' and 'spontaneity', and has rich conceptual content (1994a: 4–5 and 7–10). McDowell argues that "when we enjoy experience conceptual capacities are drawn on in receptivity, not exercised on some supposedly prior deliverances of receptivity" (1994a: 10). McDowell's point is that concepts do not merely impose a top-down constraint on the range of permissible perceptual contents; rather, they are intimately *involved in* the production of those contents. That is to say, we should not believe that a non-conceptual content presents first in experience, that conceptual capacities are then exercised on it,

and that, finally, an empirical thought (or an empirical belief) is obtained. Instead, we should think that conceptual capacities are actualized in experience—in other words, spontaneity is actualized in receptivity—and it is this "co-operation between spontaneity and receptivity" (1994a: 9) which shapes the content of empirical thought. Therefore, the content of experience is not obtained by sensible intuitions only as operations of receptivity, but is also structured by conceptual capacities as operations of spontaneity. On this, McDowell is influenced by Kant and says that "if the receptivity of our mind, its power of receiving representations in so far as it is in any wise affected, is to be entitled sensibility, then the mind's power of producing representations from itself, the spontaneity of knowledge, should be called the understanding" (1994a: 4 and footnote 3). McDowell develops Kantian idea of sensible intuition and understanding in order to redefine a notion of experience: he says that our intuition is sensible and contains only the mode in which we are affected by objects, on the other hand, it is the understanding which enables us to think of the object of the sensible intuition. Neither of them comes before the other, rather we should think that "without sensibility no object would be given to us, without understanding no object would be thought" (McDowell 1994a: 5). Using a famous Kantian slogan, 'Thoughts without content are empty, intuitions without concepts are blind.' In McDowell's words:

> "The relevant conceptual capacities are drawn on in receptivity. […] It is not that they are exercised on an extra-conceptual Given, but as a kind of occurrence or state that already has conceptual content." (1994a: 9)

Experience thus involves the spontaneity of knowledge and does not merely passively occur. Here, 'spontaneity' can be simply a label for "the involvement of conceptual capacities" (McDowell 1994a: 9) that conceptualises or categorizes an empirical object. Therefore, what McDowell calls experience involves both receptivity as the capacity of receiving sensual intuition, and spontaneity that enables us to *know* an object obtained by sensible intuition. Our mind could have an empirical relationship with the world, therefore we are able to have content in our experience. This notion of experience could

avoid the problem of myth of the Given. I adopt this idea and would like to name it, 'Type-1 conceptual capacity' (the capacity of spontaneity).

- Type-1 Conceptual Capacity: A conceptual capacity such as spontaneity operated in perception, i.e., there is a conceptual engagement at the occurrence of perception. So the content of experience can be conceptual.

As such, Type-1 conceptual capacity could be operated only in conscious experience only where an empirical object could be conceptualized or categorized.

I-1.b. The Capacity of Understanding the Relation Between Perception and Belief.

Brewer, a conceptualist, also argues that "sense experiential states provide reasons for empirical beliefs" (Brewer 2005: 217). He argues that "a person has such a reason for believing something about the way things are in the world around him only if he is in some mental state or other with a conceptual content: a conceptual state" (2005: 218). In other words, we can make sense of an experience being a subject's reason for believing something about the world only if there are conceptual relations between the experience and the belief (Brewer 1999:149-152; See also. McDowell 1994a: 7-9). Thus, he claims that if perceptual states do provide reasons for empirical beliefs, they must have conceptual content. Both McDowell and Brewer believe that concepts mediate the relationship between minds and the world. We are able to think about the relationship between perception and belief. For this, there must be a conceptual content that *enables* us to think about such a relationship. I call this capacity 'Type-2 conceptual capacity' (the capacity of understanding relational structure of perception and belief).

- Type-2 Conceptual Capacity: There is an epistemic relationship between perception and belief that allows us to make sense of how our thinking bears on the empirical world. We are able to think of this relationship, and this is possible because perception has conceptual content. As such, Type-2 conceptual capacity operates only if perception has conceptual content.

While Type-1 conceptual capacity (the capacity of spontaneity) is the conceptualist's characterization of the conceptual capacity involved in perception, Type-2 conceptual capacities operate only when we can conceive of the content of experience. That is to say, if it is clear that an experience has content, e.g. white clouds, and we can form a belief from the experience of white clouds, then we can consider whether my experience's content, namely *being of white clouds*, justifies my empirical belief about white clouds. Here, not only are we able to consider the relation between the content of experience and the content of the belief, but also we can think of what there *is* in both the experience and the belief. We can think not merely that this experience justifies that belief, but that it does so *in virtue* of being an experience *of* white clouds. This is possible only if experience has conceptual content. As such, Type-2 conceptual capacity *requires* conceptual content, i.e., we are able to have Type-2 conceptual capacity because the content of perception is conceptual.

I-1.c. The Capacity to Categorise the Object of Perception

While Type-1 and Type-2 conceptual capacities show the characteristic feature of perception, conceptualists such as McDowell and Brewer also focus on a further conceptual capacity through which we conceptually access perceptual content in the personal level of experience even when Type-1 and Type-2 conceptual capacities are not activated. That is, in order to confirm the conceptual character of experience, conceptualists regard an ability to use perceptual demonstratives as a conceptual capacity. This involves an expansion of the scope of the notion of a concept in order to include the conceptual character of perception. Conceptualists have countered the argument from Evans (1982), namely the fineness of grain argument, by appealing to demonstrative concepts (Brewer 1999: 170-174; McDowell 1994a: 56-60). According to them, a subject can make a perceptual judgment such as "that is thus" even if there are more fine-grained contents of perceptual experience than her possession of concept (Brewer 1999: 172).[8]

[8]McDowell seems to give a stronger argument about perceptual demonstratives than Brewer. He argues not only that "my visual experience represents something as being of *that* shade" (McDowell 1994a: 57), but also that we may *context-dependently* explain

Our capacity for using perceptual demonstratives is supposed to allow us to pick out fine-grained features for which we lack concepts. McDowell argues for this claim using the example of colour experience:

> "In the throes of an experience of the kind that putatively transcends one's conceptual powers –an experience that ex hypothesi affords a suitable sample– one can give *linguistic expression* to a concept that is exactly as fine-grained as the experience, by uttering a phrase like "that shade", in which the demonstrative exploits the presence of the sample." (1994a: 56-57, emphasis added)

I call this the 'Type-3 conceptual capacity' (the capacity to categorise the object of perception in the personal level of experience):

- Type-3 Conceptual Capacity: Perceived information such as phenomenal properties or characteristic features of objects can be grasped by a perceiver's possession of concepts (including the use of perceptual demonstratives) in the personal level of experience. That is to say, the subject of perception is able to engage in conceptual thought about the object presented in perception using proper concepts that she possesses.

This capacity is applicable to all features of experience. Thus constructions such as 'that shape', 'that shade', and 'that volume' should suffice for both a conceptual representation and conceptual expression of the fine-grained detail present in perception. Not only is this capacity involved in the use of perceptual demonstratives but also in the use of every expression of any content in perception. Type-3 conceptual capacity is possible only if a subject of perception possesses a proper concept about what she perceives.

---

the colour experience that cannot be captured by general concepts by using perceptual demonstratives. So the use of the perceptual demonstrative could show both Type-1 conceptual capacity and Type-3 conceptual capacity in McDowell's view.

I-1.d. Conceptual Engagement

As such, the existing conceptualists theories of conceptual character of experience could be named and summarized as follows:

- Conceptual Engagement: For any perceptual experience, at least one of the three types of conceptual capacities could be engaged; thus we should regard all experience as conceptual.

Hence, the notion of conceptual content used by the conceptualist could be perceptual content that is engaged with the three types of conceptual capacities in the processes of experience.

However, the notable point here is that conceptualists do not clarify what perceptual content really is, that is to say, they do not either set a standard for being perceptual content or delimit the scope of perceptual experience. Indeed, McDowell argues simply that either there is a rational relationship between experience and belief or that experience have rich conceptual contents by an operation of spontaneity[9] (1994a: 4-5 and 7-10), rather than giving a clear definition of what perceptual content really is. It seems that most conceptualists including McDowell (1994a) and Brewer (1999 and 2006) focus on the conceptual character of experience rather than clarifying conceptual perceptual content because they believe that the contents of experience are conceptual, based on the idea that perceptual contents (if they really exist) must be engaged with the three types of conceptual capacities.

If this is so, what non-conceptualists call 'non-conceptual content' must be perceptual content which is not engaged with the three types of conceptual capacities. In fact, some

[9] In *Mind and World*, McDowell focuses on 'receptivity' alongside 'spontaneity' as a conceptual capacity involved in experience. Hence, an ability to have experience needs both receptivity and spontaneity. McDowell's notion of experience attempts to solve 'how we locate the logical space of reasons' (suggested by Sellars (1963)) governed by spontaneity by postulating experience as an actualization of a conceptual capacity in sensory consciousness (1994a and 1998a).

of the non-conceptualist arguments to be examined in due course, suggest that such conceptual capacities may not be engaged with perceptual contents, e.g., fine-grained contents of experience (Evans 1982), non-human creatures' experience (Peacocke 1998; Hurley 1998), the waterfall illusion (Crane 1992), the example of a straight stick in water (Heck 2000), etc. Of course, these arguments also do not give us a clear definition of perceptual content, however they suggest that the content of experience is sometimes not engaged with any of these three conceptual capacities. Or, the non-conceptual arguments seem to expand the scope of perceptual content widely in order to find a perceptual content that can never be engaged with the conceptual capacities.

The aim of this chapter is not to give a final definition of perceptual content nor find the nature of it, but rather, to postulate a condition for *being* perceptual content in both the conceptualist's and non-conceptualist's account. That is, to answer the question 'what can count as a content of experience?' in order to evaluate the conceptual character of experience.

The next thing we should examine, then, is on what basis non-conceptualists think that the content of experience is sometimes not engaged with the three types of conceptual capacities.

I-2. What is Non-Conceptual Content?

Experience is simply "a relation between a perceiving subject and perceived objects, properties, events, or alternatively an event in which such a relation obtains" (Schellenberg 2011: 716). Perceptual content is content that exists within this relation. Conceptualists that we have examined so far believe that there can be, at least, one of the three types of conceptual capacities engaged within the relation between a perceiving subject and a perceived object, while non-conceptualists that we will examine in this section believe that there is a perceptual content, which does not engage any type of conceptual capacities, in this relation. The important thing is that both conceptualists and non-conceptualists[10] agree on the following claim about the relationship between

[10] In fact, non-conceptualism about perceptual experience can be divided into two types:

concepts and contents:

> **(C)** A conceptual content is a content of our thought, such as a belief or judgment. Hence a non-conceptual content cannot be a content of thought.[11]

The point to note here is that (C) does not entail that non-conceptual content is only in unconscious experience. But the interesting point here is that conceptualists treat perception as a kind of a thought-form. On the other hand some non-conceptualists, particularly Crane (1992) and Heck (2000) think that even conscious perception hardly belongs to a thought-form. They have argued that both perception and thoughts constitute their contents differently. Therefore, sometimes at least, they do not share the same type of content. If the content of an experience is of a different form to the thought-content, then it can be non-conceptual content even if we are in a conscious state because of (C). This idea is opposed to Type-1 conceptual capacity (the capacity of

---

those involving the stronger claim, that (1) a perceptual content is entirely non-conceptual (Evans 1982; Heck 2000 and 2007), and those involving the weaker claim that (2) there can be both conceptual content and non-conceptual content in perceptual experience (Particularly Peacocke (1992 and 2001)). Here I do not discuss this distinction between these types of non-conceptualism in depth. However, the key issue that I want to indicate in both cases is that the existence of content in perceptual experience implies the existence of conceptual character of experience.

[11] In the case of Byrne (2005), who defines a weaker sense of the notion of a concept, (C) is reasonable. I adopt this idea. Byrne advances a pleonastic definition of concepts, stating that a concept F is identical with the fact that a subject can possess the concept F. That is to say, "someone possesses the concept F iff she believes that ...F... So, for example, someone who believes that Seabiscuit is a horse, or that horses are birds, or that all horses are horses, possesses the concept horse" (Byrne 2005: 232). According to this definition, a concept is no more than that someone can possess a content of belief involving the concept. Further, we should not mix up 'being able to think about something' with 'an object of thought'. Note that (C) only denies the latter.

spontaneity). On the basis of this, non-conceptualists also usually agree with the following two classifications of non-conceptual content (CPC and UPC):[12]

> **CPC (Conscious Perceptual Content):** This type of content allows a subject to consciously see the world as being the way the content represents it to be. Hence, a perceptual content is CPC *iff* it exists at the personal level. Therefore, non-conceptual CPC occurs when the subject of perception is able to recognize the content but fails to grasp it with any concept that she possesses.

The fine-grainedness argument (or richness argument as sketched by Dretske 1981, Martin 1992, Bermùdez and Macpherson 1999), and first suggested by Evans (1982)) is the standard argument in favour of CPC.[13] According to proponents of this view, we are consciously able to see various and detailed things such as *properties* or *entities* in perceptual experience. Among these fine-grained things, it appears that some items cannot be grasped by concepts that subjects possess, and hence, they might involve non-conceptual content. Hence, the arguments from the above non-conceptualists who advocate CPC type non-conceptual content can be distilled into two points: First, we are sometimes not able to grasp fine-grained contents (e.g. Adrianople red, even though we may represent the object with the concept *red*); and second, concept-possession is not always required to represent the properties of objects even though we are in a conscious state about the properties of an object. These can serve as objections to Type-1 conceptual capacity (the capacity of spontaneity) and Type-3 conceptual capacity that categorises the object of perception. However, conceptualists such as McDowell (1994a) and Brewer (1999) argue that all the content of personal level experience is fully conceptual because concept possession is required for the subject to represent properties

[12] Some non-conceptualists do not distinguish CPC from UPC. But most non-conceptualists, such as Bermùdez (2003) and Heck (2007) follow this classification. Heck (2007) criticizes Fodor (2007) for using (CPC) indiscriminately from (UPC) (Heck 2007: 119).

[13] Kelly (2001a and 2001b) and Bermudez (2003) follow this line.

of the perceived object, and we are able to grasp the content of experience with demonstrative concepts that we possess; therefore all CPC must be conceptual.

On the other hand, there are philosophers who think that non-conceptual contents belong to unconscious states of experience.

> **UPC (Unconscious Perceptual Content):** This is a perceptual content of a particular stage of experience that is not first-person consciously accessible. A perceptual content is UPC *iff* it does not exist at the personal level. One example of this might be a content of a 'subpersonal' state. Therefore, perceptual content is non-conceptual UPC *iff* it is not capable of being consciously grasped by the subject.

This subpersonal state is also considered an earlier stage of perceptual processing, and perceptual information in this stage is processed unconsciously. Non-conceptualists like Evans (1982) and Heck (2007) think that this information could be a type of content. David Marr (1982)'s computational theory of vision is a good example to this. He attempts to specify visual representation as the three levels of computational processes about the objective world. The first level arranges two-dimensional optical images produced by retina and the light reflected from an object. At this level, the eye and brain represents only the difference between brightness and darkness of the object. Marr describes this process as raw primal sketch → grouping → full primal sketch (Marr 1982: 36). The second level processes visual representation as neither two-dimensional nor three-dimensional image. Marr calls this a $2^1/_2$ D sketch. The $2^1/_2$ D sketch has only retinocentric coordinates, is operated from a perceiver's angle, and does not include lighting conditions (1982: 241-245). The last level produces three-dimensional images using the $2^1/_2$ D sketch in the object's angle. At this level, a perceiver is able to recognise the object of perception by comparing previous information about the object that she has. A sub-personal mental state is described as the first and the second level, and this state is supposed to have non-conceptual content (Cf. Frankish 2009: 90-91; Crane 1992: 140-142). Perceptual information at this stage is UPC type non-conceptual content.

However, philosophers like McDowell (1995) and Hamlyn (2003) criticize this position. According to McDowell (1995), the attribution to subpersonal states is just a metaphor used for explaining perceptual states, and hence the content of a sub-personal state cannot be a content of experience. Hamlyn (2003) also claims that if there is a certain type of transaction in a perceptual state, then it is just an informational transaction, and cannot be the *content* of an experience.[14] This is connected to the question raised at the beginning of this thesis, namely the problem of delimiting the range of experience. I will examine UPC in depth, not least because we will see that non-conceptualists have a tendency to define the notion of a concept very narrowly, but also because they have considered the notion of experience widely and flexibly, e.g., from subpersonal states to personal states. This issue will be discussed in depth for two reasons: First, as I have said throughout this chapter, a perceiver's consciously inaccessible perceptual contents cannot be the contents of her experience; and second, what non-conceptualists call 'a content of subpersonal states' (just in case we assume there must be a content of these states) is nothing more than a neuro-physiological reaction to external stimuli. It is obvious that no philosopher considers the stimulation response to be the product of perceptual experience; rather, it is usually considered the very early stage of experience. The non-conceptualist thus misunderstands the notion of experience in the sense that they treat experience *as if* it belongs to a just one particular stage. In connection with this, there is another non-conceptualist tendency that I will examine:

> **SV (State View):** According to this view,[15] whether or not a content of perceptual experience is conceptual is determined by its relation to the subject. So a perceptual state is conceptual *iff* the subject has to possess

[14]I extend the idea of conceptualism, after developing these criticisms from McDowell and Hamlyn, in order to criticize the non-conceptual arguments in Chapters II, III, and IV.

[15] This is suggested by Heck (2000: 485). Since this idea was mooted, most non-conceptualists like Byrne (2003 and 2005), Speaks (2005), Crowther (2006), and Heck (2007) have followed the same line.

> concepts that are required to characterize or to specify the content of that state. In contrast, a perceptual state is non-conceptual *iff* the subject is not required to possess concepts or to entertain any relevant concepts that are required in order to specify or to characterize the content of that state (Cf. Heck 2000: 485).

In cases where a subject S undergoes a perceptual experience E, if S does not possess a concept that can typically describe or constitute E (Cf. Heck 2000:490, 2007: 130; Byrne 2005: 4; Toribio 2008), then the content 'p' of E is non-conceptual. Hence, perception can be non-conceptual at the level of individual states or at the level of the contents of those states. Hence, the state view could be divided into two different types: (1) a subject does not possess the right concepts about a perceived object and, (2) a subject does not exercise or entertain concepts in order to be in a perceptual state with regards to a perceived object. I intend to agree with both (1) and (2). Perception could occur without conceptual engagement on the subject's part, and we do not need to deploy concepts that we possess in order to specify the contents of our perceptual states. However, considerations of these versions of the state view will expose the reasons for holding conceptualism. We shall then see that there are two perspectives on perceptual experience: the functional perspective and the expository perspective. I will focus on these two perspectives in order to evaluate the conceptual character of experience, alongside criticising UPC.

The last view concerning the relationship between concepts and content that we shall examine is:

> **CV (Content View):** The content of perceptual experience is entirely different from the conceptual content that constitutes thoughts and beliefs (e.g. propositions).[16]

According to CV, we sometimes see particular features of the content of perceptual experience that may not be features of the content of propositional attitudes, and vice

[16] Philosophers like Mellor (1988), Crane (1992), and Gunther (2001) hold this view.

versa. For example, perception sometimes represents to us illusions or contradictory situations, which may not be considered attributes of conceptual content (e.g. the waterfall illusion (Crane 1988)).[17] Dretske seems to take this line when he distinguishes between experience and belief since he defines experience as a "concept-free mental state" and belief, is a "concept-charged mental state" (2000: 113); hence, the distinction between experience and belief, for Dretske, is dependent on whether mental states involve concepts or not. Hence, according to CV type non-conceptualists, the content of perception is not entirely conceptual.

This notion of the non-conceptual character of experience constitutes an objection to Type-2 conceptual capacity, i.e., the capacity of understanding relational structure of perception and belief. Of course, perception could represent contradictory contents or might involve non-propositional contents. However, the interesting point that I want to raise is 'how we could identify non-conceptual content of experience if experience is not engaged with the thought's form'. That is to say, the problem with CV is that the non-conceptual content of experience is not confirmed by either non-propositional or contradictory perception or concept-free mental states, even if it is true that perception has a different content from thought and belief. Although perception and belief do not share the same content, the conclusion that perceptual contents are not constituted propositionally and conceptually does not follow. As such, having a different content from perceptual thoughts and beliefs does not directly imply that perception has non-conceptual content. This is because, alongside those who hold UPC and SV, philosophers who hold CV also have the same tendency to think that a particular stage of experience may be non-conceptual; but they also treat the content of a particular state as the product of all of the processes of visual experience. Both the contradictory phenomenon and the possibility of a concept-free state seem to be parts of the perceptual processing that constitutes the content of experience. Although there could be non-conceptual elements in the process of experience, there must be conceptual engagement in the process of experience. That is to say, CV seems to be derived from a misunderstanding of the conceptual character of experience, which we also see in UPC

[17] In the Waterfall Illusion, a stationary object looks, in some sense, to also be moving.

and SV.

Of course, my reason for examining the above distinction is not only that I wish to show that these positions are wrong: I would also like to show that there are some common characteristics that may serve as criteria for whether something is conceptual content. In particular, the conceptual content in perceptual experience is associated with, or can be considered as having the characteristics of, consciousness, thought, and truth-apt sentences, and operates at a personal level; otherwise a non-conceptual content belongs to non-propositional and subpersonal levels that are not consciously accessible.[18] Hence, when perception, or perceptual content, does not meet these criteria, it could be non-conceptual, according to those notions of non-conceptual content.

Despite being a type of conceptualist, I do not reject all of the above-mentioned non-conceptualist demands for a non-conceptual content. In fact, as I have stated, sometimes perception occurs without any conceptual engagement, as in the case of SV; and we cannot always be consciously aware of the content of our perception at the time of perception, as in the case of UPC. I also agree that non-conscious and non-cognitive perceptual processes can be operative without conceptual engagement. However, I do not want to argue that these features of experience are sufficient for concluding that the content of experience is non-conceptual because this inference depends upon a further view common to the non-conceptualists who hold UPC and SV types of non-conceptual content. Specifically, they seem to expand the range of experience excessively in order to find any type of content that is not engaged with a subject's conceptual capacities. Yet it seems that they are willing to interpret any physical reactions to given stimuli as

[18] Of course, there can be perceptual content that we cannot be aware of in conscious experience. Ned Block (1995) makes a good suggestion. He believes that there are two types of consciousness: phenomenal consciousness (P-consciousness) and access consciousness (A-consciousness). Block's distinction of A-consciousness and P-consciousness will be discussed more in the next section, chapters IV and V.

perceptual information, and then treat these as perceptual content. This may be seen when they claim that conceptually unsophisticated creatures such as an animals and human infants must have a certain perceptual content based upon a physical analysis of vision or observation. So, this tendency may lead us to become confused about what perceptual content really is.

In addition, they seem to believe that there must be perceptual content beyond the reach of our conceptual capacities. This view of experience may help us to understand the mechanism of perception but may not lead us any closer to discovering what is in a non-conscious perceptual state. The most important thing, for my purposes, is the existence of perceptual content in order to evaluate the conceptual character of experience. That is to say, we ought to know what kind of content exists in both conscious states and non-conscious states in order to evaluate whether the content in each state is conceptually engaged with the three types of conceptual capacities that I identified. However, the non-conceptualist's account of experience clearly defines neither what kind of perceptual content belongs to non-conscious perceptual states nor how we could find what is in non-conscious states without depending upon conceptual engagement.

Nevertheless, what I want to draw from these classifications of a conceptual and non-conceptual content is that there are two perspectives on experience that we need to consider in order to evaluate its conceptual character. And these perspectives seem to satisfy both the conceptualist's and non-conceptualist's notions of *experience* and *concepts*. As I indicated earlier in this chapter, non-conceptualists have a tendency to define the notion of a concept very narrowly, while their notion of experience is wide. Likewise, conceptualists also tend to construe the conceptual character of experience very broadly, including the ability to use perceptual demonstratives, while they seem to define experience only as the product of all processes of experience. The aim of this thesis is not only to develop the existing model of conceptualism but also to build a bridge between these two different uses of concept and experience. As such, this chapter suggests that we need to consider the two perspectives, the functional and the expository, on experience so that we can satisfy the demands of both camps.

In the following sections, I provide accounts of the two perspectives and explain why we need to take them seriously in order to solve the problems raised in this section.

I-3. Two Perspectives on Experience

One point that I have emphasized so far is that non-conceptualists define concepts very restrictively whilst defining *content* and *experience* very widely. Of course, I do not intend to claim that this tendency is entirely wrong. As I have stated, I agree with the idea that SV could be a part of a perceptual process that constitutes the contents of experience. To reiterate, the aim of this thesis is to show that there must be conceptual engagement in the process of experience even if we partly accept a non-conceptualist approach to it. As such, the point of listing the above types of non-conceptual content is to show, eventually, that there is conceptual engagement in experience, i.e., the conceptual character of experience. Hence, the conceptual and non-conceptual accounts of experience that this thesis has examined so far try to answer the following questions: (1) How might a conceptual capacity affect the occurrence of perception?, and, (2) In what ways can we conceptually engage with the content of perception?

I-3.a. The Functional Perspective on Experience

The first question may be considered according to the two types of non-conceptual contents, SV (State View) and CV (Content View). Here, a conceptual capacity could be considered as a kind of 'constituent'. This is connected to Type-1 conceptual capacity (the capacity of spontaneity) because, if perception involves a conceptual capacity such as spontaneity, then its content could be constituted by such capacities. In this case, when I talk about the conceptual character of experience, I am considering whether a conceptual capacity could engage with what constitutes its content. Further, if we regard perceptual experience as a type of thought (e.g. belief), the content of perceptual experience must be conceptual because thought-content is always engaged with a conceptual capacity, particularly Type-1 conceptual capacity (the capacity of spontaneity) and Type-2 conceptual capacity (the capacity of understanding relational structure of perception and belief) that operates only when perception has content. But if

we accept CV's claim that perception is entirely different from thought (and its content is entirely different from thought-content), then we may doubt whether Type-1 conceptual capacity and Type-2 conceptual capacity is engaged with perceptual content. Hence, if there is no conceptual engagement that constitutes perceptual content, then we can accept the view that perception could occur without the operation of conceptual capacities. This can serve as an objection to Type-1 and Type-2 conceptual capacities. In the cases of UPC (Unconscious Perceptual Content) and SV (State View), perceptual states could occur without conceptual engagement, i.e., a subject could be in a perceptual state without possessing or deploying any concepts that are relevant to the object of the state. So there is no conceptual engagement in these kinds of cases.

I now want to suggest that we should take a certain perspective in order to know how the subject of perception could be in a perceptual state. I shall call this, the 'functional' perspective on experience:

- The Functional Perspective on Experience: To consider perception functionally is to individuate a perceptual experience prior to, and independently of, determining its content. In doing this, we do not consider any type of conceptual capacities as elements of the experience; rather we should consider only an enabling condition for perception that belongs to the relation between the subject of perception and the object of the perceptual state. Therefore, taking the functional perspective would imply considering experience from the third person or observer's position.

Considering this perspective could track information in sub-personal mental states. For example, human adults and infants perceive the same world in the same way if we only consider how they represent the world functionally, say, by considering an enabling condition. Thus, although human adults are more sophisticated conceptual creatures than infants in describing what is represented in their perceptual states using concepts, they are indeed functionally in the same sort of state representing the world.

I-3.b. The Expository Perspective on Experience

According to the second question, which considers a conceptual capacity 'as explanation', the content we can consciously access is entirely conceptual, even though we are able to confirm that there is no conceptual engagement in a perceptual state such as in the case above. The reason for this is to be found in the way in which we access the content of experience or mental states. Ned Block (1995) gives an explanation of why consciously accessible content must be conceptual by using the distinction of two types of consciousness: access consciousness (A-consciousness) and phenomenal consciousness (P-consciousness). According to him, P-consciousness is what we call experience, that is "the phenomenally conscious aspect of a state is what it is like to be in that state" (1995: 227). Phenomenal consciousness results from our sensory experiences such as sight, hearing, touch, smell, and taste. By contrast, A-consciousness is kind of "availability for use in reasoning and rationally guiding speech and action" (*ibid*). Unlike P-consciousness, Block explains A-consciousness as a state in which some content is "poised for use as a premise in reasoning", "poised for rational control of action", and "poised for rational control of *speech*" (1995: 231, *emphasis added*). These are clearly cognitive roles. Block argues that access consciousness must be 'representational' because only representational content can figure in reasoning. Unlike A-consciousness, we are not aware of the content of P-conscious experience. Block insists that we are not able to access all the perceptual contents of P-conscious experience—including perceptual information carried by experience— rather only some of them could be reported by A-consciousness. This implies that some contents of P-consciousness are separable from A-consciousness, i.e., A-consciousness is not accessible to all the perceptual information that comes with P-consciousness. Indeed, Block suggests a possibility of separating A-consciousness from P-consciousness by focusing on Sperling's (1960) experiment of letters.[19] In the experiment, subjects were exposed to flashing groups of letters, e.g. in 3 by 3arrays for very short periods such as 50 milliseconds. Subjects reported that they could see all the letters, but they reported

[19] I will come back to this example at the beginning of chapter V where I show the possibility of existence of conceptual content and non-conceptual content in conscious experience.

only about half of them. Block thinks that this result shows that it is possible for the subject to have P-conscious experience of the letters, but for only half of the letters to be accessible to the subjects (in A-consciousness)[20]. This implies that not all contents of P-conscious experience are always available to be reported.[21]

The notable point here is that content of P-conscious experience could allow A-consciousness to become accessible. That is to say, whatever the reason for the constituents of P-conscious experience is, the contents of P-consciousness can be reportable in A-conscious experience. Then we will be able to evaluate the characteristic feature of the reported content of P-conscious experience. This clearly entails conceptual engagement by subjects because the possibility of A-consciousness shows Type-3 conceptual capacity–a subject is able to categorise perceived information using concepts. Hence, this reportability implies not only that we are able to know that some perceptual contents can be grasped by concepts that subjects possess but also that they are able to evaluate the characteristic feature of perceptual contents. Of course, contents that exist in P-conscious experience but are not encountered in A-consciousness might have non-conceptual content because the diminished contents of P-conscious experience that are not reported could not be engaged with Type-3 conceptual capacity which categorises

[20] Block explains this by saying that "I am P-conscious of all (or almost all - I will omit this qualification) the letters at once, that is, jointly, and not just as blurry or vague letters, but as specific letters (or at least specific shapes), but I don't have access to all of them jointly, all at once" (1995: 244). Through this, he argues that P-consciousness could be independent from A-consciousness, and that there could be diminished contents of P-conscious experience.

[21] I follow Block's interpretation of the experiment here in order to clarify the expository perspective on experience, say, how we get the conceptual content of experience. But this interpretation will show the problem of conceptualism that McDowell and Brewer hold, namely the co-existence of conceptual and non-conceptual content in the personal level of experience. I will also investigate how the conceptualists overcome this.

the object of perception.[22]

Now we need to reconsider what 'being in a perceptual state' or 'having an experience' really means. It means that we have a content of the state or the experience. If the content of perception exists, then we must be able to access that content to confirm that we are having the experience, or that we are in such a perceptual state. Strictly speaking, there is no perceptual state or experience that does not involve content. Here I shall focus on McDowell's idea of the concept as a 'mediator' or 'link' (1994a: 3), where a concept mediates between a subject and the object that the subject perceives. That is to say, accessing particular contents (but not all the perceptual information) of a perceptual state or experience (that is, confirming the existence of content) is entirely dependent upon the subject's possession of certain concepts. Hence, we are able to access the content of experience through conceptual engagement even though, in such a case, our conceptual capacities are not engaged with what constitutes the content of that perception.[23] I shall call this the 'expository' perspective on experience.

- The Expository Perspective on Experience: To consider the expository perspective on experience, it is essential to take into account, in individuating the perceptual experience, both its representational content and its cognitive role.

Taking this perspective will track the content of personal level experience, and so, requires the subject's conscious awareness for identifying contents of experience, i.e.

[22] Of course, this case is applicable to only Type-3 conceptual capacity that categorises the object of perception. It also has a possibility of being a conceptual content because of the possibility of Type-1 conceptual capacity (the capacity of spontaneity) and Type-2 conceptual capacity (the capacity of understanding relational structure of perception and belief).

[23] In Chapter V I discuss the notion of conceptual engagement as a method of accessing the content of experience in depth, alongside discussing recognitional capacities ability, which are considered to be a type of conceptual capacity by both conceptualist and non-conceptualist.

first-person narrative. Hence this perspective depends upon a speaker's report. As such, considering this perspective is strongly dependent upon the subject's conceptual engagement. For example, human adults functionally represent the same world but our reports about what is represented would be different according to which concepts we use. Therefore, the expository perspective does not individuate the content of experience in the same way as the functional perspective.

I-3.c. The Reason for Considering the Two Perspectives on Experience

What I want to draw from the distinction of the two perspectives on experience is that not only does it satisfy both the conceptualist's and non-conceptualist's notion of *experience* and *perceptual content,* but also shows that both conceptual and non-conceptual content belong to each stage of experience.[24] As such, it is which part of the perceptual stage the philosopher thinks constitutes the perceptual experience which informs the perspective that they take. The functional perspective on experience concerns the role of conceptual engagement that could cause one to have an experience, namely whether experience is affected by the conceptual capacities that one possesses. That is to say, how conceptual capacities could operate in a subject's experience and put her in a perceptual state with regard to some object, i.e., the very occurrence of perception. This will be considered carefully in order to raise an objection against the view that conceptual capacities do not play a causal role in constituting the content of

[24] This does not mean that all non-conceptualists think that non-conceptual content belongs to only the subpersonal level. Non-conceptualists, (in particular Evans (1982), Dretske (1981) and Martin (1992)) focus on non-conceptual content within the personal level of experience as well, e.g., fine-grained colour contents and the representation of rich perceptual information. They argue that there is perceptual content that is not engaged with a perceiver's conceptual capacity at the personal level of experience, therefore those contents may be considered as being non-conceptual. I will examine these argument in chapter IV and V.

experience.[25] On the contrary, without deploying or entertaining any concept that we possess, we are able to have a visual experience of an object (e.g., a scarlet rose) because perception can convey the characteristic features of the rose without the related concepts that we possess. In this case, conceptual capacities do not play a role as constituents of the experience of a scarlet rose. Moreover, animals and human infants (i.e. those who are considered conceptually unsophisticated beings) can enjoy perceptual experience, and if we and those beings have the same representational contents, then their contents may be non-conceptual (Peacocke 1983; Hurley 1998). Hence, examining the functional perspectives on experience could be advantageous to these types of non-conceptualism.

In contrast, the expository perspective on experience implies that concepts could be used for the interpretation of obtained information via visual stimuli in the personal level of experience: more precisely, it refers to 'how subjects actually experience the world'.[26] While the functional perspective might motivate non-conceptualism, the expository perspective highlights the possibility of conceptual engagement on the subject's part. Because of this second perspective, I shall argue that experience does not belong to only a particular stage of that experience. Rather 'experience' ought to refer to the whole process, from a subpersonal to personal level; hence we should not think of experience as something separate from the possibility of conceptual engagement. For example, I can describe my experience of a rose in many different ways using my possession of concepts, such as 'a rose', 'a scarlet rose', 'that rose', 'a red rose', and so on, even though my possession of these concepts does not affect the occurrence of my perception of the rose. Although a subject's conceptual capacity is not engaged in putting her in a perceptual state of seeing the rose, she may freely access the content of such a state using the concepts she possesses, such as 'flower', 'rose', 'this rose', etc. The content of the perceptual state of the rose is something which in its very nature can be grasped by

[25] Most non-conceptualists that this study examines hold this view.

[26] In this sense, we have to say that 'what we say about the world' is the same as 'what we really experience about the world'.

concepts.[27] This would explain why we should identify experience as the whole process of perceiving that allows conceptual engagement. First, that we could confirm what features of an object, e.g., a rose, represented in the subject's subpersonal mental state, e.g., a red flower rather than green thorns, depending on the expository perspective on experience. Second, we are able to find how the subject of perception could be in the perceptual state of a red rose by taking the functional perspective on experience, but we are not able to approach what is in the non-conscious states of perception without taking the expository perspective on experience. Although when both conceptualists and non-conceptualists discuss the conceptual character of experience, they do not talk about the mechanism of perception only, rather they really want to argue whether the content of experience is conceptual or non-conceptual.

I-4. The Possibility of Conceptual Engagement

On the basis of the proceeding discussion, I suggest that we need to consider both functional perspective and the expository perspectives on experience in order to satisfy the conceptualist's and non-conceptualist's notion of experience. Therefore, if perceptual content cannot be engaged with any type of conceptual capacity in both perspectives, it can be considered non-conceptual. Otherwise, there is no reason to throw away conceptual engagement of experience.

If this is so, then the problems waiting to be solved in this thesis are finding whether the contents of unconscious experience such as P-conscious experience (that is not encountered with A-consciousness yet in personal level of experience) or UPC (Unconscious Perceptual Content) or SV (State View) can be engaged with the three types of conceptual capacities, i.e., how we find conceptual engagement in non-conscious experience if we define the range of experience as widely as the non-conceptualists.

Two strategies will address this issue. First, I will investigate whether there is any

[27] However, this is possible only when we do not delimit a range of experience as it belongs to a particular stage of experience, a subpersonal level or a personal level.

characteristic feature of experience that can be considered a different type of conceptual capacity that does not belong to the three major types of conceptual capacities, but nevertheless, can be considered conceptual engagement. I will focus on the discrimination ability of perception in order to argue that conceptual engagement could be saved even if we just take the functional perspective on experience. Second, I attempt to demonstrate that it is hard to define something being in a subpersonal state as a perceptual content (particularly acknowledged in UPC and SV types of non-conceptualism) if we only take the functional perspective on experience. Of course, this attempt starts by adopting the non-conceptualist's notion of experience.

In chapters II and III, I will argue against the non-conceptualists, who emphasise the functional perspective, by using the second strategy.

In chapters IV and V, I will stand against the non-conceptualists who hold CPC, SV and CV types of non-conceptualism by using the first strategy.

These strategies will not be used only for evaluating the conceptual character of experience but will also show that perception involves a different type of a conceptual capacity, namely the discrimination ability, apart from a subject's conceptual engagement using the three types of conceptualities.

Chapter II. Animals, Colour Constancy and Non-Conceptual Contents

Is a Physical Reaction to Stimulus, Experience?

This chapter discusses several arguments put forth by psychologists and non-conceptualists that conclude, since infants and animals are conceptually unsophisticated creatures who nevertheless have visual experiences, experience has non-conceptual content. To be specific, we will consider the possibility of consciously inaccessible contents that cannot be engaged by the three types of conceptual capacities at all.

In fact, some experts in several different fields, including computational vision, experimental physiology, neuro-psychology, psychophysics, and comparative psychology, have found that creatures, like honeybees or human infants, who are considered to be non-conceptual, can perceive colour constancy, i.e., they constantly perceive that an object has a particular colour even though it looks that it has more than one colour (Walsh and Kulikowski 1998). The result of these studies challenges the traditional view of *colour constancy experience* that only creatures who are able to make cognitive inferences (e.g. human adults), perceive colour constancy because the colour constancy experience has been taken to go beyond a mere reaction to external stimuli. As such, it has been held that creatures who have conceptual capacities can perceive constant colours, while all others can't.

These empirical studies deal with two types of non-conceptual content: (1) unconscious perceptual content (UPC) and (2) perception itself, which is claimed to occur without any type of conceptual engagement. Hence this type of non-conceptual content could be raised as an objection to Type-1 conceptual capacity (the capacity of spontaneity) and Type-3 conceptual capacity (the capacity to categorise the object of perception in the personal level of experience).

In fact, some non-conceptualist's, such as Peacocke (1983) and Hurley (1998),[28] also appeal to animal experience, in order to show that there may be non-conceptual content on the ground that conceptually unsophisticated creatures can enjoy perceptual experience similar to human adults. Moreover, a certain type of non-conceptualism, especially that offered by Bermudez (1998), is based on empirical studies of the experiences of non-human creatures; hence if these studies are correct, they seem to provide good reasons for accepting non-conceptualism and also suggest that it may be possible for us to enjoy experience without any type of conceptual engagement.

The purpose of discussing the above non-conceptualist argument is to show the problem with UPC and SV types of non-conceptualism; namely, it is difficult to determine a specific perceptual content without considering the expository perspective on experience. There are two reasons for this: First the empirical studies do not confirm exactly what is represented in the perceptual states of honeybees and infants because the scientific research focuses merely upon how they react to the given stimuli (which is at best an enabling condition) rather than representational content per se. Second, some scientists and philosophers seem to think that a non-human creature's mental state is at least intentionally directed upon the particular property of the target object *in virtue* of an 'as-if attribution' (McDowell 1994) of intentionality. This does not tell us that those creatures indeed behaved in a way intentionally directed at the property of the object or that they are in conscious states representing the object and property, rather it simply describes their behaviours as if they are in conscious states about the object. I argue that

[28] This does not mean that this thesis assumes that Hurley's and Peacocke's views amount to the same version of non-conceptualism. Hurley's view relies on scientific findings for her claim, whereas Peacocke's does not. Nevertheless, the reason for considering them as the same type of non-conceptualist is that both philosophers are relying on the dubious premises that 'non-human animals do not deploy concepts like humans do' and 'animals have representational contents of experience'. This chapter provides an objection to these premises because these do not license the conclusions (1) that the non-human animals *per se* are non-conceptual and that (2) animals can represent the world in the same way as we do.

by depending on the functional perspective in this way, we do not certainly know anything about the perceptual contents of animals and infants. Therefore, this chapter raises an objection to the methodology and the notion of a perceptual content that the above philosophers and the experts have used rather than arguing that there could be a conceptual content even if we only adopt the functional perspective on experience.

In section II-1, I begin by examining why empirical studies of perceptual constancy matter in the debate between conceptualism and non-conceptualism. I then identify three potential problems involved in the empirical studies of non-conceptual character of experience. First, it is assumed that we can share the inner experience of animals through a physiological analysis of vision and the physical properties of colours. Second, this type of study seems to involve an excessive and arbitrary interpretation of non-conceptual creatures' intentional attitudes, i.e., misinterpretation of intentional causation. Third, there is fundamental ambiguity in the usage of the notion of *recognition*.

On the basis of these problems, section II-2 then discusses whether the non-conceptualist's arguments raise the same problem as the empirical studies. That is to say, using a non-human case for proving non-conceptual content seems to rely upon some mistaken premises that the empirical studies hold. These are:

(1) Animals and human infants are non-conceptual creatures.

(2) We can prove that non-conceptual creatures really have perceptual experience through their behaviours and the physical analysis of vision and colours.

(3) Non-conceptual creatures can enjoy perceptual experience of objective properties like constant colour.

(4) There must be contents in their perceptual experience.

From these premises, the non-conceptualist argues that the content of a non-human creature's perceptual experience can be non-conceptual.

Section II-3 will challenge premise (1) because of two reasons. First, non-conceptualist philosophers and scientists have focused upon an enabling condition for perception, namely what such non-conceptual creatures discriminate by vision, rather than discussing their mental states; therefore the discussion does not directly address their

conceptual capacities, which could be deployed or exercised on perceptual information obtained by an enabling condition. Second, sometimes they are confused about whether such creatures do not have the same conceptual capacities that we human adults have or whether they do not possess any type of concept at all.

I then argue that (2) and (3) are insufficient to show the existence of non-conceptual content in experience, and finally suggest that these may not justify the existence of perceptual content, i.e., premise (4).
I will then conclude that these types of arguments for non-conceptual content concern entirely consciously inaccessible contents that are beyond the range of what we normally call experience; therefore, the content of animal perception may not be used for evaluating the conceptual character of experience.

II-1. Colour Constancy and Non-Conceptual Character of Experience

In this section, I begin by looking at the relationship between colour constancy and the non-conceptual character of experience. I then briefly explore the experiments with honeybees and human infants, which are typical examples of non-conceptual creatures, and consider why such examples are used for providing evidence of the non-conceptual character of experience by non-conceptualists.

II-1.1. Why does Perception of Colour Constancy Matter?

'Perceptual constancy' generally refers to the phenomenon of our constantly perceiving a property of an object even though its stimulus condition is changing. In the case of colour perception, we constantly perceive that an object has a particular colour even though it looks that it has more than one colour. In other words, it is the constant colour that is perceived as itself (its own colour) while the apparent colour is perceived through varying conditions, such as brightness. The most well-known definition of colour constancy is "the constancy of the perceived colours of surfaces under changes in the

intensity and spectral composition of the illumination" (Foster *et al*. 1997 cited in Hilbert 2005: 141).[29] I will start my discussion with this definition.

We find many practical examples of colour constancy. For instance, we can pick up a ripe apple in a box under dim lighting even though the surface of the apple looks darker or lighter than its own colour. We also know that, for instance, the surface of a white box under dim lighting may have two or more different colours (its own colour 'white' as well as apparent colours that are shadowed). Notwithstanding this, we can perceptually *judge*[30] it to be the same colour, 'white', even though they look different. We also know the reason for the difference between the apparent colour and the constant colour, even though we judge them to be the same. In this sense, colour constancy seems an essential element of our conscious experience of colours.

Traditionally, the perception of constant colour has been thought to show that our perceptual experiences do not entirely depend upon objects themselves but also on our being consciously engaged in perceptual judgment about such constancy. That is to say, while the changing aspect of colour is purely sensory, "the constancy is the result of

[29] Recently, the constant colour of an object has been defined by surface spectral reflectance (SSR), called colour physicalism. According to this account, every surface of colour reflects a certain amount of light, and our visual systems are designed to detect that reflectance. But I do not seriously consider colour physicalism in this chapter. I will critically examine colour physicalism and the problem of colour variation in the next chapter.

[30] Perceptual judgments of constant colour and apparent colour seem to imply that it requires a cognitive ability because there can be two different contents of perceptual constancy: namely, (1) I perceive them to be different and (2) I judge them to be the same despite perceptual difference. This could also show the feature of two perspectives on experience that the perceptual content from the functional perspective does not always affect the perceptual content from the expository perspective. But this does not directly entail the non-conceptual character of experience: instead, we can see how perceptual contents can be engaged with conceptual capacities throughout this thesis.

inference or judgment" (Hilbert 2005: 146) on the traditional view. For instance, the apparent colour could be constantly changed according to lighting conditions; however, we are able to draw inferences about what makes the changes and to cognitively interpret the given visual stimulus (the apparent colour) through experience.[31]

However, recent neurophysiological research tells us that the perceptual constancies are the result of unconscious processes "that are relatively independent of higher cognition is the dominant view among contemporary perceptual theorists" (Hilbert 2005: 149) rather than the result of inference. In fact, many scientific researchers in several different fields have found that creatures who are unable to make cognitive inferences can perceive colour constancy (Neumeyer 1998; Dannemiller 1998). It is claimed that non-

[31] Hilbert (2005) borrows the traditional view of perceptual constancy from Berkeley (1709 reprinted in 1979) and Russell (1912). While Berkeley focuses on visual size constancy, Russell focuses on the appearance of changing colours. However, this chapter does not discuss whether these philosophers' ideas are correct. The points that this thesis takes from the traditional view are that (1) colour (or size) is not inherit in objects themselves, rather they are dependent on the circumstance to which the coloured object and the spectator belong, such as lightning (Russell 1912: 8-9); and that (2) perception of constancy is a "cognitive or intellectual accomplishment rather than a visual one" (Berkeley 1709 reprinted in 1979: 52-66). More recently, Piaget claims that all perception of forms, size, positions, colours, etc., is acquired through "the combination of reflex activity with higher activities" (Piaget 1953: 62). In this respect, perceptual constancy can be experienced by perceivers with cognitive capacities who can understand the circumstance. I do not contend that this view is entirely correlated with the conceptualists' idea of colour experience. However, it might be thought that non-developed cognitive perceivers such as infants and animals may not be able to experience constancy because they lack such cognitive and intellectual capacities. That is to say, an enabling condition for perception of apparent colour and constant colour is dependent on understanding the circumstances of the constancy on the traditional view.

human creatures are clearly able to *react* to colour constancy and thus that they experience it.

The important point of these studies, for the purpose of this dissertation, is that perception of colour constancy can be considered independently from cognitive inferences that require conceptual capacities for two reasons: first, that creatures are able to be in a perceptual state about constancy without deploying or entertaining any concepts at all; and second, that the perceptual content of such a creature's mental state cannot be engaged with the three types of conceptual capacities due to the fact it is unable to access perceptual content with concepts because it does not seem to possess the same concepts that we have. Hence, the perceptual contents of such creatures may not be engaged with the three types of conceptual capacities. In this sense, the practical examples seem to provide evidence of the non-conceptual content of experience.

In the next section, I examine two experiments that offer typical examples of a non-conceptual creature's perception of colour constancy. There are many examples that show animals perceive colours, involving chimpanzees, birds, frogs, and cats—even insects (Walsh and Kulikowski 1998). However, I will only examine cases involving honeybees and human infants. In some sense these examples seem rather trivial for showing the non-conceptual content of colour experience, yet not only do they clearly show the basic mechanism of colour vision (which is independent from the perceiver's consciousness), they also clearly show how experts in different fields (even non-conceptualists) view the content of experience differently from the conceptualists. More specifically, the expert and the non-conceptualist take only the functional perspective on experience, whereas the conceptualists take the expository perspective on experience. We will find out that the non-conceptualist and the experimenter alike have a very problematic perspective on animals and human infants' experience through examining these examples, say the problem that arises when taking only the functional perspective on experience. In particular, they believe that there is a very strong relationship between physical causality and perceptual contents. I criticize this position mainly by exploring two examples of non-cognitive creatures: honeybees and human infants. In the case of honeybees, I critically examine whether the physical relation between perceivers and

objects characterizes the content of subjects' mental states, i.e. the physical relation could confirm that subjects are in a mental state about the relation. In the case of infants, I consider whether a physical reaction to certain stimuli implies perception of that stimulus. This approach is particularly useful for criticizing the UPC (Unconscious Perceptual Content) and SV (State View) types of non-conceptualism.

II-1.2. Non-Cognitive Creatures' Perception of Colour Constancy

Our knowledge of colour vision in animals is usually obtained from behavioural experiments. Through these experiments, we know that the differences between the visual sensory organs in all creatures result in a different stimulation for each creature, i.e. a visual stimulation is restricted to a visual organ system. In fact, this is a lesson which science has taught us that creatures that have the same the visual organs, have the same visual stimulus of light, for example, diurnal birds' visible windows, like pigeons, extend into both ultra-violet and infra-red regions of the spectrum, spanning 350–720 nm (Allen 2007). Birds, fish, and many other mammals may perceive much wider ranges of the spectrum than humans. Some insects, especially bees, can see ultraviolet colours that are invisible to the human eye. Having a better system of vision may imply having a better perception of colour. This also implies that not only do such animals have discrimination ability when it comes to colours, as we have, but they can also perceive a more fine-grained difference between colours. Clearly, being able to perceive fine-grained colour differences implies being able to have contents involving fine-grained colour differences in a perceptual state. Most empirical research into this problem suggests that the mechanism of colour perception is correlated to the contents of the colour perception. Here what we shall be concerned with is whether animals that can *see* detailed and fine-grained features of colours, but that do not possess the same concepts that we have, can *perceive* colour constancy as we do, i.e., whether they can have perceptual content of colour constancy as we do.[32]

[32] Of course, this does not mean that our perception of colour constancy is entirely conceptual. The issue here is whether nonhuman creatures, who are unable to access their perceptual contents in the same way humans do, have the same representational

If having a perceptual content of colour in non-human creatures is entirely dependent on only an enabling condition, as opposed to the traditional positions on the issue, non-conceptualism, particularly UPC and SV types, may be supported by some practical examples. I briefly examine two typical examples of a non-cognitive creature's perception of colour constancy and consider whether the method or the results of those experiments confirm the existence of non-conceptual content of experience.

II-1.2.a. Honeybees

In 1966 Mazokhin-Porshanjakov carried out an experiment with honeybees. The experiment aimed to find out whether honeybees are able to *recognize* the yellow dandelion flower, by its colour, under conditions of shade and sunshine. The bees were trained to find sugar-water in a glass dish on a yellow paper under direct sunlight. In the test, nine square pieces of coloured paper (eight green ones of different brightness and one yellow one) were shown on a rotating table. The yellow paper was shaded by a black rectangle screen. One striking feature of this experiment was that the bees found and landed on the yellow paper without hesitation, even though the paper looked less yellow or more green according to the different lighting conditions (Neumeyer 1998). The aim of this experiment was to show that perception of colour constancy is not altered by cognitive judgment; rather, it is closer to non-cognitive and automatic perceptual processes (Mazokhin-Porshanjakov 1966).

---

contents as humans have. We could have A-consciousness for accessing perceptual contents (if they really exist). However, it is doubtful whether animals are able to access perceptual contents consciously. In this sense, if animals have the same representational content as we have, then it can be concluded that those contents can be non-conceptual contents of experience.

The above result tells us that perception of colour constancy is a natural visual process that does not rely upon cognitive judgment or consciousness (Neumeyer 1998), i.e., perception of constant colour is independent from the subject's conceptual capacities.[33] So we could have an assumption that if animals, or any creatures who are considered to be unable to access their perceptual contents consciously, can enjoy experience of constant colours, and if they are able to represent the constant colour in the same way that humans do, then the representational contents of their perceptual states are not reportable.[34] Hence, their perceptual contents may be examples of non-conceptual contents. In fact, a non-conceptualist (Crane (1992) in particular) holds that non-conceptual content "eludes linguistic expression" and that it is not revisable by any other "inferential or evidential relations" (Cf. Toribio 2007: 446). Because of this, it could be that non-conceptual contents belong to mental states where the expository perspective is entirely excluded, therefore they would never be engaged with Type-2 (the capacity of understanding relational structure of perception and belief) and Type-3 (The capacity to categorise the object of perception) conceptual capacities. And, if contents of such states share the same contents with conceptually sophisticated creatures, then the content of those states may be non-conceptual because it implies that the way of representing a perceived object is not engaged with any type of conceptual capacities. From the same

[33] However, the fact is that we may not know whether the bees landed on the yellow paper consciously or intentionally. This issue will be discussed more in section II-2.2.

[34] However, Block considers some animals, e.g., chimps, to have A-consciousness. He says that "very much lower animals are A-conscious" (2005: 238) without a concept of consciousness. But he does not clarify how such animals are able to report their perceptual contents as humans do. Most non-conceptualists who focus on animals experience hold that non-conceptual contents are the same representational contents as humans', but not graspable or expressible using the same concepts humans have. In this sense, Block's conclusion about chimps is just one possibility of many, and so, seems to be unsuitable grounds for drawing conclusions about the conceptual character of experience.

perspective, Peacocke argues that if "some of their perceptual states have contents in common with human perceptions", we can draw the conclusion that "some perceptual representational content is non-conceptual" (2001: 614).

The above experiment, and the non-conceptualist position more generally, make the assumption that there is a causal relationship between the objects and the animals' representational contents of experience that we observe and from this assumption conclude that we have the same perceptual content as animals. At any rate, whether or not bees lack conceptual capacities, it seems quite clear that they are not dependent on concepts to *find*[35] the target objects. If we assume that they are totally non-conceptual beings, as the experimenters do, then this may provide positive proof of the non-conceptual content of experience.

In the next section, I will examine human infants' perception of colour constancy.

II-1.2.b. Human Infants

Non-conceptualists such as Peacocke (1998b and 2001) and Hurley (1998 and 2003), assume that human infants can enjoy perceptual experience as we do without possessing or deploying or entertaining concepts at all.[36] Hence, if human infants are able to perceive, or at least recognize, a constant colour, which philosophers have traditionally thought that only conceptual creatures can perceive, and if some scientific approach proves this, then it will provide strong evidence for believing non-conceptualism – indeed, a large number of studies have tried to answer the questions of whether infants and adults have the same perceptual abilities, (e.g. perceptual constancy). Typically,

[35] I will distinguish the difference between 'finding an object' and 'having an experience of an object' alongside the detection ability in Chapter III.

[36] Although it seems clear that human infants do not possess the same concepts that adult humans have, it is not quite clear why philosophers like Peacocke and Hurley think that they cannot have concepts of any kind.

experiments about infants' perceptual abilities use "habituation to one pattern and subsequent dishabituation (recovery of visual attention) to a novel pattern, or familiarization to a series of stimuli that have one in variant property in common, followed by the presentation of a pattern that is novel in the sense of not possessing the invariant property" (Slater 1998: 8). I will briefly examine the psychological experiments on human infants' perception of colour constancy in order to evaluate this perspective on the non-conceptualists' case.

Dannemiller (1989; See also: Yang *et al*. 2013) tested for colour generalization in human infants following illuminant alteration. The fundamental purpose of this experiment is to answer the question 'when do children acquire colour constancy? In the experiment, infants between 2 and 5 months old were exposed to a computer display of coloured objects. Infants are known to prefer looking at something new or different, so the experimenter focused on how long the infants paid attention to changes in lightning and the object colours.

In the experiment, Dannemiller found that 5monthold infants recognized the same bichromatic pattern after a change of illumination, but that they treated a change in reflectance under the original illumination as a novel object, that is to say, this group of infants paid more attention to the changes in objects rather than changes in lightning. On the other hand, 2monthold infants treated the same surface viewed under a new illumination as a novel surface, that is to say, this group paid equal attention to changes in the lightning and the object's colours. 5monthold infants could generalize the surface colour after the illumination changes, but 2monthold infants could not.

From this, Dannemiller concluded that colour constancy can be discriminated after five months of life in human beings. This result is consistent with research showing that colour vision develops during the early postnatal months (Brown 1987). In addition, human infants are thought to lack the ability to think critically and conceptually at this age. The important point is that being able to perceive colours is prior to linguistic development. Moreover, there is evidence that a certain area in the brain that allows us to perceive colour constancy – the so-called 'V_4', which lets us perceive colour,–works instead of a cognitive area when we perceive colour constancy (Komatsu 1998). Human

infants' V_4 in this period works in the same way as human adults' do. If colour vision is not affected by any cognitive inference, and 5monthold infants can *discriminate*[37] colour constancy, then these might be practical examples of the non-conceptual content experience under the condition that experience here is just 'mere seeing', such as 'concept-free mental state' (Cf. Dretske 2000).

The results from the experiments on honeybees and human infants may be tied in closely with particular types of non-conceptual content (e.g., UPC, SV, and P-conscious experience)—assuming that we treat such creatures as having personal level of experience. Moreover, if we confirm the existence of perceptual contents in such creatures' perceptual states by empirical research, then not only does their behaviour toward the given stimuli imply that we may prove the existence of perceptual contents by observing their behaviour but also that they are able to consciously access perceptual contents. These cases may then serve as practical examples of non-conceptual contents that cannot be engaged with the three types of conceptual capacities.[38]

In the next section, I focus on a particular tendency involved in the above experiments. I then indicate three possible problems involved in this type of non-conceptual argument and I discuss whether these empirical studies are appropriate for explaining the content of experience. This discussion will eventually show why we should not consider the experience of non-human creatures to be relevant when evaluating the conceptual character of experience.

II-2. Visible or Experiential?

Following the previous results, I will indicate three problems involved in the type of argument for non-conceptual content that we have been considering. First, it is a causal relationship which holds between the stimulation response and the content of experience, and this makes the range of perceptual contents ambiguous. Secondly, these arguments

[37] According to conceptualism, discrimination ability is a type of conceptual ability. I examine this issue along with the re-identification condition, in depth in Chapter V.

[38] I will be returning to these experiments in II-4.

involve a misinterpretation of intentional causation between the behaviour of a non-cognitive creature and the properties of an object. Lastly, there is a confusion in the notion of recognition as it is used in the human infants experiment. Along with the first problem, this confuses a continuous physical reaction with a type of recognition, and it also entails the contradiction that non-conceptual creatures can exhibit conceptual behaviours, particularly Type-1 conceptual capacity (the capacity of spontaneity). We shall see that the empirical data of non-cognitive creatures' perception of colour constancy is inconclusive for showing either 'what is represented in their perceptual states' or the existence of non-conceptual contents of experience.

On the basis of these three problems, I conclude that we cannot prove the non-conceptual content of experience by appealing to a non-conceptual creature's perception of colour constancy.

II-2.1. Does a Causal Relation define Experience?

What we see from the honey-bees experiment is a possibility of discrimination of constant colour in the bees' vision, but we may not see 'what is represented' in their visual experience. Moreover, the only thing that we find from the experiments is a causal relationship between the bees' reaction and the yellow paper. What I want to argue is that this causality does not guarantee high correlation between the stimulation response and the content of experience. Of course, the experimenter or the non-conceptualist might not claim that there is a guarantee of correlation; rather they may only be claiming that a reasonable explanation of such creature's perceptual content depends on the causal relationship. However, this account does not show that the honey-bees possess the mechanism of perceptual experience of colour constancy because it lacks an explanation of how we, and animals, can discriminate constant colour from apparent colour. Beyond all possible doubts, what we could find from the experiment would be the bees' well-trained and proper reactions to the colour 'yellow' rather than the contents of their experience. As such, this would not guarantee any certainty about whether the bees really had *experienced* colour constancy. They may not directly say or report what aspects of an object they perceived. They cannot describe it in a manner that

we would find persuasive. Of course, this does not mean that their behaviour toward the yellow paper (the sugar-water dish) does not tell us anything about their perceptual contents about the constancy. For example, we might be able to figure out what they are seeing through observing their behaviour.

II-2.1.a. The Problem of Experience as Perceptual Mechanism

Nevertheless, what the experiment does show us is that the bees can discriminate[39] between constant colour and apparent colour without using conceptual capacities, even though we may not explain how they perceptually judge the constant colour and the apparent colour. That is to say, we might be able to confirm that those creatures could be in a perceptual state involving a constant colour by observing their behaviour, viz. their behavioural response to a particular stimulus might suggest that they are able to be in a perceptual state without any type of conceptual engagement; hence their experiences could have non-conceptual content. However, in order to confirm the existence of perceptual content in such states, we are dependent on conscious access, i.e., conceptual engagement in the expository perspective.

Strictly speaking, analysing the visual mechanisms and behaviours of creatures towards certain stimuli may allow us to infer what it is that those creatures are experiencing. However, it would be difficult to identify just what is represented in their visual state, through an analysis that depends only on the functional perspective on experience. It is certain that the mechanism of colour vision is different from the mechanism that composes colour experience. The mechanism of vision may *cause* colour experience but it is doubtful that this mechanism always determines the *content* of colour experience. For instance, take a highly efficient camera like that found in a mobile phone. The

[39] If we treat animals as creatures with discrimination ability this raises another issue. One of the features of concepts is discrimination ability. This ability has to be accompanied by recognition ability. If animals are able to discriminate an object from others, then the content of their experience might be conceptual content, rather than non-conceptual. I will explain more about this with reference to the relationship between 'discrimination ability' and 'the condition of possessing concepts' in Chapter V.

camera is able to find human faces automatically even when the target is moving. Also, it discriminates each individual's face when taking a group photo. It operates well in every situation. If so, can we say that the camera experiences the faces because the camera recognises the constant face underlying those changes? Or is my mobile phone in a perceptual state of seeing a face? We may believe that this mechanism of finding a constant colour or face is required to have experience. But we seem to hesitate to treat such a mechanism as involving a genuine experience, i.e. what we call experience does not involve only its physical mechanism. It must include perceptual content. If so, then what is the difference between the camera and the honeybees if we only consider the functional perspective on experience? Are we really able to confirm perceptual contents of constancy in their perceptual states through taking only the functional perspective on experience?

If we treat their behaviour toward to a certain stimuli as involving the existence of perceptual content, then this leads us to accept the stimulation responses as perception. That is to say, perceptual information of which we are not consciously aware can be included in the range of perceptual content for evaluating the conceptual character of experience. In addition, we do not seem to adopt all the perceptual information as contents of experience.[40]

Of course, I do not intend to deny that such information plays a role in the process of experience, but this is an excessive extension of the range of perceptual content.

---

[40] This is a prominent feature in the expository perspective. In fact, we sometimes describe only part among all the perceptual information carried by experience, hence there can be missing contents in our description of experience, e.g., contents of P-conscious experience or the fineness of grain in colour. Also our description of experience does not only seem to contain the phenomenal property of object itself or mere terms such as sounds and colours, rather we describe them in a great variety of terms such as a car honking and burnt sienna. This feature of the expository perspective will be discussed at the end of this chapter and chapters III and IV.

The problem, then, is that such perceptual information, or a creature's reaction to a certain stimuli, may be included in experience. Again, contents of experience must allow accessibility in order to confirm what is in perceptual states; however, the possibility of conscious access was excluded in the cases of honeybees and human infants in the empirical studies because it is argued they are conceptually and cognitively unsophisticated creatures unlike us. Notwithstanding this, why should we consider their behaviour as having perceptual contents?

II-2.1.a. The Problem of Perceptual Content as a Stimulation Response

Let us reconsider the human infants case. Can we say that 5montholds can experience colour constancy just because they can recognize the same bichromatic pattern, or because they have a working area V_4? In other words, does a creature's physical reactions to external stimuli really determine its experience? And does our analysis of such a creature's behaviour or visual mechanisms really guarantee that it is in a perceptual state? Like the mobile phone in the previous example, all our senses always react to environments. And all sensibilities are determined by the ability of our sense organs. However, it is doubtful that a physical reaction to stimulus is perceptual experience. For example, we may not perceive oxygen sensuously. But our respiratory organs are always reacting to the gases in the air. We are not consciously aware of the gases, or even the respiratory system. But we may know others breath through the nose by observing or analysing other's breath. Also, the existence of oxygen is demonstrated by the fact that we are breathing, even though we are not aware of its presence. Do we always experience oxygen while we are breathing? Or, are we in a perceptual state of oxygen? It seems not. We do know, however, that we are breathing, and we know of the existence of oxygen, but these facts do not cause the experience of oxygen, and they do not entail the presence of the perceptual content of oxygen. In the same way, animals and infants having certain visual conditions, for example, bees seeing ultraviolet colours invisible to the human eye, does entail that bees have the visual experience of an ultraviolet object. Of course, creatures have *exposure* to perceivable worlds according to their own enabling conditions of perception. However, we may not be able to have experience of oxygen or other gases in the air unless we are consciously *aware* of them,

even though our physiological mechanisms are always reacting to them.[41] So it seems to me that the non-conceptualist's assumptions about the causal relationships between creatures' behaviour and the object property come from misconceiving such 'states of exposure to the perceivable world' and equating these with 'experience'. In the same way, this confused notion of perceptual experience leads to the mistaken assumption that an enabling condition for perception which allows us to have perception of colours (e.g., SSRs, light, and retina)[42] can be correlated with the content of perceptual experience. Here we find a second problem.

II-2.2. Misinterpretation of Intentional Causation

The second problem is that an enabling condition of perception seems to imply a type of intentional attitude in the subject. Intentionality is a feature of the mind "by which mental states are directed at or are about, of, or refer to, states of affairs in the world" (Searle 1998: 64). For example, in the experiment with honeybees, the bees' reactions are described as if they have an intentional attitude to the colour 'yellow'. However, as

[41] Of course, 'awareness' is required to possess the concept of physical properties. To be more concrete, we are able to know (or assume) that we are in a state of breathing (or oxygen) through the conceptual engagement, not through the physical properties of oxygen. How are we aware of the physical property of breathing (oxygen particles, an activity of alveolus, filtering impurities in a lung, etc.) without such engagement? We are able to approach the content of a mental state of oxygen by possessing concepts (or relevant knowledge) about breathing. Hence, through the conceptual engagement, we can know that our perception is physically correlated with its caused object.

[42] In a recent work, Roessler argues that we can find three levels of enabling conditions for perceptual experience involved in Evans's (1982) simple theory of perception: objects, features, and facts (Roessler 2009: 18-22). It is not that an enabling condition that I discuss in this thesis must belong to one of the three levels of enabling condition. Rather, my use of the term 'enabling condition' refers to physical factors of perception such as the wavelengths of light and visual cells.

Searle pointed out, not all conscious states are intentional, and vice versa. Hence, whether or not the bees behaviour is conscious, they are in an intentional state. Since the bees act on the world, there is good reason to believe that they are in mental states with intentionality, but that does not entail they are conscious and nor does it determine whether their mental states are directed at the yellow paper or the sugar water.[43]

The important point is that the bees are disposed to find sugar-water and not a yellow colour. In common sense terms, honeybees are ultra-sensitive to honey-like things. Hence, the indisputable intentional cause that stands between the bees and the paper is not yellow, but sugar-water. That is to say, the bees' mental states are directed at sugar water and not the yellow paper. But it is described *as if* their ability to find sugar-water was directed intentionally to the yellow colour. The point is that we know they can find sugar-water and represent that. Somehow they can work with correlations learned between sugar-water and the constant yellow. However, it is quite unclear whether this behaviour involves intentional direction to the yellow paper. So, if we merely look at the bees' behaviour, we would not be able to determine the intentionality of their experience, viz. we are not able to guarantee that they are intentionally related to an object simply by appeal to physical causation.

The result of the experiment of the conceptually unsophisticated creatures is based upon this misinterpretation of intentional causation because premises such as 'animals can enjoy perceptual experience' or 'contents of their perceptual states have contents in common with human perceptions' are just assumptions and 'as-if attribution' (McDowell 1994a and 1994b: 199) without verifying the existence of representational contents of such creatures' perceptual states. As such, it seems that applying these ideas

[43] Cf. "Every mental phenomenon is characterized by what the Scholastic 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 to be a thing), or immanent objectivity" (Brentano 1973: 78–79).

in order to explain whether the content of colour experience is conceptual is inappropriate. Hence, without verifying representational contents of such creatures' experience (if they really have experiences), the conclusion drawn from the experiments have to be reconsidered, because the experiments on non-conceptual beings are based on this misinterpretation of intentional causation between non-human beings and target objects.

II-2.3. The Problem of Recognition in the Case of Human Infants

While the conclusion drawn from the experiment on honeybees is dependent on a misinterpretation of intentional causation, the use of the human infants case seems to involve a fundamental ambiguity in the experimenters' usage of the concept of recognition. In fact, the visual organs of the infants in the experiment detect or perceive a certain repeated phenomenon that I would call a 'pattern'. The process of looking at the pattern is what the experimenter calls recognition. Of course, many philosophers and psychologists have understood the notion of recognition in different ways. Among these, I wish to address the cognitive scientific account of recognition as its method is used in the experiment. According to this account, the functionality of pattern recognition is scientifically accepted. It plays an important role in our explanation of the functioning of biological neural systems, and is very significant to research into a central area of artificial intelligence. Scientific experiments with both humans and animals show that pattern recognition is a 'very established capability of the mind' (Margolis 1987). In addition, we do not seriously doubt that the perception of colour constancy is a type of pattern, which leads a subject to *recognize* it. We also may not doubt that the brain is able to recognize patterns, to react to patterns, to remember patterns, to repeat patterns, to associate patterns, and so on.

II-2.3.a. Implicit Knowledge

Noe (2004), in his *Action in Perception*, advocates a view of colour constancy that in outline is very similar to that of Helmholtz (Noe 2004: Ch. 4; See also: Hilbert 2005). He claims that we have a certain *implicit knowledge* of the patterns found in the changes

of apparent colour with a viewing condition. Hence, we are able to use this implicit knowledge in order to "experience the actual colour of the object as, so to speak, that condition which governs or regulates the way these changes unfold" (2004: 128 cited in Hilbert 2005). Noe claims that colour constancy is not a sensory phenomenon we find in the usual examples of white walls that are differentially illuminated and the like, and "the correlations that we implicitly know and that support our conclusions about the 'actual' colour are learned from experience" (2004: 127; See also: Hilbert 2005: 153–154). The notable point here is that the experience of both a constant colour and an apparent colour implies that perception of both colours is affected by implicit knowledge, of the patterns they belong to. Hence, if colour constancy or the changes of apparent colour could form a type of pattern in material objects, then the recognition of constant colour seems not only to be an automatic visual process but also to be a mind-dependent process of vision. And if pattern recognition is a capability of the mind, then the perception of constant colour as a type of pattern recognition may be considered a type of thought: namely, Type-1 conceptual capacity (the capacity of spontaneity). Moreover, this assumption does not harm the idea that there may be a particular kind of mental entity with the physical role of detecting constant colour.

II-2.3.b. The Two Contradictory Perspectives on Non-conceptual Creatures' Recognition

It might be doubted whether the capability of pattern recognition implies the capability of possessing representational content [44] because the non-conceptualist and the experimenter do not take recognition to have the same representational content as a particular object, i.e., recognition might not involve the same perceptual content. Their assumptions are dependent on physical reactions to target objects. And the recognition

[44] The non-conceptualist and the experimenter have not discussed representational contents. However, if we take experience of pattern recognition as a conscious experience, for instance, a result of Type-1 conceptual capacity (the capacity of spontaneity), then it is possible to have a representational content when having the pattern recognition experience.

could only be in a subpersonal state where a perceiver cannot access its content. However, it seems clear that if pattern recognition is a well-developed capability of mind, then it can be considered to be, at least, conscious experience. Further, if the content can be proved scientifically, for example, in human infants' perception of constant colour, it may also be proven that a subject and even an infant are able to be in a mental state of that pattern, e.g., constancy. Hence, it could be considered as a content of thought. Bermúdez also claims that:

> "A creature has perceptions with conceptual contents […] to the extent that its perceptual representations of the environment are determined by its classificatory and *recognitional abilities.*" (1999: 367)

If this perspective is acceptable, then the experiment may support the conceptual character of human infants' experience rather than the non-conceptual character of experience.

At this point, the experiment on infants might be interpreted in one of two contradictory ways: First, that physical recognition may involve some type of content which is engaged with Type-1 conceptual capacity (the capacity of spontaneity); and second, a type of non-conceptual content can exist without the engagement of the mind. The fundamental reason for this contradiction is that the scientist and the non-conceptualist alike lack any specific reason to treat human infants as non-conceptual beings. Moreover, they sometimes do not clarify what a non-conceptual being *is*. That is to say, they treat human infants or animals as non-conceptual beings because they do not possess the same concept as human adults have, but they describe such creatures' behaviour as having similar conceptual capacities[45] that human adults usually have, such as classification, discrimination, and recognition.

The second reason is that their notion of recognition is not quite clear in that it refers to either having the same representational content of the same object or the same physical

[45] This capacity is different from the three major types of conceptual capacities. This would be more close to what we call conscious actions.

reaction to the same property of an object. If recognitional abilities imply having conceptual content, as Bermúdez claims, then states of recognition could have thoughtful content, and therefore be conceptual, according to Type-1 conceptual capacity (the capacity of spontaneity). Otherwise, if it refers to the same reaction involving no representational content, then it might be no different from the 'find a face function' of the digital camera in a mobile phone.

There is a very interesting point in that even non-conceptualists take different perspectives on the notion of non-conceptual creatures and the explanation of such non-conceptual creatures' behaviour toward a target object. That is to say, non-conceptualists treat such creatures as totally non-conceptual beings, but they describe nonhuman creatures' physical reaction stimuli as if the creatures have experience involving representational contents to which human adults' conceptual classification apply. That is to say, when such psychologists and non-conceptualists define non-conceptual beings, they usually say that animals do not have the same concepts that we human adults have. But when they describe such conceptually unsophisticated creatures' behaviours toward a target object, they seem to treat such creatures as if they would be able to categorise the object of perception. So these two different perspectives make us confuse 'what non-conceptual beings really are'. Nevertheless, I would not want to say which perspective might be better to take in the cases of the bees and the infants. My point is that, although we take these contradictory perspectives on conceptually unsophisticated creatures' experience, there is no way to find what is really in such conceptually unsophisticated creatures' perceptual states because we are not able to share the expository perspective with such non-conceptual creatures – we can only presume. Again, in order to evaluate whether perceptual content is conceptual, we must consider the expository perspective on experience: however, in the case of human infants, we are not able to access their perceptual content under the condition that it is represented. So it is also doubtful whether they have perceptual contents on the basis that they have the same visual response to particular stimuli.

In this respect, it seems that the experimenters are too dependent on very unclear definitions of *recognition* and *experience*. If such creatures are totally non-conceptual,

then they may not be able to recognize a particular pattern. If not, they could recognize a pattern; and might therefore be conceptual beings. As such, I want to argue that the attempted confirmation of non-conceptual content through unreliable and ambiguous assumptions is inappropriate. This does not mean their assumptions are totally useless. There is one more important point that we need to discuss in light of this. In some sense, the reason why the scientists treat the perception of such creatures as non-conceptual is that they do not consider what a conceptual capacity is in perceptual experience. It seems to me that the possession or existence of a conceptual capacity that I will call, 'the conceptual engagement' at the time of experience plays an important role in confirming the conceptual character or non-conceptual character of experience.

In the next section, I first consider how non-conceptualists have treated the notion of non-conceptual content in relation to such creatures' perceptual experience. Of course, the non-conceptualist Peacocke does not use the empirical studies of non-cognitive creatures, but he has the same view as the experimenters that animals are totally non-conceptual beings who do not possess the same concepts as humans. I will criticize this view and argue that it depends on two false premises: (1) that animals' behaviour such as 'mere seeing' can be experience, and (2) that the way we confirm whether animals have experience is to look at the causal relationship between their physical reaction and the given objects.

II-3. Why Non-Conceptual Content?

Peacocke (1998) claims that the contents of non-human creatures' perceptual states are non-conceptual because such creatures lack a concept of objectivity, *even if they can share perceptual content with us*. Hurley (1998 and 2003) also shares this view, but concentrates more on the 'context-bound reason' for action in animals. While non-human animals and human infants can enjoy perceptual experience, Hurley claims that they lack full conceptual abilities possessed by human adults. Perceptual states, she argues, do not require "an ability to deploy concepts in a manner that is context-free and general" (1998: 187). Also, there might be intentionality, or what she calls "practical reasoning" (2003: 231), in an animal's action towards a target object. Because of this,

she concludes that the perceptual experience of those creatures can be non-conceptual. On the same note, Bermùdez (1998) also argues that we may find non-conceptual contents in the behaviour of pre-linguistic children and nonhuman creatures, but he focuses more on the empirical findings of such creatures' experience, particularly the 'subpersonal information-processing mechanism'. As with the experimenters from section II-2, he concludes that there is a non-conceptual content that a subject cannot be consciously aware of; therefore, like the arguments considered in the section II-2, all these arguments for non-conceptual content comparing nonhuman creatures' behaviour are objections to Type-1 conceptual capacity (the capacity of spontaneity).

However, the obvious fact that we need to focus on here is that the assumption 'such creatures can have a particular perceptual content' may only be understood by us using our own conceptual classifications. We may not know what is really represented in their perceptual states.

In this section, I explore the non-conceptualist's use of non-conceptual creatures' perceptual experience, and then carefully consider the matter of the description of perceptual experience in non-conceptualism. The purpose of this section is to indicate the crucial problem of such views, namely that they treat such creatures as totally non-conceptual beings, but they describe their physical reaction to external stimuli *as if* they had experience by using their own conceptual skills. This shows that non-conceptualists take different perspective (1) when they treat such creatures as totally non-conceptual beings, and (2) when they describe nonhuman creatures' physical reaction to stimuli. They make the strong assumption that animals are non-conceptual beings unlike us, but their description involves an 'as-if attribution' that the creatures have experience involving representational contents to which human adults' conceptual classification apply. These contradictory perspectives on non-cognitive creatures' experience are based on the same assumption which we identified underlying the empirical research considered in section II-2, Also this shows that the non-conceptualists have contradictory perspectives on animal experience. This is very important to the criticisms of the non-conceptualists in this chapter.

II-3.1. Objectivity

Peacocke (1983: Ch. I) also compares animals experience to human beings' in a slightly different way from the empirical studies on the non-conceptual creature's perception. But this approach involves the same problem with the experimenters that we identified in the section II-2.

According to Peacocke, all visual experiences include sensational properties of objects, and each experience has properties that are not represented in its content. Human experience may have more rich representational contents of objects than an animals', but if both human and animal experience represent the same phenomenal properties of an object, then what they have in common in their perceptual states are "literally the same representational properties" (Peacocke 2001: 614). Peacocke says:

> "While being reluctant to attribute concepts to the lower animals, many of us would also want to insist that the property of (say) representing a flat brown surface as being at a certain distance from one can be common to the perceptions of humans and of lower animals. . . . If the lower animals do not have states with conceptual content, but some of their states have contents in common with human perceptions, it follows that some perceptual representational content is nonconceptual." (*Ibid*)

One reason for adopting this account is that a minimal requirement for having conceptual contents is a 'grasp of objectivity' (Peacocke 2001; See also: Speaks 2005). Of course, the perceptual states of animals could have an *objective* representational content; however, they are commonly thought to be unable to conceive representational content as objective. Unlike emotions (e.g., my happiness, sadness, touching, etc.) that exist in a subject's mental state when the subject feels them, colours and shapes are objective qualities (or realities) that exist without any conscious awareness of them (e.g., perception, according to the Kantian view of objectivity). It is hard to believe that animals could consider what they perceive (e.g. constant colours), as objective qualities. In addition, they cannot conceive of themselves subjectively unlike us. Indeed, a perceiver does not require a grasp of objectivity in order to be in a perceptual state.

Hence, perceptual contents sometimes are not objectivity-invoked contents, according to Peacocke. So, it may be considered non-conceptual. Peacocke also argues that "the primitive aspects of representational content in perception, which our subjective experience shares with mere animals, do not involve the grasp of objectivity required for conceptual content" (2001: 264). Animals have been thought by both the conceptualist and non-conceptualist to be unable to understand objectivity because they seem to be incapable of active and self-critical thinking.[46] In short, objectivity is understood only by creatures who are able to process active and self-critical thinking; hence contents which involve objectivity are conceptual. The position being defended Peacocke here is, first that animals do not seem to have the capability of active and self-critical thinking[47]; and second that perceptual representational contents that we and animals share are not objectivity-invoked contents, and so, can be non-conceptual.

II-3.1.a. Perceptual States without Objectivity

Peacocke (2001) insists that we need to distinguish the difference between 'content which is objective' and 'possession of a concept of objectivity'. In this sense, he insists that the non-conceptual character of experience in animals and human beings is based on the discrimination abilities between the two. Peacocke wants to argue that, in comparing animal and human experience, we might also be able to have contents that concern the objective world without possessing a concept of objectivity, i.e., we could be in a mental state about the objective world without deploying or entertaining any concepts at all. Peacocke seems to believe that this is a type of perceptual state.

If this is correct, what we need to focus on is why Peacocke turns this objectivity into a question of the conceptual character of experience. He would probably say that concepts

[46] The conceptualist McDowell shares Peacocke's view on animals' perceptual contents. He insists that "we can say that we have what mere animals have, perceptual sensitivity to features of our environment, but we have it in a special form" (1994a: 64). This special form is the faculty of spontaneity that distinguishes us from animals.

[47] This view is shared by McDowell (1994a).

are sufficient for objectivity in experience because he seems to infer the non-conceptual character of experience from the non-objectivity of experience. In which case we may ask Peacocke whether or not a perceptual content is conceptual if it can be grasped by a concept, regardless of whether or not it is objective. That is to say, if we think that there is any chance of Type-3 conceptual capacity (the capacity to categorise the object of perception), i.e., there is a possibility that any perceptual content can be grasped by concepts in the expository perspective on experience, there is no reason to exclude the conceptual character of experience. However, the issue raised in this chapter is that it is difficult to verify the expository perspective on animal experience. Of course, as I indicated in the section II-2, an animal's perceptual content is not suitable for evaluating the conceptual or non-conceptual content of experience even though they can be in a perceptual state without any conceptual engagement.

II-3.1.b. Perceptual Content and Objectivity

McDowell (1994a) has also emphasized the understanding of objectivity as a conceptual capacity. This perspective—namely that a perceptual content is constituted of concepts involving objectivity— is surely the most crucial point of conceptualism that could allow the non-conceptual character of experience from the functional perspective.
According to McDowell (1994a)'s idea of conceptual contents and objectivity:

(1) Perceptual experiences have genuine contents.
(2) If perceptual experiences have genuine contents, then these contents must be objective.
(3) If the contents are objective, they must be conceptual.

Therefore, the content of perceptual experience must be conceptual.

Both the conceptualist and non-conceptualist may agree with (1). Also, subjects may need to have a high level cognitive capacity (Peacocke 2003) like memory or categorization beyond mere perception, in order to satisfy (3). However, Peacocke argues that there is no plausible reason to believe that subjects must be able to understand objectivity in order to have a perceptual experience that has contents which

are objects. This seems right. In fact, we are not required to possess the concept of objectivity in order to perceive the objective world or to be in a perceptual state about the world. Perception does not seem to be prevented by a lack of objectivity because the basic understanding of 'objectivity', generally, is a necessary precondition for rational critical thought. Hence, objectivity could exist only in thought, but it is doubtful that perceptual states are types of thought, as stated by CV (Content View).[48] Peacocke tells us that, "perceptual states provide the necessary basis for more flexible forms of thought; but they can also exist in the absence of those more sophisticated abilities" (2003: 615).[49] Because of this, he claims that perceptual states might have content without the concept of objectivity. If conceptualists fail to directly call this assumption into question, it may imply that there must be contents in any level of the visual process. And if a perceptual state is distinguished from thought, it could possess a content, which can then be non-conceptual. Hence, Peacocke's argument might support a type of non-conceptualism that takes the functional perspective on experience.

In the next section, I examine another version of non-conceptualism suggested by Hurley (1998 and 2003), namely 'practical reasoning' in animals' behaviour.

---

[48] A content of perceptual experience is entirely different from a conceptual content that belongs to thoughts or beliefs (e.g. propositions). This idea coincides with what Speaks calls 'absolute non-conceptual contents of experience' stating that "the contents of thoughts are propositions, whereas the contents of perceptions are not" (Speaks 2005: 364).

[49] It is still difficult to accept that perception is sometimes entirely independent of thoughts. However, the fact that perception could occur without thoughts does not imply the non-conceptual character of experience, because perception is possible without any thought-form, but its contents are approachable in personal level under the condition that the expository ability belongs to thought, viz. the content of subpersonal state could be engaged with Type-3 conceptual capacities that categorise the object of perception during the processes of experience. This will be discussed through chapters III to V.

II-3.2. Practical Reason

While Peacocke focuses on understanding objectivity as a conceptual capacity, Hurley (1998 and 2003) concentrates more on normative conceptual and inferential capacities. She begins with the premise that nonhuman creatures seem to lack the full conceptual capacities possessed by human adults. But she defines animals as intentional agents with 'practical reason'.[50] We have seen that the main reason for holding conceptualism is that perceptual contents must be conceptual in order to be a reason for belief. Hurley does not deny this view. What she argues is that this does not entail that reasons for action must be conceptual even though reasons for belief must be conceptual (1989: Chapters 7 to 9). Practical reason, as she defines it, is not a type of inferential rationality, rather it is a reason for action that the agents have toward a target object, i.e., a type of intentionality. As we have seen in the section II-2.2, intentionality is a feature of the mind, and not all conscious states are intentional, and vice versa. In this sense, animals are totally non-conceptual beings but they can be in intentional states, therefore they can act for reasons. She says,

> "An intentional agent who lacks context-free conceptual and inferential abilities and does not conceptualize her reasons can still act for reasons that are her own, reasons from her perspective…Reasons for action can be context-bound and lack conceptual generality." (2003: 231)

The conclusion she wants to draw here is that an animal's behaviour toward a particular object can occupy reason for acting. However, this does not necessarily entail or require an ability to reason about, or justify, what should be done in a particular situation (2003: 232; see also Hurley 1998: 139). And non-conceptual content, as Hurley understands it,

[50] She appeals to this notion of practical reason in order to argue that the space of reason is not co-extensive with the space of inference. Hence, practical reason, as she defines it, is an ability that is distinct from an inferential skill that conceptually sophisticated creatures such as human adults have (See: Hurley 2003: 231).

is "not needed for, or able to serve, epistemological purpose, and that conceptual content[51] is needed" (2003: 232). She gives an example of a monkey:

> "Suppose a monkey observes that conspecific A is dominant over B and that B is dominant over C and, never having observed A and C together, registers that A is dominant over C, and is able to use this information in instrumentally appropriate ways in relation to various goals. Nevertheless, she might be unable to generalize the ability to make transitive inferences to foraging context, such as tree A has more fruit than tree B, which has more than tree C, so tree A has more fruit than tree C." (2003: 238-239)

Because of this, she argues that animal's behaviour towards a particular object involves a practical reason for its actions, hence, she concludes that an animal could have perceptual content about that object. However, animals do not possess the same conceptual capacities as adult humans, such as inferential skills; hence they are considered as non-conceptual creatures. If animals lack such inferential thought, then we may conclude that animals are totally non-conceptual beings even though they are able to act for reasons.

If Hurley is right, then there is a possibility that animals could be in a perceptual state with non-conceptual content. This argument could show the existence of perceptual content in the honey-bees case because they also seem to have practical reasons for their action toward sugar-water. Hence, this argument may be an objection to Type-1 conceptual capacity (the capacity of spontaneity) as well as Peacocke's argument, and Type-2 conceptual capacity (the capacity of understanding relational structure of perception and belief) because perceptual contents can be a reason for action, rather than a reason involving inferential thoughts that form beliefs.

In the next section, in connection with both Peacocke's and Hurley's arguments, I critically examine the possibility of having non-conceptual contents, alongside

[51] Hurley also does not give us a clear definition of 'conceptual content' unlike McDowell and Brewer. Rather she focuses on conceptual abilities that we can find in animal behaviour (Cf. Hurley 2003: 232-233).

Bermùdez's argument that subpersonal states must have contents that can be non-conceptual.

II-3.3. Are Sub-Personal States Experiences?

Bermùdez (1998) draws on Peacocke's notion of non-conceptual content, but he concentrates on explaining the behaviour of pre-linguistic children and non-human creatures, relying heavily on empirical results in developmental psychology and cognitive science. His idea of non-conceptual content is very close to that in our previous discussion of the experiments in the section II-2. In light of these results, he argues that "not only the notion of non-conceptual content is suitable the personal level domain of perceptual experience, but also, for the domain of subpersonal computational states posited by information-processing accounts of vision" (Bermùdez 1995 cited in Toribio 2007: 448). He finds it a feasible idea that, if subpersonal information-processing mechanisms really can process information, then the states of these mechanisms must have contents that can be non-conceptual. Also, this state or mechanism is not required to consider any objectivity of objects. As I mentioned above, it is quite reasonable that this mechanism could occur without any conceptual engagement. And the claim that the information obtained by the senses can be processed in subpersonal states is acceptable. Also, it does not seem to be directly correlated with forming empirical beliefs, but it could be possible to have a practical reason for action using this information.

However, what we have to pay attention to here is that this type of non-conceptualist seems to claim that there must *be* contents in a subject's perceptual states if we can guarantee that she is seeing an object or they are acting upon a particular object. That is to say, it seems that what they call 'information' is the content of those states; and these contents can be non-conceptual in certain mental states, subpersonal, or even at a certain level of visual processing.[52] However, it seems unclear what exactly 'information' really

[52] This is a very typical thought in this type of non-conceptualism. But the problem I want to raise here is how subjects are able to access the contents of such states without conceptual engagement. And if the contents of such thought are graspable using

refers to here: it can either be a visual response or content unaccessed by the Type-3 conceptual capacities that categorise the object of perception, or both. What Bermùdez argues is that "not only the notion of non-conceptual content is suitable the personal level domain of perceptual experience, but also, for the domain of subpersonal computational states posited by information-processing accounts of vision" (Bermùdez 1995 cited in Toribio 2007: 448). If it only refers to information in subpersonal states, we should consider how it is different from the non-conceptual content in the personal level of experience because the content of the personal level experience has the possibility of being engaged with the Type-3 conceptual capacity that categorises the object of perception at a later time. And we ought to attempt to find a way of how we can access content of subpersonal experience without depending on the expository perspective on experience. However, there seems no way of knowing the content of subpersonal states because the content of those states is not accessible by its perceiver. What is more, these non-conceptualists believe that there are contents in such states without considering the expository perspective on experience. This perspective leads us to cross the borderline between the consciousness and unconsciousness when we evaluate the conceptual character or the non-conceptual character of experience.

This feels like a very ineffective method for evaluating the conceptual character of experience because this perspective seems to involve two problems. First, it could treat a perceiver's physical reactions (or what Hurley calls 'action') to certain objects as a type of perceptual state or experience. But I think that this is over-interpretation of perceptual content. We get the results of those experiments, developed by non-conceptualists and other scientists, through observation, but this has a bearing on our conceptual classification. Moreover, an animal's reaction to a given stimulus, or what is represented by the stimulus, can only be described by us. That is to say, whether or not they have experience, the 'content' of their experience is totally dependent on our conceptual classification and description.

---

concepts at the personal level of experience, why does the conceptual character of these kinds of contents have to be removed? This implies significant ambiguity in the distinction between 'inaccessibility of contents' and 'lack of conceptual capacities'.

Second, we may not be able to guarantee that the result of the experiments or the non-conceptualist's assumption really proves animals experience. It simply shows how we and animals can perceive the world without utilizing the concept of objectivity or inferential skills, but it does not show how the content of perception *is constituted* in their experience. What we can only confirm, given their behaviour, is that they can react to the given object.

In the next section, I argue that there is a problem of description and a contradiction involved in their premises.

II-4. The Content of Experience and the Conceptual Character of Description

As we have seen, the previous examples of non-conceptual creatures' perception of colour constancy may lead to the assumption that our contents of experience are sometimes non-conceptual. This approach, namely applying non-conceptual beings' experience to human experience, seems as plausible as any other explanation, to non-conceptualists. However, we have also noted a tension in the non-conceptualist account in that (1) non-conceptualists treat such creatures as totally non-conceptual beings, and (2) the non-conceptualist describes non-human creatures' physical reaction to stimuli as if the creatures have experience involving representational contents to which human adults' conceptual classification apply. Of course, I do not deem it unnecessary to define whether such creatures are totally non-conceptual. But the point is that the description based on physical causality is easily open to misconstruing such creatures' behaviour as conceptual activity because it is possible that descriptions involving our conceptual classification could entail conceptual capacities. In some cases, concepts involved in such descriptions seem to satisfy the recognition condition for conceptual capacities

suggested by Crimmins (1989) and Millar (1991)[53] that most non-conceptualists accept. This could be another reason for believing that we need to exclude non-conceptual creatures' perception of colours in order to explain our content of experience.

Let us reconsider the experiments in section II-1.2. In the experiments, the creatures were free to react to the stimuli of colour appearance. We may not believe such reactions are a type of discrimination ability that uses conceptual capacities. In this instance, it could be possible either that conceptually unsophisticated creatures can perceive colour constancy without utilizing concepts or that it is possible for them to have a conceptual content of the constant colour. But this might lead us to another trap. The second possibility exists only when our conceptual classification is applied to an animal's reaction to stimuli. Whether or not such creatures could utilize concepts, the terms 'discrimination', 'yellow', 'colour', and 'constancy' are our conceptual classification, not such creatures'.[54] The descriptive statement such as 'honeybees found and landed on the yellow paper without hesitation' could be also considered in terms of which of our conceptual classifications were applied. But these classifications might not be relevant to

[53] An animal's ability to find constant colour itself does not seem to satisfy this condition, however, our description of their behaviour seems to imply that animals can discriminate the objective property such as a constant colour 'yellow' in every situation where the concept 'yellow' can be applied. In this sense, there can be partially conceptual activity that could satisfy the recognition condition.

[54] However, Philosophers like Gaskin (2006) believes that animals have the same conceptual content of experience as we have. On his account, their experience can be transcendently constituted as having conceptual contents by our powers of designation and classification, to the effect that they can be counted as having experience with conceptual contents even though they are unable to express their empirical contents linguistically. I will not argue this in depth because the confirmation of the existence of perceptual content must allow accessibility by its perceiver in this thesis. In this sense, perceptual representational content confirmed by others' description cannot be perceptual content for evaluating conceptual character of experience in this thesis.

the creatures because we cannot share their representational contents only depending on the functional perspective. Where we can have agreement with them is not in content, but in our observation or description of their behaviour in relation to the world.

Now we can consider a mechanical device that explains an animal's reaction to stimuli more reasonably. Suppose that there is a programmed device that utters 'Be careful, this is hot' when it is placed by a very hot object (approximately over 60°C). This device does not form any inferential beliefs derived from the programmed order 60°C. It only activates according to the programmed order; it cannot violate the programme by itself. Yet we can explain and prove how this device can find a hot object and discriminate it from other temperature objects. However, the problem is that we may not prove that this device can have experience of 'hot' based on its mechanical features.[55] It seems quite obvious that being able to discriminate or to perceive a particular property does not directly entail having a content of such perception or discrimination, viz. an enabling condition for perception does not define the content of that perception. Explanations of the non-conceptual creatures' perception drawn by non-conceptualists and the experimenter are no different from explanations of the device's inner workings using our conceptual classifications.

If we concede that they have some discrimination ability, or if our conceptual description of their behaviour is accepted as the correct explanation of their perceptual state, then aren't they able to use concepts for grasping coloured objects? Or can we prove that they are genuinely experiencing?

[55] Of course, this device could even discount ambient temperature in order to 'discriminate' a constant temperature rather than showing the apparent temperature. Hence it could be thought that perception of constancy is not affected by a subject's conceptual capacities. However, the question that I want to consider here is whether this device, or the honeybees, or even ourselves, could have contents of the constancy as a content of experience even if it could be perceived without any conceptual engagement. I discuss this issue in more depth, alongside perceptual variation, in the next chapter.

Our conceptual description of their behaviour seems to lead us to believe that we consider them as if they have contents of experience about a particular property such as a constant colour, or as if they undertake conceptual activity, such as discrimination. Unfortunately, in the case of animals, we can only confirm a physical reaction to objects; we do not see what is *really* represented in their perceptual states. At this time, the only perspective we can take seriously toward animals' behaviour is a 'sideways-on-view' (McDowell 1994a: 166-170) to which our conceptual classification applies. Hence, we are not able to confirm what is really represented in animals' perceptual states because we cannot share a description of their experience (using the expository perspective) through reflection. Moreover, there is also the problem of whether animals have the same inferential skills as us, even if we can suppose that they are able to express the contents of their perception in a similar manner to the device described.

In this respect, it might appear that it is not reasonable to argue that animals have perceptual experience on the basis of observation of their physical reactions to the world.

II-5. Why Does it have to be Non-Conceptual?

Until this point, this chapter has examined the non-conceptual arguments focusing on perceptual contents that do not allow any conscious access by the perceiver, i.e., perception excluded by the expository perspective. These can be objections to Type-1 conceptual capacity (the capacity of spontaneity) and Type-3 conceptual capacity (the capacity to categorise the object of perception).

In particular, I indicated that there are three problems involved in the appeal to empirical studies of conceptually unsophisticated creatures such as animals and human infants: (1) the causal relationship between such creatures' behaviour and the constant colour, (2) misinterpretation of intentional causation, and (3) the use of ambiguous definition of recognition. I argue that the empirical studies involving these problems are inconclusive for supporting non-conceptual contents because we are not able to conclude that the existence of perceptual representational content in conceptually unsophisticated creatures on the basis of the empirical studies. The empirical studies of animals take the

range of experience too widely to justify us in concluding the presence of perceptual representational content.

I also briefly examined three types of non-conceptual arguments comparing non-cognitive creatures' experience for demonstrating the non-conceptual character of experience: objectivity (Peacocke 1998), practical reason without inferential thoughts (Hurley 1998 and 2003), and information-processing in subpersonal states (Bermùdez 1998). As well as the empirical studies, these arguments are tied in closely UPC and SV type non-conceptual contents. Eventually these arguments will challenge Type-1 and Type-3 conceptual capacities. Through examining these, I indicated the crucial problem with these arguments, specifically that this perspective on a non-cognitive creature's experience seems to be based on the same tendency that the experimenters have in section II-2, and, moreover, that this raises a serious tension within the non-conceptualist account. We have seen that the tension arises because non-conceptualists treat such creatures as totally non-conceptual beings, but they describe their physical reaction to external stimuli *as if* they had experience by using human adults' conceptual classification.

To conclude, I have explained why we have to reject the view that the existence of perceptual content can be fully explained through empirical research or an observation of the relationship between animals' behaviour and target objects. This is because the notion of experience that this thesis employs does not only refer to a simple mental state; rather, it is "the class of mental state or events" (Flanagan 1992: 200) that compose experience. In this respect, the difficulty lies in explaining how 'experience' could refer to only one particular stage of experience. We should consider both perspectives on experience for evaluating the conceptual character of experience because we are sometimes unable to confirm the existence of perceptual content by considering only the functional perspective. And most of the non-conceptual approaches that this chapter examined hold that a content of perception can be non-conceptual because an enabling condition for perception seems not to be engaged with any type of conceptual capacities by subjects, e.g., the digital camera.

In connection with the next chapter, the point we need to take from this discussion is the non-conceptualist's argument that we do not need a particular concept or conceptual and inferential capacity to have perceptual experience, so the content of our perceptual experience can be non-conceptual. This claim might be underpinned by the fact that an enabling condition for perception is passive. In fact, to be a perceiver, there must be an object: for example, a yellow dandelion, there must be light that can reflect the surface of the flower, and we have to possess a certain visual system that is able to react to the reflectance. But these enabling conditions of colour perception are not sufficient conditions for colour experience. Of course, I have agreed that perception sometimes occurs passively, i.e., experience as considered from the functional perspective. However, is the content of perceptual experience composed passively? That is to say, why isn't the information obtained by stimuli processed actively in the mind? Why are we passive in our own thoughts? In addition, non-conceptualists do not explain why the conceptual engagement in the information would be excluded from the visual experience process.

In the next chapter, I discuss in more depth how the content of our experience is not a simple physical reaction to external stimuli that we see in animals; it is a conceptualized content that is engaged with conceptual capacities. As a result, all the perceptual content in experience can possibly be engaged with conceptual capacities—particularly Type-3 conceptual capacity that categorises the object of perception. So it must be able to be grasped by concepts that the subject possesses. That is to say, there could be non-conceptual content if we only take the functional perspective on experience, but we can see how the content in the process of experience can be engaged with conceptual capacities if we consider the expository perspective. Using the example of perceptual variation, particularly in colour, in the next chapter I will claim that we have clear conceptual contents of perceptual experience.

Chapter III. Colour Variation and Conceptual Content

Is the Content of Colour Experience Entirely Defined by its Physical Properties?

In connection with the previous chapter, the aim of this chapter is to focus on the *expository perspective* on experience in order to evaluate the conceptual character of experience even though its functional perspective is not engaged with any type of conceptual capacity at all. While chapter II considered perceptual contents that are not consciously accessible (i.e. A-Consciousness and the exclusion of the expository perspective on experience), this chapter focuses on cases where subjects can have different contents of experience in the expository perspective even though they share the same perceptual contents when taking the functional perspective, for instance, when they share the same enabling condition of perception. That is to say, subjects could have different perceptual contents even if the subjects having the systemically same vision that are exposed to the same stimuli. As such, this chapter emphasizes Type-3 conceptual capacity (the capacity to categorise the objects of perception) in colour experience that perceived contents are graspable by concepts that the perceiver possesses. This chapter proceeds as follows. Section III-1 focuses on colour physicalism, which has held a dominant position in explaining the colours of objects. According to this view, colour itself is a property of objects and has the phenomenal character of making objects appear to perceivers as they are. In explaining such features of colours, some neuro-physiological analysis of visual organs and scientific analysis of light seem to give persuasive explanations that support colour physicalism. Some philosophers (in particular Byrne and Hilbert 1997 and Tye 1995, 2000, and 2004), believe that the content of colour experience is necessarily related to the physical property of colour; they claim that "colours are type of surface spectral reflectance (SSR) and colour content

and colour phenomenology necessarily go together" (Byrne and Hilbert 1997: 264).[56] I critically examine how this view supports the idea of non-conceptualism.

In section III-2, I raise the problem of colour variation in order to bring up two implications involved in the non-conceptualist's use of colour physicalism: First, that colours are mind-independent properties of material objects; and second, that the physical property of colour is directly engaged in constituting the content of colour experience. Through exploring the example of variation, we may also see that there must be the two perspectives (the functional and the expository) on colour experience. I argue that the physicalist seems to ignore the importance of the expository perspective in constituting the content of experience.

Section III-3 discusses two things. First, I consider the non-conceptualist's two responses to the colour variation problem. One simple solution uses the analogy of a similar case involving mechanical devices, the other appeals to the normality of perceivers. Through examining these, I explore why non-conceptualists adopt the physicalist account of colour perception in developing their view. Second, I critically examine these responses, alongside two objections and one consideration. I argue that the analogy leads us to take an equivocal position on matters of contents of experience. The question 'what kind of content do perceivers have in their visual experience?' is not fundamentally about simple, sensuous, and automatic reactions to external stimuli like that displayed by the devices (as we saw in Chapter II) used in the analogy; rather it is about how it is accessed in a subject's perceptual experience. This is more closely related to the expository perspective on experience than the functional perspective because being able to explain the content of perception (either it is physical or description) means being able to access the content conceptually, even if it is true that colour perception could occur without any conceptual capacity because our contents of

[56] Like the non-conceptualism examined in the previous chapter, these philosophers have the same tendency to think that an enabling condition of perception could define a content of experience, but this allows the possibility of a subject's conscious access, e.g., A-consciousness.

experience do not represent numerical analysis that is offered by perceptual data processing. That is to say, we do not recite calculation results of perceptual mechanisms when having an experience. As such, the colour variation case clearly shows Type-3 conceptual capacity (the capacity to categorise the objects of perception). In addition, in the case of colour variation, it could be thought that one of two normal perceivers' colour experience is just an optical illusion if it does not correspond to the other normal perceiver's contents of experience. However, there is no clear criterion for discriminating illusion from genuine experience in the case of colour variation.

In the concluding section III-4, I emphasize the point derived from section III-3 that we do not experience physically fixed colours: rather colours that we experience are dependent on possession of concepts and also upon the circumstances in which they occur. I then claim that the contents of colour experience are not responses of visual neurons to the physical properties of colours as we concluded in the second chapter; rather, they are an application of concepts to stimuli and objects because we may conceptually access colour content with concepts when taking the expository perspective on experience. This is the difference from the cases considered in the second chapter, in which that we could only take the functional perspective of experience. Hence, although there can be non-conceptual processes at the occurrence of perception because the physical features of vision (an enabling condition of visual perception) that leads a subject to be in a visual state, the subject is able to nevertheless access the content of perception conceptually, in line with Type-3 conceptual capacity (the capacity to categorise the objects of perception).

As a result, what we can perceive can be proven by scientific and neurophysiological analysis; but on the other hand, how we understand a content of perception is defined by our description of that perception.

III-1. SSRs and Colour Perception

There is evidence to suggest that the surface spectral reflectance (SSRs) of objects concretely defines their colours – this view is called 'reflectance physicalism'. According to reflectance physicalism (Byrne and Hilbert 1997 and 2004), the reflectance

of a certain object is independent of any colour signal that is affected by different lighting, and our visual systems which perceive constant colours are designed to detect this reflectance (Tye 2000). This type of physicalism seems very attractive to philosophers and psychologists because the prevalent view of colours – that colours belongs to objects – is underpinned by scientific theory.

One of the strengths of reflectance physicalism is that it explains colour constancy very well. For example, the faces of a white box may have two or more different colours under some light (that is, its own colour and apparent colours); nevertheless, we perceive the object as having one colour (white). This colour constancy is not explained by wavelength and amount of light, but can be explained by surface spectral reflectance (SSR), which is an illumination-independent property.[57] If we check the SSR of the faces of the box, we can easily find out what colour the box really is. The reason why we perceive it as white is because it reflects a certain amount of light, and our visual systems are designed to detect such reflectance.[58]

III-1.1. SSRs and Perceptual Content

According to reflectance physicalism, the phenomenal character of colour experience is necessarily correlated with the physical properties of an object (Byrne and Hilbert 1997). If this is so, perception of constant colour is entirely determined by SSRs and the mechanism of vision; hence, a perceptual state representing constant colour is of a different type from belief content because the representational contents involved in

[57] All objects reflect light. However, the amount of reflected light or the reflected wavelength is not the colour of the object. "The surface spectral reflectance (SSR) of an object is given by specifying, at each wavelength in the visible spectrum, the percentage of light the object reflects at that wavelength" (Byrne and Hilbert 1997: 265). The SSR of an object does not change even if the object is taken from indoor illumination to a sunny outdoor place.

[58] According to Bradley and Tye, "the colours we see are tailored to the colour detection system evolution has given us" (2001: 481).

perception are constituted by information generated by enabling conditions that are determined by the properties of the object rather than a subject's mental processes. In addition, Byrne and Hilbert insist that "…the colour content and colour phenomenology of visual experience cannot come apart" (1997: 267). Tye (1995) also considers the phenomenal character of colour rather than its epistemic aspect, but he claims that phenomenal character is not neurophysiological, biochemical, or physical, rather it is in the representations: he says, "[…] phenomenal character is identical with representational content that is poised, abstract, non-conceptual and intentional" (Tye 2000 cited in Macpherson 2003: 619).[59]

This perspective shares the scientist's and experimenter's idea that the phenomenal character of an object which makes a subject to be in a perceptual state could be determined by certain of its properties. As we have seen in section I-2, contents of experience, constituted without any conscious access may be considered non-conceptual because subjects are not dependent upon their mind in order to have representational content of an object (e.g., a red apple) – this is the non-conceptual character of perception. Therefore, if colour perception is dependent on a physical property and the

[59] Of course, Tye (1995) changed his mind about the physicalist thesis that our feelings are in the brain at all. He now defends the representational view of experience that phenomenal consciousness is not in the neurons, but belongs to the representations. Nevertheless, he claims that contents of experiential states do not entail Fregean senses, e.g., modes of presentation, which has been traditionally considered as conceptual content. Also he insists that we are capable of many more feelings about colours than concepts that we possess, hence content of those states can be non-conceptual. Tye's perspective on phenomenal character seems to share the same idea with Block's (1995) P-conscious experience and Evans' (1982) fine-grainedness argument. Yet, I do not discuss how Tye could deal with reflectance physicalism for arguing his notion of non-conceptual content. Rather, what this chapter focuses on is Tye's argument is that it seems to ignore the expository perspective on experience. While phenomenal states are non-conceptual, there is still the possibility of A-consciousness in experience. Hence, there is no need to exclude this possibility in experience.

visual mechanism (enabling condition), the content in the perceptual state can be considered as non-conceptual. This may be an objection to Type-1 conceptual capacity (the capacity of spontaneity).

In this respect, physicalism shares basic ideas with non-conceptualism (the UPC and SV versions in particular) including the non-conceptualists that I examined in chapter II, and it could also provide strong evidence to support them. Of course, there could be a methodological difference between explaining the mechanism of colour perception and explaining the contents of colour perception. However, as I pointed out at the beginning of this thesis, having colour experience or being in a perceptual state means having a particular content of that experience or state. Hence, if a subject has a perceptual content about a particular object, which is correlated with its physical (or phenomenal) character, then we may infer that she represents the physical property correctly, i.e., its physical property is directly reflected in the content of her perceptual state. And if the property is totally disengaged with any type of conceptual capacity, then she may have non-conceptual content of an object.

III-1.2. Two Implications of Reflectance Physicalism

There are two implications of this view: First, that colours are mind-independent properties of material objects which are not influenced by the conceptual engagement when having an experience of colours; and second, that the physical property of colour is directly engaged in constituting perceptual content. If these claims are right, then physicalism could support non-conceptualism of the UPC (Unconscious Perceptual Content) or SV (State View) type. This is so because we could then find non-conceptual content when not considering the expository perspective on experience.

As well as relying upon a conceptually unsophisticated creature's perception of constant colour in chapter II, it seems to me that the non-conceptualists who strongly depend on the reflectance physicalism also have the same tendency to think that an enabling condition for perception could define perceptual content and that a content of experience could be substituted for any stage of perceptual experience.

As I mentioned in chapter I, conceptual content is typically meant to be the content of thoughts or beliefs, and so, it is mind-dependent. However, if colours are mind-independent properties of an object and could be directly reflected as constituting a subject's perceptual content (i.e., there is no conscious subjective or 'conceptual' engagement I call 'the conceptual engagement', in the occurrence of colour perception) then she could be in a perceptual state that has non-conceptual content.

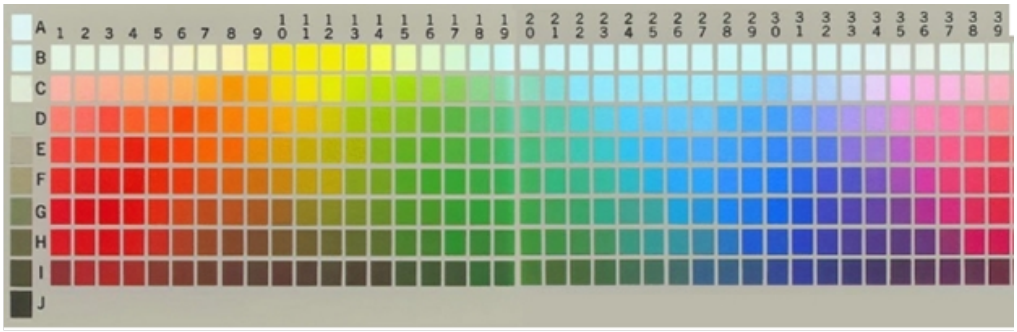
Colour physicalists (e.g., Byrne and Hilbert) and the non-conceptualist (in particular Tye) argue that colours exist mind-independently, colour and colour phenomenology cannot come apart, and that phenomenal character is identical with the representational content of experience. Now, I would like to raise a question for this perspective on colour and experience: namely, why does having a perceptual content that corresponds to its physical properties imply the existence of non-conceptual *content* in experience? Again, if a subject has a particular content that is not directly reflected in its physical characteristics, then the content could be considered to have been engaged with her conceptual capacities; so, it might be conceptual. Whereas if the subject has a perceptual content obtained by mind-independent properties of the object, then why does this have to be necessarily non-conceptual? In other words, why does the non-conceptual character of perception define whether or not perceptual content is conceptual? In this sense, it is important to critically examine this type of perspective because there is no reason to exclude the conceptual engagement of experience unless it can satisfy both perspectives of the non-conceptual character of experience. That is to say, the fact that perception could occur without conceptual engagement does not imply that the subject of perception may not be conceptually engaged with that perception.

In the next section, I give an example of colour variation as a counterexample to the physical explanation of colour experience, and consider whether physicalism is suitable for confirming non-conceptual *content* in colour experience.

III-2. Colour Variation

The aim of this chapter is not to argue that physicalism is the wrong perspective on the content of experience: in fact, it could clearly give an objective explanation of the

mechanism of colour perception and lead us to confirm that the colours we perceive exist mind-independently. Nevertheless, the problem that I want to elucidate here is that there are some aspects of colour experience that may not be explained sufficiently by physicalism. I will highlight this by considering cases of perceptual variation where neither party is perceiving even though people have the same phenomenal features of an object, but their perceptual contents of that object are different. Perceptual variation is a phenomenon whereby perceivers have different experiences, for instance colour experiences of the surface of an object, even though they are in the same circumstance, or a subject having two different colour experiences of the same surface of an object. The most typical example of this can be found in the 'Munsell Colour Chart'.



<Chart 1> Munsell Colour Chart

Not only can we see how normal people can discriminate a particular colour (for example, yellowish) from others (reddish, greenish, bluish, etc.), we also find that they are able to discriminate delicate differences in the range of yellow (dark yellow, light yellow, etc.) through this chart. For example, when subjects are asked to select a *pure* yellow colour (one that is not mixed with any other colours), their selections are hugely different. Human beings have a common visual mechanism that includes cone cells, the retina, and so on; but although we have the same cone cells, there is an inappreciable difference in the amount of photopigment in an individual's visual system. This might explain the individual's different perceptions of the same colour on a physical level.

III-2.1. Two Problems of Colour Phyicalism Concerning Colour Variation Cases

However, one problem in the above case is whether the physical property and the neuro-biological property of vision are properties of enabling conditions for perception. As well as the result of the empirical studies in chapter II, what we can know from the physicalists' account is that there exists a causal relationship between SSRs and our vision. So, if conditions – e.g., '18% of SSR' and 'normal condition of vision' – are set for the perception of the colour red, then we are able to be in a perceptual state of red. In fact, we are able to detect a certain property of an object, (e.g., 18% of SSR), however, this fact does not give us an answer as to why we could interpret such reflectance '18%' as 'scarlet red' in experience. That is to say, it is doubtful that the way that it explains an enabling condition for colour perception is suitable for explaining content of colour experience.

Another problem comes up here. It still remains a problem even if the reason for the variation can be explained by a neuro-biological condition. That is, we commonly name a certain colour of an object 'red' even though there is an individual difference in the red we see. If we suppose that an experience of the colour 'red' is altered by the amount of photopigment in a subject's visual system, and if naming a certain colour is just conventional, then the colour terms that we use are undiscriminating. In other words, there is a clear individual difference in experiences of red that we can comprehend physically, but we call every experience of red 'red' according to convention. If this is right, then perceived colours might not exist ontologically (Hardin 1993).

III-2.2. Two Perspectives on Colour Variation Case

The reason for the above worries is probably caused by the two perspectives on experience. Indeed, the colours that we perceive are limited to an enabling condition such as SSRs and our vision – physcialism is right in this case. However, colours that we understand or grasp can be richer or poorer than colour information provided by an

enabling condition. In other words, there is a possibility that the content of the functional perspective is different from that of the expository perspective.[60]

Hardin (2003) draws on this issue. He claims that most physicalists are caught between the incompatible demands of common-sense realism. He explains:

> "One is that colours should be features of the surface of objects that are independent of human perception. SSR satisfies this demand. The other one is that colours are normally what we experience them to be. This requirement is not met by SSR. In particular, the phenomenology of colour, including relations that colours bear to each other, is not well modelled by features and relationships among SSR." (2003: 201)

The colour variation problem is taken as a case in point because subjects do not always have the same representational contents that correspond to SSR or the chips in the Munsell chart on every occasion. For example,[61] when two normal perceivers see a chip C (e.g., H/20 in the Munsell chart) under identical viewing conditions (without looking at other different hues at all, e.g., bluish or yellowish), it looks uniquely green to one of them but, to another, it looks bluish green. Of course, the way both perceivers represent C can be psychophysically distinguishable from each other (in terms of whether it is represented as a unique hue).

---

[60] This is closely related to the problem of the range of perceptual content discussed in chapter II.

[61] Cohen (2006: 309-310) gives three types of colour variation examples: (a) variation between subjects of different species, (b) interpersonal variation between subjects of our own species, and (c) intrapersonal variation in a single human visual system. He uses these examples for defending 'colour relationalism' against colour physicalism. This chapter does not consider the relationalist's account of colour, but only considers second and third types for challenging colour physicalism. More details see: Cohen (2006: 307-319).

Also, there is another case in which a single perceiver can represent the same chip C differently according to its viewing conditions.[62] The chip looks uniquely green to the perceiver when it is placed against a particular background, but does not look the same colour to the same perceiver when it is placed against another background. The way that the perceiver represents the colour of C in the first viewing condition is psychophysically distinguishable from another viewing condition. From these results, Cohen argues the following:

> "There is a range of representational variants of a single stimulus C. If colour physicalism is true, then at most one of these variant representations veridically represents C's colour. But [...] it is extremely hard to imagine what could (metaphysically) make it the case that one of the representational variants is veridical at the expense of the other. Any choice seems objectionably ad hoc." (2006: 310)

Although the functional perspective on experience could satisfy the demand of the physicalist, the expository perspective is not always correlated with the functional perspective.[63] Hence, perceived colours could involve a perceiver's interpretation of the information transmitted from perceptual mechanisms using concepts. More clearly, we can freely represent colours at the occurrence of perception without any engagement including a subject's conceptual access and the relational property—properties "constituted in terms of a relation between colours and subjects" (Cohen 2006: 307).

---

[62] Cohen gives few examples of this effect. See: http://aardvark.ucsd.edu/~joncohen/color/ albers_examples.html.

[63] However, Cohen (2006) does not emphasize any expository perspective on colour variation at all. He just focuses on what is involved in such representational variation on the relationalists' perspective of colour perception. What he argues is that perceptual representation is not only dependent on the physical property, but is dependent on the circumstances to which the subject and the colour belong. I argue that this circumstance-dependent representation eventually shows the importance of the expository perspective in chapters IV to V.

However the problem in the variation is that our interpretation or understanding about the perceived colour (representation of the colour) sometimes is not correlated with its physical property. In short, the content of the functional perspective could be different from the expository perspective even though both share the same phenomenal property of the object. The colour variation problem clearly shows not only the problem of the range of perceptual content and experience hidden in the arguments for non-conceptual content raised by this thesis but also why we need to consider the two perspectives on experience in order to evaluate the conceptual character of experience.

However, the problem of colour variation is not irresolvable from the physicalist's stand point. Philosophers who take a physicalist perspective on colour perception provide two possible responses to this difficult issue. One solution appeals to the normality of colour perception. Philosophers who take the physicalist perspective postulate a normal condition and a standard perceiver to support reflectance physicalism (Millikan 1984; Block 1999; Rumelin 2006). Another solution uses an analogy of a similar case that is simply solved in a physical way. There are several analogies of this approach such as speedometers, thermometers, and etc. Among these, I particularly focus on the example of thermometers as an analogy to colour variation, as suggested by Byrne and Hilbert (2004). In the next section, I critically examine these possibilities.

III-3. The Physicalist's' Two Responses to Colour Variation

In this section, I develop Hardin's argument by using the example of colour variation, and then critically examine the two non-conceptualist solutions to such variations. I then criticize this type of non-conceptualism by indicating two crucial errors involved in this view. The purpose of this section is to investigate the basic non-conceptualist view of the content of experience which is strongly dependent upon the physical property of colours. It seems that this type of non-conceptualist view has a similar form to those like that of Peacocke, Bermúdez and Hurley, as seen in the previous chapter.

III-3.1. Appealing to Normality

Not only are the individual differences observed in colour experience a problem for reflectance physicalism, there is also another problem that arises in attempting to explain the nature of colour. Suppose that subjects K and S are standard perceivers.[64] When these subjects see a ripe grapefruit, both are able to discriminate it as the yellow that is applicable to D/10 in the Munsell Chart (See: chart 1). But suppose K and S are asked what shade the yellow is. Perhaps K answers that it is reddish yellow, while S answers that it is pure yellow.[65] In this case, we can draw the following conclusions:

(1) K and S perceive the same surface of the object differently.
(2) The surface of an object does not have two different shades simultaneously.
(3) We cannot name either K or S as a privilege perceiver because both are standard perceivers.

Physicalists, or any other type of philosopher, might not deny the above propositions. But the problem is that these propositions cannot all be true. (2) suggests that one of the perceivers has an incorrect experience of the surface. If so, (3) is also controversial. Of course, these problems are not unanswerable.

The solution could be that: (a) both K and S represent the colour of the surface correctly *or* (b) one of them represents it correctly, but the other does not *or* (c) both are wrong (Hardin 1999). Which of these answers is correct? The important point is that both perceive different shades of the object, even though they roughly perceive it to be in the category 'yellow'. Hence, the object that corresponds to both experiences may not be

[64] The term 'standard perceivers' is used in a statistical sense. A standard perceiver is, in normal cases, distinguished from the minority group who have opposed colour vision. For more detail, see e.g. Millikan (1984), Block (1999), and Rumelin (2006).

[65] Of course, there is another thing to think about: S's ability to detect the shadow as pure yellow could imply that S could detect it as pure yellow due to the fact that he possesses the concept of pure yellow. Hence, the ability to detect pure yellow could be concept-dependent perception rather than physical property-dependent. I discuss this issue more detail alongside the definition of pure hues in section III-3.2.

explained by its physical properties. It is not clear, though, that physicalism may solve this problem adequately. Let us consider the case for (a) again. Perhaps we can say that the fruit looks reddish yellow to K in a certain circumstance, but it looks pure yellow to S in another circumstance. Nevertheless, the problem remains that the surface of the object does not have two different shades simultaneously unless *shade* (defined operationally by pure hue judgements) is relative to a perceiver.

Let us consider (b). This solution implies that either K or S perceives the colour of the fruit correctly. However, here we need to set the further condition that one of them must be a *standard* perceiver, even though both are normal perceivers. We would also need to determine the criteria for the classification of a standard perceiver. This might be determined by looking at a large number of people. However, the criterion for a 'normal' perceiver does not seem to be so easily obtained. How can we pick out one normal perceiver from a great many people? In addition, what is the normal condition for the colour 'yellow'? The criterion of the normal perceptual condition is too wide to reflect fine-grained shades of yellow. Further, if the normal criterion is defined too widely, then it would be hard to determine a normal standard that could define a certain colour. Yet, if it is defined too narrowly, we encounter a situation whereby most people may not have a standard of normal perceptual condition. The idea of a normal condition seems arbitrary.[66]

As such, the conditions for a 'normal perceiver' face the same problem. It is hard to say that both perceivers have correct experiences of the surface colour of an object; hence we should say that one of them might be wrong. It is surely arbitrary to claim that one of them is a privileged perceiver.[67] Of course, the selection of one perceiver as 'normal' is

[66] There may be non-arbitrary conditions like 'natural daylight' (Allen 2010). However, there is one point that claims our attention: such natural daylight can only be expressed in physical terms such as 'cd', 'lm', or 'lux'. Although such daylights exist, the problem of whether we can detect such light epistemologically still remains. Also, the amount of natural daylight is variable according to changes in temperature or magnetic field.

[67] If both perceivers are different in age, gender, or race, and if this can be criterion of a

not simply random, because it appeals to the majority, but it falls prey to the accusation of being simply arbitrary; it is difficult to maintain that the criterion involves a conventional standard. Yet what concerns us is not the problem of finding a normal standard for a general definition of a colour. Rather, the point is that colour perception may not be explained by SSR if there is no general standard by which we can judge which colour experience is correct. However, physicalists believe that colours are not properties perceived by standard perceivers. They appeal to a kind of normality that is independent of perceivers; so, they claim that normal observers—who are naturally selected by evolution and have a normal perceptual system—are able to detect *real* colours correctly in normal conditions. The capitalized 'Normal' is distinct from the word 'normal'. The notion of Normality was developed by Millikan (1984). Normality is a state that is designed by natural selection and is used for explaining whether such a system is successful. Physicalists utilize a concept of 'Normality' to express this idea rather than 'normality' because it would seem arbitrary to identify normal environments and normal perceivers. But it might not be arbitrary to accept an assumption that there is a privileged class of normal perceivers in the history of evolution in colour perception. Tye says the following:

> "Today, those among us who have a Normal colour detection system and who use it in a Normal environment track the colours accurately. To know who such people are, we would need to know much, much more about the evolution of colour vision than we know today (Byrne and Tye 2006). Perhaps we will never know the relevant facts. Still, there is a fact of the matter as to who counts as Normal by Mother Nature's lights. So, even though it would indeed be arbitrary for us now to pick out certain humans and say that they get the fine-grained colours right, still there is a clear-cut privileged class of Normal perceivers and no deep problem posed by true blue." (2006: 175)

---

standard perceiver, we might manifest types of discrimination such as ageism, sexism, and racism (Block 1999). Hardin also claims that "if this question is to be answered at all, it can be answered only by convention" (1988: 80).

From this perspective, Tye suggests one possibility, namely that the individual differences of colour experience could be manifest on two different levels. One of these is a broad colour (coarse-grained) level, like 'red', and the other is a narrow shade (fine-grained) level, like 'scarlet red' (Block 1999: 46; Tye 2006).

III-3.1.a. Two Levels of Colour Experience

Physicalism explains the broad level by the ontological property of SSR and the narrow level using epistemological properties. This discrimination, used for explaining colour experience, might solve the problems of (1) the individual-difference of colour experience and (2) the fact that an object seems to have two different colours simultaneously. The reason why our (with the exception of 'Normal' perceivers) perceptual system is reliable on the broad level, but less reliable on the narrow level, is that the "visual system is not evolutionarily designed to detect such fine-grained level of shade reliably" (Tye 2006: 177). For example, in the evolutionary approach, colour constancy is thought to have fulfilled its role in the faculty of sight both historically and successfully. Constant colour belongs to the coarse-grained level, like 'yellow', and not the fine-grained level, e.g., 'reddish yellow'. The colour 'yellow' *looks* slightly different on the fine-grained level because the wavelength of 'reddish yellow' has a different wavelength from 'greenish yellow' according to available light, whereas the constant colour 'yellow' can be sufficiently explained by SSR even though its apparent colour can be changed by illumination.

III-3.1.b. The Limitations of the Normal Visual System

Tye's suggestion still seems to be insufficient for explaining why two normal perceivers like K and S have two different experiences of the same surface of yellow in normal viewing conditions. Both K and S represent the surface as yellow, but they represent it differently at the fine-grained level. And because of the fact, as Tye said, that our normal visual system is not designed to detect such fine-grained colours reliably, we may not say whether K or S represents it correctly, even though we know all the facts about the evolution of vision.

In the next section, I critically examine this assumption along with the analogy, and then consider whether it successfully explains individual differences in perceiving colours.

III-3.2. The Analogy

Byrne and Hilbert (2004) use an analogy to solve this problem. They found a similar case in the representation of a thermometer. Let us examine the following table:

	t1	t2	t3
Thermometer A	25	25	25
Thermometer B	24.8	25.0	25.2

<Table 1> Thermometers

Suppose that thermometer B can measure below the decimal point, but A cannot. As time goes on, B shows a very subtle difference from *t*1 to *t*3. Strictly speaking, these two thermometers calibrate different temperatures, but even so, we do not say that A shows an inaccurate measurement; it is just that B can discriminate the temperature more precisely than A. Hence, these two thermometers are not contradicting one another. In this way, individual differences in colour perception at the fine-grained level are not in question because they are just individual differences in colour *sensitivity*. Hence, their colour experiences are also compatible, like the thermometers. The difference between K's and S's experience of colour can also be explained using the following table:

	D10/ t1	D11/ t2	D12/ t3
S	Pure Yellow	Pure Yellow	Pure Yellow
K	Reddish Yellow	Pure Yellow	Bluish Yellow

<Table 2> Colour Experience of Two Perceivers K and S

In this example, how can the difference in discrimination ability of colour be explained by SSRs? The only common element in the table is that the perceivers are seeing D/11 in the Munsell Chart as falling in the range of yellow. However, K's experience of yellow embodies more fine-grained contents, while S's experience embodies only pure yellow from t1 to t3. If this is the case, they perceive the same colour, but their contents of the perception are different. However, we do not need to believe that one of them misrepresents the yellow colour. The fine-grained difference of perceptual content in the two experience's is just a difference in the range of the SSRs of the yellow that is not beyond the range of the colour yellow. That is to say, either K's perceptual content or S's perceptual content of *yellow* is not outside the range of yellow that we normally perceive even though both perceive it differently. Hence, it might also be explained as the difference in sensitivity, just like the thermometers. That is to say, both perceived yellow correctly, but K is just better at *discriminating* the colour yellow than S.

III-3.2.a. The Problem of the Analogy: No Criterion for Discriminating an Illusion from a Genuine Experience

This analogy highlights the physicalist's belief that the problem of colour variation is not an ontological but an epistemological matter. Most physicalists hold the view that colour variation shows that it is hard to impute the colour of a surface to a particular colour. It seems that a particular colour looks like a different colour according to perceivers or conditions, and is similar to the case where a straight stick looks bent in water (Tye 2000: 153–155). So it is the same colour. This is the claim that the occurrence of colour variation does not result from the physical property of *colour*. The problem occurs here. The analogy seems an inappropriate answer because it is only an optical illusion: the stick is not actually bent (Hardin 2003). The different colour experiences of the same object cannot be mistaken experiences in this way, and neither can they be corrected. In the case of the stick, we can take it out of the water and measure its angle to prove that it is 180 degrees. That is to say, there is a general, standard, and common criterion, which can prove whether or not the stick is bent. However, in the case of colour variation, there

is no sufficient reason to assume that one of two normal perceivers' colour experiences is just an optical illusion if it does not correspond to another normal perceiver's content of experience, viz. there is no criterion for discriminating an illusion from genuine experience in this case.

III-3.2.b. The Problem of the Analogy: No Criterion for Being a Pure Hue

Furthermore, there is no criterion for a being pure hue in colour experience. According to physicalism the property of being coloured is the physical property 'SSRs', which corresponds to a certain shade. In the case of K, we can find that K's perceptual content of reddish yellow has slightly changed from t1 to t3. Of course, this perception could be affected by lighting conditions or viewing position. However, K's detailed content of experience cannot be explained using the analogy. That is to say, K's and S's different colour experiences may be explained on a fine-grained level and by sensitivity to colour terms, but K's content of experience is hard to explain in physicalist terms, even though she is a standard perceiver. The notable point here is that not only could there be two different perceptual contents of a particular colour in two perceivers, but a perceiver could also have various contents of one particular property. Like the example of the stick in water, it might be easier to find out why K has various perceptual contents of yellow if there was a clear criterion that defined whether perceivers misrepresent the properties of an object.

Is there any criterion like this in colour perception? What is interesting about this type of physicalism is that there is no clear definition (e.g. a certain profile of SSR) of 'pure yellow' even though perceivers are able to perceive it (or at least, they can discriminate it from others). That is to say, we are able to perceive the colour yellow depending on SSRs and our perceptual mechanism that is not engaged with the conceptual capacities at all. However, people sometimes may not refer to the same shade of yellow in the Munsell chart when they are asked to point to pure yellow in the chart.

This clearly shows that there is a difference in the functional perspective and the expository perspective on experience. If we only take the functional perspective in the case of the colour variation, we know how people are able to be in perceptual states

about colours; but if we take the expository perspective on experience, then we find that people can have different perceptual colour content. As such, we should take both the functional perspective and the expository perspective on experience because we could know how subjects of perception could be in perceptual states about colours by taking the functional perspective on experience; and we could know what subjects have in their perceptual states by taking the expository perspective. In order to evaluate the conceptual character of experience, we should take the expository perspective primarily because we may not know what *is* in the subject's perceptual state by only taking the functional perspective on experience. The functional perspective gives us the explanation of how the subject is able to perceive colours, and not their perceptual contents. As Hardin points out, the question "what kind of content do perceivers have in their visual experience?" is fundamentally about what is *represented* in subjects' perceptual experience (2003: 201). And the confirmation of what is represented in experience is not the physical property, SSRs, rather it is dependent on the subject's description of that perception.

III-3.2.c. Representation and the Possession of Concepts

Let us reconsider the analogies of the thermometers and the cases of K and S. It is because we only confirm what the thermometer perceives by checking those digit numbers even if the thermometer could detect outside temperatures more minutely or crudely. Likewise, we may only confirm what both K and S perceive about the particular object by checking their descriptions, rather than any results offered by perceptual mechanisms and the benefit from the evolution. What we may find in the use of the analogy for the explanation of perceptual variation is that this approach seems confusing in terms of whether the sensitive perceiver K's perceptual content is affected by her possession of concepts because there could be two different interpretations of the representations of thermometers. First, both A and B only have a mechanism for *detecting* the molecular energy of heat, which is less sensitive. Second, both A and B have the very same detecting mechanism[68], but A 'rounds' the reading to the nearest

[68] This mechanism must be distinguished from the detection finding the informational

whole number before 'reporting' it, because A's representation method only uses two digits for display (perhaps it is digital and has a two-digit display), whereas B can display all the detected energies more precisely because it possesses below-decimal-point digits. In the first case, we may see that the detecting mechanisms of both A and B are not dependent on their display methods. On the other hand, in the second case, collected information from the detecting function could be represented by their display mechanisms, i.e., their different possession of digits. Hence, their representation method could also be different because of their differing possession of digits, even though both thermometers have the same detecting function.

III-3.2.d. Is the Ability to Detect Properties an Experience?

There is one interesting point that we may find in the analogy approach. That is, it is hard to believe that such a detection ability could also be a representational ability. Dennett (1991: 34) also points this out and claims that an ability to detect is not an ability to represent. For instance, a property like the molecular energy of heat can endure in the external world without the thermometer specifying it, whereas a property like 25°C is constituted by the mechanical device that can *detect*[69] it. The natural representation of a property, according to Dennett, is "its compressed description—the description encodes the property" (Dennett 1991: 32–34; Ross 2000: 191). That is to say, what we can call *representation* is a type of description-encoded property of objects; hence the detection of such molecular energy cannot be a representation because this mechanism does not need to possess any description at all in order to detect such properties. On this account, it may be considered that perceptual representation involves

---

content of objects, e.g., perceptual content (70 tree rings) and the informational contents of the rings (the tree is 70 years old). The detection ability to find the informational content could imply conceptual character of the functional perspective. For details about the detection for the informational content, see e.g. Jarvie, Milford, and Miller (2006: 160-163).

[69] 'Detect' has to be understood differently from the former. Here it could mean concept-charged perception, i.e., Type-1 conceptual capacity—the capacity of spontaneity.

a possibility of description, hence, non-describable content may not be representational content. When I quote Block's definition of two types of conscious access in chapter I, I indicated that conscious accessibility implicates reportability; hence reportable contents can be conceptual according to the Type-3 conceptual capacity that categorises the objects of perception. From this point of view, describable contents are consciously accessible. For this reason, detection could not be in the range of experience because it does not involve any representational content even though we are able to perceive colours through detection abilities, that is to say, the detection is just an enabling condition for perception, rather than a condition for constituting the content of experience.

III-4. The Possibility of Conceptual Engagement in Detection Abilities

However, the problem involved in the analogy is not that simple. The reason for considering the physicalist's account for explaining non-conceptual content is that non-conceptualists (including Peacocke, Hurley, Bermùdez, Tye, Byrne and Hilbert) are more focused on the cause of perceptual representation, rather than represented contents. As Bermùdez noted:

> "Conceptual and nonconceptual content are distinguished not by whether they are representational, but according to how they represent." (1995: 335)

On this perspective, there is still the possibility of non-conceptual content at the beginning of perception because the detection ability could induce a perceiver to be in a perceptual state about the detected content even though the detection itself does not contain any representational content at all. Here, the reason for focusing on colour variation cases is clearly shown. We are able to consciously access the representational content obtained by the detection ability even though the content is constituted non-conceptually, that is to say, even the content constituted by the detection could allow A-consciousness. This is the reason for considering the expository perspective on experience, say, the Type-3 conceptual capacity that categorises the object of perception.

We can simply apply these ideas to the example of K and S. Although both perceivers are normal and have the same detecting function for colours, their perceptual contents could be different according to their possession of concepts for colours. Not only are they able to differently interpret the given information obtained by their visual mechanisms, they could also represent the information differently according to the concepts that each possesses. In addition, it also shows that there could be conceptual engagement in the process of colour experience. Furthermore, colour variation is clearly about represented contents in two normal perceivers' perceptual states, and it shows that physical and causal properties are not transparent in a perceiver's content of experience.

In this sense, this thesis suggests that we need to consider the two perspectives on experience. The mechanism of the occurrence of perception—how we could have representational content— could be common to us all; whereas we could all have different understandings of that perception—depending on how we categorise the perceptual information obtained by the former. Experience must be considered from these two perspectives, therefore, the content of experience must allow conceptual engagement by its subject. In this respect, the description of experience is not merely in terms of simple colours or physical properties of the objects; rather it is in terms of our conceptual access 'how we can engage with perceptual information using concepts that we have'. I conclude this section by quoting Heidegger:

> "We never […] originally and really perceive a throng of sensations, e.g., tones and noises, in the appearance of things […]; rather, we hear the storm whistling in the chimney, we hear the three-engine aeroplane, we hear the Mercedes in immediate distinction from the Volkswagen. Much closer to us than any sensations are the things themselves. We hear the door slam in the house, and never hear acoustic sensations or mere sounds." (Heidegger 1977: 156; quoted in Smith 2002: 105)

III-5. The Possibility of Conceptual Engagement in Colour Variation Cases

Because of the problem that I have discussed above, what I focus on in this chapter is not the problem of properties of colours in evaluating the content of experience: instead,

it is (1) how the object is perceived and (2) how we can access the perceptual content about that object. The problem of depending on the physicalists' perspective occurs in both (1) and (2) because colour variation clearly shows the conceptual character of experience if it may not be explained appeal to physicalism. First, the important point in colour variation is that two perceivers could consciously access their perceptual contents even though the occurrence of perception is closely related to mind-independent properties of objects. This is the possibility of conceptual engagement of experience, say Type-3 conceptual capacity. As well as the cases involving non-human creatures in the previous chapter, I accept that perception could occur without any conceptual engagement, but I do not accept that its content can be accessed non-conceptually. That is to say, it allows a perceiver's access consciousness toward the obtained contents *via* her visual mechanism such as the detection ability.

Second, detecting a particular colour does not entirely imply the representation of that colour. As Dennett (1991: 32–34; See also: Ross 2001: 190–192) points out, there are two detectable types of properties: one requires that the property of the object be specifiable; whereas the other, simple detection, does not require that the property be specifiable, in order to detect the property of the object. Representation is a case of the former; the latter is not distinct from the function of the digital camera that we examined in Chapter II. What colour experience refers entirely to is represented colours caused by perception. In this sense, it seems not only that the physical approach fails to find non-conceptual content in the whole process of experience, but also that it is not applicable to represented contents of experience.

In perceiving colours, neurophysiological properties and the scientific analysis of light could give us the explanation of how we are able to have perceptual contents, but they are not sufficient to explain how we are able to engage with the content of colour experience. If our contents of colour experience are constituted by only the physical properties of objects and our visual organs, then subjects may consider these properties to compose experience epistemologically. But are subjects aware of how visual neurons respond to stimuli while they are perceiving colours?

The problem with this type of assumption is that it tries to prove that colours are identical with SSRs, and that SSRs *directly* determines the content of experience. However, perceivers may have different colour experiences of the same surface colour, even though that colour emits the same SSR, viz. perceivers do have different phenomenal and representational contents even though they have the same physical response to the same physical property of colour. In addition, if colour variation occurs in the identical condition, then there must be a certain physical stimulus which causes such differences. Physicalism must explain this. It seems to me that this perspective also focuses too much on an enabling condition for colour perception. As such, non-conceptualists who take this position also focus only on the functional perspective of experience. If the content of experience is not reflected in physical conditions, which enable that experience transparently, then why should we accept this type of non-conceptualism?

If I am right throughout the discussions in Chapters II and III, we should disassociate an enabling condition for perception from a condition for constituting the content of experience. In some senses, these look like the same mechanism because they put a subject in a perceptual state of a certain colour. But our way of approaching the two is different. While the ability to perceive (viz. an enabling condition of perception) is entirely dependent on a perceiver's perceptual mechanisms – such as sensory organs and the physical properties of objects like SSRs – the content of perception relates to how we understand or grasp the information obtained by an enabling condition. The former is functional and passive, but the latter is more active, descriptive, and expository. The latter seems to occur after a perceiver has a perception of an object, hence it is defined by the concepts that she possesses for the object and how she describes it. And what she experiences is defined by her description. The content of an experience is the outcome of the whole process of experience, and so, should not be characterized by only one of them. For this reason, we are able to evaluate the characteristic feature of perceptual content through considering these two perspectives on experience.

Most non-conceptualists that this thesis has examined so far are concerned with the functional perspective on experience; by contrast, conceptualists focus on the expository

perspective on experience. The next chapter discusses this issue more philosophically through examining the ideas of several neuro-philosophers, whose account involves two stages of perceptual experience, and does not rely solely on empirical results. However, such arguments exhibit the very same tendency as those of the experimenters, physicalists, and non-conceptualists we examined in Chapters II and III, in that they consider inaccessible stages of perception as if those stages contain the content of experience, or at least as if those stages process information obtained by vision. I claim that not only does this tendency ignore the expository perspective on experience, it also implies an 'as if attribution' to the existence of contents in mysterious states.

Chapter IV. Perceptual States and Their Contents

How Can the Contents of Perceptual States be Conceptualized?

In Chapters II and III, I examined how non-conceptualists who defend UPC (Unconscious Perceptual Content) and SV (State View) type non-conceptualism make fundamentally wrong assumptions regarding perceptual content. First, they equivocate an enabling condition for perception with a condition that constitutes the content of experience. Second they assume that there could be representational contents beyond the reach of conscious access or A-consciousness. That is to say, they depend only on the functional perspective on experience, which does not allow any type of conceptual engagement. They do not consider the expository perspective on experience according to which the subject can access the content of perception by her perceptual mechanisms. This tendency seems to fix the range of non-conceptual content at the occurrence of perception alone—that is, how a perceiver physically reacts to the object of perception rather than her higher-level understanding of it. This excludes any possibility of the expository perspective, that is to say, the existence of representational content and what the subject *really* experiences could be confirmed by taking the expository perspective on experience. I have suggested that we need to consider both the functional perspective and the expository perspective in evaluating the conceptual or the non-conceptual character of experience because what we call experience does not belong to only a particular stage or process. Therefore, the content of experience should be the product of the all the processes involved in producing it.

The purpose of this chapter is to explain why a perceiver's description or interpretation of a perceived object has to be a content of experience rather than a purely physical analysis of perceptual mechanisms. The main reason for this is that the possibility of perception of an object could be confirmed or predicted using scientific analysis, while a content of experience could only be confirmed by a perceiver's description about their perceptual state.

Recently, the above perspective on experience seems to be explained in terms of two different levels suggested by psychologists and philosophers, e.g. Marr (1982), Block

(1995), Pylyshyn (1999), Lamme (2003 and 2004), Raftopoulos and Müller (2006), and Raftopoulos (2009). But they also have the same tendency as non-conceptualists to consider perceptual content in unconscious states (e.g. UPC and SV types), and divide perceptual experience into two different stages in order to prove the non-conceptual character of experience. The first stage, which they call the 'early visual system', could be defined by taking the functional perspective on experience (here they include unconscious states such as subpersonal states; hence it is a slightly more inclusive notion than P-conscious experience and mine). The second stage, which they call 'late vision', is similar to what Block (1995) calls A-conscious 'experience'.[70]

According to them (especially Raftopoulos and Müller 2006), if a perceptual state or an experience has contents that are provided by a subject's visual system, which cannot be cognitively penetrated, then that state or experience has non-conceptual content. But if a content of a state or an experience is provided by the system, which is cognitively penetrated, then that state or experience has conceptual content. So *cognitive penetration* could be one criterion for determining to which of these two stages a given perceptual experience belongs and, in turn, for determining whether a given content of a perceptual experience is conceptual or non-conceptual.

[70] Dretske also offers a similar distinction. He thinks that 'simple seeing' is different from 'conscious experience'. Simple seeing is "distinct from, but nonetheless fundamental to, an organism's higher-level cognitive and conceptual activities" (2000: 98). Conscious experience, as it stands, occurs when a subject is conscious of an object (which could be a particular character of an object rather than the object itself), i.e., being in a conscious state of some sort and "it isn't the objects you're aware of, the objects you see, and therefore qualia you experience […]; it is the facts you're aware of, what you know about what you see" (2000: 188–189). This distinction will be very useful when discussing the existence of representation contents of the early visual stage (in this chapter) and the two perspectives on the fine-grained arguments (in the next chapter).

As a result, these philosophers allow a Type-3 conceptual capacity that categorises the object of perception, but focus on the non-conceptual character at the occurrence of perception; hence these neurophilosophers idea of non-conceptual content may be an objection to Type-1 conceptual capacity (the capacity of spontaneity) because there is perception without cognitive penetration, or as I would say, perception without the conceptual engagement. Only perceptual content in cognitively impenetrable states is considered non-conceptual content by these philosophers.

This chapter explores non-conceptual content as defined by neuroscientists and philosophers that belongs to only non-conscious states which our conceptual capacities could not engage with, and then discusses how we could define perceptual contents in such states without depending on the expository perspective on experience.

This discussion will proceed as follows: As the starting point of the discussion, the section IV-1 will reiterate the reason why we need to consider the two perspectives on experience. This will help us to define the range of contents of experience in this chapter. The second section raises an initial problem for conceptualists: they seem to overemphasize the expository perspective; as such the possibility of the existence of P-conscious contents in A-conscious experience is excluded. This shows not only that conceptualists have a different perspective on experience from the non-conceptualists but also that this perspective becomes the latest target of the non-conceptualist. This is the biggest issue that this thesis responds to.

In contrast with the second section, the third explores the neurophilosopher's perspective on the range of experience – non-conceptual content in the early visual system in particular. Through examining this, I note two things: (1) there could be conceptual engagement in the whole process of experience, and, (2) the assumption, that there must be perceptual contents in the early visual system that can be correlated with the content of late vision. However, the content of the early visual system is not accorded with the perceptual content for evaluating the conceptual or non-conceptual character of experience even if the content really exists.

In the last section, as a summary of the discussions from sections IV-1 to IV- 4, I insist that the neurophilosopher fails to prove the non-conceptual content of experience because of the possibility of Type-3 conceptual capacity that categorises the object of perception. Nevertheless, this section reveals that there remains *some* non-conceptual character of experience: namely, the coexistence of inaccessible and accessible content in conscious experience. Ultimately, this chapter proposes a strategy to respond to the non-conceptual character of experience when we only take the functional perspective on experience.

IV-1. Experience and Content

In order to have a visual perception of a certain object, we have to be in a certain circumstance that includes an enabling condition of perception, which are adequate lighting conditions, SSRs, and the perceiver's normal visual organs. These conditions permit a perception of the object in a perceiver's mental state. In addition, it would be possible that perceptual contents defined by taking only the functional perspective could imply that having representational content in experience is sometimes not engaged with any type of conceptual capacity. This could be a useful idea for classifying conceptual and non-conceptual content. One particular stage of experience would then be seen to take the functional perspective as involving only non-conceptual contents, whereas the other stage of experience (e.g. personal level of experience) would then seen to take the expository perspective as involving only conceptual contents.

However, are the contents of the former transparent to the latter? Or, are we having the different contents in every different stage of experience? If so, which one is more close to what we call *contents of experience*?

IV-1.1. The Importance of a Subject's Description

In general, we understand how we perceive the world using scientific methods. However, does this scientific understanding confirm what we really experience when we perceive an object? For example, perception of a scarlet rose in front of a seven-year old child

and a fifty-year old painter might be confirmed by physical properties of the rose and the normality of their visual organs if we could guarantee they are really seeing the rose. And we are able to make an assumption that they could have the same representational content of the rose through the scientific fact or observation. However, can their description of the rose meet our expectations? Do they really experience the rose in the same way? An enabling condition for the perception of a scarlet rose allows us to predict what they are able to perceive or to represent. But the issue is whether a content of a perceptual state is entirely transparent to a subject's description of it. The child might possess concepts such as *red*, *flower*, *rose*, etc.[71]; whereas, the painter might possess different concepts for the rose.[72]

IV-1.2. Two Problems for the Expository Perspective

At any rate, to confirm what they experience when faced with the scarlet rose, we are dependent upon their description of it. In this case, two problems could arise: (1) the application of different concepts to an identical object, and, (2) the aspects or properties of the object they perceive or represent. (1) causes a problem concerning the use of concepts for having conceptual content—that is, what is the proper use of concepts to make the content of experience conceptual? (1) will be discussed in section IV-2.1 alongside the *richness argument* because that calls the use of unsophisticated concepts into question. In contrast, (2) is more closely related to the notion of experience. This is because one notion of experience involves all the aspects of an object, while another notion is confined to only a particular feature or aspect of an object. In addition, there is a limit to categorising all the objects of perception within the personal level of

[71] The assumption that a child's possession of a concept of the rose is limited to these simple concepts might be a misconception or 'as-if attribution' about them.

[72] It could be thought that the possession of various concepts is a type of cognitive skill of perceiving the rose as having various aspects (Cf. Dretske 2000: 189).

experience, say Type-3 conceptual capacity does not cover all the elements of a perceivable field.[73]

IV-1.3. The Non-Conceptual Character of Perception and the Conceptual Character of Experience

The two problems above show that the condition for being in a perceptual state is sometimes different from the condition for composing a description of that state. I focus on these problems in order to show that the contents of experience are conceptual interpretations or descriptions of a subject's perceptual state, and hence that we have to access the functional and expository perspective at two different levels. That is to say, perception can occur independently from a subject's conscious access, and we are able to know this fact via scientific analysis or observation; but information obtained by perceptual systems has the possibility of conceptual engagement at the subject's personal level of experience. As such, the subject is able to have conceptual content of experience. In some sense, these two perspectives are the same because their contents could be confirmed by a subject's conscious state.[74] But the way to access each is different. While the ability to perceive is mostly dependent on a perceiver's perceptual mechanisms (e.g. physical features such as area V_4 and physical properties of objects like SSRs), how things are represented, the ability to have contents of experience is

[73] This raises issues for defining the range of experience for evaluating the conceptual character of experience in this thesis.

[74] Philosophers like Prinz (2007a and 2007b), Rosenthal (2002 and 2005), and Block (1995) argue that perception—of the very same kind that occurs in ordinary conscious perception—can occur without consciousness. According to these philosophers, this fact is proven by scientific research. These seem to share the idea of the non-conceptualists that I examined in previous chapters II and III. Of course, I am not entirely opposed to this assumption. However, my emphasis here is not on checking whether there is conscious access in connection with an enabling perception, but on finding a way in which we can access the contents of perceptual states. Hence, there must be conceptual engagement in such access.

about what is represented. I would say that content of experience does not only involve perceptual information obtained by the former (an enabling condition), rather, it is more closely related to the latter—say, a perceiver's interpretation of the perceptual information— because the representational content of experience may vary according to the way in which way the perceiver accesses perceptual contents (in line with the colour variation example in section III-2). The way of accessing perceptual contents involves the way that we understand, or grasp, the content of perception. In this sense, the former is passive and sometimes unconscious, whereas the latter is more active, conscious, and descriptive. In addition, the former can be proved by scientific and neurophysiological analysis; on the other hand, the second, is defined by our description of perception. The latter surely occurs after a subject has a perception of an object, hence it could be defined by the concepts that the subject possesses for it, and how she interprets the represented contents using her concepts. And what the subject experiences has to be defined by her description as we saw in the colour variation case of the sections III-3 and III-4. Of course, some non-conceptualists (e.g. Peacocke, Hurley, Bermudez, Crane, and Raftopolous) accept the conceptual character of a subject's description of a perception, but do not agree that the content of a perceptual state is entirely conceptual. It is not clear what role concepts play in a perceptual state, and it is not easy to evaluate the conceptual character of experience that are not described. Yet the important point is that if any contents in a perceptual state (including P-conscious states) allow for the possibility of conceptual engagement (particularly Type-3 conceptual capacity that categorise the object of perception i.e., they may be grasped by concepts[75] at later time) there is no reason to infer the existence of non-conceptual *content* of such a state. This is the first issue to be considered in this chapter.[76]

With regard to this, I examine three non-conceptualist arguments against this type of conceptualism. Through examining these, I discuss (1) whether non-conceptualists treat

[75] If we treat information processing in a subpersonal state as a type of perceptual content, the information could be transmitted to conceptual content, if it really exists.

[76] Existing conceptualism, particularly that of Brewer (1999), also emphasizes this point.

a content that would be defined by the functional perspective as being the same content offered by the expository perspective, and (2) whether they invest the claimed non-conceptual character of experience with 'undescribed contents' and the 'possibility of having representational contents'.

In the next section, I briefly examine how conceptualists define the range of perceptual contents through examining two types of conceptualism: *belief conceptualism* and *experience conceptualism*, in order to indicate the conceptualist's tendency to emphasize the only expository perspective rather than the functional perspective on experience. This tendency results in a limited approach to content, (e.g. perceptual information involved in perception). Therefore, taking only the expository perspective fundamentally permits the possibility of existence of non-conceptual content in the whole process of experience.

IV-2. Perceptual Information and Contents of Experience

This section explores how the range of experience and perceptual contents has been defined in existing conceptualism, and then reveals the problem that would be raised by the non-conceptualists who defend SV and UPC type of non-conceptualism.

IV-2.1. Belief Conceptualism

Most philosophers hold that beliefs and concepts are closely related, such that if a subject has a certain belief that *x* is *F*, then for any object *x* and any property *F,* she must possess one or more concepts and must be able to deploy these concepts in that belief. The content of her belief is conceptual when concepts and beliefs are related in this way. This is called 'belief conceptualism' (Crane 2010). This type of conceptualism claims that belief about a certain phenomenon would be different from another according to a subject's possession of concepts about it. Siegel gives the following account of belief conceptualism:

> "One can believe that whales swim without believing that large sea-dwelling mammals swim, even though whales are large sea-dwelling mammals.

> According to a common defense of belief conceptualism, the relevant beliefs differ in which concepts the thinker is deploying, and that explains how it is that someone can have one of these beliefs without the other." (2014: section 6)

On Siegel's view, belief conceptualism ultimately concerns our individuation of beliefs. Belief individuation is affected by concepts that the subject possesses. Hence, belief content is conceptual. Peacocke (1992) has a similar view. According to him, when we attribute beliefs to subjects, we are dependent on the concepts that the subjects possess. This is called 'belief attribution'. He says:

> "Suppose you sincerely attribute to Ralph the belief that whales are mammals. It is plausible that the truth of this attribution depends in part upon Ralph's satisfying the possession condition for an appropriate concept of whales and for a similar concept of the property of being a mammal." (1992: xiii)

Peacocke suggests, then, that we attribute a belief to a subject of the belief according to the concepts that she possesses. Hence, a subject must possess a concept in order to form a belief. Siegel also points out an importance of concept-possession for forming beliefs. She says:

> "Suppose the thinker lacked the concept 'whale': she had no idea what whales were, nor even that there was such a thing. Arguably such a thinker could not believe that whales swim, that whales are blue, or anything else about whales." (2014: section 6)

If a subject lacks a concept for a perceived object or phenomenon, then she is not able to form a belief or thought about the object or the phenomenon. Martin also argues that "where one lacks a conceptual ability, one thereby lacks a thought involving it" (1992: 238). Therefore, possession of concepts is required to form beliefs, hence belief content is constituted by concepts that the subject possesses, according to belief-conceptualism.

IV-2.2. Experience Conceptualism

The second type of conceptualism is called *experience conceptualism* (or perceptual conceptualism), which says that for any object *a* and any property *F*, a subject has an experience of *a* being *F only if* she has concepts of *a* and *F* and deploys these concepts in her experience. Proponents of this view hold that the contents of perceptual experience are of the same kind as the contents of belief. Conceptual contents in this type of conceptualism have components complying with the Fregean criterion of identity for senses, i.e., these are Fregean concepts (Toribio 2008). This idea entails that possessing a concept *F* involves exercising an ability to think of a thing as *F*. Hence, the content of perceptual experience conforms to a strong version of Evans' Generality Constraint (Evans 1982: 104; see also: Toribio 2008: 352). That is to say, if a subject is able to think '*a* is *F*', then this implies that she has two distinct abilities: (1) to think of *a*; and (2) to think of the thing as *F,* and the possession of a concept is explained by these abilities (Heck 2007: 123). Hence, this type of conceptualist holds a view that the way a subject represents the world can be specified by her possession of concepts.

IV-2.3. The Relational Structure of Perception and Belief

Of course, this distinction does not imply that these two types of conceptualism are incompatible. But the problem involved in this distinction is that if we only acknowledge, as most CV non-conceptualists do, belief-conceptualism—, then having a perceptual content must be distinguished from having a perceptual belief. Sometimes we might even have a different perceptual content from the judgment that it entails: for example, when a subject sees an objectively straight stick half-submerged in water, the stick may appear bent (Cf. Heck 2000). Although the subject who knows that the stick is objectively straight perceives the stick as if it is bent, she does not form a belief or a judgment that the stick is bent. Also, we are able to know the fact that such illusions can occur even when the subject knows the truth about what she is seeing (Crane 1988). On this view, a perceptual content is not directly reflected to a content of belief; hence a perceptual content cannot be a reason for its belief. In this sense, perception sometimes does not have conceptual contents or produces a corresponding belief.

The reason for focusing on the relationship between perceptual content and belief is not to establish whether they are different, rather, it is to establish whether a content of perception is entirely unrelated to the conceptual character of experience — the possibility of being engaged by any of the three types of conceptual capacities. This is because having different content from belief does not necessarily imply the non-conceptual character of perceptual content. We are freely able to access perceptual content using concepts at the personal level of experience even though it is represented differently from perceptual judgment or belief.

IV-2.4. Perception without Conceptual Engagement

The problem with experience conceptualism that I want to highlight is that it does not consider that perception could occur without any conceptual engagement; it does not consider this because it is possible to have perceptual contents that are irrelevant to our conceptual and rational thoughts. That is to say, the conceptualists ignore the non-conceptual character of experience that perception sometimes occurs without conceptual engagement. Crane (1988 and 1992) gives an example of this. He says that we are faced with contradictory representational contents when we see the waterfall illusion:

> "If you stare for a period of time at a scene (waterfall) which contains movement in one direction, and then turn your attention to an object (a stone) in a scene which contains no movement, this object will appear to move in the opposite direction to that of the original movement." (1988: 142)

Whilst the stick in water example shows a conflict between two conscious *states* (viz. the state of believing that the stick is not bent and the state of the stick looking to be bent), the waterfall illusion shows a contradiction in the single content of one *attitude* since the perceived object seems to be both moving and not moving at the same time (Crane 1988: 143-144). That is to say, the waterfall illusion is a case where an object (the stone) looks *as if* it is moving and not moving at the same time. Hence, the subject has an experience with contradictory representational content. According to Crane (1988 and 1992), if the content of experience is conceptual, then we may not be able to apply

incompatible concepts, e.g., 'moving' and 'not moving', to the misperceived object at the same time. However, there is a possibility that a rational subject may apply incompatible concepts to the same object in her experience. Because of this possibility, Crane argues that "the waterfall illusion is a counterexample to the thesis that concepts are involved in the content of perceptual experience" (1988: 145). He then defines perception as a 'sub-rational' process which is not governed by "the operation of the higher faculties" such as rational and conceptual thoughts (1988: 146).[77] Hence our rational and conceptual capacities are sometimes irrelevant to perception, and the content of perception is non-conceptual. This shows that non-conceptual contents that are defined by the functional perspective exist independently from the possibility that we are able to access perceptual content conceptually at the personal level of experience. The perceptual mechanism for contradictory perceptual appearances is not dependent upon our conceptual capacities, that is to say, the perceptual mechanism that makes a subject to be in the perceptual state of the contradictory phenomenon sometimes does not allow conceptual engagement even though the contradictory phenomenon still appears at the personal level of experience. As such, we have contradictory phenomena at the personal level of experience.

As such, what I want to draw from these two types of conceptualism is that the range of perceptual content is also different in both camps, as are the definitions of content and experience: namely, the perceived phenomenon and the interpreted phenomenon.

In the next section, I examine an argument for experience non-conceptualism, namely, *the richness argument* (Dretske 1981; Martin 1992) which focuses on the weak point of experience conceptualism. This discussion will establish the possibility of inaccessible content in conscious experience even though we are able to entertain concepts in the

[77] Crane thinks that this idea of 'sub-rational' process can be supported by Fodor's view that "the operations of the perceptual system are 'informationally encapsulated'; that is, the informational content of perceptual states cannot be affected by the contents of states in 'central mind'" (Crane 1988: 146; Cf. Fodor 1984: 64-86).

expository perspective on experience. I then discuss whether this fact casts doubt on the conceptual character of experience.

IV-3. The Richness Argument

The key point of the richness argument is that experience can represent rich information about the world although we are not able to deploy concepts that capture all of the information that experience can convey (Dretske 1981; Martin 1992; Bermùdez and Macpherson 1999). I consider the richness argument in two ways as suggested by Dretske (1981) and Martin (1992): 'awareness of fact and things' and 'recollecting a particular item from memory' in order to show why these philosophers believe that there could be non-conceptual contents even if we consider the expository perspective on experience.

IV-3.1. Awareness of Facts

Dretske (1981) argues that our experience can convey information about a large number of properties of the external world, but that it is doubtful whether we can possess and deploy proper concepts for the all such properties. To make this clear, he (1993) suggests two types of awareness in perception: (1) awareness of *facts*, and, (2) awareness of *things*. Awareness is a type of conscious state, in this argument. For example, *S* sees *x* (or that *p*) means that *S* is conscious of *x* (or that *p*). Hence, to have an experience of a thing is to be conscious of that thing; and to have an experience of a fact is to be conscious of that fact. However, '*S* is conscious of *x*' does not mean that '*S* is conscious that *x* is *F*'. Awareness of a thing that is *F* does not require an awareness of the fact that '*x* is *F*'. For example, suppose that *S* sees a brindled cow on which there are twelve brindles. Each brindle is clearly visible. Not bothering to count the brindles, *S* does not realize that (or is not aware of the fact that) there are twelve brindles. In such a case, although *S* is aware of all twelve brindles (or things), she is not aware of the number of brindles (which is a *fact*). The purpose of this distinction is that a perceptual state is a *conscious state* that does not require the deployment of proper concepts. Through this distinction, Dretske shows that our visual perception is a type of awareness of a thing that does not need any conceptual relation to it in order to perceive the object.

That is to say, being in a conscious state does not always guarantee that perceptual contents of this state are entirely conceptual or conceptually graspable.

IV-3.1.a. A Condition for being a Content of Experience

This idea presents a similar view to the one offered here in some respects (e.g. SV type or P-conscious experience) because it seems to imply that not all the properties of perceivable (or conceptually thinkable) objects do need to be conceptually understood or grasped in order to figure in the content of perceptual experience. All objects and their phenomenal characters are perceivable if a subject's perceptual equipment is working well. The important point, however, is that we are in a perceptual state about the external world, but not all of the properties that we can perceive directly enter into the content of perceptual experience, even though we are aware of the circumstances in which such properties are involved.

IV-3.1.b. A Condition for Being Conceptual Content

In addition, there is no clear reason why the subject would be required to deploy a particular concept in order to have conceptual content of the brindled cow. That is to say, there could be partly inaccessible contents in conscious experience even though those are clearly represented and graspable by concepts. Nevertheless, should we take this to imply the non-conceptual content of that experience? Is it not enough to have a conceptual experience by grasping only particular features using concepts?

To have a particular conceptual experience, it partly depends on what concepts the subject deploys for a given object. Moreover, the representational contents conveyed by perception would be different according to which features the subject is aware of. That is to say, what makes a subject *be* in a perceptual state is those features of an object, or of the relevant circumstances, that she is aware of instead of anything factual that her experience could convey.

Also, there is no specific reason to believe that the number of brindles is the most appropriate concept that can specify the content of the experience correctly because the conceptual content of experience does not mean that perceptual contents or particular phenomena must be grasped by particular concepts in order to be conceptual contents:

instead, it might be a matter of how we can use an appropriate concept in order to grasp perceptual content, in line with the Type-3 conceptual capacity that categorises the objects of perception. Neither do we need to deploy concepts for everything that we can perceive. In evaluating the conceptual character of experience, what we need to consider is whether the subject can grasp representational contents using her concepts, i.e., the possibility of taking the expository perspective. It is also unclear why multiple representational contents must be grasped conceptually in order to create a conscious experience in a subject. If the subject has multiple representational contents in her experience, then are these in different experiences or within the same experience?

In this respect, whatever the subject fails to notice or grasp in experience does not directly imply some type of non-conceptual content, and it does not show that she does not have an experience of the circumstances, because the absence of a particular property from the representational content does not imply no experience or the non-conceptual character of that experience.

IV-3.1.c. The Problem of 'Fact' in Experience

Additionally, the notion of 'fact' in the *richness argument* is arbitrary because possession of a proper concept to grasp a particular property seems similar to deploying a correct concept, which is correlated with the object, but they are different. Moreover the term 'fact' could be understood in many different ways according to which position we take, such as a mathematical fact, a scientific fact, a geometrical fact, and so on. There seems no clear definition of fact at work in Dretske's example. It is also doubtful that the content of a particular experience must involve a fact (any type of fact) about that experience, that is to say, there is no clear reason to believe that all the facts (e.g. mathematical and geometrical facts) about an object have to be represented in the subject's visual state which do not fall within the range of perceptual contents. Suppose that a subject, who has knowledge of a molecular theory of heat, is aware of the heat of hot water (a phenomenon) in a bath, but not aware of the molecular motion (a scientific fact) of the water. We do not believe that she is unable to have an experience of heat even though she is not aware of the scientific fact 'molecular motion'. This does not

imply no experience or non-conceptual content about the heat in the bath. We may not judge that she is unaware of facts about heat. Enabling experiences about a particular phenomenon seem not to be dependent on the possession of a correct concept or detailed knowledge about it. The richness argument makes unreasonable demands on the conceptual character of experience in terms of the conditions that constitute experience. When we talk about the content of experience, we are focusing upon a particular event or item which is perceived, and not upon all aspects of the environment that we could perceive or all of the knowledge we could deploy about that experience.

IV-3.1.d. The Possibility of Conceptual Engagement is Present

Regarding Dretske's argument, I want to suggest that we must consider whether it is possible that perceptual contents can be grasped by concepts that a subject possesses, even though those contents are not *sophisticatedly* or appropriately grasped initially. There could, I claim, be one or more descriptions available of the representational contents of experience. That is to say, representational contents could be conceptualized any time when subjects are able to use concepts in relation to their perceptual contents—as I said, there is still the possibility of Type-3 conceptual capacity (the capacity to categorise the object of perception) if she is aware of the representational contents. Subjects are able to describe their perceptual contents in various ways using concepts. So, before we confirm the non-conceptual character of the rich information, we must consider whether the rich representational contents could be conceptualized at the personal level of experience. It seems, for example, that the numbers of brindles are countable (hence reportable), therefore the representational contents of the brindles may be accessible and conceptualized by the subject's A-consciousness, unless the subject lacks relevant numerical concepts.[78] In this sense, Dretske's example also involves the possibility of the Type-3 conceptual capacity that categorises the object of perception.

[78] Of course, non-possession of numbers does not imply having non-conceptual content concerning numbers of brindles because the number of brindles could not be a fact that is accessible to the perceiver if she did not possess the concept of numbers. As I mentioned in Chapters II and III, the problem of possession of proper concepts for a

In the next section, I critically examine Martin's argument concerning memory.

IV-3.2. Memory

As well as Dretske's example of a brindled cow, Martin's example (1992) aims to show that we could have non-conceptual contents even though we may deploy concepts at the time of experience. Martin (1992: 754-755) gives an example of Mary who is playing a game with dice, one of which is 8-faced and another is 12-faced. However, she is not able to distinguish the difference between the two dice. She just treats all the dice having more than six sides, and thinks that they are just many-faced. Mary does not have the concept *dodecahedron* even though she is playing with both the dodecahedral dice and the octahedral dice. However, she can distinguish between the dice according to coloured spots on their faces – one has four kinds of spots, another has three. Hence, the difference that she focuses on concerns colour spots, rather than the number of faces. Martin says:

> "At that time Mary did not have the concept of something's being twelve-faced. Nevertheless there is reason to suppose that that is how things appeared to her, unless there are defeating reasons to oppose it." (1992: 755)

Martin uses this example to argue that Mary might lack the concept *dodecahedron* when she played the game, however, it is also possible for her to have the representational content of twelve-faced dice without possession of the concept *dodecahedron*. Hence, representation of some characteristic feature of an object does not necessarily require possession of any particular concept.

Martin also argues that it is also possible that Mary realizes that the 12-faced dice was a dodecahedron when she recalls her experience of the game, after acquiring the concept

---

target object does not only relate to all the entities represented in a perceptual state or physical properties of that object, it also relates to whether the perceiver can grasp the represented entities (though not all of them) through her possession of concepts.

dodecahedron. Her memory of the experience of the 12-faced dice can then be altered to an experience of a dodecahedral dice. Hence, it is possible that "a subject's later conceptual sophistication often does alter her memories" (Martin 1992: 755). In this sense, Mary's initial experience of the dice could, according to Martin, be non-conceptual because (1) the shape of being dodecahedral was represented as it is even though she did not possess the relevant concept, and, (2) she could not apply an appropriate concept to the object when she had her original experience.

IV-3.2.a. Does the Application of a Non-General Concept to a Perceived Object Define Perception with Conceptual Engagement?

However, we may find many counterexamples to the example above. We can imagine a case where a subject does not possess any concept or knowledge about a particular object at all, but nevertheless is able to grasp the object using the concepts that she possesses. For example, if a subject who does not know the Korean language looks at the word '바보' written in black ink on a white sheet of paper, she can distinguish the word from the paper but does not know what it means. If another person who knows Korean looks at the word '바보', he may feel angry, because it means 'fool'. Nevertheless, the person who does not know Korean could at least *discriminate*[79]the word from the paper, even though she does not possess any concept or knowledge about it.[80] The word '바보' could be perceptually represented as it is to the subject without any conceptual engagement even though she is able to discriminate it from other objects, e.g. black coloured letters and the white paper. Are these not enough for having a conceptual content of an experience? That is to say, if she later comes to learn Korean and remembers the experience of seeing the word and now feels angry that she was being

[79] Again, one of these conceptual abilities is the discrimination ability in conceptualism. I discuss this, alongside demonstrative concepts, in Chapter V.

[80] In this case, we can see that perception involves a discrimination ability, even though it is not affected by the subject's possession of a concept. This will be discussed more at the end of chapter V.

called a fool, it does not follow that she has a non-conceptual representation of being called a fool when she first saw the word. She did not have a non-conceptual representation, rather, she might have had two different representational contents — the black letters and a fool — with regard to the Korean word.

IV-3.2.b. The Non-Conceptual Character of Perception and the Possibility of Type-3 conceptual capacity

I have agreed that there could be non-conceptual content at the occurrence of perception. In Mary's case, it is certain that her initial experience of the dice was not engaged with the concept *dodecahedron* even though she represented it as twelve-faced. However, although Mary, and the subject in the example above, did not possess appropriate concepts for the represented contents, they could still grasp them as 'many-faced dice' and 'black letters'. That is to say, the contents of both subjects' experience can be grasped by concepts that they possess even if those concepts were not very sophisticated. Without deploying an appropriate concept for the representational contents, there is still the possibility of Type-3 conceptual capacity that the subject can grasp the representational contents using their own concepts. In this sense, perceptual contents can be grasped conceptually by the subject of perception even though perception itself can occur without conceptual engagement.

However, there is something that we need to consider in Dretske's and Martin's arguments even though there is the possibility of Type-3 conceptual capacity of experience. Despite the fact that the non-conceptual contents in the cases of *brindled cows* and *memory* can easily be denied by the possibility of a Type-3 conceptual capacity, there remain two complicated problems in their arguments: namely, (1) Are single or multiple experiences involved in cases where perception contains multiple representational contents?, and, (2) Is it possible to have non-conceptual content in thoughts?

In the next section, I briefly explain the relevance of the expository perspective to the above argument, and then examine these questions.

IV-3.3. The Possibility of Non-Conceptual Content

I have discussed the possibility of conceptual capacities when taking the expository perspective on experience even though having representational content is not affected by whether or not that content is conceptual. In addition, possession of concepts (in the examples of *memory* and *Korean word*, subjects were not able to deploy a proper concept for the target object because they did not possess the specific concept for that object) sometimes does not play the role of a function that constitutes the perceptual content of experience: nevertheless, the subject of perception is at least able to think that the Korean word is different from its background (a white paper) by using her discriminative abilities. Likewise, Mary was able to think that the two dice look different because of their different coloured spots by using her discriminative abilities. That is to say, although concepts do not constitute the content of experience, she can *think* about perceived objects using the discrimination ability provided by perception, and she can access those contents that she perceives using this ability. This ability is also connected to the subject's possession of concepts that could act as a mediator, so that she can access the object. So we can assume that a subject may grasp an object conceptually at a later time when she obtains a proper (or correct) concept for it. In the case of the subject who does not know Korean, she can know what '바보' means if she has a Korean-English dictionary. After she discovers the meaning, she does not see the word as black ink on the paper or as 'this word' anymore. As Martin (1992) argues, acquiring sophisticated concepts could alter one's content of experience. She might not sense any ambiguity with regard to '바보' now because she now has the correct translational concept of it. In this regard, it seems that these cases imply the conceptual character of experience because the content involves the possibility of conceptual engagement that can be grasped by concepts that the subject possesses.

There are two issues involved here. First, in order to discuss the conceptual character of experience, we have to know what contents the subject has in her experience. There is no specific reason to believe Mary's initial experience about the dice was a mere perception with which she was not conceptually engaged. She initially understood and thought of the dice as 'many-faced' dice, but later she mnemonically altered the

experience so that it involved ‘dodecahedral dice’. It seems that she has two different conceptual interpretation of a single experience. There seems no reason for treating her initial thought of the dice as non-conceptual.

Second, if the dice was not conceptually accessed by Mary, then it is possible that Mary may grasp the representational content using her possession of the concept ‘dodecahedron’ when she recollects her memory. So, it might be that the initial representational content of the dice was non-conceptual. However, there is no sufficient reason why a representational content that is unsophisticatedly grasped is not a conceptual content of experience, even though the subject was able to grasp and think about the content using her own concept. That is to say, why does only the use of a sophisticated concept guarantee the conceptual character of experience?

IV-3.3.a. The Conceptual Character of Experience

It is probable that those who agree with Dretske and Martin believe that vision conveys information about all visible objects directly into a perceiver’s content of experience. That is to say, they hold the view that the possibility of vision or of having representational contents involves the possibility of having non-conceptual content because we are not always able to notice all of the features of an object that are represented in perception. Let us look at Mary’s case again. She initially had a proper concept, *many-faced dice*, of the target object, but she was also focused on the spots on the dice. In order to have conceptual content, why does she need to deploy concepts that correspond to *all* the representational content of perception? Do they constitute the same experience or a different experience? It is not quite clear why we should think that all representational content has to be grasped using sophisticated concepts in order to have conceptual content of a single experience. This is the key point that this chapter makes regarding perceptual contents. This is so because conceptual engagement, Type-3 conceptual capacity that categorises the object of perception in particular, that conceptualists defend does not involve the use of sophisticated concepts for having conceptual contents: instead, conceptualists focus on either how concepts that we possess may mediate our mind and the empirical world (McDowell 1994a) or how we

are able to grasp represented perceptual contents using the concepts that we possess (McDowell 1994a; Brewer 1999 and 2005). In this sense, both Dretske and Martin depend on a higher notion of conceptual character of experience (e.g. the use of highly general concepts) than conceptualists.

IV-3.3.b. The Range of Experience

Another point that I want to make about both Dretske's and Martin's examples is that non-conceptualist accounts of the range of perceptual contents are too wide, such that sometimes any of the facts (e.g. mathematical and geometrical facts) that could be represented in the visual field fall within the range of perceptual contents. This seems to set an excessively demanding criterion for something's being a conceptual content.

However, I believe that conceptualists such as McDowell and Brewer should consider this point because there is an undeniable possibility of conceptually inaccessible content existing in a single conscious experience even though subjects are able to grasp particular items using concepts. That is to say, although we treat a single experience as having a single representational content, there are other represented contents that would still allow conceptual access – A-consciousness, in the subject's perceptual states. For example, in the case of the brindled cow, the representational contents of the cow may not only be 'twelve brindles' to the subject. The other characteristic feature of the cow might be represented, such as four-legs, a long tail, a cow horn, at the time of the perception. The subject may also be clearly aware of these features at a later time even though she was only aware of 'twelve-brindles' at the time of the original perception. Moreover, we may not be able to know which stage or level of experience contains those contents, but they would still meet the condition on A-consciousness. This results from the possibility that perception could occur without conceptual engagement. In this sense, there could be unconceptualized content because of this possibility.[81] Indeed, there are some philosophers who adopt this perspective, and with it, a very broad account of perceptual content, which allows for the existence of non-conceptual content. They

[81] I will be returning to this issue at the end of this chapter.

focus on ‘awareness’ and ‘cognitive penetration’ as characterizations of conceptual and non-conceptual content of experience. While Dretske and Martin try to identify non-conceptual contents in conscious experience (CPC (Conscious Perceptual Content) type non-conceptual contents), they acknowledge the existence of conceptual content in a conscious state but claim that there are non-conceptual contents in unconscious stages of perception. This involves a wider notion of perceptual content than Martin and Dretske. The characteristic feature of this approach is that it divides perception into two stages: a lower stage (like sensation) and a higher stage (perception). In dividing these two stages, the presence or absence of cognitive penetration becomes a criterion of each stage. I do not entirely agree with the view that there could be representational content that we can trace in the lower stage, however it is an undeniable fact that perceptual representational contents that could be engaged with conceptual capacities can be produced from the unconscious level of perception.

In the next section, I briefly examine the two stages of perception suggested by the so-called ‘neurophilosophers’. I discuss whether proponents of this type of non-conceptualism assume that the information within the early visual stage (a non-conscious, subpersonal, and non-cognitive state) can be perceptual representational content. I also consider whether they believe that phenomenal content differs from experiential content, so that contents of the early perceptual stage are non-conceptual. However, it remains hard to define this stage as a part of experience by which we can evaluate the conceptual character of experience, but it is clear that perceptual experience is “the result of some mediating mental process of inference or interpretation” of this stage (Drayson 2011: 243).

IV-4. The Two Stages of Experience

From the *richness argument*, it seems that Dretske and Martin believe that a perceptual state is a type of awareness. But this does not mean ‘awareness of an object’, rather, it is ‘awareness of a characteristic feature’ of an object. This view is closely related to Block’s distinction between P-consciousness and A-consciousness. In particular, a perceptual content being non-conceptual, for Dretske and Martin, is a matter of having

P-consciousness whilst lacking A-consciousness. On this view, the non-conceptual character of experience means that perceivers are not required to deploy or exercise any concept in P-conscious experience. Second, concepts do not always specify a characteristic feature of an object in the visual field even though the perceiver has an intention towards that object. If there could be non-conceptual contents in such P-conscious states, and if the presence of awareness has an important role in determining whether a subject is in a perceptual state, then it is important that we discuss how such intention and awareness could affect the content of perceptual experience. This is especially important because some psychologists and philosophers, whose views strongly depend on the neuro-physiological analysis of vision, believe that the absence of awareness in a visual process could demonstrate the non-conceptual character of experience, say perception without the conceptual engagement, and that this is a neural state that is cognitively impenetrable (Pylyshyn 1999). We have seen that the CPC type non-conceptualism that both Dretske and Martin hold would not be successful because there is the possibility of Type-3 conceptual capacity that categorises the object of perception in a conscious state. Yet, if we extend the scope of experience to an unconscious state of experience, then there would be a certain type of perceptual content that could not be engaged with the three major types of conceptual capacities. This is a wider notion of experience than Martin and Dretske hold, hence, this view may be interpreted as suggesting a possibility of a different kind of non-conceptual content from Martin and Dretske. If this is right, then content at such an unconscious stage could be non-conceptual, unless it does not allow any conceptual engagement from the perceiver.

In the next section, I focus on Raftopoulos's conceptions of visual stages and the notion of awareness.

IV-4.1. Phenomenal Awareness

The traditional philosophical problem of perceptual content, according to Raftopoulos (2009), concerns how the world is presented to us in perception. Traditionally, Raftopoulos claims, the term 'non-conceptual content' has been used to capture "an aspect of the phenomenal content (namely, that to be in a state with phenomenal content

does not require either the possession or the exercise of concepts)" (2009: 164–165). According to him, the conceptualist view (e.g. McDowell 1994a; Brewer 1999) says that we perceive the world as structured by *classification* and *categories*. On the contrary, non-conceptualists like Peacocke (1998) argue that only non-conceptual content can account for the rich phenomenal experience associated with perception, hence the content of perception is non-conceptually *structured* and *pre-linguistic*. In addition, some non-conceptualists turn to a neuro-scientific account of vision, and suggest that we need to divide perceptual experience into two stages in order to prove that the contents of a non-conceptually structured perceptual stage do exist.[82] According to Lamme's notion of perception (2003 and 2004; Raftopolous 2009: 131–132), there are two kinds of visual processing in the brain: (1) the feedforward sweep (FFS), and, (2) recurrent processing (RP). This distinction may help us to answer the question of whether our conceptual framework engages with *all* stages of perception. Of course, I do not take this view to provide evidence for the existence of non-conceptual content. Instead, I take the two kinds of visual processing to use different modes or perspectives in order to emphasize that the functional perspective and the expository perspective on experience must be divided into two stages when explaining the contents of those stages since contents of perceptual states could be explained or confirmed using neuro-scientific methods – unlike contents of experience which are initially defined by a subject's interpretation of those states. Hence, there must be conceptual engagement between the two stages. Moreover, through this distinction we can incorporate both conceptual and non-conceptual character of experience from both camps. The appearance of conflict between the two is deceiving because most state non-conceptualists take the functional

[82] According to Marr (1982) and Pylyshyn (1999), the two stages are: (1) the early visual stage, which takes retina stimuli as inputs and computes details of light and shadow, SSR, and other physical properties, and, (2) 'late vision', which takes *output* of the earlier process and identifies objects and their features. In the case of (1), information is not cognitively available, like the content of belief. We cannot access or articulate the content of this stage. In the case of (2), there must be access to semantic information and memory processes, because the classes of objects we perceive and the features we attribute to them depend upon our conceptual schema.

perspective. By contrast, conceptualists focus on the expository perspective. Therefore it is important to examine these stages and evaluate the respective notions of conceptual character of experience in order to build a bridge between both camps.

IV-4.1. a. Feedforward Sweep and Recurrent Processing

This section first explores the notion of feedforward sweep (FFS) and recurrent processing (RP), then attempts to show that the arguments from the neurophilosophers are also strongly based on a mysterious premise: namely, that there is a perceptual content in early vision.

In FFS, the signal from visual sensation is transmitted from the lower levels of the brain to the higher levels. At this stage, no signal can be transmitted top-down to influence visual processing, and there is no conscious access from higher levels. This is similar to what Marr (1982), Pylyshyn (1999), and Raftopoulos (2009) call the 'early visual stage' which processes retinal images as inputs. The information contained in the retinal image falls within the scope of what we call sensation. Sensation includes parts of early vision. The properties of stimuli obtained at this stage never reach conscious awareness; "there are nonattentional selection mechanisms involved here that filter out information" (Raftopoulos 2009: 133).

In the case of RP, the signals can flow in both directions. Lamme argues that conscious awareness occurs only during RP. In this process, there are two levels of awareness: 'phenomenal consciousness' and 'access consciousness' (Block 1995; Lamme 2003 and 2004).[83] The former is associated with 'local' RP, which is limited to the lower level, while the latter is associated with 'global' RP, which higher levels can access. Through this distinction of FFS and RP, Raftopoulos defines a notion of awareness that aims to prove the non-conceptual character of perception. He says:

[83] Raftopoulos adopts this stance. He calls these levels 'phenomenal awareness' and 'access awareness' (2009: 132).

> "Awareness is defined as the occurrence of recurrent processing. Without RP there is no awareness. The processes in the FFS are necessarily unconscious. When there is RP, awareness arises. When RP is limited to early areas, we have phenomenal experience of the content of our perceptual states, and thus this form of awareness is called "phenomenal awareness". When RP includes output areas, then attentional selection has an influence; because of attentional selection, there is "access awareness". (2009: 132)

The information of which one is phenomenally aware is a "short-lived, unstable, vulnerable, and not easily *reportable* form of visual experience" (Lamme 2003: 3). On the contrary, 'access awareness' (that is, the awareness that accompanies our normal experience) is more stable and easily reportable. However, it seems that both Raftopoulos and Lamme claim that we can have a type of awareness of contents at the early visual stage, but that these contents are not reportable or accessible. Unfortunately, neither provides a specific reason for thinking that this should be the case.

IV-4.1.b. The Content of The Early Visual Stage

It seems that we cannot have these two types of awareness simultaneously. The issue that I want to raise here is that there is a strong assumption that 'there is a perceptual content at the early visual stage'. But how can we prove the existence of such a content? That is to say, if the early visual stage is a type of FFS processing, we cannot be aware of it because there is no top-down influence on the processing, and so, there seems no way of knowing whether this stage processes any perceptual content. Also, if a content of this stage is just a retinal image (such as sensible information), then what makes it *become* perceptual content? In other words, a perceiver must be able to be consciously aware of such a content so that it can figure in her experience.[84] Raftopoulos and Műller just argue that:

[84] This is the condition for being a perceptual content and evaluating the conceptual character of experience that this thesis proposed in section I-2.2.

> "The content of many computational subpersonal states cannot be described conceptually. Natural languages do not conceptualize the contents of some of the early stages of visual processes. Thus, their content, whatever it might be, is non-conceptual." (2006: 189).

The important phrase in the above paragraph is 'whatever it might be'. It seems that they assume that non-conceptual content could exist in a computational subpersonal state without defining what it really is. Further, if it just is an image or the information processed in subpersonal states, how do we know that the content of the early stage can affect the latter stage? Without a subject's conscious access, we cannot prove the existence of content in subpersonal states nor can we know how the content of an early visual stage is related to the later vision. That is to say, taking only the functional perspective on experience does not give us an explanation of how we are able to have a content of experience through the early visual stage without depending on the expository perspective on experience. Raftopoulos just claims that the content of the early visual stage is cognitively impenetrable and must be identical to the content of conscious perceptual experience. But we can have 'phenomenal awareness'[85] of cognitively impenetrable early visual content. It seems to me that this is the mistake that Raftopoulos and Műller make. They describe subpersonal states or the early visual stage as stages that process sensible information such as visual neurons, and declare that we are not able to consciously access the contents of those stages. But they believe that early visual stages and the later vision share content. They problematically define the former as non-conceptual and the latter as conceptual without offering a clear

[85] In general, the notion of phenomenal awareness has been understood as an experiential state, for example, 'what it is like to perceive'. But for Raftopoulos, it seems to be more of a technical term that is less relevant to our concept of experience or consciousness (Cf. Drayson 2011: 244). In fact it seems rather unclear in his discussion because the notion of phenomenal awareness includes a wider range of perceptual content than that of P-conscious experience. However, it is obvious that the content Raftopolus takes to be non-conceptual is the same content that he takes to be cognitively impenetrable—not engaged with A-consciousness.

explanation of how the former could be the same content as the latter. In *Cognition and Perception*, Raftopoulos just says:

> "Nonconceptual content has been defined in this book as the content of the states that are formed during early vision. Nonconceptual representational content has been defined as the content of the states of perception. Early vision extracts information from the environment in a purely bottom-up way, which thus excludes any top-down cognitive effects; early vision processes are cognitively impenetrable. Hence, the content of those states are necessarily nonconceptual. […] In this view, conceptual and nonconceptual contents are the products of two different stages of vision; the former result from late vision or observation, whereas the latter result from early vision or perception." (2009: 146)

This classification of perceptual experience seems to imply that conceptual content exists at the late stage of vision, i.e. it is cognitively accessible (or penetrable), while a non-conceptual content exists at a stage where it is cognitively inaccessible. On this view, it seems clear that non-conceptual content exists at a stage which our cognitive capacities cannot reach. And this stage is a level of perception. However, the problem is the claim that the content of the early stage can be the same as the content of the latter stage. Also, Raftopoulos assumes that there is representational content in the early vision, but he also states that early vision is cognitively impenetrable. If so, how do we know what is represented in the early vision?

IV-4.1.c. The Possibility of Conceptual Engagement Between Early and Late Vision

As I indicated above, if we only focus on the functional perspective, there seems no way to understand how we can have a content of late vision because we are unable to access the content of computational subpersonal states independently from the expository perspective on experience. Without conceptual engagement between these two stages of experience, we cannot prove whether the content of the former is the same as the content of the latter. This allows the possibility that Type-3 conceptual capacity categorises the object of perception. In this sense, the content of the early vision could have the

possibility of Type-3 conceptual capacity unless there is a way to find perceptual content of the early stage without depending upon the expository aspect.

In addition, the early vision that Raftopoulos identifies is dependent on an enabling condition of perception; hence the content of early vision can be obtained passively if we assume that such visual information from the environment can be a perceptual content. In contrast to this, the content of late vision identified by Raftopoulos allows a perceiver conscious access; hence the content of late vision can vary according to which concepts she deploys.

If the content of the former can be the same as the latter, as Raftopolous argues, this may allow Type-2 conceptual capacity (the capacity of understanding relational structure of perception and belief) because a content of the early vision that is not engaged with Type-1 conceptual capacity (the capacity of spontaneity) and Type-3 conceptual capacity (the capacity to categorise the object of perception) can constitutively affect the content of the late vision, or potentially even higher levels of conscious stages such as beliefs (that can be affected by conceptual capacities). In this sense, Raftopoulos account of the two stages of perception allows Type-2 and Type-3 conceptual capacities.[86]

What I want to address in Raftopoulos' account is the claim that 'certain subpersonal brain states or the early visual stage have non-conceptual content' is not "the same as claiming that perceptual experience has non-conceptual content" (Drayson 2011: 246). Of course, this type of non-conceptualism is correct only if there is non-conceptual content at a certain perceptual stage. But why do we infer the existence of non-conceptual content if the content of such a stage is the same as the content of the latter vision, which is affected by a cognitive capacity (or if there is any type of conceptual engagement), as Raftopolous claims?

[86] Moreover, Raftopoulos also presents a controversial distinction between the contents of the two stages. He says that "phenomenal content is not the same as experiential content" (2009: 148). But he does not give an explanation as to how they are different.

I claim that this approach shows that the content of a non-cognitive stage has the possibility of Type-2 and Type-3 conceptual capacities ― the expository perspective if the content is the same as the content of the latter vision. In order to perceive the world, certain information must be processed in a perceptual system, but first-person conscious awareness is not required to inspect this information. If this is right, is the content in this process non-conceptual? As I mentioned throughout the discussion of the sections III-4 and IV-2, if there is any possibility that perceptual content can be grasped by taking the expository perspective, it should be considered as conceptual. If we are not able to evaluate whether the contents of subpersonal states can be grasped by concepts – because we are not able to access those contents – then such content would not be perceptual, and so, are irrelevant for evaluating the conceptual or non-conceptual character of experience.[87] Further, a certain stage of perception like a subpersonal state is either phenomenally conscious or non-conscious. If any content in a perceptual stage becomes conceptual through 'access awareness' (or any type of cognitive capacity or cognitive penetration) and is described as a conceptual content, then there is no reason to hold the existence of non-conceptual content in experience.

IV-4.1.d. Representational Content in Subpersonal States?

There is one point that claims our attention. This is that the distinction of perceptual stages offered by Raftopolous and the other neuro-psychologists and philosophers seem to excessively extend the range of P-conscious experience into subpersonal states or information processing stages which our consciousness (including both P-consciousness and A-consciousness) cannot reach. A perceptual content of such non-cognitive stages that the non-conceptualists predict is not the same content as SV and UPC type non-

[87] It is not quite clear whether existing conceptualism is committed to this issue. It seems only to be concerned with the structure of perception and the conceptual role of reasons for belief. However, how we evaluate the structure of perception and the role of concepts is first of all dependent on the existence of perceptual contents. Hence, it seems that existing conceptualism does not consider the subpersonal or sensual states of perception.

conceptual contents because it is not quite clear that such stages could contain representational contents of experience.

In the next section, I consider this issue , and briefly examine the state view in order to consider two things: (1) whether the neurophilosophers treat cognitively inaccessibility (or impenetrability) of subpersonal states or information processing stages as a kind of non-conceptual content of experience, and, (2) whether they have considered any possibility of the expository perspective on experience because they hold the claim that a content of an early visual stage is the same as the content of later vision. This discussion has the significant implication that we need to confirm what perceptual contents might be in order to access the contents of experience, and provides an important reason why we have to be open to the possibility of conceptual engagement about *perceptual contents* in the processes of experience (assuming it is true that both the early stage and the latter stage could share the same content). I suggest that the main question at stake between conceptualism and non-conceptualism, namely 'what kinds of content does perceptual experience have?', has to be transformed into 'must all stages of perceptual experience have the very same kind of content?

IV-4.2. State Non-Conceptualism and Perception without Consciousness

The philosophers examined in this chapter tend to identify the representational content of perception with the contents that the subject can understand, i.e. the possibility of A-consciousness. Indeed, this tendency may not be entirely wrong. The problem however, is that both the represented contents and the contents that the subject understands in experience must be the same if we are to identify them as being the same. However, present explanations of the former and the latter seem a little confused since they agree with the view that the former sometimes can be unconscious and subpersonal, but they do not seem to apply the same standard to explanations of the latter. It seems that the content of the latter must be understood as a conscious and personal level of a mental state. But the problem is that it is not obvious how we can prove or confirm the existence of perceptual content in unconscious states if we extend the range of those states into subpersonal ones. And there is no clear reason to believe that the contents of

unconscious states are identical to the contents of their experience. One reason for holding this view might be that even conceptualists seem to insist on believing that both perception and perceptual judgment share the same content. According to McDowell,

> "A judgement of experience does not introduce a new kind of content, but simply endorses the conceptual content, or some of it, that is already possessed by the experience on which it is grounded." (1994a: 48–49)

Brewer also begins with the premise that "sense experiential states have conceptual content", and then claims that "a mental state with conceptual content […] is one whose content is the content of a possible judgement by the subject" (2005: 217).[88] Hence, they do not seem to be concerned with how the contents of a perceptual state become equal to the judgments of experience. They only declare that perceptual states have conceptual contents. It seems to me that this view assumes that non-conceptualists hold the same tenets.

IV-4.2.a. Representation in a Mental State

However, it is possible to claim (such as SV type non-conceptualism) that perception does not involve any characteristic features of experience. Regarding the non-conceptual character of experience, Heck (2000) offers two theories: one is the 'state view', and the other is the 'content view'.[89] In the case of the state view, the thought that the content of perceptual experience is non-conceptual implies the claim that one can be in "a perceptual state an adequate specification of whose content would necessarily employ

---

[88] Conceptual character of perceptual states will be verified in the discussion of discrimination ability and demonstrative concepts in the next chapter.

[89] As many philosophers have noted (e.g. Byrne 2003 and 2005; Speaks 2005; Crowther 2006; Heck 2007), many recent debates about non-conceptualism are concerned with the content of a perceptual state. Arguments for the non-conceptual content of perceptual experience usually proceed *via* a demonstration of the concept-independence of perception.

concepts one does not possess" (Heck 2000: 488). To possess a concept, Heck argues, a subject must be able to 'entertain' it, or 'use' it as an *element* of some thought. Hence, perceptual states are not required to entertain or use a concept. It seems that there is no room left for characteristic features of the expository perspective on experience in such a view. Most state non-conceptualists hold this view. Bermùdez also offers a version of the state view:

> "The general thought is that it is theoretically legitimate to refer to mental states which represent the world but which do not require the *bearer* of those mental states to possess the concepts required to specify the way in which they represent the world. These are states with non-conceptual content. A non-conceptual content can be attributed to a creature without thereby attributing to that creature mastery of the concepts required to specify that content." (1995: 184) (*Emphasis added*)

If the thought is simply that in order to have a representational content we do not need to depend wholly on concepts that we possess, then of course, I agree with this view. But the problem is with the notion of a mental state that Bermùdez and the other non-conceptualists are using. What exactly do they mean by 'mental state? Do they mean perception, sensation, pain, hunger, or desire? The answer is simple but relies on a very restrictive meaning. It refers to representation in a mental state. We can demand the conceptual or non-conceptual content experience only about a represented content in those states.

According to the state non-conceptualist, we are not required to possess concepts to be in perceptual states; hence the representational content of those states is not affected by the concepts that we possess. It is important to note that the early visual system that the neurophilosophers define is beyond the range of representational content where we can evaluate the conceptual character of experience. State non-conceptualists are talking about representational contents, whereas neurophilosophers are talking about a much wider notion of perceptual contents, including *perceptual information*. So it seems hard to evaluate the conceptual character of perceptual content in the neurophilosopher's case because we cannot access it. In this sense, the non-conceptualist in chapters II and III

and the neurophilosophers seem to have a very ambiguous notion of perceptual content. There could be no representational content in their notion of early vision and subpersonal states.

IV-4.2.b. The Possibility of Non-Conceptual Content

It might be possible that philosophers who are only concerned with perception (i.e., those who take only the functional perspective on experience), might not accept the possibility of taking the expository perspective on experience. Also, it is still possible that there could be non-conceptual content in conscious experience even though we are able to conceptually grasp some representational content by taking the expository perspective. Indeed, we could only have perceptual states that do not need any expository perspective. That is, not all perception involves the expository perspective, and so, there is only the possibility of taking the functional perspective. This is why there could be non-conceptual content in perception.

In addition, if perceptual information is processed in unconscious states, then such information can still be representational content of P-conscious experience, and potentially engaged with the conceptual capacities because we are not sure where these contents really exist. We know what perceptual information we get *via* perception only when our conceptual capacities engage with incoming information. In this sense, and despite the fact that we emphasize the expository perspective, there might be non-conceptual representational content in both the early visual system and the late vision. If so, non-conceptual content and conceptual content could co-exist in both cognitively penetrable and impenetrable states. How do conceptualists overcome this issue?

Macpherson (2012 and forthcoming) recently gave a very interesting example of the early vision. She accepts the neurophilosopher's idea of two stages of perception, but her notion of early vision is quite different from theirs. She tries to show that there could be both conceptual and non-conceptual content in a particular type of cognitively penetrable state under the assumption that non-conceptual content exists.[90] The next

[90] She just aims to show that cognitive penetration can be compatible with non-

section attempts to reveal the fundamental problem with conceptualism, namely the possibility of the coexistence of conceptual and non-conceptual contents using Macpherson's example of a cognitive penetration state.

IV-5. Non-Conceptual Contents and Cognitive Penetration

While neurophilosophers (particularly Raftopoulos and Müller (2006) and Raftopoulos (2009)) have argued that the contents of experience can be non-conceptual *only if* they are not cognitively penetrable, Macpherson (2012 and forthcoming) claims that there could be both conceptual and non-conceptual contents in a particular type of cognitively-penetrable state. She argues that we could have both conceptual and non-conceptual contents in 'early vision'[91] *via* a particular type of cognitive penetration called 'cognitive penetration lite', using an example of an experiment with shapes.

Through the discussion of this argument, this section reveals the initial problem of conceptualism despite the possibility of the expository perspective, then attempts to show how this issue can be overcome.

IV-5.1. Cognitive Penetration Lite

Macpherson gives another model of cognitive penetration, which is called 'cognitive penetration lite', and explains how this is compatible with non-conceptual contents:

> (a) You have a certain propositional attitude that p (for example, you believe that something red is likely to be found at your present location).

---

conceptual content, arguing neither that the cognitive penetration claim is true nor for the existence of non-conceptual content.

[91] Please note that Macpherson's notion of 'early vision' is different from that of Raftopoulos. She does not describe it as a subpersonal state or an unconscious state, rather, she clearly states that 'early vision' involves a representational content.

(b) p involves a concept R (for example, the concept of being red), in the sense that possession of R is required to specify the content that p and possession of R is required in order to have the propositional attitude that p.

(c) The content of this propositional attitude causally affects your perceptual processes yielding an experience with the content that q (for example, that there is something red present) that involves R (in the sense that R is required to specify the content that q).

(d) The content that q is a content that an experience could have without being affected by propositional attitudes in this way. (Macpherson forthcoming: 22)

Here Macpherson seems to define cognitive penetration as one that has a 'propositional attitude' involving one's belief; hence the content in perceptual states is a propositional attitude representation.[92] And the notion of cognitive penetration lite is that the experience affected by cognitive penetration can share content (or the same phenomenal character) with an experience, which is not affected by that cognitive penetration. Macpherson clearly takes a different perspective from the neurophilosopher. While most neurophilosophers (particularly Raftopoulos and Müller 2006; Raftopoulos 2009) hold a view that the early visual system is produced by a cognitive impenetrable mechanism of vision,[93] Macpherson considers that there could be higher-level cognitive states

[92]In general, conceptual content is the kind of content involved in propositional attitudes. Macpherson claims that "one reason for thinking this is that a crucial role is postulated for concepts in the having propositional attitudes: in order for a subject to believe or desire something, he or she needs to possess the concepts that are required to specify what it is that is believed or desired" (forthcoming: 5).

[93]Not all neuro-philosophers and psychologists hold this view. Pylyshyn presented a similar idea to Macpherson's that early vision can be cognitively penetrated by one's higher-level cognition. He explains cognitive penetrated perception as a brain mechanism, which shows that early vision can be cognitively penetrated, for "the function it computes is sensitive, in a semantically coherent way, to the organism's goals and beliefs, that is, it can be altered in a way that bears some logical relation to what the

involving propositional attitudes such as belief and desires that "generate perceptual imagery which adds to, contributes to, or alters perceptual experience" (forthcoming: 1). Hence, there could be cognitively penetrable early vision on Macpherson's account. She (2012 and forthcoming) gives a good example of this by using a psychological experiment carried out by Delk and Fillenbaum (1965):

> "Different shapes were cut out of a uniformly coloured orange paper. Some of these shapes were shapes of characteristically red objects, such as hearts and lips, and some were not. These shapes were placed against a uniformly coloured background that could be adjusted in colour from yellow, through the shade of the orange of the paper, and into red. Subjects were instructed to ask for changes in the colour of the background to be made until it matched the colour of the shape placed in front of it. Subjects chose a background that was redder when the characteristically red objects were placed in front of it than they did when the other objects were placed in front of it. The latter were matched to a more orange colour. (The more orange colour was, objectively, the more accurate match.)" (Macpherson forthcoming: 23)

We can assume that the subjects' beliefs about the characteristic colours of particular shapes like heart and lips penetrated their experience and led them to perceive some objects as redder than others, i.e. their beliefs causally affected the representational contents of their experiences. When they looked at the orange heart, their belief that 'hearts are red' might have affected (or penetrated) the representational contents of their visual state and caused them to have the content 'red heart'. The important point here is that we do not have contents of SSRs that we perceive, rather, we have perceptual contents of colours that we perceive. Hence, colour perception in early vision could occur *via* conceptual engagement rather than being entirely dependent on its physical properties, as we had seen in sections III-2 and III-4. This is the reason for discussing Macpherson's idea of cognitive penetration and early vision. The aforementioned non-

---

person knows" (1999: 343). However, he alleged that these are said to "affect that which feeds into the early visual system, not the early visual system itself" (Pylyshyn 1999 cited in Macpherson forthcoming: 12).

conceptualists in chapter III as well as neurophilosophers have a tendency to treat early vision (sensuous) and subpersonal states as types of perceptual states of experience even though their contents are inaccessible and sometimes not different from physical reactions (or senses); therefore there is the possibility that these states would not entail representational contents. By contrast, Macpherson does not take the same view that there could be perceptual content in the state of physical reactions, rather, she clearly shows how perceptual content is represented in early vision. On her view, there is no sensible information or physical reaction to stimuli, rather, there is clear representational content even though such content can be both cognitively and non-cognitively penetrable. This classification would better define what should be perceptual contents than the neurophilosophers account of early vision, however, the problem of non-conceptual content of experience still remains. As Macpherson (forthcoming) points out, there is still the possibility of non-conceptual content that is constituted by mere perception, e.g. the 'state account of non-conceptual contents' and the 'independence of a subject's possession of concepts', as articulated by Bermúdez and Cahen (2012) who define non-conceptual content as occurring when the content is not a function of, or determined by, the subject's possession of concepts. It is also clearly possible that *this* type of experience could be produced by mere perception (a visual mechanism involving SSRs, retinas, etc.) alone, "such as might occur in a simple, noncognitively penetrated experience of a heart that is cut out of red paper—an experience as of a red heart" (Macpherson forthcoming: 24). This state seems not to be conceptually penetrated. Also, as well as SV and UPC type non-conceptualism, here the possibility of non-conceptual content still remains. Given this perspective, Macpherson claims that there could be both conceptual and non-conceptual content in a cognitively penetrable visual state.

This thesis agrees with this perspective. However, it is still doubtful how both conceptual and non-conceptual contents simultaneously in cognitively penetrable states because the existence of non-conceptual content can only be confirmed if such contents are in conscious states. Could there be any non-conceptual content that reveals its existence without conceptual engagement in conscious experience? In the next section, I explore this possibility through examining Macpherson's argument for non-conceptual contents that are compatible with cognitive penetration lite.

IV-5.2. Non-Conceptual Contents in 'Pure Perception'

Macpherson claims that cognitive penetration lite might be compatible with two kinds of non-conceptual contents: (1) the independence of a subject's possession of concepts, and, (2) the state account of non-conceptual contents. In case of (1), she uses Bermúdez and Cahen's (2012) notion of conceptual content, stating that she sees "the definition of conceptual content as occurring when the content is a function of, or determined by, the concepts of the subject" (Macpherson forthcoming: 31). Hence, if the content is not a function of, or determined by, the subject's possession of concepts, then it is non-conceptual. However, Macpherson claims that there is a hidden ambiguity in Bermúdez and Cahen's notion of conceptual content because the contents can occur in two different events: 'on that occasion' and 'in general'. So it is not clear whether they mean to refer to cases of 'on that occasion' or 'in general'.

Now we can consider a case in which cognitive penetration lite leads subjects to have cognitively-penetrable experience. *On that occasion*, the experience is produced by cognitive penetration lite, and therefore, contents of the experience can possibly be a function of, and determined by, the subjects' possession of concepts. We can utilize the same point in the case of token experiences.[94] Token experiences are usually considered to be cognitively-penetrable, because they individuate things that we perceive, such as the *glasses that I am wearing* or the *red heart at which I am looking*. If token experiences could be determined by a subject's possession of concepts, then such experiences are conceptual.

On the contrary, *in general*, "the existence of *that* type of experience—the type that has the same content and phenomenal character—does not need to be a function of, or to be determined by, a subject's possession of concepts" (Macpherson forthcoming: 31) because that kind of experience could have been produced without cognitive penetration occurring, i.e., it can be produced by pure perception alone. In fact, it seems that we do

[94]Macpherson argues that "token experience may be produced by cognitive penetration lite" (forthcoming: 32).

not need to deploy or entertain concepts (or to have any propositional attitudes) in order to have *pure* perceptual experiences. If cognitive penetration leads a subject to have a token experience (the red heart that I am looking at) of a type (a red heart), and other token experiences can occur by pure perception alone, then the subject's possession of concepts may play a causal role in her having a token experience. But "there seems no reason to think that, in general, coming to have that type of experience requires possession of concepts" (Macpherson forthcoming: 32). Hence, in order to have this type of experience, which is produced by cognitive penetration lite, a subject does not need to entertain concepts. As such, Macpherson claims that cognitive penetration lite can be compatible with non-conceptual content in the general case. If so, there could be both conceptual and non-conceptual content in pure perception that is cognitively penetrable.

What I want to highlight in this argument is that there could be non-conceptual content under the condition that we do not consider the possibility of the expository perspective at all. Although we define the content of experience to be the product of all the processes of experience, it is still possible that being in a perceptual state can be non-conceptual. And this state could contain representational contents that could lead the subject to be in the personal level of experience. Hence, if the contents in those states are not conceptually accessible, then the content of those states could be non-conceptual content even if they are cognitively penetrable.

One possible solution for this phenomenon that this thesis suggests is finding another conceptual character of perception, hence all the representational content in perception can be content of thought — the principle of Type-1 conceptual capacity (the capacity of spontaneity). Not only can this attempt respond to the possibility of coexistence of conceptual and non-conceptual content in conscious experience, but it could also satisfy the non-conceptualist's demand for a wider notion of experience. As I have repeatedly stated, the purpose of this thesis is not only the development of existing conceptualism, but also to build a bridge between the two camps.

As such, if this thesis could find conceptual character (or, at least the conceptual possibility that perceptual contents of pure perception become thought contents) in pure

perception — even if we only take the functional perspective — it will have accomplished its intended goal. For this reason, this thesis suggests that we need to take a slightly different perspective from existing versions of conceptualism in order to solve the problem of the non-conceptual character at the occurrence of perception. How will this be possible?

To conclude this chapter, I give a brief summary which focuses on whether we are able to find any type of capacity that could be called 'conceptual capacity' even if there is no conceptual engagement at all.

IV-6. The Conceptual Character of 'Pure Perception'

Throughout the discussions of the sections IV-2 and IV-3 (the *richness argument* and the neurophilosophical arguments for non-conceptual contents), I addressed two things: First, I emphasized the expository perspective that representational contents in perception could be grasped through a subject's possession of concepts; hence there is no non-conceptual content unless perceptual contents do exist. If the *richness argument* is to be successful, it must show that the rich perceptual content cannot be grasped by concepts despite its existence only being confirmed when we take the expository perspective on experience. Hence the only problem is whether we are able to report the content of experience — the principle of the Type-3 conceptual capacity that categorises the object of perception. If we can consciously access the content (A-consciousness) then that suffices for having conceptual content of that state. Even if the state represents something which may not be grasped in terms of unsophisticated concepts of the subject, that does not imply it is non-conceptual. In this case, when we talk about the content of experience, we have to consider the expository perspective, that is, whether they are able to be grasped by concepts that the subject possesses.

Second, it seems that we should not demonstrate the conceptual character of inaccessible contents. However, it is not quite clear whether non-conceptual contents in the neurophilosophers cases actually exist in perception. In chapter II, I have argued that we should avoid the view that there could be non-conceptual contents in non-cognitive

states like physical reactions or subpersonal states; in addition, it is very doubtful that such states have certain representational contents. The neurophilosophers we have examined in section IV-3.2 seem to extend the range of perceptual content beyond our ability to evaluate the conceptual character of perceptual content, as do the non-conceptualists we looked at in Chapters II and III. What we need to pay attention to is the content of a subject's experience, rather than an enabling condition for having representational content.

When discussing these two points, I also argued that non-conceptualists defined perceptual contents too widely (in section IV-3). Because of this, they seem to treat some perceptual information as if those are represented in a subject's perceptual state. Particularly in the case of neurophilosophers, their notion of the early visual system is sometimes not very different from a simple sensible reaction.

However, there is another point to which we need to pay attention in the discussion of section IV-4. Perception could occur from both a subject's possession of concepts and the visual mechanism without depending on those concepts. That is to say, being in a perceptual state (or having a representational content) could be affected by both a subject's possession of concepts and perceptual processes occurring without conceptual engagement. Also, as we had seen in the example of the brindled cow in the section IV-3.3.b, there could be, at least, one or more representational contents of the perceived object in a perceptual state even though the subject of perception is aware of only one feature of the object. This state clearly permits the possibility of the coexistence of conceptual content and non-conceptual content. Because of this possibility, I suggested that we need to find another perspective from the existing forms of conceptualism in order to respond to this issue.

This thesis will find the conceptual character of experience even if we only take the functional perspective. This should be type of thought-form that leads a perceiver to think of perceived objects *via* a discrimination ability, hence all the representational content in perception can be content of thought — the principle of Type-1 conceptual capacity (the capacity of spontaneity). If representational contents obtained by pure perception were discriminable, and hence thinkable by a subject, then this potentially

implies the conceptual character of experience, such as a possibility of inferential thought. Hence we would be able to identify the conceptual character of experience even if we only take the functional perspective.

Again, perception could occur with or without conceptual engagement, but the way that we can access its content depends upon concepts. I do not claim that the discrimination ability is a type of thought, rather, what I want to argue is that we are able to think about representational content through the discrimination ability that is operative in perception.

In the next chapter, I focus on demonstrativism, which is a strong version of conceptualism, alongside some non-conceptualist refutations of this view, mainly because the arguments that this thesis has presented are supported by demonstrativism. Through these discussions, I examine the conceptual character involved in perception, namely discrimination ability, and then take steps towards offering an advanced conceptualism that could allow for the conceptual character at two levels of experience – the subpersonal and the personal.

Chapter V. Conceptualism as Demonstrativism

Throughout the discussions from chapters II to IV, I have emphasized that we can conceptually access perceptual contents when taking the expository perspective on experience even though such contents are represented without any conceptual engagement at the time of perception. I argued that the non-conceptualist arguments of Peacocke, Hurley, and Bermùdez in chapter II focus on consciously inaccessible contents that are beyond the range of what we call experience. In a similar vein, the non-conceptualist arguments of Byrne, Hilbert, and Tye in chapter III over emphasize the role of representational content in perceptual states, rather than how it is understood. In addition, I emphasized, in chapter IV, that the non-conceptualist's notion of experience or perceptual content is overly broad and flexible, e.g. ranging from subpersonal states to the personal level. I argued that the conceptual character of experience, particularly when taking the expository perspective on experience, is still secured even if we apply the narrow notion of a concept to the wide range of experience.

However, I argued that there remained the possibility of the kind of non-conceptual content that we saw in section I-3.b—perceptual contents that are not reported, where this is understood as involving the co-existence of accessible and inaccessible content in A-conscious experience even though we take the expository perspective on experience. For example, in Sperling's experiment in section I-3.b., subjects were exposed to flashed groups of letters, e.g. in 3 by 3arrays, for very short periods. The subjects were able report that they could see all the letters, but they reported only about half of them. Although all of the letters were represented in their perceptual states, they were able to consciously access only half of the represented contents. This does not mean that the unreported letters do not figure in the content of experience. For subjects clearly have that particular content in their conscious experience because they reported that they could see all of the letters. This is why subjects can have P-conscious experience of the letters, but for only half of them to be consciously accessible (in A-consciousness). This is why Sperling's subjects can have both conceptual and non-conceptual content in their conscious experience even though we depend upon the expository perspective.

This chapter attempts to solve the problem raised in chapter IV — how we can verify conceptual character in the expository perspective on experience if there is perceptual content that is not reported. In particular, this chapter focuses on the conceptualist's stronger notion of conceptual character, namely, the relationship between demonstrative concepts and the conceptual character of experience, and how that differs from the non-conceptualist's approach. While a restricted notion of a *concept* and a broad notion of *experience* is usually held by the non-conceptualist, conceptualists are quite open to various accounts of what might be a concept, but define experience as the product of all the stages involved in its production.[95] I agree with the conceptualist that the content of experience does not only refer to an individual stage of experience, rather, it stands for the outcome of the processing of all of those stages. This position could provide a starting point for the advanced conceptualism that I wish to develop. Further, the conceptualist's account of demonstrative concepts allows us to find conceptual content in perception even if we only take the functional perspective on experience.,

As such, this chapter consists of three discussions about demonstrative concepts and makes one suggestion for developing conceptualism. In the first section I introduce a reason for taking the *argument of demonstrative concepts* and the *fineness of grain argument* (Evans 1982) as the central case of this chapter.

The second section discusses the *fineness of grain* argument in depth, and then examines how conceptualists respond to Evans. I focus on three criticisms made by non-

[95] In *Mind and World*, McDowell, introduces his conceptualism by way of the Kantian thought that empirical knowledge involves "a co-operation between receptivity and spontaneity" (1994a: 9). He then argues that contents of perceptual experience are not only obtained by sensible intuitions as operations of receptivity, but are also structured by conceptual capacities as operations of spontaneity. Receptivity could refer to the relationship between the properties of an object and a subject's visual mechanism; on the other hand, spontaneity could be considered conceptual engagement by a subject's mind. I apply McDowell's idea of receptivity and spontaneity in order to confirm the conceptual character of experience.

conceptualists (namely, the *problem of indeterminacy*, the *conditions for possessing demonstrative concepts*, *and causal relationship between the use of demonstrative concept and experience*) against demonstrativism (particularly those made by Peacocke (1998 and 2001), Kelly (2001a and 2001b), and Heck (2000)), and then consider whether these criticisms harm the conceptual character of experience.

Last, I investigate a potential conceptual capacity involved in perception, namely, the discrimination ability which could produce inferential thought in perception. Although the non-conceptualists and conceptualists who will be examined in this chapter both take the capacity to use perceptual demonstratives to be possible only at the personal level of experience, I will attempt to find an implication involved in both Marr's account of visual representation and the use of perceptual demonstrative that shows there is one possible conceptual capacity — the discrimination ability — that activates automatically at the time of perception. Therefore, we would be able to find a certain type of conceptual engagement even if we take the only functional perspective on experience. I will not attempt to argue that the discrimination ability is a type of conceptual capacity, rather, I suggest that we should consider that perceptual discrimination implies a conceptual capacity in perception.

I will then develop an idea drawn from these discussions and chapters II, III, and IV, namely, the existence of a conceptual capacity that activates when perception occurs without the three major types of conceptual capacities in order to advance a form of extended conceptualism even though there could be the possibility of the coexistence of accessed and inaccessible content in conscious experience.

V-1. The Fineness of Grain Arguments and Content of Experience

This chapter begins by examining the *fineness of grain argument* (Evans 1982) and considers some conceptualist responses. The argument claims that the content of colour experience is sometimes more fine-grained than that of our concepts of colours. Of course, I agree that there are some colour experiences that are more fine-grained than our possession of concepts, however, if we have the right information or the name of a

target object, then we can make a conceptual judgment about it (in line with the Type-3 conceptual capacity that categorises the object of perception) even though colours are represented without any conceptual engagement. In this sense, the assumption that we cannot conceptually grasp all of the fine-grained differences in shades of colours makes it seem as if we don't possess the proper names or physical theories that are relevant to perceived shades. So, the first problem brought by Evans seems to confuse being unable to name an object, a colour, or a content with there being non-conceptual content. Although this implies the non-conceptual character of experience, there is a possibility that we can use perceptual demonstratives to grasp the detailed shades of colours. Conceptualists such as McDowell (1994a) and Brewer (1999) argue that Evans fails to consider this possible use of demonstratives that characterize the content of perceptual experience, rather than just general ones, and suggest that perceptual demonstratives might allow us to grasp subtle difference between shades. Even if we encounter more fine-grained colours than we find in spectral reflectance or on the Pantone list, we can still conceptually grasp the target colour by using demonstratives such as 'that shade'. Hence, if we use the demonstrative concept properly, we can conceptually grasp the target colour.

However, the problem of fineness of grain in colour experience is not this simple. Even if we can grasp delicate shades of colours using perceptual demonstratives, it remains a problem whether or not they can play the role of a concept in experience as well as the role of a concept in thought. This will lead us to an important issue about perceptual demonstratives, namely their eligibility, to be considered to be concepts. I focus on three main problems that are presented by non-conceptualists: (1) the use of perceptual demonstratives causes indeterminacy (Peacocke 1998); (2) subjects cannot satisfy the re-identification condition (i.e. a condition for re-identifying the same object on different occasions) as a condition for their possession (Kelly 2001a and 2001b); and (3) there is a causal problem between the use of demonstrative concepts and demonstrative experience (Heck 2000). However, I believe that these problems are caused by the non-conceptualists' narrow definition of concepts, and their ignorance of both context-dependency and the constitutional aspects of colour experience.

Moreover, there is one aspect we need to consider in the use of perceptual demonstratives: This is that the *discrimination ability* must take priority over the *recognition ability* (i.e. an ability to recognise the same object on different occasions) when we consider the conceptual character of experience. There is no particular reason to believe that recognition ability is the only necessary condition for possessing demonstrative concepts — it has to be accompanied by the discrimination ability. In McDowell's conceptualism (1994a), the discrimination ability is inseparable from the recognition ability and is a type of conceptual capacity that is already settled in experience. Although McDowell takes the discrimination ability as a type of conceptual capacity when we consider personal level experience only, I take this to provide the main argument in favour of the advanced conceptualism that this thesis aims to develop: specifically, how we can find a conceptual capacity even though there is no conceptual engagement which involves only the three major types of conceptual capacities at the occurrence of perception.

My main objections to non-conceptualism, particularly aimed at those who criticize demonstrativism, are follows:

• Non-conceptualists ignore the feature of context-dependency as one of the conditions for possessing concepts.
• The re-identification condition is not the only necessary condition for possessing demonstrative concepts.
• We are able to think demonstratively using perceptual demonstratives in experience.

First, I will argue that not only does demonstrativism show the possibility of the conceptual character of experience, but it also reveals how we can think about the representational contents obtained by the discrimination ability offered by perception; hence it implies Type-1 conceptual capacity (the capacity of spontaneity) or how we can secure the conceptual character of experience when we take only the functional perspective. I then develop an advanced conceptualism which is the most important positive proposal that this thesis offers. This proposal depends on the capacity for using perceptual demonstratives being a good illustration of the existence of conceptual character in both the functional and expository perspectives on experience. This may

provide an appropriate response to the problem raised in sections I-4 and IV-5: namely, the coexistence of conceptual and non-conceptual content in conscious experience. This is the main reason why I focus on demonstrative concepts and the discrimination ability.

V-2. Why does the Fineness of Grain in Colour Experience Matter?

We have seen that most non-conceptualists cannot verify the non-conceptual content of experience when we take the expository perspective on experience. Moreover, what we call 'perceptual experience' does not only refer to the early or late vision, or as neurophilosophers' suggest, sub-personal or personal states, rather, it stands for the product of all the processes involved in those levels or states. Hence, what we call the 'content of perceptual experience' does not only refer to the content of a particular stage of experience, rather, it is the outcome of all the stages of experience including a subject's interpretation of those states. As such, I deny conceptualism about the early vision or subpersonal states, while I have favoured conceptualism about late vision or personal states. And I have argued repeatedly that we need to consider the whole process of experience in order to examine the conceptual character of experience. Of course, we have also looked at how the way we access each stage might be different and how the contents[96] of these stages are also different from one another. However, all of these stages and their contents are processes contributing to perceptual experience, as such, there must be conceptual engagement in these processes.

Most philosophers who advocate non-conceptualism, such as Dretske, Block, Raftopolous, Macpherson *et al*., also concede that there can be conceptual engagement in the expository perspective on experience, i.e., at the personal level, in late vision, the conscious state, etc. Hence, they seem to focus only on the functional perspective on experience in order to prove the non-conceptual character of experience, or they at least overlook the importance of the expository perspective. This tendency leads them to believe that there is non-conceptual content in experience. Of course, this might not be a problem for them if we consider only the functional perspective on experience, but the

[96] This is right *only if* we accept the view that visual properties or perceptual information could be the contents of those stages.

problem is that we should not talk about a content of experience by focusing on only the content of a particular stage, i.e. a content solely of the early visual stage could not be a content of experience. If this is so, why do we need to consider both the functional and expository perspectives in order to talk about the conceptual or non-conceptual character of experience? Here we need to take the discussion back to the early debates between conceptualism and non-conceptualism. Did non-conceptualism indeed focus on only one perspective on experience?

Let us have a look at Evans's (1982) fineness of grain argument. Simply put, the fineness of grain argument states that we can perceive[97] more shades of colour than we have concepts of colours. If we treat the shades of colours as sensual information or physical properties of an object, then they could be seen in terms of the functional perspective, whereas they could be seen as expository contents if we concede that they are contents of experience. The key point of Evan's argument is that the fine-grainedness at the lower (sub-personal) level of experience could affect the higher (personal) level of experience, hence there is no way to grasp the fine-grained content even if it is at the expository level because we do not possess colour concepts for such fine-grained shades. And the fine-grainedness at both levels leads to the conclusion that experience has non-conceptual content. Of course, I claimed that the non-possession of a highly general concept does not prove the existence of non-conceptual content through criticizing the richness argument (section IV-3.2). However, the fineness of grain argument must be considered separately from the richness argument because the richness argument concerns various properties of multiple objects in a subject's visual field, while the fineness of grain argument concerns a particular property that belongs to a certain object. In addition, this particular property is more fine-grained than our concept of the object. Hence, the significance of the fineness of grain argument is that not only could a particular property of the object (e.g. a certain shade) exist as a content without a subject's conceptual engagement in her perceptual state, it also cannot be explained by her possession of a concept of *that* object. This interpretation of Evans's

[97] The meaning of the term 'perceive' here is dependent on interpretation. It could refer to both the sub-personal and personal level of experience.

argument seems to satisfy the case of the coexistence of conceptually accessible and inaccessible contents of experience. Therefore, the discussion of the fineness of grain argument plays a key role in proving the conceptual character in both the functional and expository perspectives on experience.

In the next section, I critically examine the fineness of grain argument in depth in order to consider whether it supports the possibility of non-conceptual content at both levels of experience.

V-2.1. Fineness of Grain in Colour Experience

The fineness of grain argument is the most well-known argument for non-conceptualism, and was propounded by Evans (1982). Evans argues that there can be non-conceptual content in perceptual experience because perceptual contents have fine-grained details that cannot be captured by the concepts that we possess. He particularly focuses on colour experience, and famously asks, "do we really understand the proposal that we have as many colour concepts as there are shades of colour that we can sensibly discriminate?" (1982: 229). Evans's answer is to argue that we do not possess as many colour concepts[98] as shades that we can discriminate, and so, colour experience has non-conceptual content.

My objection is that it is unclear whether Evans is referring to the personal or subpersonal level when he explains non-conceptual content (Bermúdez and Cahen 2012). According to Campbell's (2005) interpretation of Evans and non-conceptual content, most contemporary debates about non-conceptual content discuss the content of conscious perceptual states. On the other hand, it seems that Evans understood the non-conceptual content of perceptual states as if it were non-conscious, but could be conceptual when a subject was able to consciously access it (e.g, A-consciousness) because the conceptual contents that Evans defines are contents of thought or talk (hence

[98] These could be linguistic terms for colours if we interpret 'concept' here as playing an expository role.

reportable), whereas non-conceptual contents are contents involved in the information processing of the visual mechanism. Campbell says:

> "Evans was one of the first to introduce the idea that there is a distinction between the type of representational content used in our thought and talk, which he called "conceptual content", and the kind of content that is involved in biological information processing, which he called "non-conceptual content"; and he tried to provide principled ways of distinguishing them, and a view of their relation to one another." [99] (2005: 196)

Campbell argues that non-conceptual contents exist at information processing stages of experience – stages which we cannot consciously access. He thus emphasizes the functional perspective on experience rather than the possibility of conceptual engagement in the expository perspective like McDowell (1994a) and Brewer (1999) — particularly Type-3 conceptual capacity that categorises the object of perception. If Campbell understands Evans's non-conceptual content correctly, then there are two notable points here: (1) Evans himself conceded that there could be conceptual engagement between the information processing stage and the stage of thought, and, (2) that the fine-grainedness could apply to these two perspectives whether or not they are in a conscious or an unconscious state. Nevertheless, what we need to take note of is that fineness of grain could exist at both a subpersonal and a personal level. Colour experience is a typical example of this. For example, in the case of the colour 'red', our perception of 'red' would be subtly different even when viewing the same designated colour. That is, although we perceptually judge the reddish object as being red using the concept of red that we possess, an individual's perceptual contents may vary as we have seen in the colour variation case in section III-2. In addition, we do not have all the concepts that correspond to each shade of 'red'. Not only is the perceptual information yielded by the visual system more fine-grained than our concept of that information, we are also unable to conceptually grasp all the information (delicate shades) that we can

[99] Cf. Evans (1982), index entries under 'conceptual and non-conceptual content', especially p. 157. For an overview of the current state of play, see Gunther (2003).

discriminate and talk about. Because of this, the fine-grained argument is claimed to show that experience has non-conceptual content even if we take both the functional and the expository perspectives.

In the next section, I explore how conceptualists, particularly McDowell (1994a) and Brewer (1999), confront the fine-grainedness of colour contents and the non-conceptual character of experience.

V-2.2. Demonstrative Concepts

As a conceptualist, McDowell appeals (in his *Mind and World*) to demonstrative concepts (such as *that* red, *that* scarlet, *that* shapes, *that* volume, and so on) in order to respond to Evans. He appeals to demonstrative concepts in his famous characterization of conceptualism, namely that "my visual experience represents something as being of *that* shade" (1994a: 57). In fact, we are not required to possess a correct name, SSRs, or a Pantone list of colours in order to grasp the detailed shades of colours that we can sensibly discriminate. It thus might be that Evans-type non-conceptualism restricts conceptual abilities to the ability to use colour expressions. As such, McDowell insists that non-conceptualists come to the wrong conclusion based on the false premise that a content of colour experience has to correspond to a colour expression like green, red, or burnt sienna (*ibid*). Hence, what we need to pay attention to in Evans-type non-conceptualism is why 'conceptual capture (or conceptual capacity)' always refers to colour terms.[100] In addition, we are not required to have physical knowledge of colour in

[100] McDowell also points to this issue. He asks, "why should we accept that a person's ability to embrace colour within her conceptual thinking is restricted to concepts expressible by words like 'red' or 'green' and phrases like 'burnt sienna'?" (1994a: 56). Here, we can see how McDowell's conceptualism responds to Evans's non-conceptualism: first, the notion of a colour concept is not only restricted to colour expressions that we normally use; and second, McDowell's understanding of Evans's non-conceptual contents refer to the contents of personal level of experience. In the next section, I will approach the former by examining Brewer's notion of demonstrative

order to grasp the target colour *conceptually*. In this sense, McDowell argues that Evans himself makes a mistake in defining a conceptual capacity simply as the ability to properly use linguistic expressions. McDowell then exploits the use of perceptual demonstratives, claiming that we can conceptually grasp fine-grained colour shades by uttering "that shade" (1994a: 57). Brewer shares the same view about demonstrative concepts, and claims that the subject can make a perceptual judgment such as "that is thus" even if more fine-grained contents of colour experience exists than she possesses concepts (1999: 172). Brewer, like Evans (1982) and Peacocke (1989), also concedes that we can perceptually discriminate very detailed shades of colours, far more shades than we possess concepts of, expressible by colour terms like yellow, scarlet, or whatever.[101] However, he believes that the non-conceptualists' claims depend on an assumption 'context-independence.' He argues that:

> "There is an unacceptable assumption behind this line of argument, that concepts necessarily correspond with entirely context-independent classifications of things […]. This restriction unacceptably rules out any appeal to context dependent demonstrative concepts, though concepts associated with expression like "that shade of red", or "just that large in volume", grasp of which essentially depends upon the subject's relations with the actual entities which constitute their semantic values." (1999: 171)

According to Brewer, colour terms like *scarlet* or *yellow* are context-independent concepts, whereas we are able to use perceptual demonstratives such as 'that shade of

---

concepts, alongside contextuality. I will explore how demonstrative concepts could solve the problem of non-conceptual character in the personal level of experience.

[101] Brewer also admits that we can find this kind of perceptual experience not only in colour experience but also in spatial magnitude or volumes of space. We are able to perceive spatial magnitude or a certain volume of space in a kitchen without having any concepts of that magnitude or that volume such as unit of measurement or cubic feet (Brewer 1999: 170-–171).

red' or 'that shade of green' that are context-dependent in order to conceptually grasp the fine-grained content of colour experience. [102]

These are the conceptualist's very basic responses to the fineness of grain argument. In the next section, I explore in depth why these conceptualists consider the use of perceptual demonstratives to be a conceptual capacity involved in the contextual feature of experience, namely, *immediacy* and *minuteness* between contents of experience and a subject's *conceptual capacity*. I then consider how the use of demonstrative concepts shows the conceptual character of experience even though we take the both the functional and the expository perspectives on experience.

V-3. Conceptualism as Demonstrativism

We have seen that both conceptualists and non-conceptualists agree on the existence of fine-grained contents but disagree over the semantic value of concepts. But their views on the fine-grained content of colour experience differ. While non-conceptualists claim that the content of perceptual experience has non-conceptual content that cannot be expressed by the concepts that we possess, conceptualists argue that colour experience has contextual features, and that fine-grained shades of colour can be grasped and understood by non-descriptive concepts called 'demonstrative concepts'. Using demonstrative concepts, subjects can explain the delicate shades of colour experience that cannot be captured by general concepts. For example, regarding a red apple in front of me, I can express in detail the properties of the apple by uttering 'this apple's surface is red', even though I do not have the concepts 'scarlet', 'F/3 in the Munsell colour chart', or '650nm'. That is to say, we are not required to possess such concepts in order to conceptually grasp the shades of a red apple; rather, we can conceptually grasp it by

[102] However, it is not quite clear whether the non-conceptualists' view of colour concepts refers only to context-independent concepts because the use of such concepts does not imply the context-independence of experience. Perhaps Brewer wants to emphasize that contents of perceptual experience belong to the context in which a subject and an object are involved. In this sense, it seems that use of perceptual demonstratives could reflect the contextual feature of experience.

saying that "my visual experience represents the red apple as being of *that* shade" (McDowell 1994a: 57).

Brewer (1999) also insists that the non-conceptualists ignore the idea of 'context-dependent' conceptual representation because the notion of 'context-independence' is implicit in the notion of a concept as used by most non-conceptualists. According to Brewer, certain concepts, such as 'scarlet' or 'four cubic feet', are context-independent concepts; on the other hand, terms such as 'that shade of red' or 'that volume' are context-dependent and are therefore demonstrative concepts. In the case of context-independent concepts, the question of who can grasp the concept is irrelevant to its semantic value. By contrast, grasping a context-dependent concept depends upon the relationship between the subject and the object that constitutes the semantic value of the concept. Brewer thinks that the difference in the fine-grained content of perceptual experience can be captured by context-dependent demonstratives. The subject can make a perceptual judgment, such as "that is thus" (Brewer 1999: 172), even if there are more fine-grained contents of perceptual experience than she experiences. In this respect, he insists that the non-conceptualist's claims are not plausible because fine-grained perceptual experience might involve conceptual contents such as the demonstratives 'this' or 'that'.

Here we can see the conceptualist's perspective on the conceptual character of experience and fine-grainedness: what subjects need to do in order to exhibit conceptual activity is not to match expressible colour terms to each shade precisely. Instead, they must match demonstrative concepts to shades in their perceptual context. Even if a subject's visual content of a certain shade (say, of the apple) is constituted without any conceptual engagement, such that her visual perception occurs without concepts, she can nevertheless grasp the content conceptually by using perceptual demonstratives when taking the expository perspective on the experience. McDowell also argues that,

> "[…] in the throes of an experience of the kind that putatively transcends ones' conceptual powers—an experience that ex hypothesi affords a suitable sample—one can give linguistic expression to a concept that is exactly as fine-

grained as the experience, by uttering a phrase like "that shade", in which the demonstrative exploits the presence of the sample." (1994a: 56-57)

In this process, we can see that the conceptual character of experience could be dependent on the context in which subjects and object are involved. There are two characteristics of this contextual feature of experience that show how perceptual contents are constituted in a relationship between subjects and coloured objects: namely, *immediacy* and *minuteness*. Since a certain perceptual demonstrative like 'this red' or 'that blue' indicates colour directly in the contexts in which it is used, demonstratives minutely and correctly individuate different shades of colour. Because of this direct indication, not only does the use of perceptual demonstratives lack ambiguity when explaining or comparing the difference between various shades, it also leads us to believe that a subject can immediately and conceptually grasp the characteristic features of an object. In this way, demonstrative concepts not only secure the content of experience, but also reflect detailed phenomenal features of an object such as different shades. It is therefore unacceptable to assume that non-conceptual contents could exist in fine-grained experience because of the possibility of use of perceptual demonstratives in the expository perspective on experience.

However, the conceptual character of the use of perceptual demonstratives has been attacked by various non-conceptualist arguments. Most of such arguments focus on the characteristic aspects of demonstrative concepts, which are based on their contextual features. In the next section, I examine non-conceptualist arguments for demonstrative concepts, and consider whether this can harm the conceptual character of demonstrativism.

V-4. Non-Conceptualist Accounts of Demonstrativism

Non-conceptualists such as Peacocke, Kelly, and Heck, do not concede that demonstrativism is a type of conceptualism because they think that perceptual demonstratives are not proper concepts, hence, demonstrative concepts cannot play the role of a concept. Peacocke (1998b) and Kelly (2001a and 2001b) ask whether

perceptual demonstratives could satisfy the conditions for being a concept. By contrast, Heck (2000) considers the operation of demonstrative concepts. Peacocke (1998a) indicates that perceptual demonstratives involve indeterminacy, and that we are not able to confirm which aspect of experience the subject really represents because perceptual demonstratives sometimes excessively and minutely classify the content of single experience. Kelly (2001a and 2001b) considers the possession condition of concepts stating that the use of perceptual demonstratives does not satisfy the reidentification condition. While these two philosophers focus on the eligibility for being a concept when using perceptual demonstratives, Heck (2000) argues that the use of demonstrative concepts does not necessarily imply that they are involved in perceptual experience, viz. the ability to use perceptual demonstratives is not engaged with having a perceptual representational content when perception occurs.

I examine these criticisms in this section, and then carefully consider whether they undermine the conceptual character of demonstrativism in the next. First, I will argue that Peacocke's argument only addresses the interpretational problem of a subject's experience, rather than the problem of conceptual character of experience. Also, Peacocke seems to overlook the possibility of demonstrative thought (specifically, that subjects can think about represented contents by using perceptual demonstratives), hence this possibility could entail that the personal level of experience has conceptual content. I then consider Kelly's *argument from the re-identification condition* as a condition on the possession of concepts and suggest that there is no standard measure of re-identification that can be used to establish whether or not a subject reidentifies an object. Second, I will argue against Heck's criticism (a) that we need to consider the constitutional aspect of demonstrative concepts in experience, and, (b) that it is unclear what Heck means by 'causal' and 'non-causal explanation.' In this way, I will take the first step towards advanced conceptualism.

V-4.1. Peacocke on Demonstrative Concepts

Peacocke (1998b) argues that perceptual demonstratives do not (1) secure the content of experience, and, (2) reflect detailed phenomenal features of an object. His reason for

holding this view is that perceptual demonstratives sometimes minutely or loosely indicate more than the experience requires when they indicate properties of colours. By this he means that perceptual demonstratives include a richer and a wider range of contents than the contents of perceptual experience. For example, certain demonstratives such as 'that red', 'that shade', and 'that scarlet' are related to the perceptual experience of a certain scarlet rose. These demonstratives all have different conceptual contents. However, they are used for the same perceptual experience – 'the visual experience of the scarlet rose'.

In addition, Peacocke points out that the problem of demonstrative concepts is that "it seems quite implausible that just one of these, not the others, features in the representational content of the experience of a shade of red" (1998b: 382). The demonstrative 'that scarlet' might refer to a property of the scarlet rose, but there is no need to exclude 'that shade' and 'that red' from the description. In this case, we may suppose that two people, *K* and *S*, experience the same scarlet rose but describe it differently. Suppose that neither *K* nor *S* have concepts for all the detailed shades of the rose, and that *K* utters 'that scarlet' and *S* utters 'that red' (rather than scarlet). Suppose also that both *K* and *S* claim that the shades they perceive are quite similar to H/6 in the Munsell colour chart. If this was the case, they might have different interpretations of what is represented in their perceptual states despite experiencing the same shade. Moreover, if each demonstrative has to indicate a different shade of the rose, then it seems that these demonstratives excessively and minutely classify the content of the experience of the single 'scarlet rose'. Because of this, Peacocke argues that they give a more detailed description than is necessary, and hence may not adequately explain a single colour experience.

Kelly (2001a) offers a similar argument. He agrees that demonstrative concepts have the benefit of directly indicating the properties of an object instead of describing them minutely. But this is quite context-dependent. It makes the referents or the contents of the experience non-fixable, because direct demonstratives like ostension do not need any other description of the target object. As such, demonstratives which indicate phenomenological properties such as *colours* might unnecessarily grasp a wider or

narrower scope of a target colour than does experience of that colour (2001a: 605).[103] Moreover, if a subject uses only 'that' to refer to a target object, then there is no way of knowing whether the demonstrative 'that' refers to 'that surface', 'that shade', or 'that texture', and so on. Because of this, Peacocke claims that "some general concept must be meant if this radical indeterminacy is to be avoided" (1998b: 382).[104]

In short, Peacocke and Kelly argue that the use of perceptual demonstratives in one's experience sometimes lead to doubts of the following kinds: (1) About what is really represented in a perceiver's experience because it is not quite clear what 'that' really refers to in various aspects of its represented contents, and, (2) Whether two different perceivers (*K* and *S*) are really experiencing the same phenomenal properties due to the fact that demonstrative concepts are expressed in the first person and this is dependent on the context in which the subject and the object are involved. This is too subjective to be an objective standard because a content of experience could be defined by which general concept that the subject is primed to use when explicating 'that', that is to say, it is not enough to evaluate the conceptual character of experience. I will respond to this

---

[103] Kelly agrees with Peacocke in claiming that Evans fails to consider the possibility of demonstrative concepts (Kelly 2001a: 602; Peacocke 1998: 382), though he does not agree with Peacocke's argument about contextual dependency which claims that properties of objects that are presented in experience are independent of the context in which subjects and objects are involved (Kelly 2001a: 606). Kelly seems to concede, at least partly, the contextual dependency of experience, but he brings out another problem with demonstrative concepts – a re-identification condition. I consider this in the next section.

[104] Peacocke basically holds the view that the content of judgements, beliefs, and other sorts of higher-level cognitive attitudes are a type of Fregean sense (1992: 3; Papineau 1996: 425–426). He thinks that concepts are entities at the level of Fregean sense rather than reference. In this sense, demonstrative concepts are more closely associated with reference rather than modes of presentation, and as such, it seems that Peacocke does not allow any spontaneous and contextual feature of concepts.

objection — the indeterminacy involved in the use of perceptual demonstratives — in section V-5.1. I then explore another condition for possessing concepts that has been suggested by Kelly, namely the re-identification condition.

V-4.2. Kelly on Demonstrative Concepts

Kelly (2001a and 2001b) argues that subjects using perceptual demonstratives can have perceptual experience without satisfying the re-identification condition which is essential for concept possession. According to Kelly's interpretation of McDowell's recognition ability …

> "The re-identification condition states that in order to possess a demonstrative concept for *x*, a subject must be able to consistently re-identify a given object or a property as falling under the concept if it does." (2001b: 403)

He then says that,

> "If a subject has a perceptual experience whose content is constituted in part by a demonstrative concept, then she must, at the same time, have the ability to *reliably* identify a separate experience as having the same content if it occurs after some interval (perhaps extremely short) of that experience." (2001b: 405–406, my emphasis)

Kelly offers two thought experiments to do with colour perception in order to show that a subject has perceptual experience using a demonstrative concept without satisfying the re-identification condition. In the first, a subject is presented simultaneously with colour samples, for example, D/10 and F/10 of the Munsell chart.[105] Here, we find that she is able to consistently distinguish two very similar shades of green. That is to say, in answer to the question, 'Are these shades the same?' the subject consistently answers no,

[105] Kelly (2001b: 405–406) originally gives examples of two shapes: a triangle and a square. I change these shapes to two greenish colour chips (they are similar looking but different in detail) in order to retain the coherence of the discussion for the fineness of grain and contextuality. This change does not harm Kelly's original argument.

and is consistently right in doing so. Also, she could use the demonstrative concept 'that green' in order to indicate D/10 or to distinguish it from F/10. In the second thought experiment however, the subject is presented with either one of the two colour samples ten times. It is perfectly conceivable that she would not be able to consistently re-identify a shade. That is to say, in response to the question, 'Is *this* the colour that was previously presented to you on your left?' the subject might answer yes five times and no five times. This is perfectly conceivable, in other words, and there is nothing about the nature of perception to keep it from being true that our capacity to discriminate colours exceeds our capacity to re-identify the colours discriminated. Kelly thinks that it would be impossible for the subject to possess the concept expressed by the phrase 'that colour' (said while pointing to the D/10 sample in the first test), because "one natural condition on the possession of a demonstrative concept is that a person be able consistently to re-identify a given object as falling under a given concept, assuming it does" (2001b: 406). In fact, we are free to use a demonstrative concept without satisfying the reidentification condition. Through these experiments, Kelly tries to show there is a case in which a subject may have a content of perceptual experience without satisfying the re-identification condition.

In sum, Kelly argues that perceptual demonstratives may not play the role of a concept by which the user can reliably reidentify the same object, hence the content grasped by perceptual demonstratives cannot be conceptual. As such, if a perceiver can have a perceptual experience without satisfying the re-identification condition, it does not imply that its content can be conceptually grasped; so, it is non-conceptual. Therefore, Kelly claims that not only are perceptual demonstratives unable to perform the role of a concept in a subject's experience, but also that contents grasped by such demonstratives cannot be conceptual because the re-identification condition is not satisfied when using them. I will respond to this objection in section V-5.2. In the next, I explore Heck's criticism of demonstrative concepts.

V-4.3. Heck on Demonstrative Concepts

Heck (2000) approaches demonstrative concepts rather differently. Rather than focusing on contextual dependency, he completely denies the basic conceptualist idea of demonstrativism, namely, that concepts are already involved in the content of perceptual experience; so, he can be understood as objecting to the Type-1 conceptual capacity (the capacity of spontaneity). He also points out that just because demonstrative concepts are available when the subject is having perceptual experience, this does not necessarily imply the conceptual character of her experience. That is to say, the conceptual character of experience cannot be inferred from the subject's ability to use perceptual demonstratives. According to him, McDowell only shows is that demonstrative concepts, which are not possessed before subjects have perceptual experience, become useable when subjects have perceptual experience. This fact does not necessarily imply that demonstrative concepts are *involved in* perceptual experience. Moreover, conceptualists do not explain how demonstrative concepts are utilized or involved in a subject's experience (Heck 2000: 490–491). As such, a content of perceptual experience constituted by a demonstrative concept does not prove its conceptual character. Heck argues:

> "Suppose we say, with McDowell, that my having certain demonstrative concepts is partially constitutive of the world's appearing to me in a particular way. How then can my having that concept be explained by my having such an experience? There would not seem to be sufficient distance between my having the experience and my possessing the concepts for the former to explain the latter." (2000: 492)

Heck's key point is that there is no clear reason why undergoing an experience constituted by demonstrative concepts entails that the world is represented demonstratively in the subject's perceptual state. This could be a question of how the content of experience constituted by demonstrative concepts in the personal level of experience could confirm the conceptual character in the whole process of experience. Heck (2000) claims that the demonstrative concepts that I possess are a function of my demonstrative thought, and that "part of what explains my having a given demonstrative capacity is my having certain associated experiences; the experience must be prior to the

possession of the demonstrative concept if the former is to explain the latter" (Bermùdez and Cohen 2012).[106] Levine (2010) also holds a similar perspective. He argues that the seeing of an object such as a green-ish chip, must be prior to the description of it, e.g., 'that green' or 'that colour', when we see and think about it demonstratively. Otherwise the utterance 'that colour' is meaningless, and the subject indeed does not know what she is describing. He says:

> "If the seeing, the perceptual experience, is prior to the demonstrating, then the demonstrating can't be what captures, or brings into existence, the content of that experience." (2010: 191)

Both Heck and Levine seem to concede the conceptual character of demonstrative concepts at the personal level of experience but deny its existence at the lower (sub-personal) level. I am quite convinced that the capacity for demonstrative thought or the ability to use it does not conclusively confirm that there is be demonstrative perception or demonstrative representation of an object. That is to say, the conceptual character of the personal level state does not necessarily confirm the conceptual character of the subpersonal one. But this thesis has argued that, despite the difference between personal and sub-personal content we need only secure the conceptual character of the former in order to show that the content of both the levels is conceptual. So, if the use of perceptual demonstratives secures conceptual content at the personal level, then experience constituted by perceptual demonstratives as contents is conceptual. However, the criticism of McDowell's demonstrativism raised by Heck and Levine seems to be based on a causal explanation of the relationship between demonstrative concepts and perceptual experience, that is to say, the causal relationship between the content of the subpersonal level and the content of the personal level of experience. Of course, as Heck admits, McDowell could respond by just "denying the causal (or explanatory) intuitions upon which it rests" (Heck 2000: 492). Nevertheless, it still remains a problem why

[106] Philosophers like Ayers (2002), Hopp (2009), Roskies (2008 and 2010), and Levine (2010) share this idea and develop it in various ways. See: Bermùdez and Cohen (2012).

perceptual experience makes demonstrative concepts useable, even if they see the relationship in non-causal terms.

Throughout chapters III and IV, I emphasized that we can have conceptual content by taking the expository perspective even if the representational content at the subpersonal level is not affected by any type of conceptual engagement at all. However, as Heck and Levine argue, perception does not seem to represent the world demonstratively because representational content clearly contains the phenomenal character of the perceived object, rather than demonstrative properties. Heck's criticism of demonstrativism also focused on the problem raised in sections I-4 and IV-5, namely that conceptually inaccessible contents (phenomenal character) of representational contents could exist even though we are able to grasp it by using perceptual demonstratives. That is to say, the use of perceptual demonstratives could lead one to understand the context to which the subjects and the objects belong, however it does not convey the phenomenal character of the objects that is represented in one's perception.

In the next section, I explore how conceptualists respond to these criticisms (raised in sections V-4.1, V-4.2., and V-4.3). I then indicate some errors involved in such criticisms that non-conceptualists have overlooked. These are the possibilities of multiple representational contents of an experience and constitutional aspects of demonstrative concepts and experience (Brewer 2005 and 2011). The reason for noting these errors is that I do not want to defend either the conceptualist or non-conceptualist (as I have said, I agree with the non-conceptualist's argument for UPC (Unconscious Perceptual Content) and SV (State View)): rather, I would like to show how the non-conceptualist's criticisms of demonstrativism fail. Throughout this examination, I consider why we should think that perception is conceptual despite the problems involved in the use of perceptual demonstratives.

V-5. Responses to Criticisms

This section addresses the conceptualist response to criticisms about (1) indeterminacy; (2) the reidentification condition; and (3) the operation of demonstrative concepts. Regarding (1), I point out that Peacocke's argument only addresses the interpretational

problem of a subject's experience rather than the problem of conceptual character. I then object to Peacocke's notion of conceptual content by focusing on Campbell's (2002) argument about demonstrative thought, namely, that the subject could *potentially* think about perceived contents demonstratively. Regarding (2), I suggest that there is no standard measure of reidentification that can prove whether or not a subject re-identifies an object. I focus mainly on Chuard's (2006) thought experiment regarding re-identification and the conceptual character of experience. Regarding (3), I suggest that we need to consider the constitutional aspect of demonstrative concepts in experience. I suggest that we need to clarify the distinction between the sub-personal and personal level, so that we can find both conceptual and non-conceptual content in the overall process of experience. Through these discussions, I identify the characteristic features of perception and experience, and pave the way for an extended notion of conceptualism.

V-5.1. Responses to the Problem of Indeterminacy

Regarding the use of demonstrative concepts – e.g., 'that shade', 'that rose', or 'that red'– Peacocke claims that it is unclear to which property of a scarlet rose demonstrative concepts really refer in the experience of a scarlet rose, because only one of these might *be* the representational content that constitutes the perceiver's experience of the rose. However, this does not seem to be a problem of *conceptual character* of experience; rather, it is closer to the *interpretational problem* of a perceiver's experience. Multiple representational contents could be involved in one particular experience. This does not mean that there are not different experiences, rather, they might be different contents of just one experience. Furthermore, the fundamental issue in the debate between conceptualism and non-conceptualism concerns whether or not a subject of experience fully possesses the conceptual content of that experience. It is not whether or not (or even how) the subject clearly explains her experience to another's satisfaction. That is to say, a subject's use of a particular concept does not need to correspond to another's use of that concept for the object that they both perceive in order for her to have a conceptual experience of it. The subject may freely grasp the object conceptually using her own concepts. So, it is unclear why the indeterminacy resulting from allowing

interpersonal variability implies the non-conceptual character of experience. In this case, Peacocke's account seems to lead us to a different issue, and veers away from the main topic of discussion.

V-5.1.a. 'Demonstrative Thought'

Another issue that we need to consider here is Peacocke's understanding of conceptual content. He agrees that conceptual content belongs to thoughts, that concepts are entities in the Fregean sense, (1992) and that there must not be indeterminacy in concepts (1998: 382). But according to Campbell (2006), the use of a demonstrative concept is associated with demonstrative *thought*. He focuses on the reference of demonstratives rather than the sense of the term. Of course, most non-conceptualists have different notions of what constitutes a concept. As I have emphasized throughout this thesis, non-conceptualists generally depend upon a very narrow notion of *concept*, while they have a very wide notion of *experience*. However, apart from the indeterminacy of demonstrative concepts, if the capacity to use demonstrative concepts implies that a subject could *think* of a perceived object demonstratively, then this ability can be considered an ability of thought. That is to say, the content of thought not only refers to modes of presentation but also demonstrative contents. Campbell says:

> "I have been arguing that experience of objects has an explanatory role to play: it explains our ability to think demonstratively about perceived objects. Experience of a perceived object is what provides you with knowledge of reference of a demonstrative referring to it." (2002: 114)

What Campbell addresses here is the idea that our ability to think about perceived objects demonstratively provides knowledge of the reference of the demonstrative. This knowledge is not a type of descriptive knowledge whose content is specifiable by a definite description applying uniquely to the relevant object: Instead, it is closer to "what Russell called 'direct acquaintance' with the object of reference" (Nes 2006: 162). Consider two standard perceivers, *K* and *S*. When *K* utters 'that rose' by indicating a scarlet rose in front of *S*, *S* is able to see the rose and has a conscious experience of it by attending to whether or not both agree about the colour of the rose, e.g. that it is at H/5

in the Munsell chart. In this way, *S* is able to know what *K* refers to, and to understand what *K* means by the demonstrative concept 'that rose'. Hence, *S*'*s* experience of the rose provides knowledge of reference for *K*'*s* demonstrative to *S* (Campbell 2002: 7–10; Nes 2006: 162). Campbell argues that this is a common-sense view of the knowledge of reference of demonstrative concepts, and that "knowledge of reference of a demonstrative is to understand the demonstrative" (Campbell 2002 cited in Nes 2006: 161). Even if the demonstrative content is not a type of conceptual content as defined by the non-conceptualist, the important point is that we can think about the perceived object using perceptual demonstratives, and at this point, the demonstrative becomes the content of thought about that object. In this sense, the demonstrative concept 'that shade' or 'that scarlet' could be a content of thought, and therefore conceptual.

V-5.1.b. The Possibility of the Type-2 Conceptual Capacity in the Use of Perceptual Demonstratives

The key point of bringing the notion of demonstrative thought to bear on the indeterminacy argument is that the indeterminacy of a demonstrative concept does not harm a subject's ability to think about that object demonstratively.[107] In other words, the use of demonstrative concepts itself implies thinking about the perceived object demonstratively, and this implies conceptual engagement—in particular, the Type-2

[107] Of course, Peacocke does not accept the view that perception itself is always type of thought. He says, "perceptual states provide the necessary basis for more flexible forms of thought; but they can also exist in the absence of those more sophisticated abilities." (Peacocke 2003: 615). As I noted in Chapter II, I agree with this idea, but we need to consider that the fact that perception could occur without conceptual engagement does not entirely imply non-conceptual content of experience because we can think about the perceived object by using perceptual demonstratives. Hence an ability to use demonstrative concepts involves the possibility to think about the perceived object demonstratively, and there is no reason to exclude the possibility that a content of experience constituted by demonstrative concept can secure the conceptual character of experience.

conceptual capacity (the capacity of understanding relational structure of perception and belief) — even though there could be some vagueness concerning what property of an object is represented in the subject's perception. We are also able to form demonstrative beliefs about what we perceive, e.g., I believe *that is thus*. The reason for how we operate the Type-2 conceptual capacity is that perception involves conceptual contents.
The lesson that I take from Campbell's perspective about demonstrative thought is that the use of perceptual demonstratives can allow us to think about those representational contents involved in an experience even though perceptual demonstratives may not correctly capture the phenomenal character of the perceived object that is represented. If so, the perceptual demonstratives used (e.g. that red), at the one's personal level of experience do not capture the phenomenal character of perceived objects correctly (e.g. scarlet red, yellowish red, and etc). However one could think about perceived objects when one uses such demonstratives. This then, can be understood as the problem of one's interpretation or understanding of the perceived object rather than any problem about the conceptual character of experience.

In this sense, Peacocke's argument ignores that the capacity to use demonstrative concepts implies an ability of thought — in particular, Type-2 conceptual capacity (the capacity of understanding relational structure of perception and belief), and that indeterminacy does not entail the non-conceptual character of demonstrative concepts.

V-5.2 Why is the Re-Identification Condition Necessary?

Kelly claims that perceptual demonstratives used in perceptual experience cannot play the role of a concept because they sometimes do not satisfy the reidentification condition. I carefully examine this account and try to show first, that it is unclear how many times a subject must succeed in re-identifying an object; and second, that a failure to re-identify the same object does not imply the non-conceptual character of experience. I will focus on McDowell (1994) and Chuard's (2006) criticisms of Kelly's argument.

V-5.2.a. Recognitional Capacities

According to Kelly, perceptual demonstratives are heavily context-dependent, and so, may not play the role of a concept. As with the second experiment suggested by Kelly, the subject is not able to re-identify the target object because the capability of using demonstratives is not necessarily an ability to re-identify the same object on every occasion. Of course, the referent of a demonstrative concept exists only in a particular context, so it will not play the role of a concept once the context ceases to exist. Yet this is not a problem for the way in which a subject perceives or experiences an object: rather, it is a problem of how long an experience has to continue in order to prove its conceptual character. Even if the experience continues for just a short period, such that the subject may not re-identify the same object under the concept such as 'that shade' in another occasion, does this imply the non-conceptual character of that experience? Non-conceptualists might not accept the contextual feature of concepts, nevertheless there is no reason to think that such contents of experience are non-conceptual. McDowell clearly identifies the notion of a recognitional capacity in the following:

> "We can ensure that what we have in view is genuinely recognizable as a conceptual capacity if we insist that the very same capacity to embrace a colour in mind can in principle persist beyond the duration of the experience itself. In the presence of the original sample, 'that shade' can give expression to a concept of a shade; what ensures that it is a concept, what ensures that thoughts that exploit it have the necessary distance from what would determine them to be true, is that the associated capacity can persist into the future, if only for a short time, and that, having persisted, it can be used also in thoughts about what is by then the past, if only the recent past. What is in play here is recognitional capacity, possibly quite short-lived, that sets in with the experience." (1994a: 57)

McDowell clearly not only considers a recognitional capacity to be a capacity to re-identify the same object on different occasions, he also thinks that it could also be exhibited in a short time-period. Moreover, why must unreliable re-identification imply the non-conceptual character of experience? As I quoted Brewer's notion of a context-dependent concept in section V-3, the semantic value of the demonstrative concept is

given by its detailed context (this is why contextual features become varied as fineness of grain increases). Hence, the duration of the recognitional capacity will shorten as contextual features become varied. But a short duration of the recognitional capacity does not imply the impossibility of that same capacity.

Another problem in Kelly's account arises here because there is no given number of times that the subject needs to successfully re-identify the object. It does not seem like a few failures of re-identification would entail that experience has non-conceptual content. If this is correct, why is the re-identification condition required for possessing demonstrative concepts? When referring to, or denoting something, using demonstratives like 'this' and 'that', there is no reason to think that such demonstratives would always refer to the same object when used in a different context at a later time. Moreover, a subject could mistakenly re-identify an object for some reason. As non-conceptualists point out, if a demonstrative concept is context-dependent, why is it always applied to the same object even if its original context ceases to exist? Kelly does not seem to pay sufficient attention to this issue. But if this is the case, the re-identification condition is not necessary for possessing demonstrative concepts, and hence, success or failure in re-identifying the object does not causally affect the conceptual character of experience.

Moreover, in the experiment, Kelly has to show that the subject could discriminate between different perceptual experiences without recognitional capacities in some cases. Recognitional abilities have to be accompanied by discriminative abilities, meaning that the two types of abilities are inseparable. If we can suppose that there is a discrimination ability but not a recognitional ability, then the expressions 'this green' and 'that green' would be meaningless, empty expressions. Thus, Kelly's claim about recognitional abilities is a *non sequitur*. In the next section, I consider why we should reject the view that only the re-identification condition can be considered a constraint upon concept possession by regarding an imagined case, known as Susie's case, as suggested by Chuard (2006).

V-5.2.b. Chuard on Kelly's Argument

I said that Kelly's argument does not adequately explain the reliable ratio of correct to incorrect reidentifications of the same object. Here I consider another case, called Susie's case. (Chuard 2006). This case suggests that a subject can have conceptual content by using perceptual demonstratives even though she is unable to re-identify the same object at a later time.

Chuard (2006) objects that Kelly confuses demonstrative with sortal concepts. As such, he thinks that Kelly restricts the conditions for possessing demonstrative concepts to the re-identification condition alone. Chuard expresses the re-identification condition developed by Kelly (2001b: 403) as follows:

> "**(R)** If a subject *S* possesses a concept *C*, *S* must be able to re-identify different objects, *O1, O2, ..., On,* which fall under the concept *C*." (2006: 167)

He then rephrases (R) to give a more detailed description:

> **"(R')** If a subject *S* possesses a concept *C* for a property *f*, *S* must be able to (i) identify some object *O* as *f* at time *t*; (ii) to identify some object *O'* as *f* at time *t*+1; and (iii) to identify *f* at *t*+1 as the same property *f* as at *t*." (2006: 170)

Chuard argues that Kelly equivocates demonstrative and 'sortal' concepts without any basis for doing so (2006: 179). That is to say, Chuard believes that **(R')** is a necessary condition for the re-identification condition because the problem stems from the view that 'these notions are equal'. Moreover, Kelly does not explain why these two different notions are equal. This is why Chuard thinks that Kelly's claim is based on a false premise. But if this is so, why does Chuard think Kelly confuses demonstrative concepts with sortal concepts? Chuard thinks that two conditions determine sortal concepts.[108] The first of these is that the subject is able to use the concept even though this usage is under the condition that any instance of the sortal concept does not appear around the subject. The second requires that the subject is able to know the criteria for whether any given object falls under that concept. Chuard also claims that Kelly's argument is based

[108] Chuard borrows these conditions from Campbell (2002: 61ff).

upon the connection between "(a) possession of a concept, (b) knowledge of the things which fall under the concept, and (c) the capacity to re-identify such things" (2006: 178). He thinks that if we can identify a new instance of a property *f* as falling under a concept *C*, then we can possess *C* for *f*. Therefore, it is not determined by "whether we can re-identify any instances as the very same objects we have previously perceived before" (2006: 182).

Chuard suggests another possible case that is similar to Kelly's experiment. In this case, the subject, 'Susie', is also unable to re-identify the same object that she initially perceived. She cannot re-identify the original object by its characteristic features, such as colour, shape, or location. Yet when that object stood alone in Susie's perceptual field, she was able to form a demonstrative concept that successfully referred to it. The following thought experiment is designed to prove that a subject is able to have perceptual experience conceptually using a perceptual demonstrative without then re-identifying the same object at the later time[109]:

> "A stone from outer space suddenly lands on Susie's desk. She has never seen anything like it before. Its colour, insofar as it seems to have one, looks completely different from any colour Susie might have experienced in the past; and likewise for its shape. She focuses her perceptual attention on the stone. As a result, she can point at it (or at some of its properties). When her colleagues ask Susie "What is that?" (pointing at the mysterious stone), she is perfectly capable to understand their question, even if she is unable to answer. Likewise, they understand what Susie means when she says "Why is this on my desk?" […] More extra-terrestrial stones appear on Susie's desk (at a later time). Each stone looks slightly different from the first stone—they seem to be chromatically and geometrically different, although Susie cannot quite say how. Susie has a careful look around her desk, looking minutely at each stone and its

[109] In this particular example, Chuard tries to show that 'it seems possible that a subject forms a demonstrative concept for an object without being able to later re-identify that object' (2006: 185).

> properties. Suddenly, due to the amount of new stones on her desk, Susie finds herself unable to tell which stone appeared first. Despite their differences, they all look more or less the same to her. And because of their sheer number, she cannot even recall the location of the first stone—or its colour or shape. And so, Susie is unable to re-identify which stone it was that first appeared on her desk." (2006: 183–185)

In this scenario, Chuard claims that we cannot say that Susie did not have a demonstrative concept of the stone when it first appeared on her desk, even though she could not re-identify the first stone after the new ones appeared on her desk. In this way, we can have a demonstrative concept of an object even though we cannot re-identify it after some time has passed.

There is also linguistic evidence that Susie and her colleagues form demonstrative concepts for the extra-terrestrial stone: they communicate using demonstrative expressions like 'this' or 'that' to refer to the stone. As I argued in section V-5.1, knowledge of the reference of a demonstrative requires understanding it, as Campbell has pointed out. The fact that they seem to understand one another suggests that they are able to grasp the thoughts expressed by such demonstrative expressions. And it seems natural to suppose that such thoughts clearly involve demonstrative concepts. What else would Susie's utterance 'What is that?' express?

In the next section, I respond to Heck's criticism of demonstrative concepts.

V-5.3. Responses to Heck

Heck and Levine argue that ostensibly or linguistically demonstrating with demonstrative concepts does not prove the existence of them in perception. Perception must be prior to demonstrating, and as such they claim that demonstrativism is a causally mistaken argument. This raises the problem of inaccessible contents in experience if we allow that the use of demonstratives is a type of A-consciousness because perceptual demonstratives such as 'this' and 'that' are not able to capture the

phenomenal character that is represented in perception.[110] That is to say, while the non-conceptualists (namely, Peacocke and Kelly) that I have examined in this chapter so far consider the use of perceptual demonstratives as a subject's capacity that activates at the personal level of experience, Heck and Levine distinguish mere perception from a particular range of experience where we are able to entertain perceptual demonstratives. So, there could be perceptual contents that are not engaged with any type of conceptual capacities from the beginning to the personal level of experience.

As we have seen in section V-4.3, Heck's criticism of McDowell is based on a causal explanation of the relationship between demonstrative concepts and perceptual experience. Of course, as he admits, McDowell could respond by just "denying the causal (or explanatory) intuitions upon which it rests" (Heck 2000: 492). In fact, Brewer (2005) insists that we should look for a constitutive explanation, not a causal explanation that requires the priority of experience. He says:

> "On the conceptualist view, experience of a colour sample, R, just is a matter of entertaining a content in which the demonstrative concept "that shade" figures as a constituent." (2005: 221; See also: Brewer 2011)

However, Heck consistently claims that the conceptualist must explain why perceptual experience makes demonstrative concepts useable, even if they understand the relationship in non-causal terms. However, he does not mention specifically what a non-causal explanation would be. He simply says:

> "There is a perfectly good, noncausal sense in which my having such an experience makes the concepts available to me: I would not have them but for having it." (2000: 493)

---

[110] Campbell (2006) also pointed out this problem. However, what I want to focus on in Campbell's argument is that there is the possibility that subjects can think about representational contents even if their ability to use demonstratives precludes them from experiencing all of the phenomenal characters initially represented in their perceptual states.

In this sense, there is no particular reason why we take the causal relationship between a demonstrative concept and its experience seriously. We can find a reason for not taking this kind of causal relationship seriously if we adopt McDowell's view about the content of experience and those beliefs that it produces.

McDowell (1994a) argues that the perceptual-experiential has a passive character, whereas belief content has an active character. He regards both the passive capacity and the active capacity as part of the same conceptual capacity. We can take this view to explain how 'having perceptual experience' means 'possessing demonstrative concepts' or 'the possibility of use of perceptual demonstratives'. Subjects use demonstrative concepts passively in perceptual experience,[111] whereas they use them actively in composing belief.[112] This seems to explain the 'sufficient distance' that Heck demands of conceptualists. First, the fact that we can compose belief from perceptual experience arbitrarily shows that a demonstrative concept in experience can be distinguished from a demonstrative concept in belief. The content of perceptual experience is passively given to us, and we can evaluate whether or not we will compose a belief from that content. If a subject regards the conceptual content of perceptual experience as a reason for belief, then she may have a perceptual belief about that content. Hence, a content of perceptual experience and a content of the correlative perceptual belief, *even if both share the same demonstrative concept*, could have a different kind of relationship. That is, the former plays the role of a reason for the latter. If the content of perceptual experience is non-conceptual, then there is no way to set up a reasonable relationship between the content of experience and the possession of demonstrative concepts, at least in relation to the question 'why does a certain non-conceptual content ground a certain demonstrative concept?'

However, non-conceptualists who sympathize with Heck may have a question about the above explanation. Although there is sufficient epistemological distance between

[111] This is quite clear if we consider that we cannot garner contents of perceptual experience arbitrarily.

[112] Whether or not we can take an object as it appears depends on us.

perception and belief, it is an undeniable fact that whilst an experience of a particular shade might allow a subject to judge 'that shade is pretty', it does not further entail that the demonstrative concept 'that shade' figures in its content. This may show that demonstrativism is not helpful for bridging the gap between perceptual representation and perceptual judgment. If we accept this perspective, then concepts that constitute the content of perceptual experience must directly relate to the perceived object. And if this is so, then without mediums like non-conceptual contents, it becomes impossible to understand how concepts might be reasonably related to perceptual objects directly.

How do conceptualists solve this issue? In the next section, I consider the results of the discussions of section V-5 alongside a characteristic feature of perception (viz. discrimination ability) in order to answer the above issue, and to show that perception might involve conceptual engagement.

V-6. Discrimination Ability of Perception

In this section, I argue that perception, including the subpersonal states of mere seeing, entails at least one conceptual capacity that is slightly different from the three major types of conceptual capacities, and moreover, that this possibility can be easily explained by the contextual character of perceptual content which derives from the role of demonstrative concepts in the expository perspective.

Most of the non-conceptualists that we have examined in this thesis assert the non-conceptual character of the subpersonal level of experience, such as the contents of unconscious states. They argue that the contents of those states are neither represented by a conceptual capacity nor graspable using concepts that the subject typically possesses. But this tendency shows that they sometimes treat perception as mere seeing or a type of visual response, and treat the state of mere seeing as an aspect of full perceptual experience. That is to say, what they focus on in terms of the non-conceptual character of experience is not very different from what we call mere visual response rather than conscious visual experience, and thus, they treat the contents of visual processing *as if* it might be the content of experience.

The fineness of grain argument also displays the same tendency in that it suggests that perception is non-conceptual because we are not depending on concepts that we possess in order to have fine-grained contents of experience. Conceptualists also concede that perception is different from mere seeing. Here, I do not attempt to argue that perception is something entirely different from 'mere seeing'. I would like to suggest, instead, that 'mere seeing' or 'visual response' is one of the processes that constitute experience.

Again, I agree with the non-conceptual character of perception when considered without the expository perspective. However my criticism of this view is that we may find how perception is possible by taking the functional perspective, but we may not find what is really represented without considering the expository perspective on perception. Meanwhile, I have shown that we need to consider the two perspectives on experience in order to evaluate the conceptual character of experience, through examining particular types of non-conceptual accounts — UPC and SV types — from chapters II to IV. If I am right, then the reason for taking the two perspectives on experience is that having a representational content in experience could be possible only when all the processes of experience are successfully performed. And these could be seen by taking the two perspectives on experience, that is to say these could be explained in two different ways. One is 'how it works', another is 'what it has'. Hence these processes are required in order for perceptual experience to have representational content, but they do not constitute the contentful experience. 'The content of experience' is not just content at a particular stage of the visual process; rather, it is the outcome of all the stages of vision. This idea is clearly seen in Marr's computational theory of vision, even though this theory has been used to support UPC type non-conceptualists who believe that there could be perceptual content in a subpersonal state. If we carefully consider a hidden implication in Marr's theory, we may find that we get clear representational content of experience only from the successful performance of all the stages of experience. That's because it shows that the information of the lower stage is successfully delivered to the higher stage without anything being lost. And this would then show how the discrimination ability works in the lower level, and also how the information, which is discriminated, is secured from the sub-personal to personal levels of experience.

Marr's reason for attempting to specify visual representation as the three levels of computational processes about the objective world is to explain the process of how light sensitivity produces visual representation: The first level (two-dimensional sketch) → the second level ($2^1/_2$ D sketch) → the last level (three-dimensional images) (1982: 36). At the first level, the eye and brain represents only the difference between brightness and darkness of the object; the second level has only retino-centric coordinates, and if the process successfully goes on to the last level, a perceiver is able to recognise the object of perception by comparing previous information about the object that she has. We can then confirm what is represented (i.e. representational content) at the last level even though Marr explains each level is able to represent something differently from the other levels as an optical image.

What I want to address here is that visual representation does succeed *only if* all three levels are active, i.e., it is successfully reached at the last level. It is then good enough to say that a subject of perception could get clear (not-confused) representational content of experience. That is to say, the subject is able to have a representational content that she can clearly describe using relevant concepts (including perceptual demonstratives) in the personal level if the perceptual processes are all active. Likewise, perceptual information at each level is developed by passing through the various processes that are operative at each level. However, we are not able to confirm what is in the lower levels because those do not allow conceptual engagement (since we can only take the functional perspective on experience about these levels). So we might be able to know how these levels process perceptual information. On the contrary, we can only confirm the content of the final level by taking the expository perspective on experience because it is this level that allows for conceptual engagement. The important point is that the perceptual information at each level is not entirely distinct from that at the other levels, and is getting sophisticatedly shaped and developed throughout the processes. The information is processed without any conceptual engagement at the lower levels, but it is processed with conceptual engagement at the final level. Hence, the perceptual information of the early stage (e.g. $2^1/_2$ D sketch) is included in the content of the later stages, and the process is one of content becoming richer without anything being lost.

From this perspective, I also claimed that non-conceptual perception is possible, but that there is no non-conceptual *content* of experience. If this is correct, what is the basis for the rejection of all non-conceptual content?

V-6.1. How Can We Prove that Sub-Personal States Entail a Conceptual Capacity?

It might be possible that the non-conceptualist who considers only the functional perspective on experience (e.g. the early visual stage, subpersonal states, and even mere seeing) would exclude the expository perspective on experience altogether and say that we may prove the existence of non-conceptual content of perception due to the fact that perception occurs without conceptual engagement. Of course we do not describe all of the perceptual experience that we undergo – countless numbers of non-described perceptual states indeed do occur in our lifetime. Consequently, there will always be some perceptual information that is not detected in the expository perspective, and this might be considered to be non-conceptual content in those states. Because of this, a subject of perception has the ability to conceptually engage with the perceptual information that is processed at the lower levels as elements of Marr's final level of representation in his computational theory of vision, even if they do not in fact exercise this ability in many cases.

Meanwhile, the debates about the conceptual or non-conceptual character of experience we have examined until now focus on 'whether we represent a perceived object conceptually' or 'whether we are able to explain the content of perception conceptually'. But now this may be adapted to ask instead, 'how we can prove a perception entails a conceptual capacity'. This is the main issue that the advanced conceptualism just described should respond to.

I will now explore one characteristic feature of experience in order to develop this advanced conceptualism. This is the discrimination ability of perception. The purpose of this section is to show that a certain type of conceptual capacity exists in perception through examining this discrimination ability. Doing this also establishes the conceptual character of both the personal level and the subpersonal level of experience. How is it possible?

It will help to carefully re-examine the three levels of visual representation that Marr suggested. Perceptual information at the first and second levels are obtained as certain features of the environment are discriminated from their surroundings, even though a subject of perception may not be consciously aware of them. This information is quite limited (only representing *the difference* between brightness and darkness of the object) at the first level; but it becomes more detailed and developed as it passes through the second and the third levels. The point is that vision represents the information as a discrimination of items in the environment even at the first level, and this discriminated information is getting more sophisticatedly and clearly represented without being lost at the higher level.[113] Finally, the developed information which has passed through these processes in the final level will allow the conceptual engagement that recognizes and classifies the perceived object. This information, which passed through the three levels of representation, is not new information from the first level and the second level, rather, I would say that it is a sophisticated content which is successfully derived from the first and the second levels. As such, this discrimination ability functions automatically and unconsciously, so we are able to have discriminated information such as the brightness in the lower level. And we are able to get more developed representational content in the higher level based on the discriminate contents from the lower level. The content of the highest level is the one that potentially allows for conceptual engagement.

In this respect, perceptual information about the object at the lower level (e.g. subpersonal mental states) is different from that at the higher level (e.g. personal level), but it is included in information at that level. So the process is one of acquiring richer content. Therefore, they are related contents *if* the perceptual representation process is successfully performed. If so, we can then confirm what has been discriminated in the higher level, and this entails that the discrimination ability was activated successfully at the lower level. We can understand the discrimination in the subpersonal mental states

[113] This is the absolutely fundamental aspect of Marr's account of vision, viz., the computational structures of vision and the environmental information that needs to be hard coded into them, which then allows the visual system to move from information at one level to information at the other.

as representational content *if and only if* the process of representation at all levels is successfully performed. And this is how a subject might perceptually represent information even though they do not possess any relevant concept at all.

V-6.2. Discriminaiton Ability as Receptivity

McDowell (1994a: 9) argues that experience is not only constituted by sensible information as an operation of receptivity but is also structured by a conceptual capacity, such as the operation of spontaneity. Receptivity could be a type of perceptual mechanism that activates without the three major types of conceptual capacities, so I have conceded that it could be non-conceptual because its representational contents could occur without a subject's conceptual engagement just in case there is no spontaneity. McDowell also says that "we need a conception of experiences as states or occurrences that are passive but reflect conceptual capacities, capacities that belong to spontaneity, in operation" (1994a: 23). However, this does not mean that an empirical thought or belief is obtained after our conceptual capacities are exercised on a non-conceptual content of experience and that we firstly get non-conceptually represented content through perception; secondly our conceptual capacities are working on the contents; and finally, conceptual contents are obtained through this process. Rather, what McDowell addresses is how conceptual capacities are actualised in experience, for example, how spontaneity is actualised in receptivity. Therefore, the co-operation of spontaneity and receptivity constitutes the content of experience. This is a typical conceptualist thought.

I have been developing a very similar kind of conceptualism, but I do not agree that both receptivity and spontaneity operate at the same time in experience, because having representational content *via* perception is possible without the operation of spontaneity; so there is no such co-operation at the stage of receptivity. In this sense, my arguments are in line with the non-conceptualist's perspective about the non-conceptual character of perceptual states. What I argued is that an ability to access or evaluate the content of perception is a conceptual capacity, even though perception could occur without any conceptual engagement. Therefore, the content of one aspect, at least, could be

conceptual. This is the whole process of experience that I have described and developed until now. And I have discussed how the non-conceptualist might be mistaken in understanding the conceptualist notions of *concepts*, *experience*, and *perceptual contents*, or alternatively, how they rely upon different definitions of these notions. But the traditional view of conceptualism still needs developing because there is still the problem that the non-conceptual character of perception (in its subpersonal state) could still cause the non-conceptual character of both the contents of a perception and the personal level of experience — e.g., the possibility of the coexistence of inaccessible and accessible content in a subject's conscious experience. And I think that conceptualists need a stronger version of conceptual character still, which could satisfy different notions of *experience*, *concepts*, and *perceptual contents*, which are shared by conceptualists and non-conceptualists.

To do this, I want to turn to the following argument from McDowell:

> "The relevant conceptual capacities are drawn on in receptivity. […] It is not that they are exercised on an extra-conceptual deliverance of receptivity. We should understand what Kant calls "intuition"—experiential intake—not as a bare getting of an extra-conceptual Given, but as a kind of occurrence or state that already has conceptual content." (1994a: 9)

Now, let us reconsider McDowell's suggestion that the ability to discriminate between particulars is the characteristic feature of demonstrative concepts. If subjects are able to discriminate a target object from others using demonstrative concepts, then both the content of their experience and the description of that content, containing demonstrative concepts must be conceptual. Here the ability to use demonstrative concepts is closely related to the discrimination ability as a type of a conceptual capacity. The reason we can pick out a particular feature of a certain object is that the feature is clearly discriminated (as it is represented) from other features of the objects, and we have the ability to discriminate all the different features of such objects — this does not also require us to entertain the three major types of conceptual capacities. Hence, we may use demonstrative concepts to refer to a particular feature, e.g. 'this shade', that is distinguishable from other features such as 'that shade' even though we do not possess a

more sophisticated concept of the former. Both conceptualists and non-conceptualists may be sympathetic to the view that perception provides us with these discriminable properties of objects. However, the problem is whether we are able to find conceptual character within this discrimination ability. Now I question, how does this discrimination ability form thoughts or beliefs?

V-6.3. The Conceptual Character of the Discrimination Ability

Armstrong (1968), in his *A Materialist Theory of the Mind*, argues that visual properties such as colours, sizes, shapes, etc., are the contents of immediate perception, that form the basis of inferences to more conceptually complex beliefs. He says that:

> "We see immediately that there is a thing having certain visual properties before us, and […] this, by an automatic and instantaneous inference, produces the further belief that there is a cat's head or a sheet of paper before us. It is only the visual properties of things that can be immediately perceived by the eyes." (1968: 235)[114]

But what makes him think such a narrow class of visual properties exhaust the perceptual experience of non-conceptual creatures who are incapable of forming more complex beliefs? Non-conceptual creatures such as birds can distinguish cats from dogs on the basis of vision alone, so it is plausible to say that they see cats. It does not follow that being a cat is a visual property, only that we theorists of vision can tell from the

[114] Armstrong (1968) distinguishes mediate from immediate perception in order to reject the premise that infants and animals do not have concepts. According to him, mediate perception forms inferential beliefs while immediate perception forms non-inferential beliefs. I do not discuss these distinctions in depth here. For more details about this distinction and a discussion of non-human animal concept possession, see Fish (2010: 59–62). Here I want to focus on the idea that visual properties have a particular conceptual character by which we undergo experiences of them and form beliefs about them; hence content constituted by those visual properties is conceptual.

bird's behaviour that being a cat is distinguishable on visual grounds alone. This is entirely consistent with the ability to visually discriminate cats being dependent upon all sorts of contingent environmental features.[115] At the personal level, discriminating cats may be prior to discriminating the above-mentioned visual properties, such as colours, sizes, and shapes. For example, the things placed on my desk, such as a rectangular keyboard, a twelve-inch monitor, and a red coffee cup, are discriminated by the visual properties of each item registered in the early stages of the visual processing even if those are not part of the content from the expository perspective. I may form the perceptual belief that 'this cup I perceive stands a short distance away from the book on my desk' without forming a belief about the visual properties of those items. Or I can have these beliefs at the same time. Armstrong tells us that:

> "Beliefs involve concepts. Acquiring the belief that a particular object is red involves possession of the concept of red. Possession of the concept entails a general capacity of the perceiver, in at least some set of circumstances, to differentiate between things that are red and things that are not red." (1968: 339)

Here Armstrong defines concepts that form beliefs in terms of an ability to discriminate one from another according to its properties. This can be applied to the discrimination ability, demonstrative concepts, and contexts, which we have previously examined. We may know that a cup is different from a book by observing their visual properties, and may form the minimal belief that 'this is different from that' even if we do not possess concepts for a cup and a book. And we may automatically form a belief 'this is discriminable from that' that is solely dependent on the context in which the objects are involved rather than their visual properties. We could form such contextual beliefs obtained by the discrimination ability before we form a belief about the phenomenal character (visual properties) of the perceived object. Hence we may have the same context-dependent content in both perception and its belief through the discrimination ability. This possibility is accorded the Type-2 conceptual capacity (the capacity of

[115] It is plausible to think that the bird's visual system has evolved to represent those contingent environmental features and this is what enables them to go from Marr's first level to a perception of a cat.

understanding relational structure of perception and belief). There is no particular reason to believe that only phenomenal character represented in perception can be the content of experience; contextual properties identically represented in both the subpersonal level and the personal level of experience can be also the content of experience, and it is this also which allows a subject to potentially form inferential thoughts and beliefs.

To make this clear, let us reconsider the honeybees experiment in Chapter II. I argued that it is difficult to know what is represented in the honeybees' perceptual states because the assumption that perceptual contents are constituted by an enabling condition independently of the expository perspective on experience involves the three problems — the problem of causal relation between a subject and an object, misinterpretation of intentional causation, and misunderstanding of the term 'recognition'. Because of these problems, I argued that we are not able to confirm what perceptual contents the honeybees have in their visual states, and hence, contents of the honeybees' perception are not perceptual contents that we can evaluate as to the conceptual character of experience. Likewise, I also argued that the content of early vision suggested by neurophilosophers in Chapter IV is dependent on an enabling condition, and so, the content of the early vision may not be perceptual content that we can evaluate as to its conceptual character without considering the expository perspective. In this respect, I am not committed to the claim that taking the functional perspective on experience entails that there is a perceptual experience. However, the important point involved in both the honeybees case and the argument about early vision is that there could be the discrimination ability even though we adopt only the functional perspective on experience, but both arguments claim that there is no conceptual engagement involved in the discrimination. I indicated that Kelly makes the mistake of confusing demonstrative concepts with sortal concepts by using Chuard's objection in section V-5.2. A demonstrative concept may be applied only to a context where its user and its target object are involved, whereas sortal concepts may be applied to other occasions as well. Of course, I do not want to argue that the use of perceptual demonstratives does not involve any sortal concept at all. What I want to argue is that the ability to use perceptual demonstratives is dependent on the discrimination ability in the context in which its user and the target object are involved. The discrimination ability leads a

subject to think of the object demonstratively and to form a belief about the context. Discrimination is a lower ability than the ability to deploy a concept for an object that specifies its features or to form a belief about it; nevertheless, we are also able to think of, and to form a belief about, discriminable features of objects *via* the discrimination ability operative in perception.

V-6. 3. a. Epistemic and Non-Epistemic Seeing

There may be a different view about defining discriminated content as conceptual content. Dretske (1969), for instance, demonstrated the possibility that discriminated contents can be considered as non-conceptual contents by dividing 'seeing' into two types: *epistemic* and *non-epistemic* seeing (to see_n). According to him, non-epistemic seeing ($seeing_n$) "is an ability whose successful exercise is devoid of positive belief content" (1969: 6). That is, the truth (not the expression or the utterance) of the statement '*S* $sees_n$ *D*' does not entail any statement of the form '*S* believes *P*'. A characteristic feature of this sense of 'to see_n' is that a subject *S* $sees_n$ *D if and only if D* is visually differentiated from its immediate environment by *S*. *D* is visually discriminated *if and only if D* looks in some way to *S*, but not necessarily looks as if it is something. To see_n *D*, *S* need not to specify *D,* consider *D* to be something, or exploit one's visual experience in any other way. So non-epistemic seeing is possible without any type of conceptual capacity possessed or deployed by the subject. Also, the subject does not need to consider any type of relationship between seeing and beliefs in order to enjoy $seeing_n$. Hence, the discriminated object (or visual content) may be considered as non-conceptual content on Dretske's account.

However, this argument could involve two problems. First that non-epistemic seeing is something that is easily attributed to animals and infants, who can be said to see objects and events of which they have, or are not capable of having, no conceptual capacity whatsoever. For example, my cat is able to 'see' me working in front of the computer despite her being unable to see *that* I am in front of the computer — a capacity which requires the ability to entertain *propositional thought* or to possess relevant concepts such as *computer*, *in front of*, and so on.

If we apply the idea of non-epistemic seeing to human adults, it may not harm the idea of conceptualism. Of course, this does not mean that I deny there is such non-epistemic seeing that doesn't require the subject to consciously specify or attend to what it is they see. I agree with the idea that non-epistemic seeing involves discriminated contents. And I agree that such discriminated content could be obtained without any conceptual capacity. However, Drestke's account has a similar problem to that of the three potential problems involved in the experiments of conceptually unsophisticated creatures in chapter II. First, it is assumed that we can share the inner experience of animals through observation. Second, this type of argument seems to involve an excessive and arbitrary interpretation of a conceptually unsophisticated creature's intentional attitudes, i.e., misinterpretation of intentional causation. Last, the distinction between epistemic and non-epistemic seeing is about the relationship between perception and belief. Perception sometimes does not entail any form of belief. But this does not mean that there is a specific reason to exclude a possibility of having a belief which is based on perception involving such discriminated (conceptually not-grasped) contents. This discriminated content can be constituted without the engagement of a conceptual capacity (in particular, Type-1 conceptual capacity (the capacity of spontaneity)): specifically, we are able to form a belief (even if both perception and belief do not share the same content) that is based on the discrimination ability operative in perception. Hence, we may able to operate Type-2 conceptual capacity (the capacity of understanding relational structure of perception and belief) in this case, i.e. discriminated contents can be a reason for operating Type-2 conceptual capacity. In this respect, I argue that perception is conceptual.

V-6. 3. b. Is the Discrimination Ability Sufficient for Being a Conceptual Capacity?

There is a still problem involved in treating the discrimination ability as a type of conceptual ability because the former can ensure that the honeybees and the camera in Chapter II have a conceptual capacity that allows them to discriminate one target object from another. However, I do not want to discuss whether the bees and the camera are conceptual beings: Rather, I want to suggest that there must be an additional condition needed for treating the discrimination ability as a type of conceptual capacity because, if

we consider the discrimination ability to be sufficient for having a concept (as Armstrong (1968) argues), it threatens to set the standard for having concepts too low, so that *any* creatures, including mechanical devices such as the camera, that are considered to be able to discriminate have a conceptual capacity.

To do this, we need to reconsider the notion of a *context-dependent concept* as suggested by Brewer (1999). According to Brewer, grasping a context-dependent concept depends upon the relationship between the subject and the object that composes its semantic value. In the cases of the honeybees and the camera, it is difficult to confirm whether they are able to compose the semantic value of the concept — since the expository perspective is excluded — even though they are able to detect the target objects (sugar water and faces) *via* the discrimination ability. That is to say, we are able to have a thought (including demonstrative thoughts) about the perceived object *via* discrimination, however, this is only possible when the discrimination engages with all the process of experience — from the sub-personal to personal level. Although we just discount the expository perspective, the discrimination ability still leads us to compose the semantic value of the concept that we use in the context, and also leads us to possibly have the expository perspective on representational contents derived from discriminated features of the objects. For example, while I am working at my desk, I garner a great deal of visual information that I can sensibly discriminate. Through this, I have a perceptual experience of a thing, e.g. a book; and this can be a reason for my belief about the book, such as 'the book is discriminable because it looks different from a cup'. In this case, we have conceptual contents when the discrimination offered by perception has the possibility of getting through to personal level of experience, where this could be confirmed when we take the expository perspective on experience.

Because of this possibility, I have emphasized the importance of considering the two perspectives on experience, and this shows how we can have perceptual contents from visual information obtained by perception. In this sense, perception could involve at least one conceptual capacity that leads us to think of the object of perception demonstratively. If this is so, then not only does this idea of discrimination ability secure conceptualism's central idea (namely that a content of perceptual experience must be

conceptual in order to be a reason for belief), but we also may find the conceptual character of experience when taking both the functional perspective and the expository perspective on experience.

V-7. Why Must It Be Non-Conceptual?

In this chapter, I examined two main ideas by exploring and examining demonstrative concept responses to the fineness of grain argument. These were associated with the two perspectives on experience, the consideration of which underpins the discussion in this thesis. First, in the case of the expository perspective on experience, *if* there is a fine-grained content (whether or not it is conceptual) in a subject's perceptual state, and *if* it can be grasped by a concept (including demonstrative concepts), how can that content be non-conceptual? Here I have discussed the content of perceptual experience. We may access such content through descriptions like 'I see that red' after perceptual experience or the perception of red occurs. If the object 'that red' may potentially be changed later into a proper concept (with which non-conceptualists would be satisfied) such as 'scarlet red', then there is no sufficient reason to accept non-conceptualism. I also suggested another reason why we need to consider the expository perspective on experience: namely, that experience not only refers to a particular stage or process of experience, it refers to all of the processes involved in perceptual experience. Hence the content of experience is conceptual because there must be conceptual engagement in the whole process of experience. Second, an experience's conceptual character still exists even when we only consider the functional perspective. This can be thought of in two ways: First, we are able to demonstratively think about a perceived object using demonstratives; and second, we can conceptually perceive the difference in objects through using our discrimination ability. If this is correct, then a content of experience that is discriminable and demonstrable is wholly conceptual.

In this way, we can also respond to (1) the problem of the coexistence of inaccessible and accessible contents in a conscious experience and (2) the problem of bridging the gap between perceptual representation and perceptual judgment. This is because both perceptual contents and perceptual representations are derived from their discriminable

features, hence, both content and representation involve discriminated properties *via* perception that we may think of (demonstratively), and form a belief about, the circumstance in which the subjects and both contents are involved. This is the idea of advanced conceptualism that allows us to confirm the conceptual character of experience in both the functional and expository perspective. Therefore, experience has conceptual content.

Conclusion: Is There Any Type of Non-conceptual Content?

This thesis has focused on the debate between conceptualists and non-conceptualists about experience and in particular colour experience, in order to demonstrate that we should understand perceptual content from both the functional and the expository perspective. Recognizing this allowed us to see how the conceptualist's and non-conceptualist's notions of *concepts*, *perceptual content* and *experience* differ, and also allowed us to infer the existence of conceptual content in experience.

This thesis started by briefly examining the three major types of conceptual capacities, and the types of non-conceptual contents of experience. By considering these, we found one major issue that formed the basis of the main argument of this thesis. This was that the difference between conceptualism and non-conceptualism could be characterized as a difference in the notions of a *concept* and an *experience*. Most conceptualists acknowledge that there are various aspects involved in the notion of a concept but define experience too restrictively. In contrast, non-conceptualists define concept very restrictively but define experience very widely, extending that notion from the sub-personal to the personal level. On the basis of these findings, this thesis suggested that we need to consider the functional and the expository perspectives in order to satisfy both camps' demands on the notions of conceptual character of experience. Using this idea, this research considers the non-conceptual arguments which show a very strong tendency to treat experience as being on a sub-personal to personal level in chapters II, III and IV.

Chapter II considered an argument for non-conceptual content which focused on the colour perception of conceptually unsophisticated creatures such as animals and human infants, and stated that there could be non-conceptual content if it is true that those creatures could enjoy perceptual experiences. I argued that there is no way to confirm whether such creatures could have perceptual content through examining two famous experiments on non-conceptual beings' perception of constant colour with honeybees

and human infants. I suggested that non-conceptualists (especially Peacocke (1998a, 1998b. and 2001), Hurley (1998) and Bermùdez (1995 and 1998)) share the same perspective on such creatures with the experimenters of honeybees and human infants, and then criticised this perspective on the grounds that it leads us into three problems related to non-conceptual character of experience: namely, physical causality, intentional causation and the problem of recognition. In light of these problems, not only do such non-conceptual arguments fail to successfully establish the non-conceptual character of experience, they also fail to show what is truly represented in a non-conceptual creature's perceptual state. Therefore, we may not confirm any conceptual or non-conceptual content (or indeed, even the existence of perceptual content) within their perceptual experience. The reason for this conclusion is that the experimenters and non-conceptualists are concerned with enabling conditions of colour perception and not the conditions for constituting colour experience. Of course, I agreed that perception sometimes occurs passively in the sense that is independent from a subject's conceptual capacity. However, I raised the question: why is the content of perceptual experience not composed passively?

In connection with the discussion in Chapter II, Chapter III began by examining colour physicalism, which is also concerned with an enabling condition of colour experience. Against this idea, I used the example of colour variation, i.e. that perceivers can have different perceptual content even though they encounter the same viewing conditions. I also critically analysed the arguments of non-conceptualists, which are strongly dependent on the physical properties of colours and assume that such colour variation can be solved within physicalism using an analogy and appealing to normality. I criticised this argument for three reasons. First, using an analogy could demonstrate a conceptual interpretation of a given stimuli, i.e. the possibility of conceptual engagement in experience, and therefore, it fails to prove the non-conceptual character of colour variation. Second, in the case of appealing to normality, I showed that there is no clear criterion for discriminating an illusion from genuine experience in the example of colour variation.

I also claimed that there is no physical definition of pure colours (e.g., pure yellow) even though subjects are able to discriminate and to judge pure colours from other different colours (e.g. greenish yellow and reddish yellow); hence the physical approach to colour experience seems to be too much to ask of a standard perceiver who is able to perceive pure colours. Throughout these discussions, I claimed that the content of colour experience is not merely a response of visual neurons to the physical properties of colours, but rather, that it involves application of concepts to stimuli and objects since we are able to access the colour content with concepts in the personal level of experience. So, the conclusion drawn is that there must be conceptual engagement in experience.

Chapter IV discussed neurophilosophers who considered the non-conceptual character of experience when taking the functional perspective on experience only. They also have the same tendency as the non-conceptualists in Chapters II and III. The difference is that these neurophilosophers divide experience into two stages: the early and late vision, and then claim that there could be non-conceptual content in the early visual stage that is not cognitively penetrable (given that the criterion of conceptual content is cognitive penetration). I accepted the coherence of this distinction but rejected the thought that there could be non-conceptual content in the early visual stage. Building on the discussions from Chapters II and III, I then argued that these philosophers make the same mistake as the non-conceptualists regarding the argument of early vision. I then considered Macpherson's example involving the psychological experiment of shapes in order to show that early vision could be affected by a subject's concept, i.e. there could also be conceptual engagement at the time of perception. However, I argued that this fact need not lead to the conclusion that sub-personal mental states always involves conceptual character since non-conceptual character can still exists at the occurrence of perception. Hence, I proposed that existing conceptualism must be re-considered in order to overcome this issue.

Throughout the discussions in Chapters II, III and IV, this thesis has claimed that there could be two types of non-conceptual arguments. One concerned the notion that representational content must somehow involve all of the object-properties in a subject's visual field. The typical arguments here are the *richness argument* and the *fine-*

grainedness argument that claim we do not possess concepts that could grasp all of the representational content that experience conveys (the richness argument) or all of the properties that one particular object has (the fine-grainedness argument). These arguments acknowledge accessible representational content. By contrast, another concerns an enabling condition for perception, particularly a physical property such as SSRs, visual mechanism and sub-personal states in colour experience. It turned out that both arguments could be refuted by the conceptualist if the latter can support the key conceptualist premise that experience is a type of mental state which provides a reason for belief. Hence, the mental state could not be an experience unless its contents could be a reason for belief (Cf. Bengson, Grube & Korman 2011: 168 and 181). For this reason, if the content of the mental state is not able to produce a corresponding belief, then it cannot be perceptual content. In this respect, what conceptualists call perceptual content must be conceptual.

Nevertheless, this study accepts the possibility of state non-conceptualism and accepts that we may be in a perceptual state without deploying any concepts at all because the occurrence of perception does not seem to be the result of the co-operation between receptivity and spontaneity. As McDowell insists:

> "We need a conception of experiences as states or occurrences that are passive but reflect conceptual capacities, capacities that belong to spontaneity, in operation." (1994a: 23)

We can think about many cases where perception occurs passively without conceptual engagement from subjects or we can be in a perceptual state which has both conceptually accessible and inaccessible content. Also, there could be non-conceptual content in early vision (as Macpherson (2012 and forthcoming) holds) where there are cognitively penetrable states. There is no reason to deny that these cases are perceptual states even though their content does not correspond to belief content or can be represented without any conceptual engagement. As such, what this thesis focuses on is that we should acknowledge that such cases of perception exist, but we must still find the conceptual character of those states. Not only is this the main aim of this thesis, but it

is also a criticism of the shortcoming of the existing conceptualism that must be remedied.

For this reason, Chapter V reconsidered the early debate between conceptualism and non-conceptualism, then discussed the fine-grainedness argument with demonstrative concepts alongside the non-conceptualist's three rebuttals of this argument. This allowed us to build a notion of discrimination ability that makes us *think* about perceptual content.

Through these discussions, I claimed that first, in the case of the expository perspective on experience, if there can be any possibility of content that could be engaged with a subject's conceptual capacities (i.e., the possibility of conceptual engagement at the personal level of experience), there is no reason for it to be called non-conceptual. I also insisted that we must consider this possibility because experience not only refers to a particular stage or a process of experience, it also refers to all of the processes of perceptual experience. Hence, we need to consider all of the perceptual content in the whole processes of experience in order to evaluate its conceptual character. .

Second, I found that we may infer the existence of conceptual character even when we only consider the functional perspective on experience because subjects perceive the difference in objects through using a perceptual discrimination ability. Discriminating perception enables inferential thoughts about a context-dependent aspect of experience. Also, we are able to know what is represented in sub-personal mental states — the existence of perceptual content in unconscious states, namely discriminated content. So, even though there is no spontaneity in receptivity, perception nevertheless provides us with discriminating representational content that allows us to have inferential thoughts about that content. For this reason I claimed that any content of experience that is discriminating or demonstrative is entirely conceptual. This is the contextual aspect of perception rather than the phenomenal character of objects represented in experience.

Still, there is one more thing that this thesis does not sufficiently consider. This is CV type non-conceptualism. CV type non-conceptualists argue that a content of perception is not always the same as a content of the corresponding belief, and so, a subject's belief

is not necessarily directly formed by the content of her perception. Hence, the content of perceptual experience can be non-conceptual. Regarding this issue, I agree that perception could operate without conceptual engagement. Hence, the main idea of conceptualism, namely that a content of experience must be conceptual in order to be a reason for belief, can be rejected. We could have belief content that differs from perceptual content, i.e. there could be perceptual content that is not a reason for perception-based beliefs. This was the main weakness of existing conceptualism. Also, I still doubt how the idea of discrimination ability as a conceptual capacity provides an adequate explanation of contradictory phenomena: for example, the waterfall illusion and a stick in water, because representation of a contradictory situation is not a simple phenomenon like the perceptual discrimination.

Nevertheless, I think that there are two errors involved in this argument. First, the difference between perceptual content and the content of those beliefs that it produces does not imply the existence of non-conceptual content. Rather, we could have inferential thought elicited from perceptual discrimination separately from perceptual belief at the same time. Therefore, it is possible that perceptual contents can be conceptually grasped by a subject in inferential thought. Hence, this fact implies neither the non-conceptual content of experience nor the impossibility of conceptual engagement. What Crane and Heck show is just that we can have belief content that is different from experience. Second, 'a single perceptual belief formed by only a single perceptual content' is a premise in both Crane's and Heck's accounts. There is no reason to exclude the possibility that we could form at least one or more perceptual beliefs from a single perceptual state. For example, not only does the perceptual information about a cup in front of me involve visual properties such as 'red' and 'round', it also entails various *contextual* information such as 'this is a short distance away from that' or 'half full'. It seems to me that neither Crane nor Heck considers such various contextual information, as well as the possibility of multiple beliefs being formed from it. Because of this Type-2 conceptual capacity (the capacity of understanding the relational structure of perception and belief) can be secured in such contextual relationships even though perceptual contents are not necessarily correlated with belief contents. This is another reason for developing a new type of conceptualism.

This dissertation tries to show that this new type of conceptualism is successful in confirming the conceptual character of experience, that it can build a bridge between conceptualism and non-conceptualism, and finally, that it can play an important role in future research regarding various perceptual experiences that are not considered here.

Bibliography

Akins, K. (1996). "Of Sensory Systems and the 'aboutness' of Mental Sates". *The Journal of Philosophy, 93(7),* 337-372.

Allen, K. (2007). "Inter-species Variation in Colour Perception". *Philosophical Studies*, *142*, 197-220.

(2010). "In Defence of Natural Daylight". *Pacific Philosophical Quarterly, 91*, 1-18.

Armstrong, D. (1968). *A Materialist Theory of the Mind.* London: Routledge & Kegan Paul.

(1981). *The Nature of Mind*, Ithaca, NY: Cornell University Press.

Ayers, M. (2002). "Is perceptual content ever conceptual?". *Philosophical Books*, *43(1)*, 5–17.

Baldwin, T. (1992). "The projective theory of sensory content". In T. Crane (Ed.), *The Contents of Experience* (177-195). Cambridge: Cambridge University Press.

Barsalou, L. & Medin, D. (1986). "Concepts: Static Definitions or Context-Dependent Representation?". *Cahiers de Psychologie Cognitive*, *6*, 187-202.

Bengson, J., Grube, E.,&Korman, D. (2011). "A New Framework for Conceptualism". *Noûs*, *45(1)*, 167-189.

Berkley, G. (1709). *An Essay towards a New Theory of Vision.* 2nd edition, Dublin: printed by Aaron Rhames, for Jeremy Pepyat, Bookseller in Skinner-Row.

(1979). "Essay towards a New Theory of Vision". In Bishop of Cloyne, A. A. Luce& T. E. Jessop (Eds.), *The Works of George Berkeley* (159-239), Vol. I, Nendeln, Liechtenstein, Kraus Reprint.

Bermùdez, J. (1995). "Nonconceptual content: From Perceptual Experience to

Subpersonal Computational States". *Mind and Language*, *10 (4)*, Reprinted in Y. Gunther (Ed.), *Essays on Nonconceptual content* (2003: 183-216). London: MIT Press.

(1998). *The Paradox of Self-Consciousness.* Cambridge, MA: MIT Press.

(2007). "What Is at Stake in the Debate on Nonconceptual Content?". *Philosophical Perspectives*, *21*, 55-72.

Bermúdez, J.&Cahen, A. (2012)."Nonconceptual Mental Content". In N. Zalta (Ed.), *The Stanford Encyclopedia of Philosophy (Spring 2012 Edition)*, URL = <http://plato.stanford.edu/archives/spr2012/entries/content-nonconceptual/>.

Block, N. (1995). "On a Confusion about the Function of Consciousness". *Behavioural and Brain Studies*, *18*, 227-247.

(1999). "Sexism, Racism, Ageism and the Nature of Consciousness". *Philosophical Topics*, *26: 1/2 (Spring & Fall 1999)*, 39-70.

(2007). "Consciousness, Accessibility, and the Mesh between Psychology and Neuroscience". *Behavioural and Brain Studies*, *30*, 481-548.

(2011). "The higher order approach to consciousness is defunct". *Analysis*, *71(3)*, 419-431.

Bradley, P. &Tye, M. (2001). "Of Colors, Kestrels, Caterpillars, and Leaves". *The Journal of Philosophy*, *98(9) (September 2001)*, 469-487.

Brandom, R. (1994). *Making It Explicit: Reasoning, Representing, and Discursive Practice*. Cambridge: Harvard University Press.

Brentano, M. (1973). *Psychology from an Empirical Standpoint*. C. Rancuredo, D. Terrell, & L. McAlister (Trans.), New York: Humanity Press.

Brewer, B. (1999). *Perception and Reason*.Oxford University Press.

(2005). "Perceptual Experience Has Conceptual Content". In M. Steup & E. Sosa (Eds.), *Contemporary Debates in Epistemology* (217-230), Wiley-Blackwell:

Oxford.

(2006). “Perception and Content”. *The European Journal of Philosophy, 14*, 165–81.

(2011). *Perception and its Objects*. Oxford: Oxford University Press.

Broad, D. (1923). “The Theory of Sense”.In J. Swartz (Ed.), *Perceiving, Sensing and Knowing* (1965: 85-129). Los Angeles and Berkeley: University of California Press.

Brown, M. (1987). “Issues in Human Colour Vision Development”.In J. Kulikowski, M. Dickinson, & J. Murray (Eds.), *Seeing Contour and Colour* (255-262). Oxford: Pergamon Press.

Byrne, A. and Hilbert, D. (1997). “Colors and Reflectances”.In A. Byrne and D. Hilbert (Eds.), *Readings on Colour: The Philosophy of Color* (263-288), Vol. 1, A Bradford Book, The MIT Press, London.

(2003). “Color Realism and Color Science”. *Behavioural and Brain Sciences*, *26*, 3-64.

(2004). “Hardin, Tye and Color Physicalism”. *The Journal of Philosophy,101*, 37-43.

Byrne, A. (2005). “Perception and Conceptual Content”. In M. Steup & E. Sosa (Eds.), *Contemporary Debates in Epistemology* (231-350), Wiley-Blackwell: Oxford.

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

(2005). “Information processing, Phenomenal consciousness, and Molyneux's question”. In J. L. Bermúdez (Ed.), *Thought, Reference, and Experience* (195-219), Oxford: Clarendon Press.

Chalmers, D. (2010). *The Character of Consciousness*. Oxford University Press.

Chuard, P. (2006). “Demonstrative Concept without Re-identification”. *Philosophical Studies*, *130*, 153-201.

Churchland, S. (1986). *A Neurocomputational Perspective: The Nature of Mind and the Structure of Science*. Cambridge, MA: MIT Press.

Cohen, J. (2006). "Colour and Perceptual Variation Revisited: Unknown facts, Ailien Modalities and Perfect Psychosemantics".*Dialectica*, *6(3)*, 307-319.

Cohen, J., Hardin, C., & McLaughlin, B. (2006). "True Colours". *Analysis*, *66 (292)*, 335-340.

Crane, T. (1988). "Waterfall Illusion". *Analysis*, *48 (3) (June 1988)*, 142-147.

(1992). "The Non-Conceptual Content of Experience" in T. Crane (Ed.), *The Contents of Experience*, Cambridge: Cambridge University Press.

(2006). "Is There a Perceptual Relation?". In T. S. Gendler& J. Hawthorne (Eds.), *Perceptual Experience* (126-146), Oxford University Press.

(2008). "Is Perception a Propositional Attitude?". *The Philosophical Quarterly Vol. 59, No.236*, 452-469.

(2010). "The Contents of Perception". *The Stanford Encyclopedia of Philosophy*, (First published Fri Mar 18, 2005; substantive revision Mon Jul 19, 2010), http://plato.stanford.edu/entries/perception-contents/#6.

Crimmins, M. (1989). "Having Ideas and Having a Concept". *Mind & Language, 4*, 280-294.

Crowther, M. (2006). "Two Conceptions of Conceptualism and Nonconceptualism". *Erkenntnis*, *65*, 245-276.

Dannemiller, J. (1989). "A Test of Colour Constancy in 9- and 20-week-old Human Infants Following Simulated Illuminant Changes". *Developmental Psychology*, *25*, 171-184.

(1998). "Colour Constancy and Colour Vision during Infancy: Methodological and Empirical Issues". In V. Walsh& J.Kulikowski (Eds.), *Perceptual Constancy: Why Things Look as They Do*(229-261), Cambridge: Cambridge University

Press.

Davidson, D. (1984). "Thought and Talk". In his *Inquires into Truth and Interpretation* (1-17), New York: Oxford University Press.

(1999). "Reply to John McDowell". In Hahn & L. Edwin (Eds.), *Philosophy of Donald Davidson* (105-107), Chicago: Open Court.

Dennett, D. (1991). "Real Patterns". *The Journal of Philosophy*, *88(1) (January 1991)*, 27-51.

Drayson, Z. (2011). "The Review of Cognition and Perception: How do Psychology and Neuroscience Inform Philosophy?"*Journal of Consciousness Studies*, *18 (7-8)*, 242-258.

Dretske, F. (1981). *Knowledge and the Flow of Information.* Cambridge: MIT Press.

(1993). "Conscious Experience". *Mind*, *102 (406)*, 263–283.

(1995). *Naturalizing the Mind.* Cambridge, MA: MIT Press.

(2005). "Is Knowledge Closed under Known Entailment?". In M. Steup and E. Sosa (Eds.), *Contemporary Debates in Epistemology* (13-25), Wiley-Blackwell: Oxford.

Dummett, M. (1975). "What is a Theory of Meaning". In S. Guttenplan (Ed.), *Mind and Language*, Reprinted in M. Dummett, *The Seas of Language* (1993: 1-33), Oxford: Oxford University Press.

Evans, G. (1982). *The Varieties of Reference*. Oxford: Oxford University Press.

Fairchild, D. (1998). *Colour appearance models*. Published Online: 18 JUN 2013, Wiley Online Library.

Fish, W. (2009). *Perception, Hallucination, and Illusion.* New York: Oxford University Press.

(2010).*Philosophy of Perception: A Contemporary Introduction*, Routledge: New York.

Flanagan, O. (1992).*Consciousness Reconsidered*, Cambridge: MIT Press.

Fordor, J. (2007). "The Revenge of the Given". In B. McLaughlin and J. Cohen (Eds.), *Contemporary Debate in Philosophy of Mind* (105-116), Oxford: Blackwell.

Foster, D., Nascimento, S., Craven, B., Linnell, K., &Cornelissen, F. (1997). "Four Issues Concerning Colour Constancy and Relational Colour Constancy". *Vision Research, 37 (10)*, 1341–1345.

Frege, G. (1892a). "On Senses and Reference". In P. Geach and M. Black (Trans.). *Translation from Philosophical Writings of Gottlob Frege* (1960: 56-78), 2nd Edition, Oxford: Clarendon Press.

(1892b). "On Concept and Object" In P. Geach and M. Black (Trans.) (1960: 42-55).

Frankish, K. (2009). "Systems and levels: Dual-system theories and the personal–subpersonal distinction". In J. Evans and K. Frankish (eds.), *In Two Minds: Dual Processes and Beyond* (2009: 89-107), Oxford University Press.

Gaskin, R. (2006). *Experience and the World's Own Language*. Oxford: Clarendon Press.

Gunther, H. (2003). *Essays on Nonconceptual content* .London: MIT Press.

Haddock, A. (2009). "Self-Conscious Perceptual Knowledge".

(2012). "Perceptual Self-Consciousness".

Available at http://cas.uchicago.edu/workshops/germanphilosophy/2011/09/27/adrian-haddock-self-conscious-perceptual-knowledge/.

Haddock, A. & Macpherson, F. (2008). *Disjunctivism: Perception, Action, Knowledge.* Oxford: Oxford University Press.

Hanna, R. (1994). "*Study of Concepts* by Christopher Peacocke Review by: Robert Hanna". *Philosophical Review*, *103 (3) (July 1994)*, 541-544.

Hanson, R. & Humphreys, C. (1969). *Perception and Discovery: An Introduction to Scientific Inquiry*. San Francisco: Freeman, Cooper.

Hardin, C. (1988/1993). *Colour for Philosophers.* Indianapolis: Hackett.

(2003). "A Spectral Reflectance Doth not a Colour Make". *The Journal of Philosophy*, *100 (4)*,191-202.

Hawthorne,J. (2005). "The Case for Closure" in In M. Steup and E. Sosa (Eds.), *Contemporary Debates in Epistemology* (26-42)*,* Wiley-Blackwell: Oxford.

Heck, R. (2000). "Nonconceptual Content and the "Space of Reasons"". *The Philosophical Review*, *109(4)*, 483-523.

(2007). "Are There Different Kinds of Content?". In B. McLaughlin and J. Cohen (Eds.), *Contemporary Debate in Philosophy of Mind* (117-138), Oxford: Blackwell.

Hilbert, D. (1987). *Colour and Colour Perception: A Study in Anthropocentric Realism*, Stanford: Centre for the Study of Language and Information.

(1992). "What Is Colour Vision?".*Philosophical Studies*, *68 (3), (December 1992)*, 351-370.

(2005). "Color Constancy and the Complexity of Color". *Philosophical Topics*, *33 (1), (Spring 2005)*, 141-161.

Hopp, W. (2009). "Conceptualism and the Myth of the Given". *European Journal of Philosophy*, *17*, 363–385.

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

(2003)."Animal Action in the Space of Reasons". *Mind and Language*, *18 (3)*, 231-57.

Jarvie, I., Milford, K., & Miller, D. (2006). *Karl Popper: A Centenary Assessment, Vol. II: Metaphysics and epistemology*. Ashgate Publishing.

Kelly, S. (2001a). "The Nonconceptual content of Perceptual Experience: Situation Dependence and Fineness of Grain". *Philosophy and Phenomenological Research*, *62 (3)*, 601-608.

(2001b). “Demonstrative Concept and Experience”. *The Philosophical Review*, *110 (3)*, 397-420.

Kim, H. (2008). “Colours and Colour Physicalism: The Problem of Color Variation”. *Philosophy of Science*, 11 (2), 59-83. In Korean.

Komatsu, H. (1998). “The Physiological Substrates of Colour Constancy”. In V. Walsh & J. Kulikowski (Eds.), *Perceptual Constancy: Why Things Look as They Do* (352-372). Cambridge: Cambridge University Press.

Lakoff, G. (1987). *Women, Fire, and Dangerous Things: What Categories Reveal about the Mind*. Chicago: University of Chicago Press.

Lamme, V. (2003). “Why Visual Attention and Awareness are different”. *Trends in Cognitive Sciences*, *7 (1)*, 12-18.

(2004). “Separate Neural Definitions of Visual Consciousness and Visual Attention: A Case for Phenomenal Awareness”. *Neural Networks*, *17 (5)*, 861-872.

Lee, P. (2011). “Empiricism and Non-conceptualism: Can Perceptual Experience with Non-conceptual Content Justify Perceptual belief?”. *Philosophical Studies*, 94, 193-234., In Korean.

Levine, J. (2010). “Demonstrative thought”. *Mind and Language*, *25*, 169–195.

Macpherson, F. (2003). “Book Review of Consciousness, Color and Content”. In M. Tye (Ed.), *The Editors of The Philosophical Quarterly* (2003). Available at: http://www.gla.ac.uk/media/media_21950_en.pdf.

(2012). “Cognitive Penetration of Colour Experience: Rethinking the Issue in Light of an Indirect Mechanism”.*Philosophyand Phenomenological Research*, *84(1)*, 24-62.

(Forthcoming). “Cognitive Penetration and Nonconceptual Content”. In J. Zeimbekis& A. Raftopoulos (Eds.), *Cognitive Effects on Perception: New Philosophical Perspectives* (Forthcoming).

Marr, D. (1982). *Vision*. New York: W.H. Freeman.

Markie, P. (2005). "The Mystery of Direct Perceptual Justification". *Philosophical Studies*, *126 (3)*, 347-373.

Martin, M.G.F. (1992). "Perception, Concepts and Memory". Reprinted In Y. Gunther (Ed.), *Essays in Non-Conceptual Content* (237-250). Cambridge: MIT Press.

Mazokhin-Porshnjakov, G. (1966). "Recognition of Colored Objects by Insects". In C. Bernhard (Ed.), *The Functional Organization of the Compound Eyes*, Oxford: Pergamon Press.

Millar, A.(1991), "Concepts, Experience and Inference". *Mind*, *100*, 495-505.

McDowell, J. (1982). "Criteria, Defeasibility, and Knowledge". *Proceedings of the British Academy*, *68*, 455-479.

(1986). "Singular Thought and the Extent of Inner Space".*Subject, Thought, and Context*, Clarendon Press, Oxford, Reprinted in his *Meaning, Knowledge and Reality* (1998: 228-259). Harvard University Press.

(1994a). *Mind and World*. Cambridge: Cambridge University Press.

(1994b). "The Content of Perceptual Experience". *The Philosophical Quarterly*, *44 (175), (April 1994)*, 190-205.

(1998). "Having the World in View: Sellars, Kant, and Intentionality". *Journal of Philosophy*, *95 (9),* 431-492.

(2008). "The Disjunctive Conception of Experience as Material for a Transcendental Argument". In A. Haddock & F. Macpherson (Eds.), *Disjunctivism: Perception, Action and Knowledge* (2008).Oxford Scholarship Online: May 2008.

Moore, G. (1939). "Proof of an External World". *Proceedings of the British Academy*, *25*, 273-300.

Nes, A. (2006). *Content in Thought and Perception.* (Doctoral Dissertation), Oxford University, Retrieved from http://philpapers.org/archive/NESCIT-2.pdf.

Neta, R. (2007). "Fixing the Transmission: the New Mooreans". In S. Nuccetelli and G. Seay (Eds.), *Themes from G. E. Moore: New Essays in Epistemology and Ethics*(2008). Oxford: Oxford University Press.

Neumeyer, C. (1998). "Comparative Aspects of Colour Constancy". In V. Walsh & J.Kulikowski (Eds.), *Perceptual Constancy: Why Things Look as They Do* (1998: 323-351). Cambridge: Cambridge University Press,

Noë, A.(2004). *Action in Perception.* Cambridge, Mass.: MIT Press.

Papineau, D (1996). "Discussion of Christopher Peacocke's A Study of Concepts". *Philosophy and Phenomenological Research*, *56 (2) (June 1996)*, 425-432

Peacocke, C. (1983).*Sense and Content: Experience, Thought and their Relations*. Oxford: Oxford University Press.

(1989a). "What are Concepts?". *Contemporary Perspectives in thePhilosophy of Language* (Vol. II), *Midwest Studies in Philosophy*, Vol. 14. Notre Dame, Ind.: University of Notre Dame Press.

(1989b). "Possession Conditions: A Focal Point for Theories of Concepts". *Mind and Language*, *4*, 51-56.

(1992). *A Study of Concepts*, Cambridge. MA: MIT Press.

(1998a). "Implicit Conceptions, Understanding, and Rationality". *Philosophical Issues*, *9*, 43-88.

(1998b). "Nonconceptual Content Defended". *Philosophy and Phenomenological Research*, *58(2)*, 381-388.

(2001). "Does Perception Have a Nonconceptual Content?". *Journal of Philosophy*, *98 (5)*, 239–264.

(2003a). "Scenario, Concepts and Perception". In Y. Gunther (Ed.), *Essays on Noncoceptual Content* (107-132), MA: MIT Press.

(2003b). Postscript: "The Relations between Conceptual and

Nonconceptual Content". In Y. Gunther (Ed.), (318-322).

Prinz, J. (2007a). "Mental Pointing: Phenomenal Knowledge without Concepts". *Journal of Consciousness Studies, 14*, 9-10.

(2007b). *The Emotional Construction of Morals*. Oxford: Oxford University Press.

Pritchard, D. (2008). "McDowellian Neo-Mooreanism" in *Disjunctivism:* In A. Haddock & F. Macpherson (Eds.), *Disjunctivism: Perception, Action and Knowledge* (2008). Oxford Scholarship Online: May 2008.

Pylyshyn, Z. (1999). "Is Vision Continuous with Cognition? The Case for Cognitive Impenetrability of Visual Perception". *Behavioural and Brain Sciences*, *22 (3)*, 341-365.

Raftopoulos, A. &Műller, C. (2006). "The Phenomenal Content of Experience". *Mind and Language*, *21(2), (April),*187–219.

Raftopoulos, A. (2009).*Cognition and Perception: How Do Psychology and Neuroscience Inform Philosophy?*. Cambridge, MA: MIT Press.

Roessler, J. (2009). "Perceptual Experience and Perceptual Knowledge". *Mind*, *118*, Retrieved from: http://www2.warwick.ac.uk/fac/soc/philosophy/people/faculty/roessler/perceptual_experience_and_perceptual_knowledge.pdf.

Rosenthal, M. (2002). "How many kinds of consciousness". *Consciousness and Cognition*, *11 (4),* 653-665.

(2005). *Consciousness and Mind*. Oxford: Clarendon Press.

Roskies, A. L. (2008). "A New Argument for Nonconceptual Content". *Philosophy and Phenomenological Research,76*, 633–659.

(2010). "'That' Response Doesn't Work: Against a Demonstrative Defense of Conceptualism". *Noûs, 44*, 112–134.

Ross, D. (2000). *Dennett's Philosophy: a Comprehensive Assessment.* Cambridge, Mass.

[u.a.]: MIT Press, A Bradford Book.

Scott, O. (1999). "Reflection of Light from a Surface". Retrieved 7th of February 2011, from http://www. siggraph.org/education/materials/HyperGraph/illumin/reflect1.html.

Sellars, W. (1963). *Science, Perception and Reality*. London: Routledge & K. Paul; New York: Humanities Press.

Shoemaker, S. (2000). "Introspection and Phenomenal Character". *Philosophical Topics*, *28*, 247-74.

(2006). "On the Way Things Appear". In T. Gendler& J. Hawthorne (Eds.), *Perceptual Experience* (461-480). Oxford: Oxford University Press.

Siegel, S. (2014). "The Contents of Perception". In N. Zalta (Ed.), *The Stanford Encyclopedia of Philosophy*(Winter 2014 Edition),URL = <http://plato.stanford.edu/archives/win2014/entries/perception-contents/>.

Slater, A. (1998). "Visual Organization and Perceptual Constancies in Early Infancy". In V. Walsh & J. Kulikowski (Eds.), *Perceptual Constancy: Why Things Look as They Do*. Cambridge University Press.

Solomon, K., Medin, D., & Lynch, E. (1999). "Concepts Do more than Categorize". *Trends in Cognitive Sciences, 3*, 99-105.

Speaks, J. (2005). "Is There a Problem about Nonconceptual Content?". *The Philosophical Review*, *114 (3)*, 359-398.

(2006). "What Sorts of Things Are the Contents of Perception?". Retrieved 10th of January2015, from http://www3.nd.edu/~jspeaks/courses/mcgill/515/content-of-perception.html.

Sperling, G. (1960). "The Information Available in Brief Visual Presentations". *Psychological Monographs: General and Applied, 74 (498)*, 1-29.

Steup, M. & Sosa, E. (Eds.), (2005).*Contemporary Debates in Epistemology*. Wiley-Blackwell: Oxford.

Stroud, B. (2009). "Scepticism and the Senses". *European Journal of Philosophy, 17 (4),* 559-570.

Thornton, T. (2004). *John McDowell (Philosophy Now)*. Routledge: London and New York

Thompson, B. (2006). "Colour Constancy and Russellian Representationalism". *Australasian Journal of Philosophy*, *84 (1)*, 75-94.

Toribio, J. (2007). "Nonconceptual Content".*Philosophy Compass* 2/3 (2007), 445-460.

(2008). "State Versus Content: The Unfair Trial of Perceptual Nonconceptualism".*Erkenn*, *69 (3)*, 351-361.

Travis, C. (2004). "Silence of the Senses." *Mind, 113*, 57–94.

Tye, M. (1995). "The Burning House," in T. Metzinger (Ed.), *Conscious Experience*(81-90). Kansas, Lawrence: Allen Press.

(2000).*Consciousness, Color and Content*. Cambridge, Mass: the MIT Press.

(2003). "A Representational Theory of Pains and Their Phenomenal Character".In Y. Gunther (Ed.), *Essays on Nonconceptual Content* (263-277). MA: MIT Press.

(2006). "Nonconceptual Content, Richness and Fineness of Grain".In T.Gendler& J. Hawthrone (Eds.), *Perceptual Experience* (504-529), Clarendon Press, Oxford.

(2006). "The Puzzle of True Blue" in *Analysis*, *66 (3)*, 173-178.

Van Gulick, R. (2014). "Consciousness". In N. Zalta (Ed.), *The Stanford Encyclopedia of Philosophy*(Spring 2014 Edition), URL = <http://plato.stanford.edu/archives/spr2014/entries/consciousness/>.

Weisberg, J. (2011). "Abusing the notion of what-it's-like-ness: a response to Block". *Analysis, 71 (3)*, 438-443.

Weiskrantz, L. (1997). *Consciousness Lost and Found.* Oxford: OxfordUniversity Press.

Wittgenstein, L. (1958). *Philosophical Investigations*. *2nd edition*, Oxford: Oxford University Press.

(1982). *Last Writings on the Philosophy of Psychology*, Vol. I, Blackwell, Oxford.

Wright, C. (2002). "Anti-sceptics simple and subtle: Moore and McDowell". *Philosophy and Phenomenological Research*, *65*, 330-348.

(2008). "Comments on John McDowell's the Disjunctive Conception of Experience as Material for Transcendetal Argument". In A. Haddock & F. Macpherson (Eds.), *Disjunctivism: Perception, Action and Knowledge*, Oxford University Press.

Yang, J., Kanazawa, S., Kuriki, I., and Yamaguchi, K. (2013). "Investigation of Color Constancy in 4.5-month-old Infants under a Strict Control of Luminance Contrast for Individual Participants". *Journal of Experimental Child Psychology (Impact Factor: 3.12), 115(1),(May 2013)*, 126–136.