A Defence of Separatism

by

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Abstract

Philosophers commonly distinguish between an experience’s intentional content—what the experience represents—and its phenomenal character—what the experience is like for the subject. Separatism—the view that the intentional content and phenomenal character of an experience are independent of one another in the sense that neither determines the other—was once widely held. In recent years, however, separatism has become increasingly marginalized; at present, most philosophers who work on the issue agree that there must be some kind of necessary connection between an experience’s intentional content and phenomenal character.

In contrast with the current consensus, I believe that a particular form of separatism remains the most plausible view of the relationship between an experience’s intentional content and phenomenal character. Accordingly, in this thesis I explain and defend a view that I call “moderate separatism.” The view is “moderate” in that the separatist claim is restricted to a particular class of phenomenal properties: I do not maintain that all the phenomenal properties instantiated by an experience are independent of that experience’s intentional content but only that this is true of the sensory qualities instantiated by that experience.

I argue for moderate separatism by appealing to examples of ordinary experiences where sensory qualities and intentional content come apart. First I argue that an experience’s intentional content does not determine the sensory qualities it instantiates by appealing to cases
where two experiences share the same intentional content but instantiate different sensory qualities. Then I argue that the sensory qualities instantiated by an experience do not determine its intentional content by appealing to cases where two experiences that instantiate the same sensory qualities differ with regard to intentional content. I consider a number of alternatives to my account of the intentional content and phenomenal character of the experiences at issue and argue that none is plausible. If so, it follows that the intentional content and sensory qualities instantiated by an experience are independent of one another.
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Introduction

There are two basic features that plausibly define what it is to have a mind—features philosophers call intentionality and phenomenal consciousness. Briefly, to possess intentionality is to be about, or represent some object or state of affairs. For instance, my belief that snow is white represents the world to be a certain way, and the way it represents the world to be is its intentional content. For a mental occurrence to be phenomenally conscious is for there to be something it’s like for the subject of that occurrence.¹ For instance, there is something it’s like for me to hear a certain note played on a piano, and what it’s like for me to hear that note is the phenomenal character of my experience.

One of the most important questions in the philosophy of mind, and one that has received a great deal of attention recently, is how these two fundamental features of the mind are related. For a time, separatism—the view that intentionality and phenomenal consciousness are independent of or separate from one another—was perhaps the most widespread view of the issue in analytic philosophy.² For instance, the prevalence of this view explains why, in the second half of the 20th century, intentionality and consciousness were often treated separately in debates over whether the mind could be “naturalized.” A popular view in the 1950s was that some sort of “behaviouristic analysis” could capture intentional occurrences such as beliefs and desires, but not conscious occurrences such as visual experiences and pains (instead, conscious occurrences would have to be identified with brain occurrences).³ Later, when functionalism had become the dominant physicalist theory of the mind, a common objection was that while functionalist accounts might be able to capture

¹ I will use “occurrence” throughout to cover both states and events.
² “Separatism” is used as the name for this view by Horgan and Tienson (2002, 520), and Graham, Horgan and Tienson (2007, 468).
³ See, for example, Place (1956).
intentionality they leave out consciousness altogether.\(^4\) In other words, for a long time it was common to think of intentionality and consciousness as distinct mental features presenting distinct challenges to physicalism and requiring distinct theoretical approaches.

Separatism’s popularity began to decline during the 1990s, largely thanks to the development of a theory known as representationalism.\(^5\) According to the representationalist, intentionality and phenomenal consciousness are not distinct and separable aspects of mental occurrences; rather, being phenomenally conscious just is a matter of possessing a particular sort of intentional content. While there has been a good deal of resistance to the claim that the property of being phenomenally conscious is identical to the property of possessing a particular sort of intentional content, the influence of representationalism has been such that currently most philosophers who work on the issue maintain that there is some kind of necessary connection between these two aspects of mental occurrences. For instance, philosophers such as Siewert (1998) and Horgan and Tienson (2002) reject the representationalist’s identity claim but maintain that certain mental occurrences possess intentional content in virtue of their phenomenal character.\(^6\) Ultimately, while as yet there is nothing approaching a consensus regarding the exact nature of the relationship between intentionality and phenomenal consciousness, there does seem to be a growing consensus amongst philosophers presently working on the issue that these two things are not independent of one another. In other words, there is a growing consensus that separatism is false.

In this context, there is a danger that the advantages of separatism and the motivations for the view are being ignored unduly. Strong arguments for separatism have been provided by philosophers such as Peacocke (1983) and Block (1990), but in the recent literature concerning

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\(^4\) A very clear statement of this view can be found in Kim (1998, 101-103)
\(^5\) Important texts from the early days of representationalism include Harman (1990), Dretske (1995) and Tye (1995).
\(^6\) The various views mentioned in this paragraph are discussed in more detail in chapter 1.
the relation between intentionality and consciousness these arguments receive very little attention. It is common for writers who reject separatism to either simply ignore such arguments, or to pass over them in a hurry. In general, there seems to be a pervasive assumption that the arguments for separatism have already been answered and don’t require much in the way of further consideration. It is my contention that this assumption is mistaken. I intend to show that the arguments for separatism are much better than is commonly recognized; in fact, I intend to show that these arguments are entirely convincing and that the replies they have received are inadequate. This point is crucial because while the relation between intentionality and phenomenal consciousness continues to be the subject of a great deal of research, separatism is rarely treated as a viable option. Separatism is being disregarded despite the fact that there are strong arguments for the view that have yet to receive convincing replies.

I will defend the separatist thesis that intentional content and phenomenal character are independent of one another in the sense that neither determines the other, and my defence will focus on one type of argument in particular. Specifically, my method of arguing for separatism will be to point to examples where intentional content and phenomenal character come apart. That is, I will consider certain experiences that possess the same intentional content but differ with regard to their phenomenal character, and others that possess the same phenomenal character but differ with regard to their intentional content. However, I am going to avoid discussing hypothetical scenarios such as the popular “inverted spectrum” and Block’s (1990) “inverted earth.” Instead, I will restrict myself exclusively to ordinary examples with which every reader is likely to have had first-hand experience. Arguing for separatism by appealing

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7 For an example of the former see Horgan and Tienson (2002); for an example of the latter see Chalmers (2004, 160-61). The philosopher who has probably taken the most care in responding to the arguments for separatism is Tye (1992, 1995, 2000).
to examples of ordinary experiences where phenomenal character and intentional content come apart is a strategy probably best known from the first chapter of Peacocke’s *Sense and Content*, and from Boghossian and Velleman’s “Colour as a Secondary Quality.” I will borrow some of my examples from these philosophers, but I will also be appealing to examples of my own. Ultimately, I hope to show that specific variants of this general style of argument can be employed to make a strong case for separatism.

My principal claim is that a particular form of separatism—which I call “moderate separatism”—is true. Moderate separatism is the view that a particular class of phenomenal properties, namely *sensory qualities*, is independent of intentional content. However, since this particular view has not been clearly delineated in the relevant literature my first task will be to explain the separatist thesis I’m defending. Consequently, chapter one is devoted to explaining the view I’ll be arguing for in chapters two and three. I begin by explaining the philosophical notions of intentionality and phenomenal consciousness in some detail. I then explain the various views one can adopt regarding the relationship between intentionality and consciousness, and how separatism relates to other views on this issue. Next I turn to the task of distinguishing moderate separatism from other separatist views. In order to do this I describe the motivation for distinguishing different classes of phenomenal properties and say something about those phenomenal properties I am calling sensory qualities. Recognizing a distinction between different classes of phenomenal properties opens up the possibility that different kinds of phenomenal properties might be related to intentionality in different ways. The separatist thesis that I defend, then, is moderate in that I do not claim that *all phenomenal*...
properties are independent of intentional content, but only that an experience’s sensory qualities are independent of its intentional content.

To show that an experience’s sensory qualities and intentional content are independent of one another, the moderate separatist has to do two things: first, show that an experience’s intentional content does not determine or fix the sensory qualities it instantiates, and second show that the sensory qualities instantiated by an experience do not determine or fix its intentional content. I defend these claims in chapters two and three respectively. In chapter two I argue that an experience’s intentional content does not determine the sensory qualities it instantiates by appealing to ordinary examples of experiences that possess the same intentional content but instantiate different sensory qualities. I begin by examining Peacocke’s (1983) well-known argument concerning two trees of the same size at different distances from the perceiver. As I understand it, this example is not intended to show that there can be sensational differences with no accompanying intentional differences; the purpose, rather, is simply to show that experiences instantiate phenomenal properties that cannot be identified with any of their intentional properties. I first explain my understanding of how the argument works and then respond to a number of objections that have been raised by philosophers such as Tye (1991, 1992, 2000), Lycan (1996) and Byrne (2001). Next, I examine Boghossian and Velleman’s (1989) argument concerning double vision. I maintain that a normal visual experience of a given object and a double vision experience of that same object will instantiate different sensory qualities but possess the same intentional content. I then consider a number of responses to this claim and explain why each is unconvincing.

In chapter three I argue that the sensory qualities instantiated by an experience do not determine its intentional content by appealing to ordinary examples of experiences that instantiate the same sensory qualities but differ with regard to intentional content. I begin by
considering a case where a certain figure printed on a page is seen first as a mere figure of a
certain shape, but later is seen as a certain type of symbol. I maintain that in such a case the
intentional content of one’s experience changes but the sensory qualities instantiated by one’s
experience do not change. The only possible responses to this argument would either be to
deny that the two experiences of the figure in question instantiate the same sensory qualities or
to deny that they differ with regard to intentional content. I consider and reject each of these
alternatives in turn. Next, I consider a case where a subject seems to see an object through a
window but later realizes that the object is behind her and is being reflected in a mirror. Again,
I maintain that in such a case the two experiences instantiate the same sensory qualities but
differ with regard to intentional content. And again, there are two possible responses that I
reject in turn: first I explain why it would be implausible to claim that these two experiences
possess the same intentional content and then I argue that it would be similarly implausible to
claim that these experiences instantiate different sensory qualities.

If, as I hope to show in chapter two, there are ordinary examples of experiences that
possess the same intentional content but instantiate different sensory qualities, then an
experience’s intentional content does not determine the sensory qualities it instantiates. And if,
as I hope to show in chapter three, there are ordinary examples of experiences that instantiate
the same sensory qualities but differ with regard to their intentional content, then the sensory
qualities instantiated by an experience do not determine its intentional content. It would seem,
then, that the growing consensus in contemporary analytic philosophy is mistaken; a particular
form of separatism—moderate separatism—is the correct account of the relation between
intentional content and phenomenal character.
Chapter 1
Moderate Separatism

Before getting to the arguments for moderate separatism, I first need to explain what this view amounts to. Consequently, the primary purpose of this chapter is to describe moderate separatism and explain how it relates to other views in the philosophy of mind. In order to do this, however, I will have to say a good deal about certain background issues. First and foremost, since moderate separatism is a view about the relationship between intentionality and phenomenal consciousness, in §§1.1 and 1.2 I will explain what intentionality and phenomenal consciousness are supposed to be. Next, in §1.3 I will briefly discuss mental occurrences that possess both intentional content and phenomenal character. The pervasiveness of mental occurrences that are both intentional and phenomenal leads naturally to the question of how the intentional content and phenomenal character of such occurrences are related. I will introduce this issue in §1.4 and briefly survey some of the different positions that have been defended in the relevant literature—one of which, separatism, is the view I will be defending.

However, I am not going to be defending separatism in general, but only one particular version of separatism—a moderate version. In order to explain the sense in which moderate separatism is moderate, I will need to examine the notion of phenomenal character in some detail. Accordingly, in §1.5 I will explain two central claims: first, that we need to distinguish between the different phenomenal properties of any given phenomenal mental occurrence; and second, that these different phenomenal properties fall into different classes (one of which is the class of sensory qualities).

Recognizing this heterogeneity amongst phenomenal properties obviously has implications for how we ought to approach the relationship between phenomenal
consciousness and intentionality. Specifically, acknowledging this heterogeneity opens up the possibility that different classes of phenomenal properties bear different relations to the intentional content of mental occurrences. Once the distinction between different classes of phenomenal properties is clear, then, I will be able to explain in §1.6 what distinguishes moderate separatism from other types of separatism. Finally, in §1.7 I will describe how this specific moderate variety of separatism relates to other well-known views on the relation between intentional content and phenomenal character, and explain why it matters whether moderate separatism is true.

1.1 Intentionality and Intentional Content

Intentionality is the property of being about or representing something. For instance, the name “Stephen Harper” is about Stephen Harper, a map of Canada is about Canada, and my belief that snow is white is about snow. However, while names and maps represent what they do in virtue of the fact that human beings have established certain conventions, this is not true of beliefs. Consequently, we need to distinguish between derived and original (or underived) intentionality: something possesses derived intentionality just in case it represents what it does in virtue of the fact that it is used in a certain way by someone possessing intentional states; something possesses original intentionality just in case it possesses intentionality that is not derived intentionality. Since I will be concerned exclusively with the original intentionality of mental occurrences, from now on whenever I say “intentionality” I mean original intentionality.

Many (perhaps all) mental occurrences possess intentionality. In addition to believing snow is white, examples include desiring to win the lottery, fearing getting on a plane, and expecting to be home before dark. Regarding such intentional phenomena we can distinguish the attitude from the intentional or representational content: the content is a proposition and
the attitude is a relation to that proposition. (By “proposition” I mean an abstract object that carries a truth-condition. For a proposition to be true (false) is for the condition it carries to be met (unmet). Roughly speaking, when a proposition is stated using a ‘that’-clause, its truth-condition is stated by the embedded complement clause. For instance, the proposition that snow is white is true if and only if snow is white). So, to believe that snow is white is to stand in the belief-relation to the proposition that snow is white (that proposition is thus the intentional content of the belief); and to desire to win the lottery is to stand in the desire-relation to the proposition that one wins the lottery (that proposition is thus the intentional content of the desire).\footnote{Byrne (2006, 407) puts the point this way.}

An intentional occurrence like a belief inherits its truth-condition from the proposition that it has as its content. For instance, my belief that snow is white is true if and only if snow is white. Now, while we would not say that a desire is true or false, there is an analogous notion of \textit{accuracy as a representation} that applies more broadly. For instance, for my desire to win the lottery to be an accurate representation is for that desire to be fulfilled—for me to win the lottery. Similarly, for my intention to save money to be an accurate representation is for that intention to be realized—for me to save money. In general, then, we can say that a given intentional occurrence is an accurate representation just so long as the proposition it has as its content is true and is an inaccurate representation otherwise.

1.2 Phenomenal Consciousness and Phenomenal Character

Phenomenal consciousness is not the sort of thing that can be defined in terms of more primitive notions but we can provide a rough idea of what it is by saying that phenomenally conscious mental occurrences are those that are \textit{like something for their subjects}. 
Alternatively, we can say that for a mental occurrence to be phenomenally conscious is for it to have some *qualitative feel*, or some *experiential character*.

Perhaps the best way to elucidate the notion of phenomenal consciousness is to consider examples. There is some disagreement over just which mental occurrences are actually phenomenally conscious, but seeing a sunset, hearing a piano, having an itch, having a headache, visualizing a unicorn, hearing a song in your head, and feeling elated are all uncontroversial examples. These different mental occurrences probably have a number of different things in common, but one obvious commonality is that there is something it’s like for one to have them.

It is also helpful to consider mental occurrences where phenomenal consciousness is missing. Consider the fact that we all believe many things that we rarely consciously think about. For example, I believe that travelling by train is more pleasant than travelling by bus but there is nothing it’s like for me to believe this. As such, this belief of mine constitutes a mental occurrence that is not phenomenally conscious. Or, consider how many of our actions each day are caused by unconscious mental events. For instance, when you reach to grasp something like a cup or a doorknob normally you don’t give any conscious thought to how you ought to hold your hand. You might consciously decide that you want to grab the cup or the doorknob, but after that everything happens automatically. However, in any such case there will be some visual processing that allows you to adopt the correct grip given the shape and size of the object you’re reaching for. This visual processing, then, constitutes an unconscious mental event—while normally there’s nothing it’s like for you to determine the best way to

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2 The usefulness of examples where consciousness is “conspicuous by its absence” is stressed by Siewert (1998, chap. 3)

3 Experiments show that the visual processing that determines one’s grip can operate quite well even when a subject’s conscious perception of the size of an object is illusory. See, Aglioti, DeSouza, and Goodale (1995).
hold your hand when you reach for an object, this is nonetheless a mental event you undergo on a regular basis.

Different kinds of occurrences differ from one another with respect to what it’s like for the subject to have them. That is, different types of phenomenal occurrences differ with respect to their *phenomenal character*. For example, there is something it’s like for me to see a blue sky and this is different from what it’s like for me to see a grey sky; and there is something it’s like for me to hear a faint noise and this is different from what it’s like for me to hear a loud noise; also, there is something it’s like for me to feel a sharp pain and this is different from what it’s like for me to feel an itch. Each of these types of experience has a unique phenomenal character that distinguishes it from other types of experience. The way the experience of a sharp pain feels, for instance, distinguishes it from the experience of a dull pain or an itch or anything else. On the other hand, the phenomenal character of a sharp pain is sufficiently similar to that of a dull pain that we call both kinds of experience “pain.” If you consult your own experience, then, it should be obvious to you that each phenomenal occurrence has a unique phenomenal character that is similar to the character of other occurrences in certain ways and different in others.

1.3 Occurrences with both Intentional Content and Phenomenal Character

One might find it striking that these two fundamental features of the mind, intentionality and consciousness, can be explained more or less independently of one another (as the explanations provided above hopefully illustrate). Nonetheless, it’s important to recognize that very many mental occurrences possess both intentional content and phenomenal character.

This point is perhaps illustrated best by perceptual experiences. By “perceptual experiences” I mean the particular conscious mental events that are normally produced when a
stimulus of the right sort impinges on the sensory transducers of a normal subject. For instance, if you are a normal subject and you look up at the moon on a clear night, light reflected by the moon will impact photoreceptors within your retinas, electrical activity will then be generated in the visual parts of your brain and a conscious mental event will result—in this case, a visual experience. Or, if you’re a normal subject and you clap your hands, a sound wave will be produced that will travel into your ears and impact mechanoreceptors along the basilar membrane inside each cochlea, electrical activity will be generated in the auditory parts of your brain and a conscious mental event will result—in this case, an auditory experience.

As I use the term, by definition a perceptual experience is phenomenally conscious. For instance, there is something it’s like for you to undergo your visual experience of the moon—the experience has some specific phenomenal character. Mental events generated in a similar fashion that are not phenomenally conscious are not perceptual experiences. For example, consider again the visual processing that allows you to adopt the correct grip when you reach for a cup or a doorknob. In such a case, light from the object impinges on photoreceptors within your retinas and electrical activity is then produced in the brain, but that brain activity is not the sort that results in a conscious mental event and so does not constitute a perceptual experience.  

However, perceptual experiences are not phenomenal events only: rather, just like beliefs and desires, they represent the world to be a certain way. Consider a simple visual experience of two pens in front of you on a desk, one of which is slightly longer than the other. In such a circumstance, it is natural to say that if there are two pens on the desk and one is slightly longer than the other then things are the way they look to you. However, if there are two pens on the desk in front of you but they are the same length, or if there are no pens on the

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4 For the details concerning which parts of the brain are involved in the visual processing that guides action, see, for example, Milner and Goodale (1995).
desk at all, then it is natural to say that things are not the way they look to you—you are suffering from a visual illusion or hallucination. One might be tempted to think that a visual experience itself is not the sort of thing that can be right or wrong about the way things are—that this can be true only of the judgment one makes on the basis of a visual experience.

However, consider what happens when you fall victim to the well-known Müller-Lyer illusion involving two lines of equal length. Even when you measure the two lines and judge them to be equal in length, one line continues to look longer than the other. Such cases suggest that perceptual experiences possess their own intentional contents that are independent of the contents of judgments or beliefs.5

These points are by no means restricted to vision, and so the general conclusion we should draw is that perceptual experiences, just like beliefs and desires, are intentional mental occurrences.6 Specifically, we can think of perceptual experiences as relations to contents. For instance, for you to have a visual experience of two pens of unequal length on the desk in front of you is for you to stand in the visual-experience-relation to a proposition—in the present case, this might be the proposition that there are two pens of unequal length on the desk in front of you.7 And as a given perceptual experience will have some proposition as its content, it is an accurate representation just in case that proposition is true and an inaccurate representation otherwise (alternatively, we can say that if the relevant proposition is true then the experience is veridical and if it is false then the experience is illusory).

5 Visual illusions are commonly cited in support of this claim: see, for example, Peacocke (1983, 6) and Tye (1995, 102).
6 While the view that perceptual experiences possess intentional content seems to be the most common view amongst contemporary philosophers, there are those who disagree. For example: Brewer (2006), Campbell (2002), Hellie (2007, forthcoming), Kennedy (forthcoming), Martin (2002, 2004) and Travis (2004). Evaluating the direct realist or relational view of perception defended by such philosophers would require a lengthy digression, so I will have to ignore the view in what follows.
7 This is intended to be a rough approximation of the content only; any given visual experience will represent the environment in much greater detail.
Exactly what sort of properties visual experiences represent is subject to dispute. For example, one might disagree that a visual experience can represent pens as pens (since it’s not obvious that if the objects on the desk turn out to be, say, paper-maché pen-facsimiles, that we would say the relevant visual experience is inaccurate or illusory). However, the final outcome of this sort of dispute doesn’t matter to the question of whether or not perceptual experiences are intentional at all. Most philosophers would accept that the colour, shape, size, and position of objects can be either accurately or inaccurately represented in visual experience, and so long as this much is granted we can conclude that visual experiences possess intentional content.

Perceptual experiences, then, are prototypical examples of mental occurrences that possess both intentional content and phenomenal character. Further, it seems plain that similar points can be made with regard to other types of phenomenal occurrences as well. Moods and emotions are phenomenal occurrences but often (if not always) have an intentional component. For instance, to be angry that it is raining is to represent the environment to be a certain way: if it is raining your anger is an accurate representation and if it is not raining then your anger is an inaccurate representation. Consequently, we should conclude that very many (and perhaps all) phenomenal mental occurrences will possess both intentional content and phenomenal character.

1.4 The Relation between Intentional Content and Phenomenal Character

We now come to a rather difficult question: what exactly is the relationship between phenomenal consciousness and intentionality? One broad issue is the relationship between intentionality and consciousness in general: can mental occurrences possess intentionality without being phenomenally conscious, and can mental occurrences be phenomenally conscious without possessing intentionality? A form of separatism has traditionally been a
widely-held view regarding this issue. That is, it has been a popular assumption that mental occurrences can possess intentionality without being phenomenally conscious (unconscious beliefs and desires are popular examples) and can be phenomenally conscious without possessing intentionality (certain bodily sensations and undirected emotions are popular examples). However, philosophers such as Tye (1995) and Crane (1998) maintain that while some mental occurrences possess intentionality without being phenomenally conscious, no phenomenally conscious mental occurrences lack intentionality. And, conversely, philosophers such as Searle (1992) and Strawson (1994) maintain that all intentional occurrences are also (at least potentially) phenomenally conscious.

Our focus will be on a more narrow issue. Specifically, we will be concerned with the relationship between the intentional content and phenomenal character of those mental occurrences, such as perceptual experiences, that are both intentional and phenomenally conscious. Regarding such occurrences, we want to know: is the property of having a certain phenomenal character identical to the property of having or representing a certain intentional content (at least in a certain manner)? If not, does either a mental occurrence’s intentional content or phenomenal character determine the other, or are they independent of one another?

We can usefully distinguish four views concerning this issue:

(A) The property of having a certain phenomenal character is identical to the property of having or representing a certain intentional content in a certain manner

This view is sometimes called strong representationalism to distinguish it from the weaker view that phenomenal character supervenes on intentional content (see below). Defenders of this view maintain that for a mental occurrence to have a certain phenomenal

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9 Clear statements of the view can be found in McGinn (1982, chap. 1) and Kim (2006, 14-27).
10 The question is posed in Chalmers’s (2004) terminology.
11 The “weak” vs. “strong representationalism” terminology is used this way by Tye (2000, 45; 2007, 598). See also Kind (2007, 406).
character just is for it to represent the world to be a certain way in a certain manner.\textsuperscript{12} (The “in a certain manner” qualification is needed because it is natural to assume that an unconscious mental occurrence can possess any given intentional content).

With regard to how to characterize the relevant manner of representation there is an important difference between \textit{reductive} and \textit{nonreductive} varieties of strong representationalism.\textsuperscript{13} Reductive representationalists, such as Tye (1995, 2000) and Dretske (1995), maintain that the relevant manner of representation can be understood in wholly nonphenomenal terms. For instance, according to Tye (2000, 60-63), the property of having a certain phenomenal character is identical to the property of possessing a certain intentional content that meets three further conditions: first, it is nonconceptual (in the sense that the subject need not possess the concepts that enter into the content), second, it is abstract (in the sense that no particular objects or surfaces enter into the content), and third, it is poised to impact conceptual occurrences such as beliefs and desires.

A nonreductive representationalist, such as Chalmers (2004), maintains that the relevant manner of representation cannot be understood in wholly nonphenomenal terms. For instance, Chalmers (2004, 159) maintains that the property of having a certain phenomenal character is identical to the property of \textit{phenomenally} representing a certain intentional content.\textsuperscript{14} That is, on this view, the relevant manner of representation is a \textit{phenomenal} manner of representation. In addition, Chalmers’s view is nonreductive in that he maintains (2004,

\textsuperscript{12} A related view, the higher-order theory of consciousness, tries to explain the phenomenal character of a given mental occurrence by appealing to the representation of that very occurrence (defenders include Rosenthal [1986, 1993], Lycan [1996], and Carruthers [2000]). None of the arguments I will present will have any bearing on whether such a theory can provide an adequate account of phenomenal character.

\textsuperscript{13} See Chalmers (2004, 162).

\textsuperscript{14} Chalmers (2004, 160) allows that we might want to be more specific: for instance, we might want to appeal to the property of \textit{perceptually} phenomenally representing a certain content, or even \textit{visually} phenomenally representing a certain content.
that the relevant contents are modes of presentation that involve phenomenal properties—as he says, his representationalism is “

**doubly nonreductive**” (2004, 175).

(B) Any two phenomenal mental occurrences with the same intentional content have the same phenomenal character

   This view, that with regard to phenomenal mental occurrences intentional content determines phenomenal character (i.e. phenomenal character supervenes on intentional content), is sometimes called weak representationalism. The view is entailed by strong representationalism, but one can defend (B) without committing oneself to (A). For instance, Byrne (2001) argues that two experiences cannot differ phenomenally without also differing with regard to their intentional content, but he remains neutral on the strong representationalist’s identity claim.

(C) Any two intentional mental occurrences that are the same phenomenally in a certain respect will share a certain specific intentional content

   This view is weaker than the claim that mental occurrences with the same phenomenal character cannot differ with regard to their intentional content (which no one defends independently of strong representationalism, as far as I know). Rather, the view is that certain specific phenomenal properties entail certain specific intentional contents. The view is again entailed by strong representationalism, but one can defend (C) without committing oneself to (A).

   Siewert (1998) and Horgan and Tienson (2002) are committed to (C).\(^\text{15}\) Specifically, they maintain that there is a pervasive, fundamental kind of intentional content that is determined by phenomenal character—**phenomenal content**, as it is known. For instance,

\(^{15}\) Chalmers (2004, 157-58) also makes a case for (C) incorporating Siewert’s and Horgan and Tienson’s arguments.
according to Siewert (1998, 221), when you have a visual experience with the phenomenal character that is normally produced when you look at an X-shaped object in front of you, it follows that your experience represents that there is an X-shaped object in front of you (any experience that has this phenomenal character will have this specific intentional content). Moreover, since there is nothing special about the phenomenology associated with looking at X-shaped objects, Siewert (1998, 221) maintains that “enormously many” phenomenal properties entail specific intentional contents.

Similarly, Horgan and Tienson maintain that, for instance, the phenomenal character of a visual experience normally produced when one looks at a picture hanging crooked is such that any experience that has that phenomenology represents a picture to be hanging crookedly: “in order for such an experience to be accurate, there must be a picture before oneself, and it must be crooked” (2002, 524). They grant that two such experiences can differ with regard to the particular objects that are represented by the experience, but they insist that the representation of general features such as shape, size and position is fixed by the phenomenal character of the experience.

(D) The intentional content and phenomenal character of a phenomenal mental occurrence are independent of one another in the sense that neither determines the other.

This view, a form of separatism restricted to the present narrow issue (as opposed to the separatist view regarding the broad issue mentioned above), is defended by Peacocke (1983) and Block (1990, 1996). Peacocke (1983, 23) argues that an experience’s intentional content does not determine its sensational properties (a special type of phenomenal property—more on this below), and neither do its sensational properties determine its intentional content. Block’s view is similar, except that he does not limit his claim to a specific type of phenomenal property. Rather, he states straightforwardly that two experiences can have the same
intentional content but differ with regard to their phenomenal character, and that two experiences can have the same phenomenal character but possess different intentional content (Block 1990, 58).

1.5 Phenomenal Qualities

The view I will be defending is a moderate version of (D), and it is moderate in the sense that it is restricted to a particular class of phenomenal properties. Before I can explain what moderate separatism is in any detail, then, I first need to draw a distinction between certain classes of phenomenal properties.

By “phenomenal property” or “phenomenal quality” I mean some distinguishable aspect of the overall phenomenal character of a conscious mental occurrence—some property that can be shared even amongst occurrences that differ with respect to their overall phenomenal character.¹⁶ Consider, for instance, what your experience is like when you view a red wall under white light and a white wall under red light. These two experiences share a certain specific aspect of their phenomenal character that neither shares with your experience of a white wall under white light; this shared aspect of what it’s like for you to have those two experiences is a phenomenal property we can call *phenomenal redness*.¹⁷ But, of course, experiences that instantiate phenomenal redness can differ widely with regard to their overall phenomenal character. To take a simple example, imagine a case where you view a number of different coloured shapes against a neutral background; imagine, too, that these different shapes are painted the exact same shade of red and are viewed under the same lighting conditions. In such a situation, your various visual experiences of the different shapes from different vantage points will differ with regard to the phenomenology of size, shape, and

¹⁶ Chalmers (2006, 54-55) makes this same distinction but uses different terminology: he calls the overall phenomenal character of an experience its “global” phenomenal character, and uses “local phenomenal character” and “local phenomenal properties” for what I’m simply calling phenomenal properties or qualities.

¹⁷ I’m borrowing this example from Hellie (2006, 6).
location; but each of your different visual experiences will instantiate a certain specific phenomenal redness.

For present purposes, the crucial point is that different phenomenal properties can be divided into different groups or classes. For example, the phenomenal qualities normally possessed by experiences caused by looking at different shades of red under white light will all be included in a class we might call *red qualities*; and the class of red qualities is in turn a subset of the more inclusive class of *colour qualities*. Furthermore, all the different phenomenal qualities characteristic of visual experience form the class of *visual qualities*.

While it would be unreasonable to deny that, in general, phenomenal qualities can be divided up into classes along these lines, there are bound to be disagreements regarding any specific proposals. For instance, Graham and Horgan (2008, 93-94) distinguish between at least four fundamental classes of phenomenal qualities: those of perceptual experience, those of agency, those of entertaining propositional attitudes, and those of self-modification or self-attribution. Some might want to deny that one or more of these really is a distinct class of phenomenal properties; others might think that there are other fundamental categories that need to be added to the list. However, we don’t need to settle on anything approaching an exhaustive taxonomy of phenomenal properties. In order to explain and defend moderate separatism all that’s required is that we recognize a distinction between a class of phenomenal properties that I’ll call “sensory qualities” and a class that I’ll call “cognitive qualities.”

1.5.1 Sensory Qualities

By “sensory qualities” I mean a certain class of phenomenal properties instantiated by visual, auditory, gustatory, and olfactory experiences, as well as bodily sensations, dreams, and

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18 The same distinction is drawn using similar terminology by Kriegel (2003, 11) and Graham, Horgan and Tienson (2007, 472-73).
visual and auditory imagining. Very roughly, sensory qualities are those phenomenal properties we sometimes refer to by talking about, for instance, visual or auditory sensations. To get a less rough sense of what sensory qualities are supposed to be the best thing to do is to consider examples.

We have already seen some examples of the sensory qualities instantiated by visual experiences: red qualities are sensory qualities, as are all the other colour qualities. The phenomenal properties characteristic of the visual experience of shape are also sensory qualities. For example, consider what your visual experience is like when you view a circular object that’s tilted and what your experience is like when you view an elliptical object head-on. These two experiences share a certain specific phenomenal property that neither shares with your experience of a circular object viewed head-on—a phenomenal property we can call *phenomenal ellipticalness*.\(^1^9\) A similar procedure could be used to identify *phenomenal squareness*, *phenomenal circularity*, and so on—all of which are included in the more general class of *shape qualities*. In addition to colour qualities and shape qualities, the sensory qualities instantiated by visual experiences also include, for example, the phenomenal properties characteristic of the experience of size and spatial location (*phenomenal size* will be discussed at length in §2.1).

Examples of the sensory qualities instantiated by auditory experiences would include the phenomenal properties characteristic of the experience of pitch, timbre and volume. For example, your experience of hearing middle C played on a piano and of hearing middle C played on a trumpet both share a certain specific *phenomenal pitch* which neither shares with your experience of hearing tenor C played on a piano. And your auditory experiences of any two notes played on the piano will share a certain specific *phenomenal timbre* which none will

\(^{19}\) Again, I’m borrowing the example from Hellie (2006, 6).
share with an experience of any note played on a trumpet. Finally, your experience of a loud sound heard from a distance might share exactly the same phenomenal volume as an experience of a quieter sound heard close up, which neither would share with your experience of a quiet sound heard from a distance.

Hopefully these examples provide a basic sense of the kinds of phenomenal properties that are included in the class of sensory qualities. However, later (chap. 3) we will need to be able to determine when two experiences instantiate precisely the same sensory qualities, and the examples just provided won’t enable us to do that. One method for determining whether two experiences instantiate the same sensory qualities, adapted from Peacocke (1983, 24-26), would be to compare judgments of subjective similarity. In the case of vision, for instance, you can determine whether two of your visual experiences instantiate different sensory qualities by considering whether you would make opposing judgements regarding how subjectively similar the objects presented in those experiences look relative to other stimuli. More specifically, for any two of your visual experiences, \( e_1 \) and \( e_2 \), and any two possible stimuli, \( s_1 \) and \( s_2 \), if you judge (upon due reflection) that the object(s) presented in \( e_1 \) looks subjectively more similar to \( s_1 \) than to \( s_2 \) and that the object(s) presented in \( e_2 \) looks subjectively more similar to \( s_2 \) than to \( s_1 \), then \( e_1 \) and \( e_2 \) instantiate different sensory qualities. Conversely, if there are no two possible stimuli, \( s_1 \) and \( s_2 \), such that you would judge (upon due reflection) that the object(s) presented in \( e_1 \) looks subjectively more similar to \( s_1 \) than to \( s_2 \) and that the object(s) presented in \( e_2 \) looks subjectively more similar to \( s_2 \) than to \( s_1 \), then \( e_1 \) and \( e_2 \) instantiate the same sensory qualities.

What it means for a given object to look subjectively more similar to one thing than to another should be tolerably clear from the following examples. First, consider again two experiences of a circular object: first, when viewed head-on and second, when viewed while
tilted. When you view a circular object head-on, that object looks subjectively more similar to

than it does to

But when you view that same object while it is tilted the reverse is true. Consequently, these
two experiences of the circular object instantiate different sensory qualities.

Next, consider your experience of the Necker cube:

As you look at this figure, your experience will likely switch back and forth between two
“interpretations.” When you interpret the figure one way you will notice that it looks
subjectively more similar to
And when you interpret the figure the other way you will notice that the reverse is true. Consequently, your two experiences of the Necker cube involving these two different “interpretations” instantiate different sensory qualities.\(^\text{20}\)

Next, imagine a case where the first time you look at a wall painted a certain specific shade of red the colour appears highly attractive, but when you look at the wall a second time (under exactly the same viewing conditions) the colour appears unattractive. In such a case it would be plausible to say that the overall phenomenal character of your two visual experiences is different.\(^\text{21}\) Even so, it could still be the case that there are no two possible stimuli, \(s_1\) and \(s_2\), such that you would judge that when the wall appeared attractive it looked subjectively more similar to \(s_1\) than to \(s_2\), but that when the wall appeared unattractive the reverse was true. For instance, let’s assume that the wall in question is painted scarlet; and let’s assume also that even though your tastes have changed concerning the attractiveness of scarlet, you consistently find crimson attractive and vermilion unattractive. Nonetheless, we can imagine that even though the phenomenal character of your experience of the scarlet wall has changed, you would not judge that at first the wall looked more similar to a wall painted crimson than to a

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\(^{20}\) A number of different writers have claimed that when the “interpretation” of such ambiguous figures changes one’s visual sensations change as well. See, for example, Broad (1923, 260), Tye (1995, 140), and MacPherson (2006, 87-93). Kriegel (2003, 8) disagrees; but for our purposes it will be preferable to stick with the present broader conception of sensory qualities.

\(^{21}\) One might object that the difference in such a case is merely a difference between the emotional occurrences caused by the visual experiences in question. But, I don’t think that the attractiveness or unattractiveness of some object can be excluded from the visual experience itself; when something looks beautiful the character of our visual experience itself is different from when something looks ugly, just as when something tastes good the character of our gustatory experience is different from when something tastes disgusting.
wall painted vermilion but that later the wall looked more similar to a wall painted vermilion than to a wall painted crimson. In such a case, then, even though there is some kind of phenomenal difference between your two experiences of the scarlet wall, those experiences instantiate the same sensory qualities.

This method of determining when two experiences instantiate the same sensory qualities works equally well for other sense modalities. For instance, in the case of audition we simply need to replace the foregoing talk of an object *looking* subjectively more similar to one stimulus rather than another with talk of an event *sounding* subjectively more similar to one stimulus rather than another; in the case of touch we would substitute talk of an object *feeling* subjectively more similar to one stimulus rather than another, and so on.

1.5.2 Cognitive Qualities

Mental states such as beliefs and desires don’t possess sensory qualities—there’s no particular sensation associated with believing snow is white or desiring to win the lottery. However, we commonly distinguish between conscious and unconscious beliefs and desires (if you think we should reserve “belief” and “desire” for mental states lacking phenomenal consciousness, then the distinction is between beliefs and desires and the conscious mental occurrences they produce). For example, while I’ve believed that Toronto is the biggest city in Canada for most of my life, I haven’t spent a lot of time thinking about it. But right now, as I think to myself that Toronto is the biggest city in Canada, I am undergoing a conscious mental occurrence. Is there, then, something it’s like for me to entertain that proposition? Some philosophers will say “no.” Such philosophers believe that there is nothing it’s like to have such thoughts and that whatever temptation we might have to attribute a phenomenal character to these mental occurrences stems from the fact that they are accompanied either by mental imagery or feelings of different kinds.
Tye provides a rather clear statement of this view (1995, 3-5). “Insofar as there is any phenomenal or immediately experienced felt quality to [occurrent beliefs and desires],” Tye says, “this is due to their being accompanied by sensations or images or feelings that are the real bearers of the phenomenal character” (1995, 4). This is another way of saying that there is no phenomenal or immediately experienced felt quality to occurrent beliefs and desires. A mental occurrence that is not phenomenally conscious itself does not become phenomenally conscious simply because it is accompanied by sensations, images, or feelings that are phenomenally conscious. When I think to myself that Toronto is the biggest city in Canada I might, for instance, imagine looking at a map of Canada, and there will be something it’s like for me to experience this mental imagery; but there will not be something it’s like for me to think the thought in question simply because at the very same time I visualize looking at a map. Ultimately, then, the view that Tye endorses is that beliefs and desires are not the sorts of things that are ever phenomenally conscious.

This view that occurrent beliefs and desires do not possess their own phenomenology has been opposed by a number of different philosophers. For instance, Edmund Husserl (1900/1970, 586-90) maintained that both the attitude (which he calls the *quality*) and the intentional content (which he calls the *matter*) of a conscious thought make a difference to the character of the subject’s experience. In other words, he claims that there is a phenomenal difference between believing, desiring, wondering, intending, etc., and also a phenomenal difference between believing, desiring, wondering or intending different things. More recently, philosophers such as Flanagan (1992, chap. 4), Goldman (1993), Horgan and Tienson (2002), Kriegel (2003), Peacocke (1998), Siewert (1998, chap. 8), and Strawson (1994, chap. 1), have argued that either the attitude or content of a particular conscious thought (or both)

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22 For further discussion of Husserl’s view and how it relates to the contemporary literature on these issues, see Zahavi (2003).
contributes to the phenomenal character of that thought. If they are right, it would mean that we ought to acknowledge another class of phenomenal properties—a class that I will call cognitive qualities.²³

Various arguments have been offered to demonstrate the existence of cognitive qualities. For my purposes, the important arguments are those that demonstrate that the intentional content of a mental occurrence contributes to what it’s like for the subject to be in it. For the moment, then, I want to review some of these arguments in order to support the conclusion that the intentional content of a conscious occurrence contributes to the phenomenal character of that occurrence. Moreover, I am going to be arguing for the claim that intentional content influences the phenomenal character of a conscious occurrence in and of itself—in other words, the contribution to phenomenal character made by the content of a conscious mental occurrence cannot be explained away by appealing to sensations, mental imagery or feelings that accompany the occurrence in question.

There are two general strategies one can use to demonstrate this point and I am going to use both. First, one can appeal to examples of thoughts that possess a certain phenomenal character, but that are not accompanied by any mental imagery or feelings whatsoever. Second, one can appeal to pairs of experiences that involve the same sensory qualities but nonetheless differ with respect to their overall phenomenal character.

(i) Conscious thoughts not accompanied by mental imagery

It can be difficult to think of conscious mental occurrences that are not accompanied by any visual or auditory imagery. When we think we often think with language and hear the words in our heads, and our thinking often seems to spontaneously produce visual images of

²³ Siewert calls these phenomenal properties “noetic phenomenal features” (1998, 284); Kriegel uses the expression “intellectual qualia” (2003, 11). More recently, Graham, Horgan and Tienson (2007, 472) have adopted the term “cognitive quality.”
the objects or situations with which our thoughts are concerned. However, it would be a mistake to assume that we cannot have conscious thoughts that are completely independent of such imagery; we just have to search a bit harder for examples.

Charles Siewert claims we can find examples of the right sort by examining cases “where there is what we might call an abrupt shift in the direction of thought” (1998, 276). He offers the following example:

Suppose you are sitting and reading one morning, and suddenly you remember some incipient appointment—you wonder when exactly it was, feel anxious that you may have missed it, and look at your watch. The thought of the appointment and when it was is an occurrence of consciousness, but it may not be verbalized silently or aloud. You may not have said to yourself—“I have an appointment around now, don’t I? When was it? Did I miss it?” You may not even have said something fragmentary, like: “Appointment! When? Miss it?” And you may not have visualized or imaged any item or event at the time of this thought, such as the person with whom you had the appointment, or the place at which you were to meet. (1998, 276-77)

Hopefully it is obvious that in a case like this, there is something it’s like for you to have the thoughts in question—some phenomenal character to this mental occurrence. But this example is a case where there may be no visual or auditory imagery present, so one cannot claim that the phenomenal character of these thoughts properly belongs to accompanying mental imagery.

Now, as Siewert describes the present case, there is a distinct emotional response, and so one might be tempted to say that the phenomenal character of the occurrence belongs exclusively to the anxiety one feels (in which case, the example wouldn’t show that intentional content itself can contribute to phenomenal character). However, this response is insufficient for two reasons. First, it is simply implausible to claim that what the present mental
occurrence is like for you is entirely exhausted by what it’s like to feel anxious. If your thoughts were concerned with the possibility that you may have forgotten to pick up your kids from school hopefully you would feel the same anxiety, but the phenomenal character of your thoughts would be different. Second, the feeling of anxiety is not a necessary component of the example. If you were the sort of person who did not care either way whether or not you were late for appointments, there would still be something it’s like for it to suddenly occur to you that you might be late, even though you would not react emotionally. Or, we could consider a case where the appointment you may have missed is not at all important and so there is no reason for you to feel anxious.

In addition to these abrupt shifts in the direction of thought, another relevant type of example would be thoughts that are extremely complex but occur instantaneously. If you reflect on your own experience you should not have any difficulty finding examples of thoughts that are highly complex but occupy only the briefest of moments. Again, it might be helpful here to consider an example of Siewert’s:

Walking from my table in a restaurant to pay the bill, I was struck briefly by a thought, gone by the time I reached the cashier, about my preoccupations with this book’s topic, the effects of this, and its similarity to other preoccupations and their effects. Asked to state more precisely what this was, I would have to say something like: “My preoccupation with the topic of my book has made the world seem especially alive with examples of it, references to it, so that it can’t help but seem to me that the world is more populated with things relevant to it than previously. And it struck me that this is similar to the way in which new parenthood made the world seem to me burgeoning with babies, parents, the paraphernalia of infancy, and talk and pictures of these.” Somehow this thought of my philosophical preoccupations and parenthood, and an
analogy between their effects, rather complex to articulate, occurred in a couple of moments while I approached the cashier, in the absence of any utterance. (1998, 277) Presumably most everyone has had just this sort of experience. And if you have, hopefully you will recognize that there is something it’s like for you to have these kinds of thoughts (if you have reservations about this point, ask yourself whether these kinds of thoughts are subjectively different from the sort of unconscious mental processing that goes on in your brain most all the time).

However, regarding the present example we cannot attribute the phenomenal character of the thought to any sort of auditory or visual imagery. First, since the thought is too complex and occurs too quickly to be expressed through “inner speech,” there is no reason to think that any kind of auditory imagery must be involved. Second, there is no reason at all to assume that some sort of visualization must accompany these types of thoughts. We can also rule out the possibility that the phenomenal character properly belongs to accompanying emotional states, since the thoughts in question need not be the sort that produce any kind of emotional response. Furthermore, what it’s like to have a complicated thought of the sort described above depends on the content of the thought in question. As Siewert says, it is absurd to assume that there is just one way it’s like to think without experiencing mental imagery, as though such thoughts “were accompanied by some humming or buzzing sensation” absent when our minds are inactive (1998, 278). Consequently, we ought to conclude that the content of a conscious mental occurrence contributes to its phenomenal character.

(ii) Phenomenally different experiences with the same sensory qualities

Another way to illustrate the phenomenal contribution of intentional content is to consider pairs of experiences that share all their sensory qualities but differ with respect to their phenomenal character. Galen Strawson has recently described an example of this type (1994,
5-13). Strawson asks us to consider the experience of a monoglot Frenchman named Jacques and a monoglot Englishman named Jack as they listen to a newscast delivered in French. According to Strawson, even though Jacques understands what the newscaster is saying while Jack does not, the sensory component of their experience is the same. In other words, the auditory sensations Jacques and Jack undergo are exactly the same because they are listening to exactly the same words being spoken by the same person at the same time (perhaps we should assume that they are both listening to the news on a radio from the same relative position).

The important question, then, is whether or not the experiences of these two subjects differ with regard to their overall phenomenal character. Strawson’s answer is that their experiences differ phenomenally: “Jacques’s experience when listening to the news is utterly different from Jack’s” (1994, 6). This response seems to have a good deal of plausibility. As a general point, it is undeniable that what it’s like to hear speech in a language that you understand is different from what it’s like to hear speech in a language that you do not understand. But the present example is designed in such a way that the only explanation for this sort of phenomenal difference is the fact that one understands or grasps the meaning of the words being spoken. That is, the example seems to force the conclusion that the mere apprehension of the meaning of words in and of itself makes a difference to the phenomenal character of one’s experience.  

If one wanted to deny that apprehending the meaning of words makes a phenomenal difference in and of itself, how might one respond to the present example? Well, this is what

24 Strawson’s example is similar to one Husserl describes (1900/1970, 566-67). Siewert also offers similar examples and makes similar points regarding the phenomenology of understanding (1998, 275-76). See also Dainton (2000, 11-13) and Kriegel (2003, 7-8).
Tye says in response to Strawson’s general claims concerning the experience of understanding speech:

The phenomenal aspects of understanding seem to me to derive largely from linguistic (or verbal) images, which have the phonological and syntactic structure of items in the subject’s native language. These images frequently even come complete with details of stress and intonation. As we read, it is sometimes phenomenally as if we are speaking to ourselves. We “hear” an inner voice. Depending upon the content of the passage, we may also undergo a variety of emotions and feelings. We may feel tense, bored, excited, uneasy, angry. Once all these reactions are removed, together with the images of an inner voice and the visual sensations produced by reading, I am dubious that any phenomenology remains. (1996a, 422)

Many of these points do not seem to be applicable to the specific example being considered here. When we hear someone speaking we do not normally “hear” an inner voice (as we often do when reading), and we need not experience any auditory or visual imagery at all. Moreover, hearing someone speak often does not produce any emotions or feelings whatsoever. For instance, there is no need to assume that Jacques is emotionally affected by what the newscaster is saying, or that Jack is emotionally affected by the sounds he hears coming from the radio. This leaves someone like Tye in the position of having to deny that there is any phenomenal difference between Jacques’s and Jack’s experiences. Hopefully, though, the example is sufficiently well-chosen that most people will find this sort of response implausible. That is, hopefully most people will accept that, despite the absence of differences in auditory sensations, “linguistic images,” or emotional responses, it is still correct to say that what it’s like for Jacques to hear the news is significantly different from what it’s like for Jack to hear the news.
However, Tye’s concern with “phonological and syntactic structure” might suggest another kind of objection. Specifically, one might suggest that the character of the sounds a person hears when they listen to someone speaking a language they do not understand is different from the character of the sounds that a native speaker hears.\textsuperscript{25} Accordingly, one could object that there is good reason to think that Jacques’s and Jack’s auditory sensations will not be identical when they listen to the news, despite what Strawson assumes. However, this sort of objection can be answered by making only minor revisions to the example. For instance, we can simplify the example considerably if we consider the experience of Jacques and Jack as they hear a single, one-syllable word being pronounced very carefully by the newscaster. In such a case, it is much more difficult to imagine that the auditory sensations they would experience would be different.

Alternatively, we could make more substantial revisions to the example. In fact, Strawson responds to just this sort of objection by offering a variation on his original example (1994, 6n). He asks us to consider a case where a code is constructed using certain English words to stand for certain other English words. Next, he asks us to imagine that a coded message is played for two English speakers—one who is quite familiar with the code and another who is entirely ignorant of it. In such a case, it seems certain that the auditory sensations these individuals would experience would be identical; yet, it would be highly implausible to maintain that what it’s like for the first individual to hear the coded message must be the same as what it’s like for the second individual to hear the coded message. Again, the moral of the story is that the mere apprehension of the meaning of the words being used contributes to the phenomenal character of the first individual’s experience.

\textsuperscript{25} As Tye points out elsewhere (2000, 60-61).
Since these are hypothetical examples involving the experiences of different subjects, it might be helpful to consider examples that have some connection to one’s own experience. For instance, it is relatively common to come across sentences (either spoken or written) that can be understood in more than one way. Consider the following sentence: “visiting relatives can be boring.” When you read that sentence just now, you probably read it in either one of two ways: as either a claim about having one’s relatives visit or about visiting one’s relatives oneself. But now, depending on which way you read the sentence the first time, you can go back and read the sentence the other way. If you do so, hopefully it will be clear that there is a difference between what it’s like for you to read the sentence one way and what it’s like for you to read the sentence the other way.

If it’s correct to say, then, that the phenomenal character of one’s experience is different depending on which way one understands the sentence, the question becomes how to account for that difference. Obviously the visual qualities instantiated by your experience as you look at the sentence on the page are not affected by how you interpret the sentence. And there need not be any difference in the auditory imagery you experience while you read the sentence: as you say the words in your head, it is possible to stress either “visiting” or “relatives” depending on how you are reading the sentence, but you do not need to do so in order to recognize the phenomenal difference (the issue of auditory imagery can also be eliminated by considering a case where you hear the sentence spoken by someone or other). Moreover, the visual images that pass before your mind as you read the sentence might remain constant—for instance, you might see your mother-in-law’s face regardless of how you read the sentence—or such images might be entirely absent (similar points can be made regarding your emotional response to the sentence). Since, then, your experiences differ phenomenally

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26 Horgan and Tienson (2002, 523) use this example to make the same point. Similar examples are discussed by Siewert (1998, 278-79).
depending on how you read the sentence even when there is no difference with respect to the sensory qualities instantiated by your experience, it must be your understanding of the sentence itself that accounts for the phenomenal difference. That is, in the present case the content of your mental occurrence contributes to its phenomenal character.

It is important to note that the arguments included in (i) and (ii) do not show anything beyond the fact that in and of itself the intentional content of a conscious mental occurrence contributes to that occurrence’s phenomenal character. If one wanted to make the stronger claim that there is a unique phenomenal quality that necessarily corresponds to every distinct intentional content, then one would have to address a number of difficult issues. For instance, the standard externalist thought experiments may well show that different conscious thoughts can have the same phenomenal character but differ with respect to their intentional content. In addition, there is the possibility, raised by Siewert (1998, 287-88), that the phenomenal character of certain conscious thoughts is not sufficiently determinate to fix a single correct rendering of the intentional content of those thoughts. Of course, these kinds of considerations don’t show that cognitive qualities are entirely independent of intentional content. For instance, while externalist thought experiments might show that two mental occurrences can instantiate the same cognitive qualities but possess different intentional content, it is not obvious that it is conceivable for two occurrences to have the same intentional content and yet instantiate different cognitive qualities. In any case, for present purposes it is not necessary to nail down the precise relationship between cognitive qualities and intentional content. The only crucial claim being made here is that the arguments from (i) and (ii) demonstrate that intentional content contributes to the phenomenal character of conscious occurrences, and that therefore we have to recognize the existence of cognitive qualities.
Recognizing this distinction between sensory qualities and cognitive qualities complicates our picture of phenomenal consciousness: we have to admit that phenomenal properties come in different varieties, and that the phenomenal character of any given mental occurrence might be made up of different kinds of phenomenal properties. This fact is perhaps most evident in the case of perceptual experience as we’ve already seen in some of the examples just considered. For instance, Strawson’s example of Jacques and Jack listening to the news involves perceptual experiences (hearing the speech of a newscaster), the phenomenal character of which have both a sensory and a cognitive component. Using the present terminology we would say that Jacques’s and Jack’s perceptual experiences instantiate all the same sensory qualities but instantiate different cognitive qualities (and therefore that the overall phenomenal character of their experiences differ).

Distinguishing between different types of phenomenal qualities and acknowledging that more than one type of quality can be instantiated by any given experience obviously has implications for how we ought to characterize the relationship between intentionality and phenomenal consciousness. In particular, we have to acknowledge the possibility that different kinds of phenomenal qualities might bear different relationships to the intentional content of conscious occurrences. For instance, while it seems that cognitive qualities are closely connected to intentional content, it might still be that sensory qualities are independent of intentional content.

1.6 Two Types of Separatism

Previously (§1.4) I distinguished four views one might adopt concerning the relation between the intentional content and phenomenal character of phenomenal mental occurrences. Separatism—view (D)—is the view that the intentional content of a phenomenal mental
occurrence does not determine its phenomenal character, and neither does the phenomenal character of a phenomenal mental occurrence determine its intentional content.

But, now, if we consider the conclusions of the previous section, it looks like it would be possible for one to adopt a more complicated or subtle position that nonetheless ought to be called separatism. For, we have seen that there are different kinds of phenomenal qualities and a particular phenomenal occurrence can instantiate different kinds of phenomenal qualities. Moreover, we have seen that it is possible that different kinds of phenomenal qualities bear different relations to an occurrence’s intentional content. As such, it would be possible for one to adopt a separatist position concerning certain classes of phenomenal qualities but not others—for instance, one could maintain that the sensory qualities of mental occurrences are independent of intentional content, but that cognitive qualities are necessarily connected to intentional content.

Given the distinction we have drawn between different classes of phenomenal qualities, then, we need to distinguish between two different types of separatism: *radical separatism* is the view that the overall phenomenal character (or all the phenomenal qualities) of any given mental occurrence is independent of that occurrence’s intentional content; *moderate separatism* is the view that some specific class or classes of phenomenal qualities are independent of intentional content (but that this isn’t true of all phenomenal qualities in general).

This distinction between radical and moderate separatism might seem like a merely hypothetical distinction between positions one might possibly adopt. However, if one examines the work of separatist philosophers one finds that their views are actually divided along these lines. The views of the two best-known separatists, Ned Block and Christopher Peacocke, illustrate this point nicely—Block (1990) exemplifies the radical separatist position,
While Peacocke (1983) exemplifies the moderate separatist position. Consider, for instance, how each defines the sensational qualities of mental occurrences. Block says straightforwardly that there is a kind of “content of experience” that is constituted by what it’s like to have the experience, and that this content is the “qualitative or sensational content” (1990, 54). In other words, he suggests that the phenomenal is coextensive with the sensational. Conversely, Peacocke defines sensational properties as “properties an experience has in virtue of some aspect—other than its representational content—of what it is like to have that experience” (1983, 5). Peacocke, then, explicitly acknowledges that there is more to the phenomenal character of mental occurrences than the merely sensational.

Moreover, Peacocke makes it clear that intentional content makes a difference in and of itself to the overall phenomenal character of a conscious mental occurrence (1983, 9). As such, Peacocke’s arguments for the claim that an experience’s sensational properties are independent of its intentional content are unequivocally not arguments for the claim that the overall phenomenal character of an experience is independent of its intentional content. Block, on the other hand, does not allow for the possibility that intentional content could have any influence over phenomenal character (what he calls qualitative or sensational content). For Block, the intentional content of an experience is a functional property constituted by relations to external objects (1990, 58), and the qualitative/sensational content is an intrinsic property supervening on the physical constitution of the brain (1990, 68). We see in Block, then, the radical separatist view that overall phenomenal character is entirely independent of intentional content, whereas Peacocke exemplifies the moderate separatist view that only some specific aspect of phenomenal character (in this case, sensational properties or qualities) is independent of intentional content.
Neither is the distinction between radical and moderate separatism relevant only to the contemporary literature concerned with these issues. To the contrary, Edmund Husserl develops a view in his *Logical Investigations* that fits neatly into the category of moderate separatism. As we’ve already seen (§1.5.2), Husserl believes that both the quality (attitude) and matter (intentional content) of a given mental occurrence have an experiential character and contribute to what it’s like to for the subject to have it. As such, Husserl obviously does not believe that the overall phenomenal character of a mental occurrence is independent of its intentional content. However, he is quite explicit that perceptual experiences possess a non-intentional sensory component that is independent of intentional content. For Husserl, perceptual experiences involve sensations that are part of the “real make-up” of the experience but are not represented by it (not part of the intentional content). For instance, he says “I do not see colour-sensations but coloured things, I do not hear tone-sensations but the singer’s song etc. etc.” (1900/1970, 559). According to Husserl, having such sensations is not sufficient for an experience to represent the world to be a certain way; the sensations need to be interpreted or taken in one way or another. However, interpretation here does not require a distinct mental act—the interpretation is built into the perceptual experience yet constitutes an aspect of the experience distinct from “the raw existence of sense” (1900/1970, 567). As Husserl says, the interpretation is “the act-character which as it were ensouls sense, and is in essence such as to make us perceive this or that object, see this tree, e.g., hear this ringing, smell this scent of flowers etc. etc.” (1900/1970, 567).

Husserl’s view, then, is that the interpretation-aspect of a perceptual experience determines the intentional content of the experience. However, the sensations instantiated by a perceptual experience do not determine the interpretation, and therefore do not determine the intentional content: “whatever the origin of the experienced contents now present in
consciousness, we can think that the same sensational contents should be present with a differing interpretation, i.e. that the same contents should serve to ground perceptions of different objects. Interpretation itself can never be reduced to an influx of new sensations” (1900/1970, 565). As such, for Husserl, the “sensational content” and intentional content of a perceptual experience are independent of one another in the sense that sensations do not determine a unique interpretation. Husserl is therefore a separatist, but since his separatist claim is restricted to the “sensational content” of experience he is a moderate separatist.

Husserl and Peacocke thus both appear to endorse a similar version of moderate separatism. Both maintain that the intentional content of a given conscious occurrence contributes to the phenomenal character of that occurrence, and for that reason would reject radical separatism. Yet, both claim that perceptual experiences involve non-intentional sensory qualities (or sensational properties) that are independent of intentional content. In other words, the particular variety of moderate separatism Husserl and Peacocke endorse is separatism about sensory qualities. Other versions of moderate separatism would of course be possible—one could identify some further class of phenomenal qualities and argue that such qualities are independent of intentional content. However, as it happens, the only version of moderate separatism that has been defended at any length is separatism about sensory qualities. Since this is also the version of moderate separatism I intend to defend, I will use “moderate separatism” to mean separatism about sensory qualities. For present purposes, then, moderate separatism is the view that the sensory qualities and intentional content of a phenomenal mental occurrence are independent of each other in the sense that neither determines the other.

(It’s important to note, however, that according to this definition one can endorse moderate separatism while remaining neutral regarding the relationship between intentional content and other classes of phenomenal qualities. For instance, different moderate separatists
might disagree regarding the precise relationship between intentional content and cognitive qualities. Endorsing moderate separatism simply does not commit one to any particular view on the issue.)

1.7 Moderate Separatism and the Alternatives

By this point, we should hopefully have a clear notion of what moderate separatism amounts to. However, before we get to the arguments for moderate separatism, we should consider two questions: first, how does this specific moderate variety of separatism relate to the other views on the relation between intentional content and phenomenal character described above (§1.4)? And second, why does it matter whether moderate separatism is true?

Regarding the first question, it will be helpful to separate two claims the moderate separatist makes regarding perceptual experience (the literature on these issues has focussed on perceptual experience and that will be my focus as well):

(1) The intentional content of a perceptual experience does not determine or fix the sensory qualities it instantiates

(2) The sensory qualities instantiated by a perceptual experience do not determine or fix its intentional content

(1) is straightforwardly inconsistent with (A) and (B). If two experiences instantiate different sensory qualities then they differ phenomenally, so (1) entails that two experiences that possess the same intentional content can differ phenomenally; and if so then (A) and (B) are false.

The connection between (2) and (A) and (C) is more complicated. (2) says that two experiences that instantiate the same sensory qualities can differ with regard to intentional content; but since the moderate separatist says there is more to an experience’s phenomenal
character than sensory qualities, this falls short of the claim that two experiences with the same phenomenal character can differ with regard to intentional content.

Nonetheless, (2) still seems to be inconsistent with the commitments of those philosophers who defend (A) and (C) (at least so long as we add certain qualifications regarding the kind of intentional content that is not fixed by sensory qualities). For instance, Tye’s account (1995, chaps. 4 and 5) of how perceptual experiences represent what they do focuses entirely on the mechanical production of sensations by external stimuli. According to Tye, an experience represents that some object in the subject’s environment possesses a certain property in virtue of the fact that the experience instantiates a sensory quality that causally covaries with the relevant property under optimal conditions (which conditions count as “optimal” is determined by the evolutionary history of our species). The general view of perceptual experience that emerges from Tye’s account, then, is that for a perceptual experience to represent the environment to be a certain way is simply a matter of it instantiating certain sensory qualities. As such, Tye’s view of perceptual representation is inconsistent with (2) without qualification.

Chalmers is not concerned exclusively with sensory qualities as Tye is; but he, nonetheless maintains that specific sensory qualities entail specific intentional contents. For example, Chalmers (2004, 174-76) maintains that any experience that instantiates phenomenal redness also has a certain specific intentional content. He then suggests (2004, 177) that the same will be true of other aspects of visual phenomenology such as spatial phenomenal properties and phenomenal properties associated with other kinds of perceptual experience. So, Chalmers is committed to the view that specific sensory qualities entail specific intentional contents, and that is inconsistent with (2) so long as we restrict the claim to the kinds of contents that Chalmers is concerned with (further details will emerge in subsequent chapters).
The defenders of (C) also maintain that specific sensory qualities entail specific intentional contents. For instance, Siewert (1998, 221) maintains that any experience instantiating the phenomenal property normally caused by looking at X-shaped objects also has the content that there is an X-shaped object in front of the subject. And Horgan and Tienson claim that “even considered in isolation from any total visual-experiential state, the what-it’s-like of experiencing red is already intentional, because it involves red as the intentional object of one’s experience” (2002, 521).

Horgan and Tienson are explicit that phenomenally identical experiences will not share all their intentional content. However, it is only those intentional contents concerned with the particular objects in one’s environment that they allow can vary between phenomenally identical experiences. For instance, Horgan and Tienson (2002, 524-29) maintain that the sensory phenomenology of an experience fixes the general features (such as colour, shape, size, and relative position) that the object represented by an experience must have in order for that experience to be accurate. The particular object that enters into the wide content of your experience depends on your particular environment, but the representation of general features does not similarly depend on the environment. In other words, Horgan and Tienson are committed to the view that specific sensory qualities entail specific intentional contents concerned with general features such as colour, shape, size, and relative position; that view is inconsistent with (2) so long as we restrict the claim to intentional contents concerned with such general features.

These conflicts between moderate separatism and the defenders of (A), (B) and (C) are closely connected to the question of why it matters whether moderate separatism is true. As I understand it, there is a fundamental disagreement here regarding the nature of perceptual experiences—specifically concerning the relationship between sensation and representation. In
recent debates over the relationship between intentionality and phenomenal consciousness something of a consensus has developed concerning this issue. The defenders of (A), (B) and (C) all appear to agree that in order for your experience to represent the world to be a certain way all you need is to have sensations of a certain sort. For instance, the defenders of these different views all agree that in order for the experience of a normal human perceiver to represent some object to be red it is sufficient that her experience instantiate a red sensory quality.

However, if moderate separatism is true then this consensus view of the nature of perceptual experience is false. According to the moderate separatist, in order for your experience to represent the world to be a certain way it is not sufficient that you have sensations of a certain sort. Moderate separatism suggests that we need to return to a Husserlian view of perception where perceiving the world to be a certain way is not simply a matter of having sensations of a certain sort—not only must one have sensations of a certain sort, but these must be “interpreted” or “taken” in a certain way (see §1.6). From this perspective, there is an essential element of perceptual experience—this interpretation or taking—that is left out of the present consensus view.
Chapter 2
Same Content but Different Sensory Qualities

Suppose you wanted to show that moderate separatism is true. What would be the simplest way to do so? Well, suppose you wanted to demonstrate that with respect to objects that have both shape and colour, an object’s colour does not determine its shape and an object’s shape does not determine its colour. The easiest way to do so would be to simply point to certain objects that are the same colour but have different shapes and other objects that have the same shape but are different colours. For instance, by pointing to a red square and a red triangle you would thereby demonstrate that an object’s colour does not determine its shape; and by pointing to a red square and a blue square you would thereby demonstrate that an object’s shape does not determine its colour.

What is true for shape and colour is also true for sensory qualities and intentional content: if one wants to show that the sensory qualities and intentional content of experiences are independent of one another in the sense that neither determines the other, the simplest thing to do is to point to ordinary examples where these two things come apart. It should not be surprising, then, to find that the moderate separatists discussed previously—Husserl and Peacocke—employ just such a strategy in defence of their view. In the Logical Investigations, after explaining the difference between the intentional content and sensational content of perceptual experiences, Husserl (1900/1970, 564-66) points to examples of experiences that involve the same sensations but possess different intentional content. Specifically, he claims that when we see and hear certain linguistic symbols, first without recognizing their meaning, and then later after having learned or recognized their meaning, the intentional content of our experience changes without any change to the sensations involved (1900/1970, 566-67). Peacocke employs this very same type of argument in the first chapter of Sense and Content in
order to establish that the sensational properties of an experience are distinct from its intentional (or representational) content, and that these two things are independent of one another. There he points to experiences that have the same intentional content but instantiate different sensational properties and to experiences that possess different intentional content yet instantiate the same sensational properties (1983, 13-17). He then concludes on the basis of these examples that “neither one of representational content and sensational properties determines the other” (1983, 23).

In some ways, then, defending moderate separatism by pointing to these types of examples is a very simple strategy; however, determining whether or not two experiences actually have the same intentional content or sensory qualities can be a rather complicated business, and therefore an objector always has the option of rejecting the account Husserl and Peacocke provide of the experiences that figure in their examples. Husserl’s arguments are not often discussed in the contemporary literature on these issues, but Peacocke’s arguments have received a number of replies. As one would expect, these replies generally involve an attempt to find some intentional or sensational difference between the relevant experiences, where Peacocke says there is none. And at the moment the consensus seems to be that such replies are ultimately convincing.¹ That is, the prevailing opinion appears to be that there are no easily identifiable examples of experiences that have the same intentional content but different sensory qualities or the same sensory qualities but different intentional content.

As I have already said, it is my intention to show that specific versions of the type of argument that Husserl and Peacocke employ demonstrate that moderate separatism is true. In the present chapter I will attempt to show that a visual experience’s intentional content does not determine the sensory qualities it instantiates by appealing to two well-known examples.

¹ See, for example, Chalmers (2004, 160-61), Loar (2003, 81), and Tye (2000, 70).
In §2.1 I will discuss Peacocke’s (1983, chap. 1) argument concerning the visual experience of two trees at different distances from the subject (which I will call the trees argument); and in §2.2 I will discuss Boghossian and Velleman’s (1989) argument concerning double vision (which I will call the double vision argument).

However, there is an important difference between these two arguments that has to be noted at the outset. The double vision argument claims that a normal visual experience and a double vision experience of some specific object or state of affairs have the same intentional content but differ with regard to their sensory qualities. Conversely, Peacocke does not intend his example of a visual experience of two trees to involve a sensational difference where there is no accompanying intentional difference. Rather, Peacocke only intends his example to show that certain sensational differences are not identical to differences in intentional content. Peacocke’s argument, then, does not neatly fit the template outlined above; it is, rather, a variation on the general style of argument I am discussing here.

The difference between these two arguments can be explained another way. The moderate separatist is committed to the following two theses:

(0) The sensory qualities instantiated by a perceptual experience are distinct from its intentional content (i.e. different sensory qualities cannot simply be identified with different aspects of an experience’s intentional content).

(1) The intentional content of a perceptual experience does not determine or fix the sensory qualities it instantiates.

Since it involves experiences that have the same intentional content yet instantiate different sensory qualities, the double vision argument is intended to demonstrate both (0) and (1). However, Peacocke’s trees argument is only intended to demonstrate (0). As such, since the moderate separatist claims not only that an experience’s intentional content and sensory
qualities are distinct from one another but also that neither determines the other, she cannot rely exclusively on Peacocke’s trees argument. I do not think this means, though, that the argument is not worth discussing in the context of a defence of moderate separatism. For, first, if (0) is false then moderate separatism is false, so it is important that the moderate separatist show that (0) is true. Second, the trees example is by far the most well-known example from Sense and Content and is criticized regularly by those who want to show that separatism is false. It seems to me that the perceived failure of this argument has contributed greatly to the sense that there just are not good arguments for separatism, and so demonstrating the strength of this argument will help the moderate separatist’s case a good deal.

In §2.1 I will introduce Peacocke’s trees argument and clear up some common misconceptions about its structure. Then, in §§2.1.1-2.1.3 I will survey the replies that have been offered to the argument and explain why each is inadequate. In §2.2 I will describe two cases involving double vision and explain why it is at least plausible to regard the relevant experiences as possessing the same intentional content but differing with regard to their sensory qualities. Then, in §§2.2.1-2.2.4 I will consider a number of different proposals concerning where to locate an intentional difference between the relevant experiences; I argue that none of these various proposals is plausible, and that we must therefore conclude that the intentional content of a perceptual experience does not determine or fix the sensory qualities it instantiates.

2.1 The Trees Argument

When you are looking at a given object and it moves toward you or you move toward it, there is a sense in which it looks bigger as it gets closer to you. However, in another sense the object continues to look exactly the same size as it get closer to you—regardless of how far away a particular object is from you, your visual perception of that object’s physical size
remains basically constant. The standard scientific term for this phenomenon is size constancy and philosophers have been interested in it for some time. For instance, Hume appeals to this same general phenomenon in an attempt to refute the view that we directly perceive mind-independent objects. He argues that, since with regard to our “perceptions” there is a “seeming encrease and diminution of objects, according to their distance,” but since no mind-independent object increases or decreases in size depending on the distance at which it is viewed, it follows that our “perceptions” are not mind-independent objects (1739-40/1978, 210-11).

Christopher Peacocke appeals to size constancy as a way of demonstrating the distinction between what he calls representational content and sensational properties. The target of Peacocke’s argument is the extreme perceptual theorist, who subscribes to the Adequacy Thesis (AT)—the thesis that the phenomenal character of a visual experience can be characterized completely “by embedding within an operator like ‘it visually appears to the subject that . . .’ some complex condition concerning physical objects” (1983, 8). Elsewhere, Peacocke describes the AT as the thesis that the phenomenal character of a visual experience is “exhausted by a specification of its representational content” (1983, 11). In other words, the extreme perceptual theorist believes that a visual experience’s phenomenal properties are nothing over and above its representational or intentional properties—the former can be captured entirely in terms of the latter. Peacocke thinks such a view can be refuted with a rather simple example:

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2 For further details of Peacocke’s view, see §1.6 above. “Representational content” and “intentional content” are synonymous expressions as I understand them, and I will use them interchangeably. However, “sensational properties” and “sensory qualities” are not synonymous expressions as I understand them—Peacocke describes “sensational properties” in such a way that by definition they are not identical with intentional properties (1983, 5), whereas I have defined “sensory qualities” in such a way as to remain neutral on this issue (see §1.5.1 above).

3 Peacocke doesn’t use the “phenomenal” terminology; rather he talks in terms of “intrinsic properties.” But since he says intrinsic properties are “properties which help to specify what it is like to have the experience” (1983, 8), I assume that the “phenomenal” terminology captures his meaning.
Suppose you are standing on a road which stretches from you in a straight line to the horizon. There are two trees at the roadside, one a hundred yards from you, the other two hundred. Your experience represents these objects as being of the same physical height and other dimensions . . . Yet there is also some sense in which the nearer tree occupies more of your visual field than the more distant tree. This is as much a feature of your experience itself as is its representing the trees as being the same height . . .

[This feature of your experience] presents an initial challenge to the Adequacy Thesis, since no veridical experience can represent one tree as larger than another and also as the same size as the other. The challenge to the extreme perceptual theorist is to account for these facts about size in the visual field without abandoning the AT. (1983, 12)

How exactly, then, does this example present a challenge to the extreme perceptual theorist? Peacocke’s argument is sometimes taken to be, like others in the first chapter of Sense and Content, an attempt to show a difference in intentional content where there is no difference in phenomenal character.\(^4\) However, Peacocke explicitly denies this: later in the chapter he says the trees example was not a case where “the additional characterization apparently omitted by representational properties was something which could vary even though representational content is held constant” (1983, 13). But if this example is not intended to show a phenomenal difference where there is no representational difference, one might wonder what exactly it is supposed to show. Byrne says, for instance, that since the trees example is “not even intended by Peacocke” to be a case “of phenomenal character varying despite sameness of content, it is not at all obvious why Peacocke supposes [it] . . . to present an ‘initial challenge’ to the Adequacy Thesis” (2001, 222).

\(^4\) For instance, this is how Chalmers (2004, 160) interprets the argument.
It seems to me that Byrne’s uncertainty regarding how the argument is supposed to work stems from a misunderstanding of the conclusion of the argument. Byrne introduces Peacocke’s trees argument as an attempt to refute the view that an experience’s intentional content determines its phenomenal character (2001, 220). However, as I have already said, this is not the purpose of the argument. Peacocke’s stated intention is to show “that every experience has some sensational properties” (1983, 8). And since he defines sensational properties as “properties an experience has in virtue of some aspect—other than its representational content—of what it is like to have that experience” (1983, 5) it is clear that his primary purpose is to show that experiences have phenomenal properties that are distinct from their representational properties. We need to keep in mind, then, that the claim that sensational properties are distinct from aspects of an experience’s intentional content is different from the claim that the sensational properties of an experience are not determined by its intentional content. The trees example is supposed to refute the AT and the AT does not say anything about determination. Moreover, when he introduces his arguments against the AT, Peacocke continually states that the point at issue is whether there are phenomenal properties of visual experiences that are not “captured by” (1983, 10) or “exhausted by” (1983, 11) their representational properties; he does not say that the issue is whether representational properties determine sensational properties. Peacocke does, of course, go on to claim that an experience’s intentional content and sensational properties do not determine one another. However, he appears to recognize that the trees argument does not establish this particular conclusion, since as evidence for this claim about determination he appeals, not to the trees argument, but to his subsequent arguments only (1983, 23).

Once we are clear that the trees example is supposed to show only that an experience has phenomenal properties that are distinct from its intentional properties, it is easier to see
how the argument is supposed to work. As I understand it, the argument has two steps. The first step is to point to a certain aspect of the phenomenal character of an experience (some phenomenal property, or more specifically, some sensory quality) that is supposed to be difficult for the extreme perceptual theorist to identify with some aspect of the intentional content of that experience (some intentional property). The second step is to then consider various proposals concerning which intentional properties might plausibly be identified with the phenomenal property in question, and then to explain why none of these proposals is ultimately acceptable.

Such an interpretation, I think, neatly corresponds to how Peacocke actually proceeds. He first identifies a particular phenomenal property with respect to which one’s visual experience of the two trees differs, and claims (in the long section quoted above) that the example presents an “initial challenge” for the extreme perceptual theorist—the challenge being to identify this specific difference in phenomenal character with some specific difference in the way the trees are represented. Peacocke then goes on to consider various suggestions the extreme theorist could make in response, and rules them out for various reasons (1983, 17-22). According to this interpretation of the argument, then, very little is achieved by the initial description of the visual experience of the two trees. All the difficult philosophical work goes on at step two; the success of the argument really depends on whether one can give solid reasons for rejecting the different proposals that can be made on the extreme perceptual theorist’s behalf.

The first step, then, consists merely in pointing to a particular phenomenal difference between one’s experience of the two trees. In the present example, what it’s like to see the nearer tree is different from what it’s like to see the farther tree in a certain obvious respect. For his part, Peacocke describes this difference in terms of the visual field—he says there is
“some sense in which the nearer tree occupies more of your visual field than the more distant tree” (1983, 12). Peacocke intends this point to be uncontroversial but some philosophers consider it problematic to talk about the “visual field” in this way. For example, Byrne (2001, 222-24) takes Peacocke’s talk of “regions of the visual field” to be just another way of talking about sense-data—dubious entities that the subject of a perceptual experience is supposed to be aware of. Moreover, Byrne maintains that all the real force of Peacocke’s argument derives from his positive description of the trees example in terms of “regions of the visual field” and suggests that this is a problem for the argument since Peacocke provides no justification for positing the existence of such entities. However, if we can avoid it, we ought not to interpret Peacocke’s argument as resting on the presumed existence of such controversial entities as sense-data. All Peacocke says is that there is “some sense” in which the nearer tree takes up more space in your visual field than the farther tree; he provides no defence of this claim because he assumes it is obvious to anyone who has had an experience of this sort. That is, Peacocke clearly takes his claim about the visual field to be uncontroversial and, as such, any interpretation of this claim ought to reflect this fact.

Since Peacocke intends the claim at issue to be uncontroversial, the best thing to do is to interpret his talk of the “visual field” simply as a convenient way of talking about the phenomenal properties instantiated by the experience. So, when Peacocke says “the nearer tree occupies more of your visual field than the more distant tree,” we should assume that he is merely making the uncontroversial point that one’s experience of the two trees differs phenomenally in a certain obvious respect. In other words, Peacocke is merely pointing out that there is a certain specific phenomenal property with respect to which one’s experience of the two trees differs (and even if this is not all that Peacocke intends, it is all that the argument

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5 Somewhat confusingly, Peacocke’s language suggests that the trees themselves take up space in the visual field, but this can’t be what he intends (as Meehan [2002, 633] points out).
requires). Peacocke calls the phenomenal property in question “size in the visual field” (1983, 12) but it would be simpler to call it *phenomenal size*. Stated in these terms, we would say that the first step of the argument is simply to call attention to the obvious fact that one’s experience of the two trees differs with regard to phenomenal size.

The “initial challenge” of the trees example is that the particular phenomenal property isolated in the example seems to be, at least at first glance, difficult to identify with any particular intentional property. The difficulty is that the physical features and relations that are most obviously included in the content of visual experience—things such as shape, size and relative distance—do not match up with phenomenal size. For instance, you cannot identify phenomenal size with the representation of physical size because the representation of physical size can remain constant despite changes in phenomenal size (as the trees example illustrates). Nor can you identify phenomenal size with the representation of relative distance, since the representation of relative distance can remain constant despite changes in phenomenal size (for example, imagine a case where you see two trees, one larger than the other, at precisely the same distance from you). Nor can you identify phenomenal size with the representation of both size and distance, since phenomenal size can remain constant even when experiences represent objects of different sizes at different distances from the perceiver (for example, in a case where you see two trees, one of which is slightly larger and slightly farther away than the other, there will be no difference with respect to phenomenal size). Someone who wants to hold onto the thesis that the phenomenal character of a visual experience is “exhausted by a specification of its representational content” is thus faced with a problem: to what intentional property can this particular phenomenal property be reduced?

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6 Hellie (2006, 6-7) gives an argument with the same structure to the effect that (to use his terminology) proximal shape is distinct from at least ostensibly experiencing distal shape and orientation, and proximal colour is distinct from at least ostensibly experiencing distal colour and illumination.
The second step of the trees argument is to consider the most plausible responses that someone might make to this initial challenge and explain why such responses do not succeed. That is, after isolating the phenomenal property we are calling phenomenal size and explaining why it constitutes a challenge for someone who holds phenomenal properties to be identical with intentional properties, we next need to consider how such a person might respond to this challenge. If none of these responses are plausible then we may safely conclude that an experience’s sensory qualities are distinct from its intentional properties. But what are the relevant options? We have just seen that phenomenal size cannot be identified with the representation of either physical size or distance from the perceiver, since these can remain constant despite changes to phenomenal size. However, it seems correct to say that whenever there is some change with respect to phenomenal size there is always some change with respect to the representation of either size or distance. A natural suggestion, then, would be that phenomenal size is identical to the representation of the relation between the size of an object and its distance from the subject. Another way to express this proposal would be to say that phenomenal size is identical to the representation of the visual angle an object subtends. Such a suggestion cannot be ruled out as easily as those concerning the representation of size or distance alone: at first glance, changes to phenomenal size seem to correspond with changes to the visual angle an object subtends. As such, appealing to visual angle is the most straightforward strategy for meeting the “initial challenge,” and perhaps unsurprisingly has been the most popular response to Peacocke’s argument. Thus, if the trees argument is ultimately to be successful, the separatist has to provide a good reason for denying that phenomenal size is identical with the representation of visual angle.

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7 The visual angle subtended by an object is the angle between two lines extending from the opposite edges of the object through the center of the pupil. See, for example, Levine (2000, 257-58).
2.1.1 The Visual Angle Reply

In *Sense and Content*, Peacocke responds to the possibility that phenomenal size is merely the representation of the visual angle an object subtends by claiming that most people have no concept of visual angle. He says “it is a conceptual truth that no one can have an experience with a given representational content unless he possesses the concepts from which that content is built up . . . This conceptual point entails that adding contents concerning the visual angle to representational content to save the AT is illegitimate: for an unsophisticated perceiver who does not have the concept of subtended angle it is nevertheless true that one object takes up more of his visual field than another” (1983, 19-20). In other words, Peacocke claims here that the content of visual experience is *conceptual content* in the sense that no properties and relations can be represented by an experience unless the subject of the experience possesses concepts of those properties and relations. Such a view immediately rules out the possibility of reducing phenomenal size to the representation of visual angle assuming that very few people have any concept of visual angle.

The obvious problem with Peacocke’s answer to the visual angle reply is that one can simply deny the assumption that no properties and relations can be represented by an experience unless the subject of the experience possesses concepts of those properties and relations. Gilbert Harman (1990) was perhaps the first to make such a proposal in connection with Peacocke’s argument. Discussing a slightly different example in which a subject sees two trees of different sizes, Harman says the larger tree of the two “is presented as the same size ‘from here’ as a closer smaller tree, which is not to say that it really looks the same in size, only that it is presented as subtending roughly the same angle from here as the smaller tree” (1990, 38). He then goes on to claim that an individual need not possess the concept of visual angle in order to have an experience that represents the visual angle subtended by an object:
I do not mean to suggest that the way the tree is visually presented as being from here is something that is easily expressed in words. In particular, I do not mean to suggest that the tree can thus be presented as subtending a certain visual angle only to someone who understands words like ‘subtend’ and ‘angle’ (as is assumed in Peacocke 1983, Chapter 1). I mean only that this feature of a tree from here is an objective feature of the tree in relation to here, a feature to which perceivers are sensitive and which their visual experience can somehow represent things as having from here. (Harman 1990, 38)

This suggestion that an individual’s visual experience can represent visual angle even though that individual lacks the relevant concept has been developed into an explicit response to Peacocke’s trees argument by Michael Tye (1991, 129-30; 1992, 172-73; 1996b, 123-25; 2000, 78-9; 2002, 453). With respect to Peacocke’s example, Tye agrees that there is a certain sense in which the nearer tree looks larger than the one that is farther away, even though the trees are represented as being the same physical size. But he avoids Peacocke’s conclusion that an experience instantiates sensational properties (which are distinct from its intentional properties) by claiming that “the nearer tree (or its facing surface) is represented as being larger from here, while also being represented as being the same objective size as the further tree” (2002, 453). Now, one thing cannot literally be “larger from here” than another thing, but Tye adds that this phrase should be understood as the claim that “one item subtends a larger visual angle relative to the eyes of the viewer” (2002, 453). In other words, Tye’s response to the trees argument is to claim that the nearer tree is represented as subtending a larger visual angle than the farther tree. Tye then claims that Peacocke’s reason for rejecting this response is inadequate:

Peacocke rejects this proposal on the grounds that experiences like mine can be had by people who lack the concept of a visual angle. My reply is that the perceptual
experience represents the feature, being larger from here, nonconceptually. For a person to undergo an experience that represents one thing as larger relative to his viewing point than another, it suffices that the encoding feature of the experience (larger number of filled array cells, if the representational vehicle has an array-like structure) suitably track or causally covary with the instantiation of the viewpoint-relative relation. The person does not need to have any cognitive grasp of subtended angles. (2002, 453)

This suggestion that visual angle can be represented nonconceptually, then, constitutes a significant obstacle to the trees argument. The second stage of the argument cannot succeed unless we can rule out the proposal that phenomenal size is identical to the representation of the visual angle an object subtends, but all Peacocke says by way of undermining this proposal is that most people do not possess the relevant concept.

Many philosophers appear to be convinced by Harman’s and Tye’s reply to the trees argument. For instance, Byrne (2001, 220) calls the response valuable and Chalmers (2004, 160) calls it plausible—as Tye says himself, “it is fair to say that a good many philosophers are persuaded” by the response (2000, 70). However, despite the apparent consensus that the visual angle reply is plausible, there is a serious difficulty with the reply that ultimately makes it untenable: the appeal to nonconceptual representation requires that there be a causal correlation between phenomenal size and visual angle, but there is no such correlation.

Tye claims that in order for one’s experience to nonconceptually represent visual angle “it suffices that the encoding feature of the experience . . . suitably track or causally covary with the instantiation of the viewpoint-relative relation.” And for the sake of argument we can grant this point. However, even if it were true that our visual experiences represented visual angle nonconceptually, it would still not be sufficient to establish the trees argument.

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8 Meehan (2002, 631-635) and Dretske (2003, 77-79) also reject the trees argument by appealing to the nonconceptual representation of visual angle.
angle in virtue of possessing some feature that was causally correlated with the visual angle subtended by an object, it would not follow that phenomenal size was identical to the representation of visual angle. To establish that conclusion there would have to be, in addition, a correlation between phenomenal size and that feature of the experience causally correlated with visual angle—that is, the phenomenal property we are calling phenomenal size would itself have to be causally correlated with visual angle. After all, it might be true that our visual experiences represent the spectral reflectance of surfaces in virtue of the fact that some feature of those experiences “tracks” the spectral reflectance of a surface. But, of course, it would be totally implausible to claim that phenomenal size is identical to the representation of spectral reflectance precisely because there is no causal correlation between phenomenal size and a surface’s spectral reflectance. Consequently, the visual angle reply is only plausible if there is a causal correlation between phenomenal size and the visual angle an object subtends. In other words, the reply only works so long as any differences in the visual angle an object subtends produce differences in phenomenal size and any differences in phenomenal size are produced by differences in the visual angle an object subtends (at least under “normal” or “optimal” conditions).

It may be quite natural to assume that there is just such a causal correlation between phenomenal size and visual angle; yet, the simple fact that people have two eyes rather than one is inconsistent with this assumption. Whenever your eyes are not equally distant from an object you happen to be looking at, that object will subtend a different visual angle relative to each eye. Consequently, there will very often be cases where there is a specific phenomenal size associated with a given object even though there is no such thing as the visual angle subtended by that object; and so it follows that there can’t be a correlation between
phenomenal size and the visual angle an object subtends.\textsuperscript{9} One might want to suggest that certain perceptual experiences represent the different visual angles subtended relative to each eye, but then one could not say that phenomenal size is identical to the representation of these two different angles because that would require two different phenomenal “images” of the object (i.e. a double vision experience—the problem being that it is common for an object to subtend different angles relative to each eye without producing a double vision experience).

Alternatively, one might respond to this difficulty by suggesting that in such cases the visual system splits the difference between the two angles. That is, one could say that one’s visual experience does not represent the visual angle an object subtends per se, but rather the midpoint between the angles the object subtends relative to each eye (or, alternatively, the angle the object subtends relative to the midpoint between the two eyes). One could then suggest that phenomenal size is identical with the representation of the midpoint between the angles an object subtends relative to each eye. However such a suggestion would be problematic because once you build an object’s relation to each individual eye into the complex relation supposedly represented by visual experience, you do not get the requisite correlation between this relation and phenomenal size. Since an object can cause an experience instantiating the same phenomenal size whether it is viewed with one eye or two, there just is not a unique correspondence between phenomenal size and any relation an object bears to both eyes (or to a single point between the two eyes).

\textsuperscript{9} One might think that the visual angle subtended relative to each eye will be “close enough” in most cases, but even relatively small differences in the distance of a given object from each eye can make for a significant phenomenal difference. To test this for yourself, tilt your head to the right or left while keeping your eyes focused on a particular object, and then alternate between closing your right and left eyes. It is also important to note that there is nothing abnormal or sub-optimal about situations where an object casts two significantly different retinal images—in fact, the proper functioning of your visual system depends on such disparities in order to acquire detailed depth information.
One might try to get around this difficulty by claiming that conditions are not “normal” or “optimal” when an object is viewed with only one eye. However, such a claim would be implausible because a consequence would be that a monocular visual experience cannot accurately represent the visual angle subtended by an object. That is, this claim would require that when you view an object with one eye you don’t (and cannot) accurately perceive the visual angle the object subtends relative to the relevant eye; instead, your experience inaccurately represents that the object bears a certain specific relation to both eyes even though one of your eyes is closed. In addition, the claim that monocular experiences cannot accurately represent the visual angle an object subtends would have the implausible consequence that such experiences cannot accurately represent both the size of an object and its distance from the relevant eye (since the visual angle subtended by an object is uniquely determined by its size and distance from the perceiver it would not make sense to claim that a particular experience inaccurately represents visual angle but accurately represents both size and distance). It is also important to note that even when you have both eyes open a significant region of the visible scene in front of you is visible only to your left eye, and a significant region is visible only to your right eye—you can demonstrate to yourself just how significant these regions are by looking at an array of objects and closing each eye one after the other. Consequently, if one claims that conditions are sub-optimal whenever an object is seen with only a single eye, and that therefore in such conditions visual angle is misrepresented, then one would also have to assert the following: when you have both eyes open your visual experience misrepresents the visual angle subtended by all the objects visible to one eye alone. And, of course, it would also follow that your experience misrepresents either the size or distance of all these same objects. However, such a claim would ascribe a significant degree of misrepresentation to just about every visual experience you have in just about any situation;
and it is implausible to charge the human visual system with such widespread and significant error.

From the simple fact that human beings have two eyes, then, it follows that the assumption that there is a causal correlation between phenomenal size and the visual angle an object subtends isn’t plausible. But what if we ignored the complication of binocular vision for a moment? Could we then say that the visual angle an object subtends uniquely determines phenomenal size? There is reason to think that the answer would still be “no.” Consider the fact that the moon often appears much larger near the horizon than it does higher in the sky—a phenomenon known as the moon illusion. Anyone who has suffered under this illusion would agree that there is a significant difference with respect to phenomenal size when the moon is seen near the horizon and when it is seen higher in the sky. Yet, regardless of where the moon is in the sky on any given night, the angle it subtends relative to your eye does not change very much at all. The question we need to ask, then, is how is it possible to get a significant difference in phenomenal size when an object subtending a constant visual angle is viewed in two different relative locations? Scientists and philosophers have been attempting to explain the moon illusion for thousands of years and there is still no consensus regarding the correct explanation. However, it is clear that, on any plausible account of the illusion, external factors other than the visual angle the moon subtends play a key role in generating the illusory experience. Consequently, we can safely say that with respect to one’s experience of

10 If you do not agree that there is a difference of phenomenal size here, then we can provide a different argument against the present proposal. When one suffers under the moon illusion the moon typically appears both closer and larger (see the works cited in the following footnote): so if you think that visual experiences represent the angle an object subtends relative to one’s vantage point, then the moon illusion is a case where the representation of that angle changes but there is no change with respect to phenomenal size.

11 For an overview of some of the different explanations that have been offered see Egan (1998), Ross and Plug (2002) and the articles in Hershenson (1989).

12 Factors that may contribute to the illusion include the presence of intervening objects, aerial perspective, colour, and even the subject’s posture (for an overview of the evidence concerning these sorts of factors, see chapters 6-12 of Ross and Plug [2002]). It’s also worth noting that the illusion itself is quite variable. For instance, Ross and Plug (2002, 7-8) distinguish between the “normal illusion,” where the moon appears 1.5 to 2 times larger than
the moon, phenomenal size depends crucially on factors other than the visual angle the moon subtends relative to one’s eye. Moreover, it seems unlikely that such factors play a role in determining phenomenal size only in the case of one’s visual experience of the moon, and so it seems reasonable to conclude that, in general, the visual angle an object subtends does not uniquely determine phenomenal size.

A representationalist might object here that the moon illusion involves a misrepresentation of visual angle, but such an objection would miss the point. I am not suggesting here that the moon is represented as subtending the same visual angle by experiences that differ with regard to phenomenal size. The present point is just that the visual angle reply assumes that the visual angle an object subtends causally correlates with phenomenal size, and the moon illusion is evidence that this assumption is mistaken. The conclusion, then, is that even if we restrict ourselves to monocular vision there does not seem to be a causal correlation between visual angle and phenomenal size, and as such, the visual angle reply is not plausible.\footnote{Similar points would apply to a variation on the visual angle reply that appealed to the different sizes of objects that would occlude one’s view of each tree (Tye [2000, 79] offers this sort of reply in response to the example of the elliptical appearance of a tilted penny).}

2.1.2 Lycan’s Reply

If it is not plausible to identify phenomenal size with the representation of the visual angle an object subtends then the extreme perceptual theorist is in a difficult position. Size, distance, and visual angle appear to be the only ordinary physical properties and relations that are relevant to the trees example. If the phenomenal difference in our experience of the two trees cannot be reduced to the representation of one of these properties or relations, then it looks like there are not any ordinary physical properties or relations left to appeal to. One

\footnote{Similar points would apply to a variation on the visual angle reply that appealed to the different sizes of objects that would occlude one’s view of each tree (Tye [2000, 79] offers this sort of reply in response to the example of the elliptical appearance of a tilted penny).}
solution to this problem, offered by Lycan, is to deny that “everyday environmental things are all that are represented in vision” (1996, 144).

Lycan’s reply to the trees argument is that in addition to representing the presence of equally sized trees at different distances from the subject, one’s visual experience also represents the presence of unequally sized “colored shapes.” These coloured shapes are perceived to be external objects existing out there in the environment, but they are not “everyday” objects in that they are represented as being something less than “robustly physical” (Lycan 1996, 152-3). One might object that when one looks down the road one does not see four different items, two trees and two tree shapes. But according to Lycan, “a single apparent color patch in one’s visual field represents not just one kind of external object but at least two at the same time (1996, 144). That is, while there are only two apparent colour patches in one’s visual field, each of these represents both a tree and a tree shape, and represents these things to be different sizes (since one’s experience represents the two trees to be the same size, but the two tree shapes to be different sizes). Accordingly, Lycan concludes that the phenomenal difference in our experience of the two trees is reducible to the representation of two unequally sized tree shapes: “the experiential features Peacocke claims to be sensational rather than representational are represented contents after all, though the representata are not physical objects of the everyday sort” (1996, 152).

To understand Lycan’s reply to the trees argument we have to understand what he means when he says that “a single apparent color patch” in the visual field represents two different things at once. Lycan’s view is that any given sensation in any sense modality can have “more than one layer of intentional objects” when it represents one object by representing another (1996, 144). As an example of this sort of layered content he points to olfactory sensations. When you smell a rose, Lycan says, your olfactory experience represents both the
presence of a certain odour (a collection of molecules of a certain type) and the presence of a rose at the same time. Moreover, it is by representing the presence of a certain odour that your experience represents the presence of a rose (1996, 145-48). In the case of vision, your experience represents ordinary objects arranged in a certain manner by representing coloured shapes arranged in a certain manner. As Lycan puts the point, “in vision, I see an array of colored shapes, and by seeing these I see a room full of furniture, and perhaps by seeing this I see something still more concept-laden” (1996, 149). But why should we think that our visual experience represents the presence of ordinary objects by representing the presence of coloured shapes? Lycan’s argument is to point to certain “peep box illusions.” For instance, he points to a certain Victorian toy consisting of a small box with a peephole in one end (Lycan 1996, 150). When you look through the peephole in this box you see what looks to be a miniature furnished room, but when you take the top off the box the contents are revealed to be a jumble of disconnected bits of wood, wire and cloth (much like the Ames chair illusion). Lycan claims that when you look through the peephole the content of your visual experience is veridical in certain respects and illusory in others. To account for this fact, he argues, we must say that your experience is veridical insofar as it represents certain coloured shapes that really are there in front of you, and illusory insofar as it represents miniature pieces of furniture that do not exist (Lycan 1996, 150). In other words, Lycan thinks that this sort of illusion provides evidence for the claim that we represent the presence of ordinary objects by representing the presence of coloured shapes.

Lycan’s response to the trees argument, then, is to say that one represents the presence of two equally sized trees by representing the presence of two unequally sized tree shapes. The tree shapes in question are represented as external objects distinct from the actual trees (Lycan 1996, 157). However, our visual experience represents these tree shapes to be external objects
of a rather strange kind. As Lycan says, “one may think that they are mere facades or that they are flimsy and filmy, or one may not know what to think of them . . . [the coloured shapes] are not robustly physical, but they re not nonphysical or immaterial either” (1996, 153). The important point is that, since in the case at issue there are not two strange tree shapes of different sizes out there in the environment, the relevant layer of content is illusory (Lycan 1996, 152). On Lycan’s view, then, the trees example is the converse of the peep box illusion. Lycan claims that when you look into the peep box your experience accurately represents the presence of various coloured shapes but thereby inaccurately represents the presence of various pieces of tiny furniture. In the trees example, however, your experience inaccurately represents the presence of two unequally sized tree shapes and thereby accurately represents the presence of two equally sized trees. Consequently, by positing an illusory layer of content wherein one’s visual experience represents the presence of two unequally sized tree shapes, Lycan can account for the difference in phenomenal size in wholly representational terms. That is, on Lycan’s view, the difference in phenomenal size present in the trees example is reducible to the representation of two tree shapes of different sizes.

There are at least a few reasons for which we ought to reject Lycan’s reply. The first is that Lycan’s argument for his “layering thesis” does not appear to be sufficient. His reply to the trees argument assumes that we see ordinary objects by seeing coloured shapes, and the only argument he provides for this assumption is to point to the peep box illusions just described. However, these peep box illusions do not seem to provide evidence for his assumption. Remember that Lycan’s view is that the very same “apparent color patch” in one’s visual field can represent both a tree shape and a tree at the same time. In the peep box illusion, though, we do not have a case where any specific visual sensation represents two different objects. Lycan claims that when we look into the peep box our visual experience
represents “shapes and textures that are physically real” and also miniature pieces of furniture that are not real (1996, 150). But to establish his layering thesis with respect to vision he has to show that the very same visual sensation is both veridical insofar as it represents a real shape, and illusory insofar as it represents some non-existent object. However, the peep box illusion just does not provide an example of this sort.

Consider that coloured portion of the visual field that corresponds to our perception of a chair in the peep box. Does this colour patch both accurately represent a chair shape and inaccurately represent a chair? Clearly it does not, since there is no object in the box with the shape of a chair. The only accurate element of our visual experience in such a case is that it represents the presence of a number of small pieces of wood that really are there in the box. If we see “physically real” shapes, as Lycan suggests, it is only the individual shapes of the individual pieces of wood that are represented accurately by our experience. The illusion concerns how those pieces of wood are represented to be arranged: they are represented as being connected to one another in such a way as to form a chair when in fact they are not so connected. The most one could say about this example, then, is that a certain colour patch in the visual field represents the contents of the box accurately in certain respects and inaccurately in other respects. But this is not a case where the very same colour patch inaccurately represents the presence of a chair by accurately representing the presence of a chair shape.

A second reason for rejecting Lycan’s reply is that it requires that one’s visual experience of the two trees represent a logically impossible state of affairs. Tye (1996b, 120) objects to Lycan’s proposal about the content of the visual experience at issue by pointing out that the same two objects are represented as being both the same size and different sizes at once. Lycan responds (1996, 156-57) that he is innocent of “attributing contradictory
representations” to the experience of the trees because the tree shapes are represented to be different objects from the trees themselves. However, when one examines how the relation between the tree shapes and the actual trees is represented, it looks like Lycan ends up attributing contradictory representations after all. Consider what Lycan says regarding the satisfaction conditions for the “tree shape layer” of content. In a discussion of Lycan’s proposal, Stalnaker points out that in order to understand what the tree shape layer of content is supposed to represent, we need to know “what the world would have to be like in order for the representation to be veridical” (1996, 106). In response, Lycan says: “think of a gigantic peep box that convincingly presents a whole facing environment to the subject by containing large cloths and cutouts and facades arranged in just the right ways” (1996, 156). If the subject in the trees example were looking into an enormous peep box instead of down a road at real trees, Lycan says, the tree shape layer of content would be veridical. Lycan (1996, 156) also endorses Stalnaker’s suggestion that the tree shape layer of content would be veridical if the subject were looking at two physical images of different sizes (e.g. in a mirror, or projected onto a screen). A striking fact about these two suggestions is that in both cases the layer of content concerning the actual physical trees (the tree layer) would be illusory. If one is looking into a peep box at tree facades then one isn’t looking at two trees, and so the tree layer of content is inaccurate. Similarly, if one is looking at images of trees in a mirror or on a screen then one’s experience is not being caused by the presence of the two trees down the road (where they appear to be), and once again the tree layer of content is inaccurate. Accordingly, it seems like the only conditions in which the tree shape layer of content would be satisfied are conditions in which the tree layer would not be satisfied, and vice versa. In other words, the way the tree shape layer represents the world to be is inconsistent with the way the tree layer
represents the world to be.\textsuperscript{14} So, given that our visual experience represents both that there are two tree shapes in front of us and also that there are two trees in front us, and given that there are no conditions in which both these layers of content are veridical at the same time, our visual experience represents an impossible state of affairs.\textsuperscript{15}

Finally, Lycan’s reply is problematic in that it attributes misrepresentation to a visual experience that appears to be entirely accurate. Tye makes this point quite clearly: “intuitively, the person who looks down the road is not in the grip of \textit{any} sort of illusion. True, there is a sense in which the nearer tree occupies more of the visual field than the one that is further away, even though they appear to be the same size. But, intuitively, no illusion exists here” (1996b, 121). The point here is just that it’s highly counterintuitive to suggest that the size difference evident in the experience of the trees involves any kind of misrepresentation. However, on Lycan’s view, the difference in phenomenal size is reducible to the representation of two tree shapes of different sizes. And since there are no such tree shapes in front of the subject, this aspect of the experience is illusory. More than that, the illusion in question is not just some trivial misrepresentation of minor details, but an hallucination of rather strange objects—“flimsy and filmy” tree shaped things that don’t appear to be “robustly physical”—that are no where to be found.

Unless, then, we had some independent grounds for thinking that the experience of the two trees is illusory, it would be reasonable for us to reject Lycan’s view. However, it seems clear that there are no such independent grounds. Consider the analogy with the peep box

\textsuperscript{14} At one point Lycan says that the tree shapes are represented as being “alongside or overlapping the ordinary physical objects” in the environment (1996, 157). But this doesn’t make sense because if the tree shapes overlapped the trees you wouldn’t be able to see the trees. Also, if the tree shapes are represented as being at the same location as the two trees, then how can one tree shape be represented as being larger than the other if they occupy exactly the same amount of room in the visual field as the equally sized trees?

\textsuperscript{15} Even if you thought that some perceptual experiences can represent impossible states of affairs (see §2.2.2 below), surely you would have to admit that experiences with such content are rare. The trees example is a very simple, common perceptual situation and attributing contradictory content in such a case is unreasonable.
illusion that Lycan appeals to. When you open the top of the box for the first time and discover there are no tiny pieces of furniture inside, you are surprised and immediately recognize that things are not the way they looked. Later, when you look through the peep hole again the illusion is as pronounced as ever, but now you are aware that the way things look to you is mistaken. Now, regarding the trees example, Lycan claims that the tree shape layer of content is inaccurate because the subject is not, for instance, looking into a giant peep box. But, if you point out to the subject looking down the road at the two trees that he or she is not in fact looking into an enormous peep box at two unequally sized tree shapes, but rather down an actual road at two equally sized trees, the subject is not going to be surprised at all. The subject will deny that her experience is illusory in any way. Generally speaking, there just does not seem to be any commonality between an accepted visual illusion like that of the peep box and the experience of the two trees. We have no independent reason, then, to think that the subject in the trees example suffers under any illusion, and as such we ought to reject Lycan’s reply.

2.1.3 Byrne’s Reply

A last response to the trees argument that we ought to consider is that offered by Byrne (2001, 220-27). Byrne’s primary criticism of Peacocke is that his description of the trees example does not rule out intentionalism—which Byrne defines as the view that “the propositional content of perceptual experiences in a particular modality (for example, vision) determines their phenomenal character” (2001, 204). According to Byrne (2001, 223-24), Peacocke’s talk of different “regions of the visual field” and their properties is simply another way of talking about sense-data. Here sense-data are to be understood as objects of one’s experience. For instance, something that a veridical experience of a tomato and a phenomenally indistinguishable hallucination of a tomato have in common is that in both cases
the subject of the experience is aware of an identical-looking sense-datum. However, as objects of experiences go, sense-data are unusual in that they are the sort of thing that we never misperceive (or, as Byrne [2001, 224] says, at least that is how the sense-datum theorist ought to think of them). As a consequence, Byrne can argue that whenever there is a difference in sense-data there is a difference in the intentional content of one’s experience: the sense-data are represented by the experience and represented to be just as they are, so whenever the sense-data change there will be a change in intentional content. With respect to the trees example, then, it follows that the difference in size in the visual field must be included in the content of the experience, and so there is a variation in intentional content to go along with the difference in sensational properties. Consequently, positing the existence of unequally sized sense-data is perfectly consistent with intentionalism.

The first thing we should say in Peacocke’s defence is that the trees example is not intended to demonstrate that intentionalism is false. Byrne is concerned with whether a perceptual experience’s intentional properties determine its phenomenal properties, but that is not the focus of the trees argument. As I have already argued (§2.1 above), Peacocke intends the trees argument to establish only that experiences have sensational properties that are distinct from their representational properties—the argument concerns the identity issue not the determination issue. Consequently, one could grant Byrne’s claim that Peacocke’s regions of the visual field are really just sense-data (and therefore included in the content of visual experience) without affecting the conclusion of the argument. For, even if it were true that the different sized regions of the visual field were included in the content of the experience, we could not conclude from this fact that these regions of the visual field are merely intentional properties. The fact that some property is represented by an experience does not make that property intentional—the tree’s greenness is represented by my experience, but its greenness is
not therefore an intentional property of my experience. So, Byrne’s objection has no bearing on the argument’s conclusion that an experience possesses sensational properties that cannot be identified with its representational properties.

But, of course, Peacocke also holds that an experience’s intentional content does not determine its sensational properties (even if he doesn’t think the trees argument establishes this conclusion). Do Byrne’s criticisms, then, undermine Peacocke’s general separatist view? If it were true that Peacocke’s regions of the visual field were really just sense-data and therefore objects of experience, perhaps it would follow that they are included in the content of experience. As such, an experience’s intentional content would fix its sensational properties and moderate separatism would be false. However, as I have already argued (§2.1 above), we do not need to interpret Peacocke’s talk of different regions of the visual field as an appeal to sense-data. Rather, we can state the trees argument while only talking about phenomenal properties and thereby avoid Byrne’s criticisms. Sense-data are supposed to be the objects of perceptual experiences, and that is why Byrne (2001, 225-26) maintains that a sense-datum theorist has to admit that sense-data are represented by perceptual experiences. However, if one is appealing only to phenomenal properties one is not obviously forced to make a similar admission. From the fact that a subject has an experience that instantiates certain phenomenal properties it does not automatically follow that those phenomenal properties are represented by that very same experience. That is, even if it were necessary for sense-data to be included in the content of an experience, it is not obvious that what it’s like for the subject to have a given experience is necessarily included in the content of that experience. Consequently, if it is possible to argue for separatism without appealing to sense-data then Byrne’s criticisms of Peacocke do not constitute an objection to separatism.
One might wonder, though, whether Byrne’s criticisms of Peacocke could not be modified by substituting phenomenal properties for sense-data. Assume that the trees argument is correct and an experience’s sensory qualities are distinct from its intentional properties. The moderate separatist will then go on to give examples that purport to involve two experiences with the same intentional content but different sensory qualities (as in §2.2). Someone inspired by Byrne might produce the following response to any such example: in addition to representing the external world to be some way, a perceptual experience also represents the sensory qualities it instantiates; and so if the two experiences in question instantiate different sensory qualities then they also differ with regard to intentional content. In fact, Michael Pace (2007) has recently adopted the view that experiences represent their own phenomenal character in an attempt to save representationalism from similar kinds of examples.

There are at least three things the moderate separatist should say in response. First, this kind of objection to arguments for moderate separatism is only plausible so long as the view that perceptual experiences represent their own phenomenal character is plausible. There seem to be strong prima facie grounds for thinking that such a view of the intentional content of perceptual experiences is false: a typical perceptual experience certainly seems to its subject to only be about the way the world is from a certain vantage point; and it is not obvious that perceptual content could be as sophisticated as the present proposal would require.\(^\text{16}\)

Consequently, we need independent reasons for thinking that visual experiences represent their own sensory qualities, and neither Byrne nor Pace provide such reasons.\(^\text{17}\)

\(^{16}\) The present suggestion would also be inconsistent with the transparency considerations that have served as the principal motivation for representationalism. As Pace himself notes, “this puts intentionalism in some danger of being unmotivated” (2007, 349).

\(^{17}\) For instance, when Byrne (2001, 211-12) discusses the view that we are aware of \textit{mental paint}—“the intrinsic properties of [an] experience by virtue of which it has the content it has” (Harman 1990, 38)—he seems to be claiming only that someone committed to such a view \textit{could} consistently endorse intentionalism.
Second, even if it were true that the sensory qualities instantiated by an experience are included in the content of that very same experience, it would still be possible to find examples that support moderate separatism. Illusions regarding the sensory qualities instantiated by an experience would provide just such examples. The notion of a phenomenal illusion might initially seem strange but it is certainly no stranger than the notion that an experience represents what it itself is like for the subject who has it.\textsuperscript{18} And if the sensory qualities instantiated by an experience were indeed represented by that experience, it is not clear what reasons one could have to deny that an experience’s sensory qualities could be misrepresented at least sometimes. Byrne (2001, 224) notes that the sense-datum theorist cannot permit sense-data illusions, but that is because sense-data are introduced to explain the sameness of phenomenal character in a case where a veridical and an illusory experience are phenomenally identical. If the sense-data theorist allows for sense-data illusions he or she undercuts his or her original motivation for introducing sense-data, since then the phenomenal similarity between a veridical and an illusory experience of sense-data would be left unexplained. However, since sensory qualities are just aspects of an experience’s phenomenal character and are not introduced to explain the problem of illusion, there is no similar prohibition against allowing for illusions regarding sensory qualities. Given the possibility of sensory quality illusions, then, there could be two experiences, one that represents accurately the sensory qualities it instantiates and another that misrepresents the sensory qualities it instantiates, that share their intentional content but differ with respect to their sensory qualities.

Third, there is another move a moderate separatist could make in the face of the suggestion that sensory qualities are included in the content of an experience: restrict the scope of the separatist thesis. Byrne himself makes just such a move when he discusses the

\textsuperscript{18} Examples where subjects misrepresent the phenomenal character of their own experiences have been described by Churchland (1984, 77) and Warner (1993, 188).
representation of time. He points out that if the time at which an experience occurs is represented by the experience then no two experiences occurring at different times can have the same content (Byrne 2001, 203 n. 9). And if no experiences occurring at different times can have the same content, Byrne says (2001, 217 n. 25), then his argument in defence of intentionalism does not work. Byrne’s solution is to restrict intentionalism to a claim about “equivalent content,” where the contents of two experiences are equivalent “if and only if they only differ with respect to the represented times” (2001, 217 n. 25). The moderate separatist can make this same move with respect to the representation of sensory qualities. He or she can say that the contents of two experiences are equivalent if and only if they only differ with respect to the represented sensory qualities, and then define moderate separatism in terms of equivalent content. Amending the moderate separatist thesis along these lines would not drastically affect its significance; whether or not this form of separatism is true would still be a controversial and important question. Of course, I am not suggesting that we need to amend moderate separatism along these lines; the point is just that, if it is true that an experience represents the sensory qualities it instantiates then it would be reasonable for the moderate separatist to restrict the scope of his thesis.

Ultimately, then, Byrne’s criticisms of Peacocke do not undermine either the trees argument or moderate separatism in general. As such, it appears that the trees argument is successful. The “initial challenge” of the trees example was that a certain phenomenal property, phenomenal size, seems to be difficult to identify with some specific intentional property. The argument is not complete until various proposals have been considered and rejected; but we have now seen that the most promising responses to the “initial challenge” are implausible. We cannot conclude from this that it is impossible to reduce phenomenal size to some intentional property—it is at least possible that some yet unthought-of proposal could
ultimately succeed. However, the trees argument establishes that the most plausible view is that perceptual experiences instantiate sensory qualities that are distinct from their intentional properties.

We need to keep in mind, though, that the trees argument says nothing with respect to how sensory qualities and intentional properties are related. While the subject’s experience of the two trees differs phenomenally, there is also an intentional or representational difference—the trees are represented to be at different distances from the subject. Consequently, the moderate separatist cannot conclude on the basis of this example that the sensory qualities instantiated by an experience are independent of its intentional content. To establish this conclusion we need an example where sensory qualities differ but where there is no difference in intentional content. Double vision is an example of this sort.

2.2 Double Vision

Double vision is a relatively common phenomenon in human visual experience. Human beings have two eyes, each with a slightly different view of the world, and as a consequence the light reflected by a given object will often fall on different regions of each retina. When this retinal disparity is great enough the object you are looking at will, in a certain sense, “appear double.” Double vision experiences have been a topic of philosophical discussion at least as far back as Aristotle.¹⁹ Some time later, Hume appealed to double vision as an argument against the view that we directly perceive mind-independent objects (1739-40/1978, 210-11). Then, in the 20th century, there were debates as to whether double vision experiences are evidence for the sense-data theory.²⁰ However, for my purposes, the relevant

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¹⁹ In the *Parva Naturalia*, Aristotle (1931, 461b-462a) notes that when you insert a finger beneath an eyeball a single object will present two visual images. He claims that when you do not observe the finger this will produce the opinion that there are two objects, but when you do observe the finger the “presentation” will be the same but will not produce the same opinion that there are two objects.

²⁰ See, for example, Price (1950, 62-63), Pitcher (1971, 41-42) and Jackson (1977, 99-100).
use that has been made of double vision is Boghossian and Velleman’s appeal to such experiences in an argument against representationalism.

In “Colour as a Secondary Quality,” Boghossian and Velleman consider a couple of different examples that they believe support Peacocke’s view that the sensational properties instantiated by an experience are distinct from its intentional content (1989, 92-93). One of the examples they point to is double vision:

If you press the side of one eyeball, you can see this line of type twice without seeing the page as bearing two identical lines of type. Indeed, you cannot even force the resulting experience into representing the existence of two lines, even if you try. Similarly, you can see nearby objects double by focusing on distant objects behind them, and yet you cannot get yourself to see the number of nearby objects as doubling . . . None of these experiences can be adequately described solely in terms of their intentional content. Their description requires reference to areas of colour in a visual field, areas that split in two . . . without anything’s being represented to you as doing so. (Boghossian and Velleman 1989, 94)

Boghossian and Velleman are not trying to show that an experience’s intentional content does not determine the sensory qualities it instantiates; their claim is simply that double vision experiences show us that there is more to an experience than its intentional content. However, by suggesting that a double vision experience represents the presence of a single object rather than two, they imply that the content of a double vision experience is no different than that of a normal visual experience. Consequently, if we restate their examples in terms of pairs of experiences where the first is a normal visual experience and the second a double vision experience, we get an argument for the claim that an experience’s intentional content does not fix its sensory qualities.
Let us begin with Boghossian and Velleman’s example of looking at a line of type while pressing on the side of one of your eyeballs. First, look at a line of type printed on a white page under normal lighting conditions, without doing anything funny to your eyes (and let us assume for the sake of simplicity that the line you’re looking at is the only line of type on the page). Under these circumstances you ought to have a normal (i.e. non-double) visual experience that represents the presence of a page directly in front of you with various letters printed on it arranged in a straight line.\textsuperscript{21} Since there really is a line of type on the page directly in front of you in this case, this visual experience is veridical. Next, while looking at the same line of type press the side of one of your eyes. If you are doing this right, you should notice your experience change dramatically. One natural way of describing this change is to say that your second experience involves two “images” or “visual impressions” of the line of type, whereas your first experience involves only one.

If you reflect on what it’s like for you to have these two experiences of the line of type, it should be obvious that the sensory qualities instantiated by the first experience differ significantly from those instantiated by the second. However, it is at least plausible to maintain that there is no difference of intentional content between these two experiences. When you press on your eyeball it does not look to you as though the original line of type has somehow been duplicated—as Boghossian and Velleman insist, you cannot “force the resulting experience into representing the existence of two lines, even if you try.” In other words, it would be counter-intuitive to describe the double vision experience as an illusion representing the existence of two lines of type where there is only one; rather, at least prima facie the double vision experience seems to be an accurate representation of a single line of type. But, of

\textsuperscript{21} I obviously do not intend this to be an exhaustive description of the content (e.g. there is no mention of colour). A partial description of the content will be sufficient for the purposes of the present argument.
course, the normal experience is also an accurate representation of a single line of type, so it seems plausible to think that these experiences possess the same intentional content.

The other case that Boghossian and Velleman describe—seeing nearby objects double by focusing on objects behind them—can be stated in similar terms. First, hold a finger up about a foot in front of your face, directly opposite your nose, and focus your gaze on that finger. All other things being equal, you should have a normal experience with the content that there is a single finger in front of your face. Next, relax your gaze somewhat (that is, do not aim your eyes directly at the finger) but keep your attention focused on your finger. Again, if you are doing this right you should notice your experience change dramatically. And again, it is natural to describe this change by saying that your experience now involves two images or visual impressions of your finger.

Once again, the phenomenal difference between these two experiences will be obvious to everyone; the sensory qualities instantiated by the normal visual experience of your finger are clearly different from those instantiated by the double vision experience of your finger. But, at the same time, at least prima facie it seems plausible to say that neither experience represents the presence of two fingers in front of your face. When you relax your gaze it does not appear to you as though your finger is somehow spontaneously dividing into two distinct fingers. As with the previous example, we have a strong intuition that our double vision experience is not an illusory representation of two fingers, but a veridical representation of a single finger. As such, since the normal visual experience is also a veridical representation of a single finger, it seems plausible to conclude that these two experiences possess the same intentional content.

If the present account of these two cases is correct, then it follows that an experience’s intentional content does not determine the sensory qualities it instantiates. Consequently,
someone who wants to deny this conclusion has to tell us precisely how the contents of the two experiences of the line of type or of the finger differ. Unless we can find some plausible alternative account of the intentional content of double vision experiences we will have to admit that an experience’s intentional content does not fix its sensory qualities.

2.2.1 Double Vision as Illusion

Boghossian and Velleman assume that their readers will share their intuition that double vision experiences are not illusory representations of two objects; and I for one certainly feel the force of this intuition. When I have a double vision experience I do not seem to be suffering under any kind of illusion. When I hold up a finger in front of my face and relax my eyes it does not seem as though I am looking at two fingers occupying two distinct locations; rather, it seems as though I am looking at a single finger in a single location. And while I think that this intuition is widely shared, the anti-separatist is free to deny it.\(^{22}\) That is, an anti-separatist can simply insist that when he has a double vision experience it looks to him as though there are two objects in front of him rather than one. Accordingly, the separatist needs to provide independent reasons for rejecting such a view.

There is at least one philosopher who maintains that double vision experiences represent the presence of two objects. Michael Huemer claims that when you have a double vision experience of a finger held up in front of your face, “that object seems to be in two places. That is, your visual experience incorrectly represents the finger in two different places. This is a case of visual illusion” (2001, 131). In a footnote Huemer clarifies this claim: “I do not mean that the visual experience has a self-contradictory content, like ‘There is a single finger which is simultaneously here and there.’ Rather, the visual experience represents that

\(^{22}\) Some other philosophers who share the intuition: Clark (1996, 486), Hellie (2005, 12-13) and Lormand (2006, 323n.). Even Tye (2000, 89), who rejects Boghossian and Velleman’s argument, claims that “in the epistemic or conceptual sense of the term ‘appears,’” it does not appear to you that there are two objects in front of you when you have a double vision experience.
there is a finger here, and there is a finger there” (2001, 146 n. 8). So, according to Huemer, your double vision experience of a finger has the content that there are two different fingers occupying two different locations in front of you.

The separatist needs a response to a claim like Huemer’s. But how can we settle a disagreement over the content of a particular sort of experience? Normally when we want to determine the content of our thoughts and experiences we simply rely on introspection. However, in the present case it will not do any good to say to Huemer, “if you consult your own experience carefully, you will find that your double vision experience of a finger represents the presence of a single finger in front of you”—obviously he disagrees. However, I think there are other things that can be said in defence of the intuition that Huemer is denying. Specifically, I think it is useful to compare double vision experiences to other sorts of experience. That is, in order to settle the disagreement regarding the content of double vision experiences we do not have to rely exclusively on introspection of those specific experiences. Rather, we can consider other experiences the content of which we have a clearer understanding, and, by comparing the two, improve our understanding of the content of double vision experiences. Such a procedure will not, of course, demonstrate without question that double vision experiences do not and cannot represent the presence of two objects. However, I think that certain comparisons put a good deal of pressure on someone who wants to hold that double vision experiences are illusory representations of two objects.

From the claim that your double vision experience of a finger represents the presence of two fingers in front of you, it follows that the content of that experience is inaccurate or illusory (since in the case we are considering there is only a single finger in front of you). An obvious thing to do, then, is to compare such an experience to other well established visual illusions. For example, consider the visual experience you have when looking at the Müller-
Lyer diagram. If you did not know beforehand that the two lines are the same length, you would not find anything out of place—it would simply seem to you that you were looking at two unequal lines. But once you have discovered that the lines are equal in length, for instance by measuring them, you immediately feel that there is something not quite right. That is, once you have determined that the lines are the same length, you become immediately aware of a conflict between what your eyes are telling you and what you know to be the case. In the case of standard visual illusions like this you feel a disconnect between your different mental occurrences (a feeling that can sometimes even be uncomfortable). And your experience when viewing the Müller-Lyer diagram is typical of other standard visual illusions (e.g. the Ponzo illusion or Fraser’s spiral illusion): in such cases, when your beliefs about the object you are looking at are inconsistent with your visual experience, you are immediately aware of the conflict.

The question to ask yourself, then, is whether the phenomenology of the double vision experience of your finger is anything like the phenomenology of the experience of a standard visual illusion when you recognize your experience to be illusory. When you experience double vision while looking at your finger you know very well that there is only a single finger in front of you, yet it seems obvious that you do not feel that anything is amiss. If the double vision experience represents that there are two fingers in front of you, why are you not immediately aware of a conflict between what your eyes are telling you and what you know to be the case? Why do you not feel the sense of disconnect that you feel when looking at the lines in the Müller-Lyer diagram? One might be tempted to suggest that the difference has to do with the frequency with which one experiences double vision, but that would not be a plausible suggestion: one’s familiarity with the Müller-Lyer illusion doesn’t have any tendency to eliminate one’s immediate awareness of the conflict between what one knows and what one
sees. Accordingly, given that the phenomenology of the double vision experience of your finger differs significantly from that of a standard visual illusion in circumstances where what you believe is inconsistent with the content of your visual experience, we have a solid reason for thinking that the double vision experience is not illusory.

Another example worth considering is a kind of double vision experience that does produce the sense that one is suffering under an illusion. For instance, consider the visual experience you have when looking at a stereogram: if you look at a stereogram made up of two slightly different images of some object or other using a partition so that each of your eyes sees one of the images and not the other, your visual system will slowly combine the two images and produce an experience of a single, three dimensional object. But, if you pay close attention to your experience before the two images are fully combined, you will notice that you seem to be having a double vision experience of a single object. When you have an experience like this you immediately feel that there is something strange going on—just as when you look at the Müller-Lyer diagram, you become immediately aware of a conflict between what your eyes are telling you and what you know to be the case. However, in the present case, the reason you feel the disconnect between what you know and what you see is because while you know you are looking at two distinct images, your visual experience represents the presence of a single object in front of you.

This strange sense of disconnect is even more pronounced when one has a similar sort of experience using three dimensional objects instead of a stereogram. You can check this for yourself by doing the following: take two small objects such as two identical paperclips and place them 4 centimetres apart on a table or desk in front of you; then cut a 2 centimetre hole in a piece of paper and position the piece of paper such that you see one of the paperclips through the hole with one eye and the other paperclip through the hole with your other eye. When you
focus your eyes on the paperclips you will seem to see two holes and two paperclips, but when you focus your eyes on the hole in the piece of the paper you will seem to see a single hole and a single paperclip. For present purposes, the important thing is that when you are in the process of switching your focus from the paperclips to the hole, you will notice that, before the two visual impressions of the paperclips are combined, you seem to be having a double vision experience. Once again, in these circumstances you will become immediately aware of a strange disconnect between what your eyes are telling you regarding the number of paperclips and what you know to be the case.

One’s experience while looking at the stereogram and the paperclips, then, presents a problem for anyone who wants to maintain that standard double vision experiences—like the experience of the line of type or the finger—represent the presence of two objects. These unusual cases of the stereogram and the paperclips possess the same relevant phenomenology as the standard double vision experiences at issue. So, if experiences of this sort represent the presence of two objects in front of you then that would mean that your experiences of the stereogram and the paperclips are accurate. But, if these experiences are accurate there is no reason why you should feel the strange sense of disconnect between what your eyes are telling you and what you know to be the case. It seems preferable, then, to classify the experiences of the stereogram and the paperclips as illusions, and to do so we must assume that double vision experiences represent the presence of a single object.

Examining these other types of experience thus gives us good reasons for thinking that your double vision experience of a line of type or a finger is not an illusory representation of the presence of two objects in front of you. In the first case, when you look at well-established visual illusions you feel that your visual experience is inconsistent with what you know; yet, you have no such feeling when you have a double vision experience of a line of type or a
fingertip. In the second case, it seems that double vision experiences do sometimes feel like illusions, but only when there are two objects in front of you instead of one. These comparisons, then, back up the intuition that double vision experiences of the sort at issue are accurate representations of a single object (just as the normal experiences are).

2.2.2 Tye’s Layers of Content

In the previous section we were considering a rather blunt statement of the view that double vision experiences represent the presence of two objects; Michael Tye (2000, chap. 4) adopts a much more subtle strategy. As a representationalist, Tye cannot accept that there are experiences with the same intentional content but different phenomenal character. But, at the same time, he wants to accommodate the intuition that when we see double it does not look as though there are two objects in front of us. Tye is able to accommodate this intuition yet insist that normal and double vision experiences differ in content by appealing to the notion that perceptual experiences possess different levels or layers of content:

It is certainly the case that when one presses one’s eyeball, one has no inclination to think or judge that the number of lines of type has doubled . . . So, in the epistemic or conceptual sense of the term ‘appears,’ it does not appear that the number of lines has doubled. But phenomenologically, there is, of course, a conspicuous change. This, the representationalist can plausibly claim, is because at the level of the grouped array, there is a change in representational content. The surface that is identified within the overall experience as the page now has small regions represented as black that were represented as white before (corresponding to those places where one sees the duplicated line). (2000, 89)

Tye’s suggestion seems to be that the “epistemic or conceptual” layer of content is the same for both the normal and double vision experiences of the line of type. In other words, in both
cases “one brings to bear the complex concept” one line of type “in one’s experience” (2000, 89). This similarity at the conceptual level explains why it does not look to you as though there are two lines of type during the double vision experience any more than it does during the normal experience. However, Tye maintains that perceptual experiences possess other layers of content in addition to their conceptual layer (2000, 70-74), and in one of these other layers there is a representational difference. Specifically, he says that at the level of the “grouped array” the normal experience and the double vision experience differ in their content: at this level, the double vision experience represents certain regions of the page as black that the normal experience represents as white (and presumably the double vision experience represents two narrow, horizontal regions of the page as being largely black while the normal experience represents only one such region as largely black). Thus, Tye claims that there are differences in content corresponding to the differences in phenomenal character between the normal and double vision experiences.

The obvious question at this point is: what exactly is the “grouped array” supposed to be? Tye uses this expression to refer to a representation at a certain stage of visual processing consisting of an array of brain cells, where each cell is dedicated to a particular line of sight—basically, a neural map of the visible scene in front of one (2000, 71). The archetype of this sort of representation is David Marr’s “2½-D sketch” (1982), but Tye doesn’t believe that the grouped array of cells corresponding to Marr’s 2½-D sketch is actually part of the content of visual experience. He argues that if one is looking, for example, at a diamond-shaped object and tilts one’s head 45 degrees to the left, there is no change to the content of one’s visual experience. Yet, upon tilting one’s head there is a change to the content of “the purely retinotopic grouped array” corresponding to Marr’s 2½-D sketch. Therefore, Tye maintains, the content of this particular grouped array is “not a component part of the content of visual
experience” (2000, 73). Tye goes on to say, however, that there is another grouped array that *is* part of the content of visual experience. He claims that “at the level of visual experience, a representation is constructed and deployed with the same general character as the purely retinotopic grouped array but with a more stable content, reflecting a coordinate system whose origin and axes are not fixed to the eye alone . . . Given an appropriate coordinate system, the content of *this* grouped array will not alter as one tilts one’s head while viewing [the diamond-shaped object]” (2000, 73). It is this second grouped array (which I’ll call “Tye’s array”) and not the grouped array corresponding to the 2½-D sketch (which I’ll call “Marr’s array”), whose content Tye claims is included in the content of visual experience. And, thus, it is Tye’s array rather than Marr’s array that Tye is appealing to in his account of double vision. That is, Tye’s response to the double vision argument is essentially that at the level of Tye’s array there is a difference in content between the normal and double vision experiences.

Some, at least, find Tye’s response to the double vision argument compelling. However, I think that there are a number of problems with the reply that ultimately make it unacceptable. Perhaps the most obvious difficulty concerns the status of Tye’s array itself. That there is such a thing as Tye’s array is an empirical hypothesis that goes beyond anything that vision scientists themselves have postulated (or at least that is how Tye presents the idea). What, then, is the empirical evidence that there is a stage of visual processing corresponding to Tye’s array? Tye leans heavily on Marr’s theories, but, as Hellie (2005, 15-16) points out, Marr himself is not committed to the existence of a representation like Tye’s array. The only other evidence Tye offers is rather slight. He points out that while Marr’s array is not a part of the content of visual experience, “we certainly have visual experiences as of surfaces and

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23 For example, Chalmers (2004, 161) calls Tye’s response “reasonably plausible.”
24 In addition, Hellie (2005, 16-17) argues that Tye’s proposal is inconsistent with one of the basic principles of Marr’s theory.
surface details of the sort specified in the grouped array”; he then suggests that the explanation of this fact is the existence of another grouped array, Tye’s array (2000, 73). However, that the existence of Tye’s array could explain the fact that visual experience often represents the sorts of features included in Marr’s 2½-D sketch does not seem to be sufficient reason to accept Tye’s empirical hypothesis (presumably there are other plausible explanations of this fact). Consequently, it would appear that Tye’s response to the double vision argument ultimately rests on a speculative proposal that, at the very least, requires a good deal more evidence.

A second problem is that, even if we granted the existence of Tye’s grouped array, one could appeal to double vision to argue that the content of that array is not part of the content of visual experience. Consider Tye’s argument for his claim that Marr’s array is not included in the content of visual experience. He maintains that when one looks at, for example, a diamond-shaped object and tilts one’s head 45 degrees to the left, the content of one’s experience does not change. However, since there is a change to the content of Marr’s array when one tilts one’s head, Tye concludes that Marr’s array is not a component part of the content of visual experience. The problem, then, is that one could apply this same reasoning to the case of double vision and conclude that Tye’s array is not a component part of the content of visual experience: prima facie, there is no change in content from the normal to the double vision experience of a line of type, but there is a change in the content of Tye’s array; therefore, prima facie, Tye’s array is not a component part of the content of visual experience.

Now, the premise that there is no change in content from the normal to the double vision experience might sound like begging the question in this context. But, of course, I have added the “prima facie” qualification, and I think even Tye would have to endorse the statement in this qualified form—after all, he says himself that when one has a double vision experience it does not appear that the number of lines has doubled. Also, I do not think the
present argument assumes anything more than Tye assumes in his argument that Marr’s array is not a part of the content of visual experience. Just as when you tilt your head 45 degrees it does not seem as though the scene you are visually aware of has changed in any way, so too when one has a double vision experience it does not seem as though the scene you are visually aware of has changed in any way (after all, as we saw in the previous section, there are good reasons for thinking that your double vision experience of the line of type or the finger represents the presence of single object, just as your normal visual experience does). These assumptions seem to me to be on perfectly equal footing, and if that is correct then Tye’s argument that Marr’s array is not a part of the content of visual experience also shows that Tye’s array is not a part of the content of visual experience. At the very least, we can conclude that if Tye wants to appeal to his hypothetical array in order to insist on a difference in content between normal and double vision, he has a problem: if there’s a difference in content at the level of Tye’s array between normal and double vision, then it is at least as reasonable to insist that Tye’s array is not a part of the content of visual experience as it is to insist that normal and double vision experiences differ in content because there is a difference in content at the level of Tye’s array.

One final problem with Tye’s response concerns the fact that he assumes that the content of a double vision experience is internally inconsistent. Tye claims that, at the level of Tye’s array, the normal vision experience represents particular regions of the page as white that the double vision experience represents as black (2000, 89). In other words, the double vision experience represents two narrow, horizontal regions of the page as being largely black, while the normal experience represents that a single such region is largely black. However, Tye also claims that at the epistemic or conceptual level, when one has a double vision experience “it does not appear that the number of lines has doubled” (2000, 89). In other words, at the
conceptual level, the content of one’s double vision experience is that there is a single narrow, horizontal region of the page which is largely black, not two such regions. Consequently, the double vision experience possesses two different layers of content that directly contradict one another.\textsuperscript{25}

Presumably there is nothing in principle wrong with the notion of an inconsistent visual representation; nonetheless, there are good reasons to think that we do not have visual experiences with such strikingly incoherent content as Tye claims is possessed by double vision experiences. Let us say that when some visual experience represents incompatible features to be possessed at the same time by some object or array of objects occupying a central region of the visual field, that the content of that visual experience is \textit{acutely inconsistent}. Tye claims that the content of your double vision experience of the line of type is acutely inconsistent: when you view a line of type occupying a central region of your visual field and press on the side of one eye, your experience represents both that a single narrow, horizontal region of the page is largely black and that two narrow, horizontal regions of the page are largely black at the same time.

The question, then, is whether or not it is plausible to suggest that visual experiences ever possess acutely inconsistent content. There are good reasons to think that the answer is “no.”\textsuperscript{26} Those circumstances that one might think would be most likely to produce experiences with acutely inconsistent content instead produce fluctuations between experiences with internally coherent content. Consider, for instance, the phenomenon of binocular rivalry: when

\textsuperscript{25} Tye (2000, 85-86) also appeals to experiences with “necessarily inconsistent” contents in his response to Boghossian and Velleman’s suggestion that visual experiences of afterimages constitute a difficulty for intentionalism.

\textsuperscript{26} In an earlier paper, Tye himself suggests that the notion that a perceptual experience can be internally inconsistent does not make sense. In response to a proposal made by Lycan (the details of which don’t matter here), Tye (1996b, 120) argues: “for my experience to represent that the one tree shape is larger than the other, it must represent that there are two \textit{objects}, both tree-shaped, one larger than the other . . . But my experience also represents that those two very objects are trees of the same size. So, my experience represents that there are objects of both different and the same sizes. That, however, it surely cannot do.”
completely different stimuli are presented to each of your eyes, your visual experience does not represent that distinct objects occupy the same location in space; rather, you switch back and forth between experiences with distinct but internally coherent content. So, even when, as Randolph Blake (2001, 5) puts it, “the eyes are signalling the brain that two different objects exist at the same location in space at the same time,” our experience does not represent that some impossible state of affairs obtains. Similar points can be made with regard to our experience of ambiguous figures such as the Necker cube: if the visual system produced acutely inconsistent visual representations, one might expect that when faced with such a stimulus it would sometimes produce each of two incompatible interpretations at once. But when you look at the Necker cube figure you alternate between seeing it as a cube in one orientation and seeing it as a cube in a distinct orientation; you never see it as a cube in two incompatible orientations at the same time.\(^{27}\)

One final type of example that is relevant to the question of whether visual experiences ever possess acutely inconsistent content is the experience of “impossible figures.” Tye (2000, 75), for instance, defends his view on the present issue by appealing to experiences of such figures; and I think it is safe to assume that if any of our visual experiences ever possessed acutely inconsistent content, our experiences of “impossible figures” would possess such content. However, the kinds of figures that Tye points to do not appear to produce acutely inconsistent visual representations.

For instance, Tye says if you look at a particular four-sided figure consisting of a string of four staircases, each connected to the last (pictured on p.76 of Tye 2000), you will “see each set of stairs as ascending to the next, even though this is impossible” (2000, 75). But it is not obvious that you can really see what Tye says you do when you look at the figure in question.

\(^{27}\) Both Bayne (2007) and Tononi and Edelman (1998) appeal to binocular rivalry and ambiguous figures as support for the conclusion that the content of a visual experience is never internally inconsistent.
When I look at the figure I cannot get myself to see each set of stairs as ascending to the next *at the same time*. Of course, as my eyes move around the figure I see a set of stairs ascending to another set of stairs, and when I then look at that set of stairs I see that it ascends to the next set, and so on (and after a while I realize there is something funny about the picture). Yet, I just cannot seem to see that each set of stairs ascends to the next all at once. Rather, I find that when I look at this particular figure my experience is like the experience I have when I look at an ambiguous figure such as the Necker cube—at a particular time I can see two or three sides of the figures as sets of stairs each ascending to the next, and when I move my eyes I can see a different combination of sides as sets of stairs each ascending to the next, but I cannot have an experience that combines these different interpretations at one time. Obviously I can see the entire figure all at one time, but it is not the figure itself (the two-dimensional drawing on a page) that is impossible; it is a particular interpretation of the figure that is impossible, and I find that my visual system never produces this impossible interpretation. Consequently, given that even when you view an “impossible figure” your visual experience does not possess acutely inconsistent content, it is reasonable to conclude that visual experiences never possess such content.

Ultimately, then, we have at least three reasons for rejecting Tye’s proposal about the content of double vision experience. First, his proposal relies on the speculative empirical claim that there is a stage in visual processing corresponding to Tye’s array. Second, even if there is such a thing as Tye’s array it would be perfectly reasonable to deny that this array is a

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28 In fact, there are independent reasons for thinking that when you fixate on one side of the figure your visual system will ignore the competing information from the other side of the figure: when you look at a modified Necker cube where one region is clearly unambiguous and you fixate on the opposite ambiguous region, you experience the same perceptual switching that you experience when viewing a standard Necker cube (see Peterson and Hochberg [1983]).

29 The other example Tye appeals to is the waterfall effect. He claims (Tye 2000, 75) that when one experiences the waterfall effect some object seems to both move and not move at the same time, which is impossible (Crane [1988] makes the same claim). Once again I find the description of the phenomenology is mistaken: when I experience the waterfall effect a single object does not appear to be both moving and not moving at the same time and in the same respect. Bayne (2007, 203) expresses the same scepticism regarding this example.
component part of conscious visual experience. And third, the proposal that at the level of Tye’s array the double vision experience represents two regions of the page as black has the unacceptable consequence that the content of such an experience is acutely inconsistent. As such, we do not yet have a reason to think that the contents of normal visual experiences differ from the contents of double vision experiences.

2.2.3 Subjective Direction

If it is implausible to claim that the double vision experiences in the cases at issue represent the presence of two objects in front of you, and if distinguishing between different levels of perceptual content is no help, then where else can the anti-separatist look for a representational difference between normal and double vision? One might think that the position of one’s eyes is relevant here. In the two cases described above, the double vision experience is produced by altering the orientation of one’s eyes (either by pushing on an eye or by re-focusing one’s eyes). Consequently, an anti-separatist might claim that the position of objects relative to the orientation of one’s eyes is included in the content of visual experience. Such a view would enable the anti-separatist to claim that because the normal and double vision experiences in our examples differ with respect to the orientation of one’s eyes, there must be a difference of intentional content between them.

The most natural way to state this objection would be to say that the intentional difference between the normal and double vision experiences concerns the representation of the *subjective direction* of objects. Consider, for instance, the finger example. The normal experience involves only a single image of the finger because the direction of the finger is perceived relative to a single point—specifically, relative to a point between one’s eyes (the “cyclopean eye”). In this particular case, then, the finger looks to be precisely straight ahead relative to one’s vantage point. Conversely, so the present objection would go, the double
vision experience involves two images of the finger because the direction of the finger is perceived relative to each eye. That is, the finger looks to be slightly to the right of the visual axis (a line passing through the centre of the fovea and the fixation point) of your left eye and also slightly to the left of the visual axis of your right eye. Consequently, since the direction of an object relative to one’s vantage point is surely included in the intentional content of visual experiences, the normal and double vision experiences of the finger differ with respect to their intentional content.

This type of objection has a couple of things to recommend it. First, one cannot deny the assumption that visual experiences represent objects as being in certain directions relative to one’s own vantage point. Second, one cannot deny that in the example at issue one’s eyes are first pointed directly at the finger and then are pointed slightly beyond the finger. Nonetheless, this objection fails because it requires that when you have a double vision experience you see the position of different objects relative to different vantage points at the same time, but this is not the case.

Consider a case where one object is seen normally while another object is seen doubly—for instance, consider what your visual experience is like when you hold up a second finger just beyond the first, and focus your eyes on the second finger. In such a case, the nearer finger will appear double but the more distant finger will not; yet, the more distant finger will appear to be precisely straight ahead relative to the cyclopean eye. The present proposal requires, then, that in such a case the more distant finger is seen relative to the vantage point of the cyclopean eye while, at the same time, the nearer finger is seen relative to the vantage point of each eye. In other words, the suggestion is that in binocular vision we see the directions of objects relative to three different vantage points at once (Hellie [2005, 17-19] accounts for double vision experiences by providing just such a theory of binocular vision).
However, there are strong reasons for thinking that in binocular vision, the direction of objects relative to each eye is not included in the content of visual experiences (in other words, there are strong reasons for thinking that when we have binocular visual experiences we see the direction of objects relative to the vantage point of the cyclopean eye alone). First, we do not just see objects to be in some absolute direction relative to our vantage point, but we also see objects to be in certain directions relative to other objects. That is, you do not just see that some object is, say, off to the left relative to your vantage point, but you also see that that object is a certain number of degrees to the left of some object that looks to be straight ahead relative to your vantage point. But, of course, one object can only look to be in a certain specific direction relative to another object so long as both are seen from the same vantage point. For instance, when you hold up a finger directly in front of your nose and hold up a second finger just beyond and to the right of the first finger, the more distant finger will look to be farther off to the right of the closer finger when viewed with your right eye alone than it will when viewed with your left eye alone—the direction of the one finger relative to the other changes depending on one’s vantage point, and so the one cannot look to be in a certain specific direction relative to the other unless both are seen from a specific vantage point. Consequently, if in binocular vision we saw the directions of objects relative to three different vantage points at once, then certain visible objects would not look to be in a certain specific direction relative to certain other visible objects. For instance, objects to your far left that are visible to your left eye alone would not look to be a certain specific number of degrees to the left of objects to your far right that are visible to your right eye alone. However, in a typical binocular visual experience objects visible to your left eye alone do indeed look to be a certain specific number of degrees to the left of objects visible to your right eye alone.
Another reason for thinking that in binocular vision the direction of objects relative to each eye is not included in the content of visual experiences is the fact that if an object that is visible to one eye alone is located on the visual axis of that eye, that object will look to be exactly straight ahead relative to the vantage point of the cyclopean eye.\textsuperscript{30} To test this for yourself, take a hollow tube roughly 12 inches long and look through it with your right eye while keeping your left eye closed. Next, put a pencil down in front of you on a desk and look at it through the tube, getting your head down close to the desk so that you’re viewing the pencil from just slightly above it. Position the pencil precisely along the visual axis of your right eye such that it looks to be pointing directly into your eye; then take your free hand and hold it up next to the far end of the tube so as to occlude your left eye’s view of the pencil once you have opened it. If you now open your left eye you should seem to be seeing the pencil through a hole in your left hand. For our purposes, the important point is that, if you have done this right, the pencil will look to be pointed directly at the cyclopean eye (just how badly you are misperceiving the relative position of the pencil will become clear once you move the tube and your hand out of the way). If the perspective of each eye were preserved in binocular visual experiences then there would be no reason for the pencil to look to be pointed at the cyclopean eye in such a circumstance. So, since we find that the pencil does indeed look to be pointed at the cyclopean eye in this case, we should conclude that in binocular vision the direction of all objects, even those that are visible to one eye alone, is seen relative to the vantage point of the cyclopean eye.\textsuperscript{31}

\textsuperscript{30} Ewald Hering was one of the first scientists to recognize this fact. The following example is a variation on an experiment of Hering’s—see Howard and Rogers (1995, 596) for a description.

\textsuperscript{31} Binocular rivalry is further evidence for this conclusion (see §2.2.2): if binocular visual experiences represented the direction of objects relative to each eye there would be no perceptual conflict when disparate stimuli are presented to each eye. In addition, as Blake notes, when one of the two stimuli is dominant, the subject cannot tell which eye that stimulus is being presented to: “the observer ‘sees’ a stimulus without regard to its eye of origin” (2001, 19).
For reasons such as these, then, we ought to conclude that in binocular vision the direction of objects relative to each eye is not included in the content of visual experience. Consequently, since the reply at issue (that the content of one’s double vision experience differs from that of one’s normal experience with respect to the representation of subjective direction) requires that binocular visual experiences typically represent the directions of objects relative to three vantage points at once, that reply is implausible.

2.2.4 Fregean Representationalism

It looks like it is implausible, then, for the anti-separatist to appeal to either the representation of the number of objects in front of one, or to the representation of the direction of those objects, and these seem to be the only external properties and relations that the anti-separatist can plausibly appeal to. However, it would be possible for the anti-separatist to abandon the claim that the two experiences of the line of type and the finger represent different states of affairs, but nonetheless still maintain that the contents of those experiences differ. There are two different ways one could do this: first, one could maintain that the phenomenal character of an experience is included in the content of that very same experience; and second, one could claim that the contents of the experiences that figure in our examples involve distinct modes of presentation. I have already discussed the first suggestion in connection with the trees argument (§2.1.3); however, something needs to be said regarding the second suggestion.

The claim that perceptual contents involve modes of presentation is characteristic of a view known as Fregean representationalism (which has been developed by Chalmers [2004] and Brad Thompson [2006; 2009]). Defenders of this view agree with traditional representationalists that there are intentional contents such that any experience that has that content has a certain specific phenomenal character and any experience that has that phenomenal character has the relevant intentional content. However, they differ from
traditional representationalists in that they maintain that the relevant intentional contents do not involve objects and properties but rather modes of presentation of objects and properties. As Chalmers (2004, 172) explains it, modes of presentation should be thought of here as “conditions on extension”: the content of a given experience involves specific conditions that an object or property must satisfy in order to be the object or property represented by that experience.

One might think that a Fregean representationalist has the resources to handle problem cases like double vision. After all, one of the stated advantages of this variety of representationalism is its ability to handle inverted spectrum scenarios where two different subjects have experiences that differ phenomenally but that attribute the same physical colours to objects.32 A representationalist who maintains that perceptual content involves properties can’t allow for spectrum inversion without illusion—every phenomenally red experience has to possess the content that a specific physical property is instantiated in one’s environment. But according to the Fregean, every phenomenally red experience only has to possess a content involving a specific mode of presentation, and that same mode of presentation can pick out different physical properties in different subjects or in different environments. For example, Chalmers describes the mode of presentation necessarily connected to phenomenally red experiences as something like “the property that normally causes phenomenally red experiences in me” (2004, 176).33 So, if we imagine that there are two subjects whose colour experiences are inverted relative to one another, when the first subject has a phenomenally red experience the content of that experience will involve a different mode of presentation than will be involved when the second subject has a phenomenally green experience; but nonetheless these two experiences will pick out the same physical property because the same

33 Thompson (2009) is committed to the same view.
property satisfies the relevant condition relative to each subject (i.e. the physical property that
normally causes phenomenally red experiences in the first subject normally causes
phenomenally green experiences in the second subject).

Since Fregean representationalism allows for phenomenally distinct experiences to
represent the same state of affairs, one could try to explain the intentional difference between
normal and double vision by appealing to distinct modes of presentation. However, this view
is only able to handle spectrum inversion by building the normal causal basis of a particular
type of experience into the mode of presentation. A similar approach can of course be taken to
other properties: for instance, Chalmers maintains that the mode of presentation of spatial
properties and relations “are determined as that manifold of properties and relations that serves
as the normal causal basis for the corresponding manifold of spatial experiences” (2006,
106). But any attempt to extend this approach to distinguishing the content of normal visual
experiences from that of double vision experiences will have unacceptable consequences.

Consider the two experiences of the finger again. The Fregean representationalist
might claim that the content of the normal visual experience of the finger involves a mode of
presentation like *the property that normally causes phenomenally singular experiences*, while
the content of the double vision experience of the finger involves a mode of presentation like
*the property that normally causes phenomenally double experiences*. The problem, however,
is that many different things can cause phenomenally singular and phenomenally double
experiences. This difficulty is clearest with respect to phenomenally singular experiences: in
any given case the property of an object in virtue of which it causes a phenomenally singular
experience will be the property of standing in a certain relation to the eyes of the subject; but,
the nature of that relation varies greatly depending on the circumstance. Frequently you have a

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34 Thompson (forthcoming) makes a similar proposal.
phenomenally singular experience of an object because it is positioned relative to the orientation of your eyes such that it reflects light onto corresponding areas of each retina (not necessarily exactly corresponding areas, but at least within a certain range). But you also frequently have a phenomenally singular experience of an object because, even though the object is not positioned relative to the orientation of your eyes such that it reflects light onto corresponding areas of each retina, the view of one eye is suppressed from your conscious visual experience. Additionally, you often have a phenomenally singular experience of an object because it is visible to one eye only—either because you have only one eye open, or because, while both eyes are open, the object is to your far left or right, or some object is occluding the view of one eye but not the other.

Given the variety of situations in which an object will cause a phenomenally singular experience it would be a mistake to suggest that every phenomenally singular experience attributes the property that normally causes phenomenally singular experiences to the object causing that particular experience. In order to illustrate the problem, let us assume that the property that normally causes phenomenally singular experiences is the property of reflecting light onto corresponding areas of each retina. If so, a simple way to underline the difficulty with the Fregean view would be to point to monocular visual experiences. When I view a finger with one eye only I have a phenomenally singular experience of the finger; but if every phenomenally singular experience involves a mode of presentation like the property that normally causes phenomenally singular experiences then my monocular visual experience misrepresents my finger to be reflecting light onto corresponding areas of each retina. In other words, the Fregean proposal at issue would have the consequence that when you look directly

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35 See, for example, Schor (2000, 243).
at a finger with one eye only your experience is an illusory representation of having both eyes pointed at the finger. Such a result is clearly unacceptable.\(^{36}\)

Normally, there is a distinct phenomenal difference between viewing an object with two eyes and viewing an object with one eye only—in binocular vision there is a special kind of depth phenomenology that is lacking in monocular vision. Consequently, this simple example would not undermine a more sophisticated Fregean view such as that proposed by Thompson (2009, 112), where what a certain phenomenal property represents depends on what other phenomenal properties are instantiated elsewhere in the visual field. However, making the relevant modes of presentation sensitive to the context of the entire visual field does not eliminate the problem. For instance, if you are viewing an object with both eyes and the view of one eye is suppressed, your visual experience will be phenomenally singular but will lack the depth phenomenology just mentioned. Such an experience might have the same total phenomenology as a monocular experience of some object, and so it would still be a mistake to say that the monocular experience represents the property that normally causes experiences with the relevant phenomenology. Moreover, you can have a phenomenally singular binocular experience of a given object with the typical depth phenomenology when one eye’s view of the object is occluded but the other’s is not.\(^{37}\) But, again, we would not want to say that any such experience misrepresents the object to be reflecting light onto corresponding areas of each retina. (Here it might be objected that in cases where one eye’s view of the object is occluded you seem to see the object through a translucent intervening object, and so there will be a phenomenal difference somewhere in the visual field between such cases and normal binocular

\(^{36}\) The same difficulty would face a representationalist approach to double vision that appealed to the representation of “dispositional appearance properties” of the sort Shoemaker (2001) describes.

\(^{37}\) This phenomenon is sometimes called “da Vinci stereopsis”: see Nakayama and Shimojo (1990).
experiences; however, this feature of the case could be replicated by looking directly at some object with both eyes through a translucent object of the right sort.)

Ultimately, then, it appears as though someone who wants to hold onto the claim that an experience’s intentional content determines its phenomenal character is in a difficult position. It is obvious that the normal experience and the double vision experience of a line of type or a finger instantiate different sensory qualities, yet it seems plausible to say that there is no intentional difference between them. Someone who wants to avoid separatism must provide an account of the two experiences such that they differ with regard to their intentional content; but, as we have now seen, there are a limited number of available options and none of them are ultimately acceptable. For the reasons outlined above, it just is not plausible to claim that double vision experiences represent the presence of two objects (as Huemer does), even if you restrict your claim to some specific level of perceptual content (as Tye does). Neither can the anti-separatist appeal to the representation of subjective direction. Moreover, attempts to find an intentional difference that does not concern the representation of external properties and relations are no more promising: while appealing to modes of presentation involving the normal causal basis of a particular sort of experience enables the representationalist to maintain that phenomenally distinct experiences represent the same state of affairs, this approach cannot be extended to handle double vision. So, assuming that there are no other reasonable options remaining, we are left with our original conclusion. The normal and double vision experiences involved in the cases outlined above differ phenomenally but possess the same intentional

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38 A Fregean representationalist might try to get around these problems by including the viewing conditions in the relevant modes of presentation. For example, one might claim that the normal visual experience involves a mode of presentation like the property that normally causes phenomenally singular experiences under present viewing conditions. The problem, however, is that once you build “present viewing conditions” into the mode of presentation it becomes almost impossible for visual experiences to be inaccurate—a point recognized by Thompson ([2009, 110-11]).
content. As such, an experience’s intentional content does not determine the sensory qualities in instantiates.
Chapter 3
Same Sensory Qualities but Different Content

If the previous chapter’s arguments are sound then an experience’s intentional content does not determine the sensory qualities it instantiates. However, this conclusion constitutes only one half of moderate separatism; it remains to be shown that an experience’s sensory qualities do not determine its intentional content. In the previous chapter we saw that a simple method for demonstrating that an experience’s intentional content does not determine its sensory qualities is to point to ordinary examples of experiences that have the same intentional content but instantiate different sensory qualities. We can use a similar strategy to establish the second half of the moderate separatist position so long as we can find examples of the right sort. Specifically, we need to find examples of experiences that have the same sensory qualities but differ with regard to their intentional content.

In the present chapter I will argue that the sensory qualities instantiated by an experience do not determine its intentional content by appealing to two relatively simple examples. First, in §3.1, I will consider a case where a certain figure printed on a page is seen first as a mere figure of a certain shape, but later is seen as a symbol of a certain type. The two visual experiences involved here can plausibly be described as instantiating the same sensory qualities but differing with regard to their intentional content. If you want to maintain that sensory qualities determine intentional content, then, you have only two options: either you must deny that these two experiences of the figure in question instantiate the same sensory qualities or you must deny that they differ with regard to intentional content. My primary task will be to consider and reject each of these possible replies.

Second, in §3.2, I will describe a case where at first you seem to see an object in front of you through a window, but later see that you are in fact looking at an object behind you
reflected in a mirror. Again, the two experiences involved here can plausibly be described as
instantiating the same sensory qualities but differing with regard to intentional content: the first
experience is an illusory representation of an object in front of you on the other side of a
window, whereas the second is a veridical representation of an object behind you reflected in a
mirror. And once again, there are only two possible replies: either one must deny that these
two experiences instantiate the same sensory qualities or one must deny that they differ with
regard to intentional content. I will argue that neither reply is acceptable.

I should note that, unlike the previous chapter, the two different arguments I am about
to present have exactly the same conclusion. Both examples purport to involve experiences
that instantiate the same sensory qualities but possess different intentional content; so, both
purport to show that an experience’s sensory qualities do not determine or fix its intentional
content. However, there is an important difference between these two examples: they deal
with the representation of different sorts of properties. The first example is concerned with the
representation of a high-level property—being a symbol of a certain sort—rather than with the
representation of low-level properties such as shape, size, colour, and position. Some of the
defenders of (A) and (C) outlined in §1.7—for example, Chalmers, Siewert and Horgan and
Tienson—can accept the claim that the sensory qualities instantiated by an experience do not
fix what high-level properties an experience attributes to objects. Nonetheless, the example is
still significant insofar as it rules out the view that the way a perceptual experience represents
the world to be is completely determined by its sensory phenomenology.¹ Moreover, the
example lends support to the view (discussed in §1.7) that in perceptual experience sensory
qualities receive something like an interpretation.

¹ Tye (1995) seems to be committed to such a view—see §1.7.
The second example is concerned with the representation of a low-level property: the spatial location of an object relative to the vantage point of the perceiver. Since the example purports to show two experiences with the same spatial phenomenology but which differ with regard to the representation of the spatial location of the relevant object, it is at odds with the commitments of most of the defenders of (A) and (C). For example, as we have already seen, Siewert (1998, 221) maintains that any experience instantiating the phenomenal property normally caused by looking at X-shaped objects also has the content that there is an X-shaped object in front of the perceiver; it is natural to assume, then, that he would hold that any experience instantiating the phenomenal property normally caused by looking at an object located in a certain position in front of you also has the content that there is an object located in a certain position in front of you. Similarly, Horgan and Tienson (2002, 524-29) are committed to the view that the representation of the kind of general features at issue are fixed by an experience’s sensory phenomenology. And Chalmers (2004, 177; 2006, 106) maintains that any experience with a certain spatial phenomenology will have as its content a specific location-concerning mode of presentation (see §3.2.2 for discussion). Consequently, while the first and second example I will present are both intended to establish the same conclusion, as the second is concerned with the representation of a lower-level property it is inconsistent with a much wider range of views.

3.1 The Delta Example

As I have said previously (§1.6), Husserl was an early proponent of the view I am calling moderate separatism. In the *Logical Investigations*, he argues that we need to recognize the difference between the sensational element of a perceptual experience and its intentional content. He says he finds “nothing more plain” than the distinction between “perceptual contents in the sense of presentative sensations, and perceptual acts in the sense of
interpretative intentions” (1900/1970, 566). One of the reasons Husserl thinks sensations ought to be distinguished from intentional content is that the same sensations can belong to experiences with different content. To illustrate this point, he appeals to the following example: “let us imagine that certain arabesques or figures have affected us aesthetically, and that we then suddenly see that we are dealing with symbols or verbal signs” (1900/1970, 566). What is the difference between the visual experience we have before we recognize that we are dealing with a symbol and the one we have afterwards? According to Husserl, the sensations are the same but with respect to a certain “act-character”—an aspect of the experience akin to interpretation—these experiences differ (1900/1970, 567). In other words, these two experiences represent different things even though they involve precisely the same sensations.

Accordingly, the moderate separatist can appeal to Husserl’s example as an argument for the claim that the sensory qualities instantiated by an experience do not determine its intentional content. It may be helpful, though, to consider a more specific case. Take, for instance, the following figure:

![Δ]

Imagine a case where you first see this figure without having any notion that it is in fact a symbol. That is, imagine that you first see the figure merely as a triangle made up of lines of different thicknesses. Next, imagine that sometime later you come to the realization (for whatever reason) that the figure you were looking at is in fact a Greek delta. You then look at the figure again (under exactly the same conditions as before) and have another visual
experience, but this time you see the figure as a Greek delta.\(^2\) I will call this case the \textit{delta example}.

It is at least plausible to assume that the two visual experiences involved in this case differ with respect to their intentional content. Your first experience, it seems natural to say, represents the presence of a triangle made up of lines of different thicknesses on a page in front of you. Your second experience, it seems natural to say, also represents the presence of a Greek delta on a page in front of you. Both experiences are accurate but they nonetheless differ in content—just as the belief that there is a triangle on a page in front of you differs in content from the belief that there is a Greek delta on a page in front of you, even though in the present case both beliefs would be true.\(^3\) Moreover, it is also plausible to assume that the two experiences instantiate the same sensory qualities. After all, neither your visual system nor the figure in question change from one experience to the next and the viewing conditions (we’re supposing) are exactly the same. It seems reasonable to conclude, then, that the two experiences under consideration instantiate the same sensory qualities but differ with regard to their intentional content.

If it is true that these two experiences differ with regard to their intentional content despite the fact that they instantiate the same sensory qualities, then it follows that the sensory qualities instantiated by an experience do not determine its intentional content. Consequently, if you want to reject this conclusion there are only two responses available to you. First, you could insist that the two experiences at issue instantiate different sensory qualities. I will explain why I think such a suggestion would be implausible in §3.1.1 below. Second, you

\(^2\) Other similar examples have been presented by Peacocke (1992, 89-90), Siewert (1998, 257) and Siegel (2006b, 490-91). Auditory versions of this type of example are presented by Husserl (1900/1970, 566-67), Strawson (1994, 5-13), Siewert (1998, 275-76), and Horgan and Tienson (2002, 523). Strawson’s auditory version was discussed in §1.5.2.

\(^3\) The content of these two experiences is alike with respect to the representation of certain basic properties; a natural response, then, might be to claim that an experience’s sensory qualities are necessarily connected only to content concerning such basic properties. I discuss this type of response in §3.1.2 below.
could insist that the intentional content of the two experiences is the same. In §3.1.2 below I
will argue that the most reasonable view of the matter is that the two experiences differ with
respect to their intentional content. If, as I hope to show, neither of the two available responses
is successful, then we have to accept that the delta example does indeed involve an intentional
difference with no accompanying sensational difference.

3.1.1 The “Different Sensory Qualities” Reply

One’s initial reaction to the delta example might be to complain that in fact there is a
significant phenomenal difference between seeing the figure merely as a triangle and seeing the
figure as a Greek delta. For instance, Siewert makes this very claim with respect to a similar
example. He says that what it’s like for a subject to see a particular figure as an M is different
from what it’s like for the subject to see that same figure as a Greek sigma: “The way it seems
to one changes when one looks at the figure and recognizes it now as one, now as the other of
these letters. The way it seems to me for it to look as if something is recognizable as M-shaped
differs from the way it seems to me for it to look as if something is recognizable as sigma-
shaped. And this difference need not involve my seeing the figure in different orientations”
(Siewert 1998, 257). Susanna Siegel makes this same point with respect to a different
example: “Consider a page of Cyrillic text. The way it looks to someone before and after she
learns to read Russian seems to bring about a phenomenological difference in how the text
looks” (2006b, 490).

These authors clearly believe that if you consult your own experience you will notice a
phenomenal difference between seeing a particular figure as one type of thing and seeing that
figure as another type of thing. However, it is important to recognize that such a claim does
not constitute an objection to the present argument. I agree that the experience of seeing the
above figure merely as a triangle differs in its overall phenomenal character from the
experience of seeing it as a Greek delta. Yet, given the distinctions drawn earlier with respect to different types of phenomenal qualities (§1.5), the fact that there is a phenomenal difference between the two experiences under consideration does not entail that they instantiate different sensory qualities.

Now, of course, it would be possible to reject the present argument by rejecting the distinction between the overall phenomenal character of a perceptual experience and the sensory qualities instantiated by a perceptual experience. That is, one could say: clearly there is a phenomenal difference between the two experiences, and since we cannot divide up the phenomenal character of an experience into different sorts of phenomenal properties, we cannot use the delta example to show that an experience’s phenomenology does not determine its content. I obviously think that such a response is mistaken, but since the motivation for distinguishing different classes of phenomenal properties was provided in chapter one, I won’t address the issue here. I will say, however, that it would be extremely difficult for someone who granted that there is a phenomenal difference between the two experiences of the above figure to deny that we can identify a sensational element shared between the experiences at issue. The difficulty is that the intuition that the two experiences of the figure instantiate the same visual sensations is much stronger than the intuition that there is any kind of phenomenal difference. As such, it seems that one could defend the claim that the overall phenomenology of the two experiences is different only so long as one located that phenomenal difference somewhere other than at the level of mere sensations. In other words, it seems that anyone who is going to maintain that the delta example involves a phenomenal difference is going to be forced to say that while the two experiences instantiate the same sensory qualities, there is
more to the phenomenal character of an experience than just sensory qualities. Consequently, I do not think there is much reason to worry about an objection of this sort.

The fact, then, that there is some kind of phenomenal difference between seeing the figure merely as a triangle and seeing the figure as a Greek delta does not constitute a problem for the present argument; the only relevant issue is whether or not there is a difference specifically concerning the sensory qualities instantiated by the two experiences. Hopefully most people will have the reaction that it is just obvious that the sensory qualities instantiated by your experience do not change when the figure is seen as a Greek delta. As I have said, the figure itself does not change, and we are assuming that neither your visual system nor the viewing conditions change. The only difference between the first and second experience is that in the second instance you recognize the object you are looking at as a Greek delta. By way of analogy, if you are looking at a red paint chip and learn that the particular shade of the chip is called “crimson,” the fact that you now recognize the colour of the chip as crimson does not alter the sensory qualities of your visual experience. I think it is safe to assume, then, that the prima facie correct view of the matter is that simply learning to recognize the above figure as a Greek delta does not change the sensory qualities instantiated by your experience.

Should anyone wish to dispute this view, we can appeal to the method for determining when experiences instantiate the same sensory qualities established in §1.5.1. There I said that if there are no two possible stimuli, \( s_1 \) and \( s_2 \), such that you would judge (upon due reflection) that the object(s) presented in \( e_1 \) looks subjectively more similar to \( s_1 \) than to \( s_2 \) and that the object(s) presented in \( e_2 \) looks subjectively more similar to \( s_2 \) than to \( s_1 \), then \( e_1 \) and \( e_2 \) instantiate the same sensory qualities. It should be clear, however, there are no two stimuli you could point to regarding which it would be true to say that when you see the figure merely as a

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4 This is why different philosophers have relied on examples of this type to show that phenomenal character is not limited to sensory qualities. See, for example, Strawson (1994, 5-13) and Kriegel (2003, 7-8).
triangle it looks subjectively more similar to one of these stimuli than the other, but that suddenly the reverse is true when you see it as a Greek delta. Learning to recognize the figure to be a certain sort of symbol just is not going to make any difference to how subjectively similar it looks to other stimuli. After all, this figure

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looks subjectively more similar to

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despite the fact that we recognize the first and the last of these to be the same letter. And learning that the specific shade of a particular paint chip is called “crimson” does not change how subjectively similar that paint chip looks relative to other paint chips.

Sometimes the way we “interpret” a stimulus does change how subjectively similar that stimulus looks relative to other stimuli. For instance, as noted previously (§1.5.1) when you are looking at an ambiguous figure such as the Necker cube and your “interpretation” of the figure changes, how subjectively similar the figure looks relative to other stimuli changes as well. So if the phenomenological change in the delta example were similar to the phenomenological change that occurs when one views an ambiguous figure, then we would have a reason to think that there is a difference in sensory qualities between the two experiences of the figure in question.

However, if we compare the two cases, it should be clear that the phenomenological changes involved are distinct. When you are looking at an ambiguous figure and your
“interpretation” of it changes, there is a sudden and pronounced phenomenological “switch” or “flip.” For instance, when you look at the Necker cube a certain face will look to constitute the front side of the represented cube; then, suddenly, that same face will look to constitute the back side of the represented cube. And as this change occurs, there is a sudden re-organization of the visual field. Similarly, when you look at the vase/face figure you might first see two faces pointed at one another; then, suddenly, a vase will “pop out” from the centre of the image while the sides of the image recede into the background. Again, there is a pronounced phenomenological switch as certain areas of the image suddenly flip from foreground to background and others flip from background to foreground. In the case of the delta example, however, there is no similar phenomenological switch whatsoever. If you first see the figure merely as a triangle with sides of different thicknesses and then suddenly recognize that the figure is a Greek delta, no visual switch or flip occurs: the different parts of the figure do not suddenly look to be arranged in a different way, no elements of the figure look to have switched from background to foreground or vice versa, the triangle does not suddenly look to point in a different direction, etc.

I think it is safe to conclude, then, that it is implausible to think that how subjectively similar the figure in question looks relative to other stimuli changes when one sees it as a Greek delta. And if there is no difference between seeing the figure merely as a triangle and seeing it as a Greek delta with respect to these sorts of subjective similarity judgments, then we can say that they instantiate the same sensory qualities. Consequently, it would be implausible to claim that the two experiences involved in the delta example instantiate different sensory qualities.
3.1.2 The “Same Intentional Content” Reply

If it is implausible to claim that our two experiences of the Greek delta instantiate different sensory qualities, the only other way to respond to the present argument would be to claim that these two experiences possess the same intentional content. I said above that it is at least plausible that the two experiences of the figure differ in content. It seems reasonable to me to say that before you recognize the figure to be a Greek delta you see it as a triangle with sides of different thicknesses, and that afterwards you see it as a Greek delta. I am claiming, then, that your second visual experience attributes a certain property to the figure—the property of being a Greek delta—that you first visual experience does not attribute to the figure. Some philosophers will be happy to accept that a property like being a Greek delta can be included in the content of a perceptual experience.\(^5\) But obviously such a claim is controversial. A perfectly natural view might be that only certain low-level properties such as shape, colour, position, motion and illumination can be included in the content of a visual experience. In which case, one might object to the present argument by claiming that since there is no difference between the two experiences with respect to the representation of these low-level properties, there is no representational difference at all. In other words, one could claim that the two visual experiences of the figure have the same content because neither represents the figure to be a Greek delta.

To respond to this objection, then, we need to provide an argument for the view that normally when we recognize a figure as a symbol of a certain kind, our visual experience itself represents that the figure is a symbol of a certain kind. Such an argument has recently been presented by Susanna Siegel (2006b). She argues that higher-order properties such as the meaning of a given word or the natural kind to which a given object belongs can be included in

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\(^5\) See, for example, Peacocke (1992, 89-90) and Siegel (2006b).
the content of a visual experience. Accordingly, I am going to adapt her argument to the present case and attempt to show that when you recognize the figure to be a Greek delta, your visual experience itself represents that the figure is a Greek delta.

The first step of Siegel’s argument is to appeal to a “simple and modest” intuition concerning a phenomenal difference between two experiences (2006b, 490). If we substitute the delta example for Siegel’s own, the claim is that your overall experience before you recognize the figure to be a Greek delta differs in phenomenal character from your overall experience after you recognize the figure to be a Greek delta. In other words, the claim here is that if you consult your own experience you will find that what it’s like for you to see the figure merely as a triangle differs in at least some respect from what it’s like for you to see the figure as a Greek delta. The reason this is supposed to be a “modest” claim is that it involves a broad appeal to one’s overall experience when one recognizes the Greek delta; the claim leaves open the possibility that the phenomenal difference might be located somewhere other than in one’s visual experience specifically. Stated in terms of one’s overall experience, the claim does indeed seem difficult to deny. For instance, consider an equivalent auditory example: would anyone deny that what it’s like for you to hear a word in a foreign language is different once you have learned the meaning of the word? 

Assuming, then, that your overall experiences of the figure differ phenomenally, the next premise of the argument is that the phenomenal difference in question is located in your visual experience specifically. The reason we should accept this claim is simply that there are no other mental occurrences to which one might plausibly ascribe the phenomenal change (Siegel 2006b, 492-97). If one wanted to deny that it is the phenomenal difference between

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6 Even someone like Tye who denies that there is something it’s like to grasp the meaning of a word in and of itself will nonetheless grant that one’s overall experience when hearing a word one understands is phenomenally different from one’s overall experience when hearing a word one doesn’t understand. See Tye (1996a, 422).
your two visual experiences that accounts for the phenomenal difference between your overall experiences, then one would have to attribute the phenomenal difference to some other mental occurrences that accompany these visual experiences. But, the options are limited: the only possibilities would seem to be mental imagery, emotional states or cognitive occurrences.

Appealing to mental imagery is no help because there is no reason to admit that one’s visual experiences of the figure must be accompanied by mental imagery of any sort; and even if there were, there would be no reason to admit that one’s experiences of the figure must involve a change of mental imagery. When you recognize the figure as a Greek delta you might imagine yourself saying “that’s a Greek delta”; but there is no reason to think that the example will only involve a phenomenal change so long as some such verbal imagery accompanies your second visual experience. Appealing to accompanying emotions would be no more promising. For example, there is no reason to assume that you must have some specific emotional response upon recognizing the figure to be a Greek delta. Alternatively, one could suggest there is a certain feeling of familiarity that attends one’s second but not one’s first visual experience of the figure. However, we could alter the example such that you are perfectly familiar with the figure prior to recognizing it to be a Greek delta—both visual experiences could be attended by a general feeling of familiarity, and yet there would still be a phenomenal change to be accounted for.

Perhaps a more promising strategy would be to appeal to cognitive occurrences that accompany our visual experiences. For instance, one might suggest that one’s second but not one’s first visual experience is accompanied by a conscious thought or judgment that the figure is a Greek delta. However, as Siegel (2006b, 496-97) argues, usually when we recognize a linguistic symbol or grasp the meaning of a bit of text, our visual experience is not accompanied by any distinct conscious act of recognition. Of course, sometimes when we are
reading we might first see a bit of text and only then consciously recognize something (e.g. when it takes a second to get a joke); but that is not what reading a bit of text or recognizing symbols is normally like. As Siegel says, normally our understanding of the text we are reading “just happens,” the meaning is simply “taken in” visually (2006b, 497). Consequently, we do not have to assume that some distinct conscious thought or judgment accompanies our visual experience when we recognize the figure to be a Greek delta—even if there is no such conscious thought there will still be a phenomenal difference between our overall experiences of the figure. Since, then, there are no other mental occurrences to which one might plausibly ascribe the phenomenal difference, we have to accept that our visual experiences of the figure before and after we recognize it to be a Greek delta differ phenomenally.

The next premise of the argument is that this phenomenal difference between our two visual experiences of the figure is due to a difference in intentional content. Siegel’s defence of this claim is that if the phenomenal difference were not due to a difference in content then “there is such a thing as a non-representational feeling of familiarity” (2006b, 497). That is, if you wanted to deny that there is a difference in content the only other way you could account for the phenomenal difference between the two visual experiences would be to posit a certain kind of “raw” feeling of familiarity that is a component of the second but not the first visual experience. However, Siegel argues that there cannot be a non-representational feeling of familiarity because “familiarity is not the sort of thing that could be felt without any representation of something as familiar” (2006b, 498). Furthermore, even if Siegel is mistaken concerning this particular point, appealing to a general feeling of familiarity would not constitute a plausible objection to the argument. As I have already said, we can alter the delta

7 Personally, I would be happy to allow for a “raw” feeling of familiarity: I think it would at least be possible for the feeling that is usually associated with the representation of something as familiar to be felt in the absence of any such representation.
example so that you are perfectly familiar with the figure before you recognize it to be a Greek delta. Simply recognizing the figure or seeing it to be a familiar object is not enough; you might recognize that the figure is the same figure you have seen a hundred times before, but still when you recognize the figure to be a Greek delta the phenomenal character of your visual experience will be different. Consequently, unless we admit that our two visual experiences of the figure differ in intentional content we have no plausible account of the phenomenal difference between them.

The final premise of the argument is that the difference in content between the two experiences specifically concerns the property of being a Greek delta. In other words, the claim is that the specific difference in content is that the second visual experience represents the figure to be a Greek delta while the first does not. Now, Siegel (2006b, 498-500) defends the final premise of her argument against alternative accounts of the representational difference in question, but I will not do so here. The point of the delta example is that visual experiences that instantiate the same sensory qualities can possess different intentional content. I assume that the intentional difference between the two visual experiences of the figure is that the second represents the figure to be a Greek delta while the first does not; but if someone wanted to claim that, while there is some difference in content between the two experiences, this difference does not concern the property of being a Greek delta, I would have no reason to argue with her. All my argument requires is that the intentional content of these two visual experiences differs in some respect.

So, assuming that this defence of Siegel’s argument is adequate, we ought to grant that the two visual experiences of the figure differ in intentional content. And if the arguments of the previous section (3.1.1) are also successful, then we can conclude that the delta example does indeed involve a difference in intentional content where there is no difference in sensory
qualities. The delta example demonstrates, then, that the sensory qualities instantiated by an experience do not determine its intentional content. However, as I’ve acknowledged above, the consequences of the delta example are limited insofar as the example deals with the representation of a high-level property—being a Greek delta—rather than with the representation of low-level properties such as shape, colour, and position. As such, one possible response to the argument would be to grant that an experience’s sensory qualities do not determine what higher-level properties are represented by that experience, yet claim that this is not the case for lower-level properties such as those just listed. Strictly speaking, such a claim would not be inconsistent with moderate separatism; but the worry would be that if the moderate separatist cannot show that experiences instantiating the same sensory qualities can differ with regard to the representation of such low-level properties, then his claim that an experience’s sensory qualities do not determine its intentional content will not seem terribly controversial. It would be useful, then, if the moderate separatist could produce an example that specifically concerns the representation of properties such as shape, colour or position. Our next example is one of just this sort.

3.2 The Mirror Example

Presumably everyone reading this has had an experience where he or she was fooled by a mirror. Sometimes when you are in unfamiliar surroundings and a mirror is placed in just the right location it looks to you like the room you are in is larger than it actually is; then, later, you acquire more information and realize that you are not looking into open space but at the surface of a mirror. Other times there are instances when you cannot tell for a moment whether you are looking at a mirror or not—maybe the room continues or maybe there is a mirror positioned just so, but from a certain position you cannot tell which it is. Later on, you
are able to settle the question as you acquire new information, and then when you look again
the indeterminacy of your previous visual experience disappears.

In cases such as these, when you are first fooled by a mirror but then realize your
mistake (or when you are first uncertain of your surroundings but then make an accurate
determination), there seems to be change with respect to what your visual experience “says”
about your surroundings: first you are suffering under a visual illusion in that you seem to see
an open space where there is none, but later you have an accurate experience of a reflection in
a mirror. However, on a purely sensory level, your experience does not seem to change at all.
Accordingly, the moderate separatist can appeal to such cases as an argument for the claim that
the sensory qualities instantiated by an experience do not determine its intentional content.

We need a specific example, though, so imagine a case where you are facing a mirror
but from your position the only thing you can see reflected in the mirror is a single pillar in an
otherwise empty room. Now, imagine that when you first look at the mirror it appears to you
that you are looking through a window at a pillar in the next room. Next, imagine that
sometime later you come to recognize (for whatever reason) that what you took to be a window
is in fact a mirror, and what you took to be a pillar in the next room is in fact a pillar some
distance behind and to one side of you. You then look at the mirror again (under exactly the
same conditions as before), but this time you see that the pillar is behind you and is being
reflected by the mirror in front of you. I will call this case the mirror example.

It is at least plausible to assume that in such a case your two visual experiences differ
with regard to their intentional content. Your first experience, it seems natural to say, is an
illusory representation of a pillar some specific distance in front of you on the opposite side of
a window. Conversely, your second experience seems to be an accurate representation of a
pillar located behind you reflected in a mirror. Moreover, it is also plausible to assume that
these two experiences instantiate the same sensory qualities. After all, neither your visual system nor the visible scene has changed, and the viewing conditions (we are supposing) are exactly the same. It seems reasonable to conclude, then, that the two experiences under consideration instantiate the same sensory qualities but differ with regard to their intentional content.\textsuperscript{8}

If it is true that the intentional content of these two experiences is different despite the fact that they instantiate the same sensory qualities, then it follows that the sensory qualities instantiated by an experience do not determine its intentional content. Accordingly, as with the argument of the previous section, there are only two ways to respond to this argument. First, you can insist that the two experiences possess the same intentional content. To do so, however, you would have to claim either that both experiences represent the location of the pillar accurately or that both represent the location of the pillar inaccurately; in §3.2.1 below I will argue that neither of these options is plausible. Second, you can claim that the two experiences instantiate different sensory qualities; I will explain why I think such a suggestion would be implausible in §3.2.2 below. If, as I hope to show, neither of these two available responses is successful, then we should conclude that the mirror example involves an intentional difference with no accompanying sensational difference. Moreover, if the present argument is successful, it shows that even the representation of low-level properties such as an object’s position is not fixed by an experience’s sensory qualities. Specifically, the argument shows that the spatial phenomenology of an experience does not determine the representation of an object’s spatial location relative to the vantage point of the perceiver.

\textsuperscript{8} Looking at a pillar in a mirror is a famous example of Grice’s (1961, 142). The fact that looking at an object reflected in a mirror can often be phenomenally similar to looking at an object through a window has been noted by at least two different philosophers. Broad (1923, 317-18) says that a visual experience of a light source reflected in a mirror will possess precisely the same “sensa” as an experience of a similar light source viewed through a thin pane of glass (assuming the light source is in the right position). Stalnaker (1996, 107) points out that a situation in which you were looking at trees through a window could produce an illusory experience of trees reflected in a mirror.
3.2.1 The “Same Intentional Content” Reply

I have said that it is at least plausible to assume that the two experiences differ with regard to their intentional content. In cases where you are fooled by a mirror it seems natural to say that it is your visual experience itself that is the source of the mistake. In our specific example, it seems natural to say that your first visual experience represents the pillar to be located in front of you on the other side of a window, and is therefore illusory. Further, it seems natural to say that once you have discovered your mistake and look again, your visual experience now accurately represents that the pillar is behind you and is being reflected by a mirror.

Now, very often when we discover visual mistakes we cannot alter the illusory content of our experience. For example, once you have measured the two lines in the Müller-Lyer diagram and discovered that they are the same length they continue to look to be different lengths. However, we are also often able to eliminate visual illusions by acquiring new information. For instance, it sometimes happens that your visual experience gets the size of some unfamiliar object wrong when you first see it; but once you have gotten close enough to it, or once you have seen it next to some other object the size of which you are familiar with, your visual experience no longer misrepresents its size. It seems plausible to treat the mirror example as analogous to such a case—first you are subject to a visual illusion, but when you learn that what you took to be a window is in fact a mirror, the content of your visual experience is corrected.

I acknowledge, of course, that there will be a good deal of shared content between the two experiences in the mirror example. For instance, both of your experiences will attribute the same colour and shape to the pillar. My claim is only that your two experiences differ with regard to the representation of the spatial location of the pillar. If so, then the example shows
that the representation of spatial location is not determined by an experience’s spatial phenomenology (assuming that the two experiences instantiate the same sensory qualities—a point which will be addressed in the following section). Someone who wants to reject this consequence, then, must either say that both experiences represent the location of the pillar accurately or that both experiences represent the location of the pillar inaccurately. The problem facing someone who wants to reject the present argument, however, is that neither of these two options is satisfactory.

First, let us consider the view that both experiences are illusory. One could object to the present argument by granting the assumption that the first experience represents the pillar to be in front of you while denying the assumption that the second experience does not. In other words, one could hold that both times you look at the pillar reflected in the mirror your experience represents the pillar to be in front of you, and therefore that both experiences are illusory. According to such an account, the first time you see the pillar in the mirror you are fooled because you judge in accordance with the content of your visual experience; but the second time you see the pillar in the mirror, while the content of your visual experience does not change, you nevertheless judge that the pillar is located behind you. The two times you look at the pillar in the mirror are different, then, not because the content of your visual experience itself is different, but only because you make an accurate judgment in the second instance that you fail to make in the first instance.

There are at least two reasons for rejecting such an account of the mirror example. First, since there is nothing special about looking at pillars in mirrors, such an account is only plausible so long as we assume that all visual experiences involving mirrors are illusory. Some scientists and philosophers have in fact maintained that every time we see an object reflected in

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9 A Fregean account may provide an exception. This point is addressed below.
a mirror our visual experience inaccurately represents an object to be on the far side of the mirror. However, there is good evidence to the contrary. Specifically, Jones and Bertamini (2007) have shown that when a subject can see both an object and its reflection in a mirror, the perception of the reflection improves the representation of the size and distance of the relevant object. If the visual system were always fooled by reflections in mirrors then in such situations a subject would perceive two objects, and as such the properties of the one would not provide any information about the size and distance of the other.

Second, the claim that both experiences of the pillar in the mirror represent the pillar to be in front of you is unacceptable because it makes the second experience a case where what your eyes are telling you is inconsistent with what you believe. The problem with such a suggestion is that the phenomenology of the second visual experience of the pillar is not similar to the phenomenology of other cases where what your eyes tell you is inconsistent with what you believe. Consider, for instance, what it’s like to be subject to the Müller-Lyer illusion after having measured the two lines in the diagram. In such a case you are immediately aware of a conflict between what your eyes are telling you and what you know to be the case. In such a case you feel a disconnect between your different mental occurrences (a feeling that can be strange and even uncomfortable). Conversely, after you have discovered that what you took to be a window is in fact a mirror, you do not sense any conflict between your visual experience and your beliefs about the scene in front of you (and this is also true of your visual experiences of reflections generally). One might suggest that the difference has to do with the frequency with which one encounters mirrors, but this fact is not relevant: one’s familiarity with the Müller-Lyer illusion does not have any tendency to eliminate one’s immediate awareness of the conflict between one’s visual experience and what one believes.

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10 See Clark (1996, 489-90) and Gregory (1997, 77-8).
Consequently, since there are fundamental phenomenological differences between the second visual experience of the pillar and cases where the content of your visual experience is inconsistent with what you believe, it is implausible to claim that this second experience represents that the pillar is in front of you.\textsuperscript{11}

A more sophisticated way of maintaining that both experiences of the pillar in the mirror are illusory would be to appeal to a distinction between different levels or layers of content. Specifically, a Tye-style account of the case would be that at the nonconceptual level of content the two experiences both represent the pillar to be in front of you (so both experiences are illusory at this nonconceptual level), but that the two experiences differ with regard to the “epistemic or conceptual” level of content. When you see the physical scene the second time, so the account would go, you see it \textit{as} a mirror image or reflection of a pillar located behind you; whereas, you do not conceptualize the scene this way the first time you see it.\textsuperscript{12} Such an approach would avoid the difficulties of the previous account, since it does not posit a conflict between the content of visual experience and the content of the judgment the experience gives rise to. However, such an account would be unacceptable because it has the consequence that the content of your second visual experience is acutely inconsistent: on this view, the second time you look at the pillar your experience represents both that the pillar is in front of you and that the pillar is behind you at the same time. However, as I have already argued (§2.2.2), the claim that visual experiences ever possess acutely inconsistent content is implausible.

\textsuperscript{11} In chapter two I argued that double vision experiences cannot be considered illusory for the same reason (see §2.2.1).

\textsuperscript{12} Such an account would be consistent with moderate separatism, strictly speaking, since it involves a difference of content \textit{at some level}. However, this account would allow one to maintain that the nonconceptual representation of an object’s position is fixed by an experience’s sensory qualities and I want to rule out such a view.
It looks as though it is implausible, then, to claim that both experiences involved in the mirror example represent the location of the pillar inaccurately. Consequently, if one wants to maintain that both experiences have the same content, the only option is to claim that both experiences are accurate. I can see two different ways of doing this: first, you could say that both experiences are neutral with respect to the location of the pillar; and second, you could say that both experiences represent the pillar to be located behind you.\textsuperscript{13}

Let us consider the former suggestion first. It is at least possible that one might want to maintain that the two visual experiences involved in the mirror example do not specify the location of the pillar—perhaps one could claim that both experiences represent merely that there is a pillar somewhere nearby. If that were true, then since there is a pillar in the vicinity each time you look, it follows that both experiences are accurate. Alternatively, one could claim that the two experiences involved in the mirror example represent that the pillar is located \textit{either} in a certain position in front of you \textit{or} in a certain position behind you. If that were the case then both experiences would be accurate because there is a pillar in the appropriate position behind you each time you look. It should be obvious that both of these suggestions are highly counter-intuitive. It is difficult to understand the notion that a visual experience could represent merely that some object is nearby without specifying where. And the suggestion that the experiences featured in the mirror example are accurate so long as there is a pillar \textit{anywhere} nearby just seems false. It is similarly difficult to understand how an experience could represent that \textit{either} an object is in one location \textit{or} another entirely different location.\textsuperscript{14}

\textsuperscript{13} Another possibility might be to claim that both experiences accurately represent that light reflected from the pillar is emanating from in front of you. However, I need not deny such a claim since I maintain only that the two experiences differ with regard to the representation of the location of the pillar.

\textsuperscript{14} One final possibility would be to maintain that the location of objects is not included in the content of visual experience. However, it is not obvious how an experience could represent one’s environment to be a certain way without representing the location of objects.
More importantly, neither of these suggestions would be able to explain the phenomenal difference between the two experiences featured in the mirror example. I assume that most everyone would grant that what it’s like to see the pillar as located in front of you is different at least in some respect from what it’s like to see the pillar as located behind you. But according to the account at issue, both times we look at the pillar in the mirror our visual experiences are exactly alike; the only difference concerns the judgement that each of the two experiences gives rise to. Specifically, the two experiences specify the same range of possible locations of the pillar, but the first time we look we judge that the pillar is located in a certain position in front of us, and the second time we look we judge that the pillar is located in a certain position behind us. As such, the only way for someone defending such an account to explain the phenomenal difference between seeing the pillar as in front of you and seeing it as behind you would be to maintain that you make different conscious judgments in each case. In other words, someone defending such an account would have to say that visually locating the pillar is a matter of first seeing that the pillar is within a certain range of possible locations and then consciously choosing one of the locations within that range. However, it should be clear that when you locate the pillar visually you do not consciously choose a particular location amongst a range of possibilities. There is an analogy here with Siegel’s (2006b, 497) point about understanding the meaning of a given bit of text. Seeing the pillar to be in a certain location is something that “just happens,” something that is simply “taken in” visually; it is not something that requires a distinct conscious judgment. Therefore, we ought to reject any account of the mirror example according to which the relevant experiences are neutral with regard to whether the pillar is located in front of or behind you.

If you want to maintain, then, that the two experiences involved in the mirror example are both accurate, the only other option would be to maintain that both experiences represent
the pillar to be located behind you. According to such an account, both experiences represent
that there is a mirror in front of you reflecting a pillar located behind you. But, the first time
you see the pillar in the mirror you are fooled because you mistakenly judge (contrary to the
testimony of your eyes) that there is pillar in front of you on the other side of a window. When
you look a second time, you are not fooled because you refrain from making this faulty
judgment thanks to whatever additional information you have acquired in the meantime. The
two times you look at the pillar in the mirror are different, then, not because the content of your
visual experience is different, but because you make a faulty judgment in the first instance that
you avoid making in the second instance.

Such an account of the mirror example is unacceptable for at least a couple of reasons.
First, this account makes the first experience of the pillar an instance where what your eyes are
telling you is inconsistent with what you believe or judge to be the case. The problem with
such a suggestion is that the phenomenology of the first visual experience of the pillar is not
similar to the phenomenology of other instances where what your eyes are telling you is
inconsistent with what you believe to be the case. Specifically, when you view the pillar in the
mirror for the first time you are not aware of a conflict between what your eyes are telling you
and what you believe to be the case—rather you enjoy a perfectly ordinary visual experience of
a pillar on the other side of a window. Given these phenomenological considerations, then, it
is implausible to maintain that your first experience of the pillar in the mirror represents the
pillar to be located behind you despite the fact that you judge it to be located in front of you.

The second problem with the present account is that people do not form judgments
inconsistent with the content of their visual experiences unless they have independent reasons
for doing so (in other words, you need a reason for not believing your eyes). For example, if
you were completely unfamiliar with the Müller-Lyer diagram, when you first viewed it you
would certainly judge that the two lines were different lengths. It is not until you measure the lines, or until someone tells you it is a trick, that you judge the lines to be the same length. However, with respect to the mirror example, there is no necessity to presuppose that you have any independent reasons for judging, contrary to the content of your visual experience, that there is a window in front of you rather than a mirror and that the pillar you see is in front rather than behind you. In fact, we can stipulate that you have no independent reasons for so judging and the example is still perfectly comprehensible. As such, the claim that the first experience represents the pillar to be behind you makes your judgment that the pillar is actually in front of you a complete mystery. Such an account of the mirror example is implausible in that it requires us to accept that in ordinary circumstances people sometimes form judgments inconsistent with the content of their visual experience for no reason at all.

Before concluding that the two experiences of the pillar reflected in the mirror differ with respect to their intentional content, there is one final response we should consider. I said above that if you want to maintain that both experiences have the same content then you must claim either that both are inaccurate or that both are accurate; but one might think that the Fregean representationalist has the resources to allow that the first experience is inaccurate and the second accurate and still maintain that both experiences possess the same content.\textsuperscript{15} Because the Fregean theorist maintains that perceptual contents are composed of modes of presentation rather than objects and properties, he can allow that two phenomenally identical experiences can represent the world to be different ways. For instance, Thompson (forthcoming) has developed a Fregean view that allows for phenomenally identical experiences to represent different spatial relations to obtain between objects in the perceiver’s environment. On his account, when Oscar, who lives on Earth, looks at a tree ten meters from

\textsuperscript{15} Fregean representationalism is described in greater detail in the previous chapter (§2.2.4).
him and Big Oscar, who lives on Doubled Earth (a planet just like Earth except that everything is twice as big), looks at a corresponding tree that is twenty meters from him, their experiences will be phenomenally identical; and while each of these two experiences has the same mode of presentation as its content, each experience accurately represents the distance of the tree from the perceiver having that experience.

However, the Fregean view can only allow for phenomenally identical experiences to represent objects to be at different distances from the subject by building the normal causal basis of the relevant phenomenology into the mode of presentation. In the case of Oscar and Big Oscar, Oscar’s experience represents the tree he is looking at to be ten meters in front of him because objects being located ten meters in front of him is what normally causes experiences of this sort in Oscar; Big Oscar’s experience represents the tree he is looking at to be twenty meters in front of him because objects being located twenty meters in front of him is what normally causes experiences of this sort in Big Oscar.

But since the mirror example involves a single subject in a single environment it should be clear that including the normal causal basis of an experience with a certain phenomenology in the relevant modes of presentation will not help the representationalist address the present case. Unless you are surrounded by mirrors most of the time, what normally causes experiences with the phenomenology possessed by your experience of the pillar is an object being located in front of you; so if both experiences pick out what normally causes experiences with this phenomenology in you, then both experiences inaccurately represent the pillar to be located in front of you (and I have already explained why such a view is unacceptable). The Fregean might respond that viewing conditions are also included in the relevant modes of presentation; however, this suggestion is no help either since the viewing conditions are precisely the same with respect to each experience. If the mode of presentation picks out what
normally causes experiences with the relevant phenomenology in you *under present viewing conditions*, then both experiences accurately represent the pillar to be located behind you (and, again, I have already explained why such a view is unacceptable). Ultimately, then, the Fregean view does not provide a way for the representationalist to maintain that the first experience represents the location of the pillar inaccurately while the second experience represents the location of the pillar accurately.

Consequently, we can conclude that our original assumption was correct: if you want to object to the present argument by denying there is a difference in content, you would have to maintain either that both experiences of the pillar are accurate or that both are inaccurate. But, for the reasons just provided, neither option is acceptable. We ought to grant, then, that the two experiences of the pillar in the mirror represent the pillar to be in different locations. Consequently, the only other way to respond to the argument would be to maintain that the two experiences of the pillar in the mirror possess different sensory qualities.

3.2.2 The “Different Sensory Qualities” Reply

One’s initial reaction to the mirror example might be to complain that there is indeed a significant phenomenal difference between the two experiences of the scene in question. However, once again, we need to recognize that such a claim does not constitute an objection to the present argument. I have already acknowledged that the overall phenomenal character of the two experiences is different—what it’s like for you to see the pillar as located in front of you is different from what it’s like for you to see the pillar as located behind you. But the fact that there is some phenomenal difference between the two experiences does not entail that they instantiate different sensory qualities.

It seems to me that the most natural account of the mirror example is that the phenomenal difference between the two experiences is exclusively a difference in the cognitive
qualities each instantiates. That is, it is natural to view the mirror example as analogous to Strawson’s French language example (discussed in §1.4.3). According to Strawson, what it’s like for Jacques (who understands only French) to hear a particular French word spoken is different from what it’s like for Jack (who understands only English) to hear that same word spoken. However, Strawson maintains that since it is clear that there will not be any sensational difference between Jack’s and Jacques’s experiences, we have to grant that the difference in content accounts for the difference in phenomenal character. Similarly, it seems reasonable to assume that there will not be any sensational difference between your two experiences of the pillar given that the visible scene (or sensory stimulus) does not change and given that we are assuming that neither your visual system nor the viewing conditions have changed. And so it is reasonable to maintain that it is the difference in content between your first and second visual experiences of the pillar that is responsible for the phenomenal difference between them.

But not everyone will find this account so natural. For instance, one might object that in order to perceive the pillar as being reflected in a mirror one would have to notice certain visual cues that were not noticed when the pillar was perceived to be located on the far side of a window, and that noticing these visual cues would make a difference to the sensory qualities instantiated by one’s experience. The suggestion here would be that perceiving an object to be reflected in a mirror is made possible by the fact that your visual system is sensitive to certain cues. Such cues might include a disparity between the surrounding background and what is seen in the mirror (for example, when you look in your rearview mirror while driving), imperfections of the mirror’s surface that warp the reflection, or the presence of dust (or other sorts of dirt and grime) on the mirror’s surface that is reflected in a tell-tale pattern. With respect to the present example, we are assuming that the mirror is hung on the wall in such a
fashion as to be easily mistaken for a window, so the only potentially relevant cues would be
imperfections of the mirror’s surface or dust. The objection, then, would be that in this
scenario it is not possible to switch from seeing the pillar as located on the far side of a window
to seeing it as located behind you, unless the second time you look you notice either
imperfections or dust that you failed to notice the first time you looked. And assuming that
noticing such features would involve a change in the sensory qualities instantiated by your
experience, one could insist that it would not be possible to switch from seeing the pillar as
located on the far side of a window to seeing it as located behind you without the sensory
qualities instantiated by your experience changing.

As far as I know, there is no research that shows that perceiving an object to be
reflected in a mirror can only occur in the presence of visual cues such as those just described.
And while I think it is quite plausible that such cues would play a role in certain situations, I do
not think it is plausible to claim that one cannot perceive an object to be reflected in a mirror in
the absence of such cues. Many of us encounter mirrors on a regular basis where the only
potential such cues would be surface imperfections or dust; but these cues are not always
present and they are not noticeable beyond certain distances or from certain vantage points.
Accordingly, if perceiving an object to be reflected in a mirror required making use of such
cues, mirrors would produce illusory experiences much more frequently than they do.\textsuperscript{16}

It is more plausible to assume, then, that even in the total absence of such cues,
background knowledge and expectations are sometimes sufficient for perceiving an object to
be reflected in a mirror (consider how unlikely it would be for you to see the objects reflected
in a mirror above the sink in a bathroom to be located on the far side of a window, even if no

\textsuperscript{16} Also, researchers sometimes make use of computer simulated scenes when investigating the perception of
mirrors, and they do not need to include surface imperfections and dust in their simulations in order for their
experiments to work. For example, see Hecht, Bertamini and Gamer (2005).
dust or surface imperfections were visible to you). That is, my suggestion is that in some situations the visual information available to you leaves two possibilities open: either there is a mirror in front of you or there is a window in front of you. And in such situations your expectations or beliefs about your environment can influence the content of the resulting visual experience (just as sometimes your expectation that you are about to see a picture of a vase results in your seeing a vase rather than two faces when you view the vase/face figure). If this assumption is correct then we can stipulate that in the mirror example the switch from seeing the pillar as located in front of you to seeing the pillar as located behind is not precipitated by your noticing any visual cues that would make a difference to the sensory qualities instantiated by your experience.

Assuming, then, that your knowledge of your surroundings is solely responsible for the change to the intentional content of your experience when you look at the pillar the second time, might it still be plausible to insist that your second experience also instantiates different sensory qualities? Here we can again appeal to the method for determining when experiences instantiate the same sensory qualities established in §1.5.1. As was the case with the delta example, your two experiences of the pillar do not appear to give rise to conflicting judgments of subjectively similarity. There are no two stimuli you could point to regarding which it would be true to say that when you saw the pillar as being located in front of you the visual scene looked subjectively more similar to one of these stimuli than the other, but that suddenly the reverse was true when you saw the pillar as being located behind you.

For instance, imagine trying to produce two drawings each of which captured one of your two experiences more accurately than the other. Simply drawing a square opening in a wall with a pillar visible through it would not be any help; presumably you would have to resort to some kind of graphic convention, like inserting a stereotypical window sill or a
stereotypical mirror frame. But relying on such graphic conventions would not accomplish the task at hand—adding a stereotypical window sill would indicate to the viewer that your drawing is a depiction of a window, but such a drawing would not look more subjectively similar to the scene when you seemed to see the pillar on the far side of a window than to the scene when you perceived the pillar to be reflected in a mirror. This same difficulty would apply to three-dimensional stimuli as well. For instance, one might build a qualitatively identical room but replace the mirror with a window and position a pillar on the other side just so. But the problem is that the resulting stimulus would not look subjectively more similar to the scene when you seemed to see the pillar on the far side of a window than to the scene when you perceived the pillar to be reflected in a mirror. Consequently, since your two experiences of the pillar reflected in the mirror do not appear to give rise to conflicting judgments of subjective similarity, we should conclude that they do not instantiate different sensory qualities.

One might object that sometimes the way we “interpret” a stimulus does change how subjectively similar that stimulus looks relative to other stimuli. In particular, as we have already seen, when our “interpretation” of a given ambiguous figure changes, how subjectively similar that figure looks relative to other stimuli changes as well. However, just as we found with the delta example, if we compare our experiences in the mirror example to our experiences of ambiguous figures it should be clear that the phenomenological changes involved are distinct. Again, when you are looking at an ambiguous figure such as the Necker cube there is an abrupt phenomenal flip or switch when your “interpretation” of the figure changes. But if you try to think back on cases where you were fooled by a mirror and later realized your mistake, I think it will be clear to you that this sort of sudden and pronounced phenomenal switch is absent from such experiences. If you do not have a clear memory
of such a case, the only thing to do is to find a mirror and try to convince yourself momentarily that you are in fact looking through a window and that the objects you see are not behind but in front of you (this is not easy, but it is not impossible either, and it is generally easier if you are in somewhat unfamiliar surroundings). When you do this you will notice that there is some sort of phenomenal change as you switch from the false “interpretation” to the correct one, but you will notice that this phenomenal change is not like the one you experience when your “interpretation” of an ambiguous figure changes.

Here one might note, however, that the experiences involved in the mirror example are similar in an important respect to our experiences of looking at something like the Necker cube. Specifically, in both cases there is a change regarding the spatial relations perceived to obtain amongst particular elements. For instance, when your “interpretation” of the Necker cube changes a particular face will appear to switch from the front to the back of the represented cube. Similarly, in the mirror example, the pillar first looks to be on the far side of the window in front of you, but then later it looks to be on the same side of the window that you are on. I do not think, however, that simply because there is a switch of the spatial relations perceived to obtain between the pillar and the window, that we have any reason to think that the mirror example involves the sort of phenomenological switch at issue. To the contrary, if you compare the two examples it should be clear that when your “interpretation” of the Necker cube changes there is a pronounced reorganization of the visual field which is entirely absent in the mirror example. It seems, then, that there can be a “switch” of the perception of the spatial relations obtaining between different elements, without a phenomenological switch of the sort we find when viewing the Necker cube.

In fact, we can point to a good many examples where there is a change concerning the spatial relations perceived to obtain between certain objects, but where intuitively one’s visual
sensations do not change. Consider the experiences of someone as they get acquainted with a telephoto lens. Since such a lens compresses space, you can imagine someone looking through the lens for the first time and being fooled—for instance the subject might have an illusory visual experience representing two objects to be closer together than they really are. But after enough experience with the lens it would be possible for the subject’s visual experiences to represent relative distances accurately. That is, you can imagine such a subject eventually learning to see the relative distances of various objects as they really are while looking through the lens. Yet, we would have no reason to suppose that the nature of this subject’s visual sensations would have to change as she learned to see accurately while looking through the lens.

Or, consider the experiences of someone who is just learning about the left/right reversal of mirror images. For instance, you can imagine someone who is at first fooled by the left/right reversal and therefore sees some object located on his right as being located on his left. But, once this subject learns how mirrors work, he might look in the mirror again and now accurately see that this object is in fact located on his right. It seems intuitively plausible, though, that this subject’s illusory experience would involve the same visual sensations as his accurate experience. In such cases, then, even though there is a change concerning the spatial relations perceived to obtain amongst certain objects, there does not seem to be any sort of dramatic reorganization of the visual field. As such, it would be implausible to assume that any change concerning perceived spatial relations must also involve a sensational change of the sort that we experience while looking at ambiguous figures such as the Necker cube. And so, the fact that the mirror example involves a change of perceived spatial relations does not undermine the claim that this example does not involve the same kind of phenomenological switch we experience while looking at ambiguous figures.
I think it is safe to conclude, then, that it is implausible to think that how subjectively similar the scene at issue looks relative to other stimuli changes when you perceive the pillar to be located behind you and reflected in a mirror. And if there is no difference with respect to these sorts of subjective similarity judgments between seeming to see the pillar as located in front of your and perceiving the pillar to be located behind you, then we should say that they instantiate the same sensory qualities. Consequently, it would be implausible to claim that the two experiences involved in the mirror example instantiate different sensory qualities. However, for the reasons provided above (§3.2.1), we must also grant that these two experiences represent the pillar to be in different spatial locations. As such, it would appear that the mirror example is a case where experiences that instantiate the same sensory qualities differ with regard to intentional content. Our conclusion, then, is that an experience’s sensory qualities do not determine or fix its intentional content.
Conclusion

Moderate separatism is the view that (1) an experience’s intentional content does not determine or fix the sensory qualities it instantiates, and (2) the sensory qualities instantiated by an experience do not determine or fix its intentional content. If the arguments of chapter two are successful, then we can conclude that (1) is true; and if the arguments of chapter three are successful, then we can conclude that (2) is true. But, one might still wonder about the scope of the argument provided so far. In particular, given that all the examples presented above involve visual experience, one might wonder whether what is true of visual experience is true of other types of perceptual experience as well.

I do not think it is difficult to find ordinary examples that show that intentional content and sensory qualities are independent of one another with respect to perceptual modalities other than vision. One general reason for thinking this is the case is that any given perceptual system will be in different states at different times, and as such, a particular stimulus will have different effects on that perceptual system depending on its present state. Consequently, the same stimulus will sometimes produce different sensations and different stimuli will sometimes produce the same sensations; yet we have every reason to think that regular and widespread perceptual error does not result from these facts. For instance, whether a perceptual system is moving or stationary makes a significant difference to the kinds of sensations that will be generated by a particular stimulus; if the system could not account for its own motion there would be widespread error, but we know this is not the case. In other words, since a given perceptual system is often in different states, if the way that system represented the world to be was determined by the sensations generated by a particular stimulus, the result would be widespread perceptual error of a sort we know does not occur.
Thus, we have a good general reason for thinking that sensation and representation can come apart for any type of perceptual experience.

Let me briefly describe two particular examples of this general phenomenon, concerning hearing and touch respectively. First, consider the acoustic or middle-ear reflex—the involuntary contraction of the stapedius muscle (one of the two muscles connected to the middle-ear bones) in response to loud sounds and vocalization. When the stapedius is contracted the vibrations transmitted from the middle-ear bones to the cochlea can be reduced significantly, and the louder the sound the ear is exposed to the more the muscle contracts.¹ The operation of this reflex, then, is not unlike how the contraction of the iris sphincter muscle reduces the amount of light that reaches the retina. For present purposes, the important point is that there is no reason to think that any misperception of the loudness of sounds results when the stapedius is contracted. When your iris is constricted less light reaches your eye and your visual sensations change; but clearly your visual experience does not mistakenly represent that surrounding light levels are diminishing when this occurs. Similarly, it would be highly implausible to suggest that your auditory experience misrepresents sounds as fainter than they really are as a result of the acoustic reflex.

Assuming, then, that the acoustic reflex alters the sensory qualities instantiated by your experience without generating auditory illusions, it will be easy to find auditory experiences where intentional content and sensory qualities come apart. For instance, imagine that you are in an otherwise noiseless room and you hear a pure tone of an intensity just below the threshold of acoustic reflex activation in you. In such a circumstance you are likely to have an auditory experience that represents the intensity of the tone accurately. Next, imagine that under precisely the same conditions you hear the tone again, only this time you hear the tone while

¹ See, for example, Møller (2006, chap. 8).
the stapedius muscle is contracted (which would be the case if you were just about to speak or if you had just heard a sufficiently loud sound). Just as the contraction of the iris sphincter muscle alters your visual sensations, the contraction of the stapedius will alter your auditory sensations; but, again, it would be implausible to suggest that misrepresentation will result (just as when you plug your ears your auditory sensations change but the world does not seem to get quieter). Consequently, these two auditory experiences will instantiate different sensory qualities yet possess the same intentional content. And so we can conclude that, just as is the case for visual experience, an auditory experience’s intentional content does not fix the sensory qualities it instantiates.

To show that the sensory qualities instantiated by an auditory experience do not determine its intentional content we only have to alter the example slightly. As before, imagine that you are in an otherwise noiseless room and first you hear a pure tone of an intensity just below the threshold of acoustic reflex activation in you. But next, instead of hearing the same tone again, imagine that you hear a tone of the same pitch but loud enough to activate your acoustic reflex. If the situation is arranged just right the auditory sensations of your second experience should precisely match those of your first (since the tone is louder but the contraction of the stapedius is dampening the vibrations transmitted to the cochlea); but, assuming that the contraction of the stapedius does not cause you to misrepresent the intensity of the second tone, your second experience will represent the tone to be louder than the first. As such, these two auditory experiences will instantiate the same sensory qualities yet differ with regard to their intentional content.

We can find similar examples involving the sense of touch if we consider the perception of an object’s temperature. Just as the contraction of the stapedius muscle makes a difference to the auditory sensations produced by a given stimulus, so too the temperature of
your skin makes a difference to the temperature sensations produced by a given stimulus. For instance, presumably most everyone knows first-hand that when you touch a particular object with one cold hand and one hot hand the temperature sensations you experience with respect to each hand differ. But, once again, there is no reason to assume that temperature illusions result from such variation. One might be tempted to think that when one touches a particular object and experiences different temperature sensations in each hand that at least one hand must be getting things wrong;\(^2\) but that is only true so long as we presuppose that sensation and intentional content are necessarily connected.

If you consider your own experience carefully it should be clear that in such cases your different hands do not represent different parts of the object to be different temperatures. For instance, if one of your hands is hot and the other is cold and you try to gauge the temperature of the surrounding air, you will experience different sensations with respect to each hand without the air feeling hotter near your cold hand and colder near your hot hand (such an experience is clearly distinct from one where the air really does feel hotter to one hand than the other—for example, when you hold one hand close to a hot stove while feeling the air farther from the stove with the other hand). In addition, if you wanted to insist that in any such case at least one hand must be getting things wrong, then you would be committing yourself to the view that temperature sensations are only accurate when one’s skin is at a certain specific temperature; but, of course, it would be difficult to provide a principled reason why one particular skin temperature is thus privileged, given how much the temperature of the skin on different parts of your body changes over the course of the day and at different times of year. Moreover, research has shown that variation in skin temperature does not cause us to misrepresent the temperature of objects; rather, even when the temperature of our skin varies

\(^2\) Locke (1690/1975, 139) concluded on the basis of such an example that none of the temperature sensations we experience “resemble” any mind-independent properties of physical objects.
considerably our perception of an object’s temperature through touch is quite accurate, so long as there is a significant difference between the temperature of our skin and the temperature of the object (Tritsch 1988; 1990).

Assuming, then, that the temperature of your skin alters the sensory qualities instantiated by your experience without generating temperature illusions, we can point to tactile experiences where intentional content and sensory qualities come apart. For instance, imagine a case where you have had your hands in cool water for some time and you then reach out to touch an object that is significantly warmer than the skin on your hands. In such a circumstance you are likely to have a tactile experience that (amongst other things) represents the temperature of the object accurately. Next, imagine that you immerse your hands in warm water until such time as the skin on your hands is significantly warmer than the object in question. You then reach out and touch the object again (the temperature of which has remained constant) with precisely the same grip. This time the temperature sensations you experience will be different; but since it is implausible to suggest that a change of skin temperature leads to temperature illusions, we can assume that this second experience will also represent the temperature of the object accurately. Consequently, these two tactile experiences will instantiate different sensory qualities yet possess the same intentional content.

As was the case with our auditory example, in order to show that the sensory qualities instantiated by a tactile experience do not determine its intentional content we only have to alter the scenario slightly. As before, imagine that first, after having had your hands in cool water for some time, you reach out to touch an object that is significantly warmer than the skin on your hands. But next, instead of immersing your hands in warm water, you immerse them in slightly colder water for some time; you then touch the very same object, which is just as it was before except that its temperature has been reduced to match the reduced temperature of
the skin on your hands. If the situation is arranged just right the sensory qualities instantiated by your second experience should precisely match those of your first experience; but, assuming that the change of skin temperature does not cause you to misrepresent the temperature of the object, your second experience will represent its temperature to be colder than it was at first. As such, these two tactile experiences will instantiate the same sensory qualities yet differ with regard to their intentional content.

These examples illustrate, then, how a particular perceptual system is often in different states at different times and that the sensations produced by a given stimuli will be different depending on the state the system is in. Hopefully they also illustrate that it is at least plausible to think that this sort of variation does not lead to widespread perceptual error. Assuming it does not, we have a good reason for thinking that moderate separatism should not be restricted to visual experience; rather, it seems to be a pervasive feature of perception in general that an experience’s intentional content and sensory qualities are independent of one another.

Before concluding, let me say something about what I take to be the most important implications of the argument provided so far. First, if moderate separatism is true, this has certain obvious implications for recent attempts to make intentionality the fundamental feature of the mind. One of the most influential movements in philosophy of mind in the past twenty years has been the strong representationalist project initiated by Tye (1995) and Dretske (1995): they argued that reducing phenomenal character to intentional content would finally make a naturalistic account of phenomenal consciousness possible, assuming that plausible naturalistic accounts of intentionality already exist. Given the arguments above, such a project is clearly unworkable: there is a class of phenomenal properties, sensory qualities, that are not only distinct from but not even necessarily connected to an experience’s intentional content. But even leaving aside the attempt to provide a naturalistic account of consciousness, some
philosophers, such as Crane (1998), have been attracted to the notion that intentionality is in some sense the “mark of the mental.” If we take such a view to entail that all prototypical mental properties are intentional, then we would have to conclude that such a view is clearly false: the arguments above have shown that there are prototypical mental properties that not intrinsically representational and which can vary independently of representational properties. But even if we take such a view to entail only the weaker claim that all mental occurrences possess intentional content, there is cause to be suspicious. We have seen that an experience’s sensory qualities are distinct from and independent of its intentional content; and this suggests that in principle there is no reason why sensory qualities could not be instantiated by a mental occurrence that lacked intentionality all together.

Beyond this general metaphysical question, as I explained above (§1.7), moderate separatism has important implications concerning the nature of perceptual experiences specifically. In the recent debates over the relationship between intentionality and phenomenal consciousness something of a consensus has developed concerning the relationship between sensation and intentional content. The philosophers who defend (A), (B) and (C) all appear to agree that the sensory qualities instantiated by an experience fix the way it represents the world to be. They hold this view for different reasons, but they all maintain that in order for your experience to represent the world to be a certain way all you need is to have sensations of a certain sort—if you have an experience involving a reddish sensation then it follows that your experience represents some object to be red, if you have an experience with a specific temperature sensation then it follows that your experience represents some object to be a specific temperature, and so forth. However, if moderate separatism is true then this view of the nature of perceptual experiences is false. Instead, we need to return to a Husserlian view of perception where to perceive the world to be a certain way is not simply a matter of having
sensations of a certain sort—not only must one have sensations of a certain sort, but these
must be “interpreted” or “taken” in a certain way (see §1.6). From this perspective, the
element of taking or interpretation is essential to perceptual experience and the contemporary
view fundamentally underrates perceptual experience by reducing it to a simple matter of
having sensations.
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