**The Metaphysics of Sensory Experience**

**David Papineau**

***(Draft 13 Jan 2020—please do not cite or quote without permission)***

**Table of Contents**

**Introduction**

**Chapter 1 Preliminaries**

**1.1 Sensation versus Perception**

**1.2 Sensation versus Cognition**

**1.3 Properties and Experiences**

**1.4 Naïve Realism: Outline**

**1.5 Naïve Realism and the Time-Lag Problem**

**1.6 Naïve Realism and Phenomenal Similarities**

**1.7 Mental Contact with Reality**

**1.8 The Instability of Naïve Realism**

**1.9 Sense-Datum Theories**

**1.10 Representationalism: Weak and Strong**

**1.11 Representationalism: Naturalists and Intentionalists**

**1.12 Representationalism: Content and Mode**

**1.13 Representationalism: Broadness, Supervenience and Identity**

**Chapter 2 Representationalism**

**2.1 The Metaphysical Challenge**

**2.2 Initial Representationalist Thoughts**

**2.3 Naturalist Theories of Representation**

**2.4 The Implausibility of Naturalist Representationalism**

**2.5 The Distractions of Broadness**

**2.6 Broadness in Context**

**2.7 The Appeal to Transparency**

**2.8 Free-Floating Properties**

**2.9 Mysteries of Mental Contact**

**2.10 Here-and-Now**

**2.11 The Efficacy of Mental Representation**

**2.12 Transparency Denied**

**2.13 Pure Intentionalism**

**2.14 What are the Truth Conditions?**

**Chapter 3 Structure**

**3.1 The Qualitative View**

**3.2 No Problems**

**3.3 Block, Peacocke and Qualia**

**3.4 Functionalism and “Role Semantics”**

**3.5 The Organization of Experience**

**3.6 Quasi-Objects and their Quasi-Properties**

**3.7 Intentional Objects**

**3.8 A Dangerous Confusion**

**3.9 Paint that Doesn’t Point**

**3.10 Spatial Experience**

**Chapter 4 About Experience**

**4.1 Why I am Not a Sense-Datum Theorist**

**4.2 Awareness**

**4.3 Transparency Revisited**

**4.4 The Complications of Attention**

**4.5 Introspection of Experience**

**4.6 Contentful Mental States**

**4.7 Phenomenal Concepts and the Knowledge Argument**

**4.8 Talking about Experience**

**4.9 Red Squares and Green Circles**

**4.10 Rich Sensory Contents**

**4.11 Very Rich Sensory Contents**

**Introduction**

This book addresses a specific question. What is the metaphysical nature of the conscious properties we enjoy when we have sensory experiences?

Right now I am looking at a yellow ball in the middle of my garden lawn. In so doing, I am having a conscious visual experience, constituted by my instantiating certain conscious properties, properties that I would cease to possess if I closed my eyes. Similarly, I can hear various background noises, and I can feel the hardness of the chair I am sitting on. These are further sensory experiences involving further conscious properties.

So, to repeat, this book is about the nature of conscious sensory properties, like the visual, aural and tactual properties that I am having right now. What kinds of properties are these? How are they structured? Can they be analyzed into more basic components?

Perhaps it is worth emphasizing from the outset that I am interested in these questions in their own right, and not because of their significance for further philosophical debates. Many philosophers work on sensory experience because they think its analysis is crucial for a philosophical understanding of knowledge, or reasons for belief, or our ability to refer to things, or other such topics. In this book I shall make occasional comments on such further topics when they are relevant. But my primary focus throughout will be on sensory experience itself. I simply want to understand what is going on when I have conscious sensory experiences.

In my view, conscious sensory properties are intrinsic qualitative properties of people. When I have a visual experience of a yellow ball, for example, I have a certain conscious property, a certain feeling, which does not essentially involve any relations to anything outside me. Taken purely in itself, my state does not guarantee the presence of an actual yellow ball, nor does it even represent a possible yellow ball. The same state could be present in a subject, like a brain in a vat, who was in no way related to yellowness or roundness. In what follows, I shall aim to show that this qualitative view is the only one that fits the facts.

I should admit from the outset, however, that this answer runs contrary both to initial intuition and philosophical orthodoxy. Intuition and orthodoxy alike take sensory properties to be *world-involving*, not purely intrinsic properties of subjects.

Take my visual awareness of the yellow ball. There is the ball, right in my field of view, with its yellow colour. Isn't it obvious that my visual experience involves the visible features of this object, and not just intrinsic qualitative properties of me?

This initial world-involving thought can be developed in two different ways.

A first version takes it that my sensory experience relates me to the actual ball and its actual colour. The ball is yellow, and my sensory experience simply consists in my visual openness to this fact. The fact that the ball is yellow is literally part of my visual experience.

At the philosophical level, this is the *naïve realist* theory of sensory experience. According to naïve realism, conscious sensory properties are perceptual relations to observable facts. The property that constitutes my conscious visual experience is simply the relational property of being visually related to the ball’s yellowness.

Naïve realism might seem in line with initial intuition, but it runs counter to another intuitive thought. Could I not have just the same sensory experience as I am having now, even if the ball weren’t actually yellow, but I were suffering some kind of colour illusion—or even if there were no ball there at all, and I were the victim of an outright hallucination?

This second thought goes naturally with the idea that sensory experiences are *representational*. My current experience doesn’t necessarily relate me to an actual yellow ball. Rather it represents such a thing. It conveys to me that there is a yellow ball on the lawn, even though in truth there may not be.

*Representationalism* is currently the dominant philosophical theory of sensory experience. On this theory, conscious sensory properties are to be equated with representational properties—to have sensory experience is simply to represent in the sensory mode that things are thus-and-so.

This representationalist theory comes in different varieties, to be explored in detail I what follows. As standardly developed, representationalism agrees with naïve realism that conscious sensory experience is relationally world-involving—but now the relation is to worldly *properties*, not to worldly facts.

Consider once more my experience of the yellow ball. Perhaps the experience does not relate me to the *fact* that the ball is yellow—after all, if I am hallucinating or under an illusion there is no such fact to be related to. Still, even if I am so misperceiving, my conscious experience would still arguably involve the *properties* of yellowness and roundness, not as instantiated in my actual environment, but as manifesting the way that my experience takes that environment to be. And in general, according to standard representationalism, sensory experiences involve a range of worldly properties—all the shapes, colours, and textures that our experiences tell us, perhaps falsely, to be present in our environment. These possibly uninstantiated properties are certainly present in my experience, say representationalists, even if they may not be present in my environment.

So in their different ways both naïve realism and standard representationalism take experience to constitutively involve elements from the world beyond the mind. Naïve realism takes it to involve worldly facts, and representationalism take it to involve worldly properties.

In this respect, both these philosophical positions are in accord with initial intuition. I shall be arguing, however, that even so both are fatally flawed. They might seem to make good sense at first sight, but a closer acquaintance will reveal deficiencies that cannot be remedied.

Some readers might find it surprising to learn that I reject not only naïve realism, but also representationalism. Surely the current philosophical enthusiasm for this position is well-deserved. Do we not have every reason to view sensory experiences as representations? Both common sense and contemporary neuroscience tell us that sensory experiences inform subjects about features of their environments and guide their behaviour accordingly. Does not this suffice to show that those sensory experiences represent those environmental features to those subjects?

I sympathize with readers who feel surprised at this point. Indeed, there was a time not so long ago when I myself was surprised to learn that I rejected representationalism. For most of my philosophical life, I had assumed that I agreed with representationalists about perception. After all, I too hold that sensory experiences inform subjects about their environments and so qualify as representations. It was only relatively recently that I came to realize that the “representationalism” accepted by most philosophers of perception involves far stronger commitments than these everyday truisms.

In fact my former misapprehension is a matter of public record. In 2009, some while before I became interested in the philosophy of perception, David Bourget and David Chalmers conducted an online survey of philosophical views (Bourget and Chalmers 2014). One of the questions was on “perceptual experience” and asked respondents to choose between “representationalism”, “qualia theory”, “disjunctivism”, and “sense-datum theory”. Well, I had no doubt that sensory experiences are representations, for the reasons just rehearsed, so I ticked the first option.

It was only a few years later, when I started working seriously on perception myself, that I realized that I didn’t believe the kind of representationalism embraced by philosophers of perception at all. The reason is that their theory is far stronger than the claim I took myself to be endorsing in the PhilPapers survey. Representationalism in the philosophy of perception isn’t just the thesis that sensory experiences are representations. We might call this claim “weak representationalism”. Representationalism in the philosophy of perception is the far stronger further thesis that sensory experiences are *essentially* representational.

To bring out the issue, here is an analogy. Take the words “Sydney is the capital of Australia”, considered as a sequence of marks on paper, in a certain font style and coloured black. This English sentence is certainly a representation. It portrays the world as satisfying a certain condition, namely that *Sydney is the capital of Australia*, and is true if this condition obtains and false otherwise. However, those marks are not *essentially* representational. It is not their nature as written marks that constitutes them as representations, but the workings of the English language. Just those marks could have meant something different, or nothing at all, if our linguistic practice had been different.

The point is that those marks only represent as they do because of certain contingent facts about them. They gain their representational powers because of the way they are used by the English language community. But it is not an essential feature of those marks that they are so used. We can easily think of possible situations where just those marks would have had a different significance.

Representationalists in the philosophy of perception think that conscious sensory experiences are *not* like written marks on paper. In their view, conscious experiences don’t just happen to represent, courtesy of further surrounding facts. Rather sensory experiences have their representational powers essentially. Any given conscious experience is per se a representation. Its representational power is determined by its conscious nature, and does not depend on the way it is embedded in some further environment.

Consider what it is consciously like for me to visually experience a yellow ball. According to representationalism, the conscious nature of this experience suffices on its own to fix its representational content, namely that *a yellow ball is before me*. Unlike conventional marks on paper, the experience needs no help from its contingent surroundings to have this representation power. Once the conscious character of an experience is given, say the representationalists, nothing more is needed for it to have a representational content.[[1]](#footnote-1)

In my view, representationalism is wrong about this. Conscious sensory properties are very much like written marks on paper. In themselves they are dumb arrangements of contentless signs. While they do represent worldly facts, this is only in virtue of further contingent facts about the way they are embedded in the wider world. Take away those further facts, and you take away the representational power of the experience. Just that same experience could have had a quite different representational significance, or no representational significance at all, given different contingent surroundings.

Imagine a cosmic brain in a vat, a perfect duplicate of my brain that coagulates by cosmic happenstance in interstellar space, together with sustaining vat, and proceeds to operate just like my brain for some minutes, with the same sensory cortical inputs, motor cortical outputs, and intervening neuronal processes. I take it that this being would share all my conscious sensory experiences. Yet its sensory states would represent nothing. They would lack the kind of systematic connections with worldly circumstances required for representational significance. They would no more have a representational content than would the marks “Sydney is the capital of Australia” traced out by the wind on some mountain on Mars.

The analogy with words isn’t perfect. The further facts that allow sensory experiences to represent are different from those that make words represent. They are not contingent facts about language communities, but contingent facts about the way the intrinsic mental states of normal subjects—but not of the cosmic brain in a vat—are correlated with features of their perceptible environments. Even so, the underlying point stands, or so I shall argue. The conscious properties we enjoy in sensory experience stand to the representational powers of experience just as the typographical properties of words stand to the representational powers of words. Normal instances of those conscious properties do represent things, just as do normal instances of typographical properties, but in both cases those property instances only represent in virtue of further contingent facts about them.

So my own view is that sensory experiences are intrinsic qualitative properties of people that are only contingently representational. I shall call this the “qualitative view” in what follows. This position has scarcely any defenders in the contemporary literature. The majority of contemporary philosophers of perception think experiences are essentially representational, and the next most popular view is naïve realism. I must say that I find this rather odd. In truth the strong representationalism of the philosophers of perception is a strange view, requiring unusual commitments on the part of its adherents, while the challenges facing naïve realism are scarcely less formidable. Given this, you might have expected more of the specialists to explore the possible attractions of the qualitative view.

It is true that a few contemporary philosophers of perception uphold the existence of some “qualia”, by which they mean intrinsic qualitative non-relational elements of conscious sensory experience—"mental paint” in Ned Block’s graphic coinage. These advocates of qualia, however, take themselves to be pointing to *extra* elements in sensory experience, over and above those constituted by relations to worldly facts or properties. This is not the qualitative view that I favour. I deny that there are *any* essentially relational elements in conscious experience. On my view, it’s *all* paint.

It is not as if this qualitative view is particularly obscure or outlandish. It has respectable antecedents in the history of philosophy. Moreover, I suspect that it is the view adopted by most non-specialists with a serious opinion about sensory experience, be they reflective high school students, practicing neuroscientists, or philosophers working in other areas.

I am not sure why the qualitative option is so unpopular among the specialist philosophers of perception. Perhaps it is because the position is undoubtedly ugly. It is natural to think of sensory experience as in some sense providing a bridge between the mind and the world beyond. Both naïve realism and representationalism support this natural thought in their different ways, by building worldly facts or properties into the fabric of experience itself. The qualitative view rejects any such worldly involvement in experience. It says that conscious sensory properties are sufficient unto themselves, enclosed within an internal subjective realm, and have no essential connection to anything beyond. This certainly isn’t a view that wears its attractions on its sleeve.

Still, philosophy isn’t a beauty contest. If the superficial attractions of a theory were all that mattered, we could dispense with careful argument and analysis, and simply opt for those positions whose surface features best conform to our initial intellectual inclinations. In truth, however, the surface charms of a theory often hide debilitating internal failings. So it is, I shall be arguing, with the alternatives to the qualitative view. Once we probe beneath the surface, these theories turn out to be flawed inside.

I see no alternative to learning to live with the qualitative view. On first impressions, it might strike us as less attractive than its initially more appealing competitors. But in truth it is the only option that makes good metaphysical sense.

The rest of this book will proceed as follows. Chapter 1 sets the stage and reviews existing theories of perception. Chapter 2 takes a closer look at the currently dominant representationalist approach and exposes its severe internal problems. In chapter 3 the qualitative view is developed and shown to accommodate the internal structure of sensory experience. The final chapter 4 explores the implications of the qualitative view for introspection, sensory language, and rich perceptual contents.

**Chapter 1 Preliminaries**

**1.1 Sensation versus Perception**

This chapter will deal with various issues that can usefully be addressed at a preliminary stage. I shall begin with some initial clarifications and distinctions. I will then briefly discuss naïve realism and sense-datum theories. Finally I shall make some initial points about representationalism, as a precursor to the extended critique of this position which follows in chapter 2.

A different kind of book, one aiming at a comprehensive survey of the philosophy of perception, would no doubt offer a more extended treatment of naïve realism and sense-datum theories. However, I have no great desire to add to the already extensive literature on these two approaches, and so shall restrict myself to some general comments that will serve to identify these positions as reference points and indicate my reasons for putting them to one side.

Let me start with a terminological point. I have called this book “The Metaphysics of *Sensory* *Experience*”. The more conventional terminology for this subject area, however, is “perception” and its cognates—as in “perceptual experience”, “the philosophy of perception”, “the contents of perception”, and so on.

The reason I have preferred “sensory experience” to “perception” is simply that “perception” is a success term, and so strictly excludes illusory and hallucinatory sensory experiences. You can only perceive what’s there. So you can’t perceive a ball to be yellow, say, in a case where the ball you are looking at is green, say, or where you aren’t looking at anything at all. Yet I want my analysis to cover cases like this. I want to understand what is going on when I have a visual experience as of a yellow ball, even when there is no yellow ball present for me to perceive. “Sensory experience” includes these cases in a way that “perception” does not.[[2]](#footnote-2)

I do not intend this terminology of “sensory experience” to prejudge the issue against naïve realist views that insist on a fundamental division between the kind of conscious experiences we have in the “good cases” of successful perception and those we have in the “bad cases” of illusions and hallucinations. As it happens, I reject naïve realism, and will be arguing later in this chapter that the same kind of experience can occur in both kinds of cases—a “common factor”, as it is normally called. But for the moment I only intend my terminology of “sensory experience” to signal that our subject matter covers bad cases as well as good. Naïve realists will have no cause to object to this terminological stipulation. After all, even philosophers who deny any experiential commonality between bad cases and good must acknowledge that bad cases do occur, and so that there are questions to be answered about their nature.

One further terminological point. Certain philosophical traditions, especially those associated with Kant and Reid, distinguish *sensation* from *perception* and mean by this that the former is some species of raw, non-representational material first presented to consciousness, and the latter is something that results only when this raw material is worked up into representational form with the help of higher mental faculties involving concepts. This is no part of what I intend to convey by my talk of “sensory experience”. As will become clear in what follows, I do not take conscious sensory experience to need any help from higher mental faculties to become representational. It is representational in its own right, independently of what higher mental faculties make of it. (So the sensory experiences of animals can represent their environments to them, even when those animals lack any higher mental faculties.)

It is true that I deny that conscious sensory experience is *essentially* representational. But that is a different issue. On my view sensory experience needs an appropriate *environmental* setting to become representational. Without the right environmental embedding, it is representationally silent. But this is not because it is insufficiently structured in itself, somehow lacking the right form prior to its reshaping by higher mental powers. Sensory experience is already perfectly adequate to play a representational role, given the right environmental setting. It doesn’t need any help from higher mental faculties, even if it needs the assistance of environments.

**1.2 Sensation versus Cognition**

I don’t want to be restrictive about sensory experiences. As well as taking these to include products of the familiar five senses—sight, hearing, touch, smell, taste—I also want to encompass a range of other sensory modalities, such as proprioception, kinaesthesia, balance, pain, warmth and cold.

I have no clear views on the number of different senses, or what distinguishes them from each other, or indeed whether, given their rich interconnections, they should be regarded as separate systems at all. (See Nudds 2004, Macpherson 2010, O’Callaghan 2012.) Since my subject is the nature of sensory experience as such, I can happily by-pass these issues. As is normal in this area, I shall draw mainly on vision for my examples, but I shall intend my conclusions to apply to sensory experience in general.

As I shall use the phrase in this book, “experience” will always be understood as implying *conscious* sensory experience. Some philosophers are interested in the possibility of “unconsciousperception”, as putatively illustrated by responses to subliminal visual stimuli and the like (Block 2016, Phillips 2018). I have no principled objection to this idea. There may well be some interestingly unified category of responses to sensory stimuli that covers both conscious and unconscious cases. My stipulation about “experience” always being conscious is intended as no more than an expository convenience. Given that this book is specifically about the conscious properties that are associated with sensory experience, it will be helpful to understand the term accordingly.

I shall offer no general theory in this book of what qualifies a mental state as a sensory experience, nor indeed of what qualifies a mental state as conscious. These are interesting questions, but they are not my concern here. I am happy to take these issues as read, in line with most other work in the philosophy of perception, and move on to the metaphysical analysis of those properties that do constitute conscious sensory experience.

There is one preliminary classificatory issue, however, that I would like to comment on at this stage. This is the distinction between sensory experience and *thought*[[3]](#footnote-3). Not all mental responses to the world are sensory. It is one thing to see or otherwise sense a yellow ball. It is another to believe (with your eyes closed, say) that a yellow ball is before you. Given that this distinction will figure significantly in what follows, it will be useful to say something about the way I understand it.

At first pass, as this example would suggest, it is natural to appeal to introspectible phenomenology to distinguish sensory experience from thought (or “perception” from “cognition”, as the division is normally phrased in cognitive science circles). What is more obvious than the conscious difference between seeing a yellow ball—with shape and colour made manifest—and merely believing a yellow ball to be present?

It is not clear, however, that a phenomenological criterion will do all the work. For a start, not all sensory modalities have as vibrant a phenomenology as vision; think of proprioception, or the sense of balance, where distinctive phenomenological properties are not easy to pin down. Moreover, many hold that thought itself has a definite phenomenology. Given these points, it is not immediately obvious, to say the least, *what* phenomenological difference is supposed to mark the sensory-cognitive divide.

The idea of a phenomenological distinction between sensation and cognition comes under further pressure from the possibility of “rich perceptual contents”. As we shall see in chapter 4, there is much contemporary disagreement as to whether vision and other senses can register such high-level features as being a *kestrel*, or a *pine tree*, or *my wife*. All sides in this debate accept that there are characteristic conscious sensory differences between expert observers who can recognize such things and naïve observers who can’t. The disputants disagree, however, on the source of this phenomenological difference. Some take it at face value, as due to the experts sensing the high-level features as such; others argue that the experts are simply attending sensorily to more detailed low-level features; and yet others say that the extra phenomenology enjoyed by the experts lies at the cognitive level, not the sensory one. These controversies about “rich contents” present further challenges to the project of distinguishing sensation from cognition by purely phenomenological means.

In the face of these difficulties, some philosophers have sought to understand the sensory-cognitive division in terms of cognitive architecture rather than phenomenology. There are a number of possible ways of doing this.

One option is to appeal to supposed differences in the structure of the vehicles of representation: where cognitive representation is “symbolic”, or “conceptual”, or “digital”, sensory representation is “iconic”, or “non-conceptual”, or “analogue”. The difficulty here is to pin down a sharp difference. While there are no doubt variations in format corresponding to the different sorts of information conveyed by cognitive and sensory states, it is unclear whether this amounts to any principled distinction. In particular, it seems likely that sensory as well as cognitive representation involves elements that can be recombined into different complex vehicles. Perhaps sensation displays less such “systematicity” or “generality” than cognition, but even so this seems more a distinction of degree than kind. (For further discussion of this issue, see sections 3.6 and 4.9 below.)

A different option appeals to the supposed way that sensory experience is “cognitively impenetrable”. Certainly some sensory experiences are resistant to correction by some cognitive states, as illustrated most strikingly by “knowingly experienced illusions”—for example, the visual impression that Müller-Lyer lines are different lengths will typically persist even in observers who know they are subject to an illusion. The problem, however, is that sensory processing is by no means immune to all kinds of “top-down” cognitive influences (see the contributions to Zeimbekis and Raftopoulos 2015). This undermines any straightforward attempt to delineate the sensory as a realm that is independent from any cognitive influences.

A rather different strategy is to distinguish experience by the automaticity and speed of the processes that generate it. Subjects whose sense organs are functioning have no choice about the immediate formation of visual, aural and other sensory experiences of their surroundings. This stands in marked contrast to the way that cognition can be deliberately controlled and is often slow-moving.

As it happens, I myself rather favour this last-mentioned way of distinguishing sensation from cognition. However there is no need for me to resolve this issue at this point. This is a book about the nature of sensory experience, not about the distinction between sensory experience and cognitive thought. Now that we have flagged the issue, we can happily proceed with an unanalyzed distinction. For most of the discussion that follows, it will serve well enough if readers focus on paradigm cases of sensory experience, like visually experiencing a yellow ball, or hearing a loud bang, or tasting something sweet. We can leave further examination of the division between sensory experience and thought to those sections where it matters to my arguments.

**1.3 Properties and Experiences**

At the start of my Introduction, I said that this book is about the nature of the conscious properties that *people* possess when having sensory experiences. Much of the book will be about the putative identity of these conscious properties with other properties of *people*. This might strike some readers as odd. Is it not more common to frame the issues in terms of conscious properties of *sensory experiences*, not properties of people? For example, philosophers of mind will typically ask such questions as “Can the conscious properties of *sensory experiences* be identified with representational, or relational, or physical . . . properties of those experiences?”, rather than “Can the conscious sensory properties of *people* be identified with physical, or representational, or relational . . . properties of those people?"

This is not a fundamental issue, but it will be worth explaining why I prefer my way of phrasing things. In general, I think of *facts* or *states* as the basic furniture of the world. The simplest case is the possession of some property by some particular object. There are also relational facts where several particulars satisfy some relation

and perhaps facts of yet more complex forms.

In line with this, I think of *mental states* as the possession of mental properties by people. *David being in pain* is a mental state that is constituted by *David* having the property of *being in pain. Jane thinking about chocolate* is a mental state that is constituted by *Jane* having the property of *thinking about chocolate*

Sensory experiences are then a particular kind of mental state, namely, those involving the possession of conscious *sensory* properties by people. For example, *Jennifer visually experiencing a yellow ball* is constituted by *Jennifer* having the conscious sensory property of *visually experiencing a yellow ball.*

But now it looks as if talk of the conscious properties of *sensory experiences*, as opposed to conscious sensory properties of *people*, will call for more properties than we want. A conscious property of a sensory experience would need to be a sort of second-order property. It would have to be a property of a state, like the state of *Jennifer visually experiencing a yellow ball*—that is, it would have to be a property of the possession of a sensory property by a person. There seems no immediate need for such messy second-order properties. Rather than asking about conscious properties of sensory experiences, we can proceed more simply just by asking about conscious sensory properties of people, and investigating their relationships to other properties of people, like their physical properties, representational properties, and so on.

As I said, this is not a fundamental issue. There are no doubt other acceptable ways of setting things up. For example, you could perhaps think of sensory experiences as themselves particulars (as metal *events*, perhaps, or neural *processes*), and then consider relationships between properties of these particulars, rather than between properties of people, and thereby adopt a different means of avoiding messy involvement with higher-order properties. Still, I prefer to start with people and their properties. Later on we will need to say more about the structure of conscious sensory properties, but for now this will help us to keep things simple.

**1.4 Naïve Realism: Outline**

According to naïve realism, conscious sensory properties are relational properties[[4]](#footnote-4)—properties of bearing the relation of *perceiving* to a *fact*. So, for example, when I perceive a yellow ball, my conscious sensory experience is constituted by my perceiving the fact that the ball is yellow. (Hinton 1967, Snowdon 1980, Martin 2002, Fish 2009.)

Naïve realists mean this literally. My conscious experience—what it feels like for me to see the yellow ball—is constituted by my relation to the ball being yellow.

This is of course a natural enough thought. There is the ball, right in front of me, and my visual powers reveal its colour and other visible properties.

Still, as I observed in the Introduction, this natural thought comes under immediate pressure from a contrary natural thought—surely I can possess just the same conscious property even in the bad cases when I am not seeing a yellow ball, as for instance when its yellowness is an illusion, or when I am hallucinating and no ball is present at all.

Naïve realists deny this second thought. They hold that subjects cannot possess the same conscious sensory property in the bad cases as in the good cases. Since the conscious property present in the good cases involves the fact that the ball is yellow, and no such fact is available in the bad cases, subjects of illusion or hallucination cannot be consciously the same as veridical perceivers.

Because of this, naïve realists are committed to “disjunctivism”. On their view, when we say that someone is “visually experiencing a yellow ball”, leaving it open whether or not the subject is perceiving veridically, then we are making a disjunctive claim: *either* the subject has the conscious property of seeing some real ball to be yellow, *or* the subject has the distinct property of undergoing an illusion or hallucination. (Soteriou 2014.)

Naïve realists allow that subjects will not always be able to discern internally whether they are in a good or bad case. Misperceiving subjects cannot always tell introspectively that they are misperceiving. But naïve realists say this is no reason to abandon the claim that veridical perception involves one conscious property, and cases of illusion and hallucination something quite different. It only shows that we cannot always tell from the inside what kind of conscious state we are in.

The main objection to naïve realism is that it makes little sense to separate conscious properties from introspective powers in this way. Perhaps human subjects are not always introspectively infallible about the conscious states they are in. But naïve realism does not merely query the infallibility of introspection. Rather it posits a kind of conscious difference, between veridical perceptions and matching misperceptions, which introspecting subjects are *never* able to discern.

This radical move threatens to loosen our hold on the very concept of consciousness itself. It is unclear what substance is left to the idea of two states being *consciously* different, if the difference can *never* be apparent to subjects from the inside. If that is the cost of naïve realism, it is arguably too high. Certainly few thinkers since the seventeenth century have been prepared to pay it.

In my view, naïve realism is undermined by its insistence on conscious differences that can never manifest themselves introspectively. But let me put this issue to one side for a moment, and first consider two more specific lines of objections to naïve realism. After that I shall return to the issue of introspective undetectability, and show how even naïve realists themselves find it difficult consistently to maintain the separation of conscious nature from introspective availability.

**1.5 Naïve Realism and the Time-Lag Problem**

Some perceived facts ceased to exist long before they were perceived. In 1604 Kepler’s Supernova was visible to the naked eye in daytime for over three weeks. However, this massive explosion had in fact occurred at least 13,000 years earlier.[[5]](#footnote-5)

This seems inconsistent with the idea that sensory consciousness of a supernova is constituted by a perceptual relation to the explosion itself. How can my sensory consciousness, which is here and now, be constituted my bearing some relation to a long past event?

This challenge doesn’t arise only in extreme cases like supernovae. Light takes time to travel even short distances. The delay mightn’t be as extreme as with supernovae, but many of the more mundane things we observe have ceased to exist by the time we see them.[[6]](#footnote-6)

It might seem that this time-lag worry simply betrays a refusal to take naïve realism seriously. After all, naïve realism is committed from the start to the constitution of sensory experience by *spatially* distant facts, as when I see a yellow ball on the other side of the room. Why should it be any worse that it has sensory experience depending on *temporally* distant facts?

But time is worse for naïve realism than space. It is a familiar point, going back at least to Descartes, that consciousness is definitely located in time in a way it is not in space. If you tell me that my consciousness of the yellow ball extends outside my head and into my garden, I might find this odd, but I won’t automatically think it incoherent. But if you say that my visual experience of the supernova stretches back in time 13,000 years, I am not sure how to understand you. Surely we all know the experience didn’t begin until I looked up at the sky this morning.[[7]](#footnote-7)

Perhaps naïve realists will agree that the conscious experiencing doesn’t start until the light reaches me, but insist that for all that it constitutively involves the earlier supernova. Here is an analogy. Last week I got sunburnt. This alteration of my skin didn't start until ultraviolet radiation from the sun reached me. But for all that my sunburn constitutively involved earlier-occurring events on the sun. (Let us agree that *sunburn* is a condition that requires exposure to ultraviolet radiation *from the sun*. On this understanding, you can’t get sunburnt in a tanning studio.)

In a similar way, it is arguable that factive mental states like knowledge can constitutively involve past facts. I didn’t know the result of last night’s football game until I read the newspaper this morning. But even so my factive state of knowledge constitutively involves the earlier outcome of the match. Knowledge is constituted by a relation to the fact known.

So why can’t my current sensory experience constitutively similarly involve something that happened in the past, even though the experience didn’t start until now? However, sunburn and knowledge are not good analogies for sensory experiences. The crucial point is that sensory experiences are *conscious* states and as such are constituted by what occurs during their temporal duration. This duration has a definite starting point, marked by when their subjects start experiencing, and a definite end point. Event that lie outside this local interval cannot make a constitutive contribution to conscious sensory experience. (Past events can of course make a causal contribution, instigating causal processes that result in later conscious experiences. But causation is not constitution.)

Some philosophers find it important to maintain that knowledge is a *mental* state. I have no objection to this way of talking. But there is every reason to deny that knowledge is a *conscious* mental state. It can’t be conscious if it constitutively involves elements that lie outside its temporal duration. (Indeed we might similarly query whether sunburn, understood as constitutively requiring a solar aetiology, is really a *skin* *condition*, on the grounds that the skin condition in question could equally well be acquired in a tanning studio.)

Naïve realists want to say that veridical perceptions are both factive, in constitutively involving the facts perceived, and consciously distinctive, in contrast to matching misperceptions. But these two claims are in tension. Perceptions cannot constitute a *conscious* kind if they constitutively involve elements that lie beyond their temporal boundaries. Factive states can be constituted by relations to past facts, but conscious states cannot.[[8]](#footnote-8)

**1.6 Naïve Realism and Phenomenal Similarities**

Adam Pautz has observed that similarity relationships between sensory experiences don’t match similarity relations between the worldly facts perceived (Pautz 2018). This poses a problem for the naïve realist thesis that sensory experiences are constituted by relations to worldly facts. If your various sensory experiences consisted in nothing more than your bearing the uniform relation of perceiving to various worldly facts, then we might expect the similarities between those experiences to track the similarities between those facts. But that isn’t how it comes out.

So, for example, Pautz shows that in physical terms blue surfaces are far more similar to green surfaces than to purple surfaces. Physically speaking, blue and green go together and are unlike purple. In particular, the reflectance profile of blue surfaces closely matches that of green surfaces but is markedly different from those of purple surfaces.

At the level of conscious colour experiences, though, blue goes with purple, not with green. Experiences of blue surfaces are much more like those of purple surfaces that those of green surfaces. This argues that the conscious character of colour experiences is determined, not by subjects’ relation to worldly surface properties like reflectance profiles, as naïve realism would have it, but rather by intrinsic properties of subjects.

Pautz concludes that conscious colour experiences must be determined by patterns of neural response in V4 in the visual cortex, not by the nature of the surface properties responded to. At the neural level, responses to blue surfaces are similar to those to purple surfaces, and unlike responses to green surfaces. If we suppose that the conscious character of colour experiences is fixed by this internal neural activity, then we have a natural explanation of the similarity relations between the conscious experiences.

Pautz makes similar points about auditory and olfactory experiences. Conscious sensory experiences in these modalities can also differ sharply even when prompted by similar worldly properties, and display similarity even when prompted by different worldly properties. As before, this is in tension with naïve realism. The natural explanation is that the conscious auditory and olfactory experiences are determined, not by perceptual relations to external facts, but rather by internal properties of subjects, such as patterns of neural activation.

Some naïve realists have responded to this argument that not all objective features of the non-mental world are reducible to basic physical properties.[[9]](#footnote-9) Maybe the reflectance profiles and other basic physical characteristics of blue and purple objects are very different. But such objects might nevertheless share an objective worldly similarity. After all, plenty of categories are “variably realised” at the physical level. Two materials can be similar in respect of their hardness even though they have quite different molecular constitutions, and vice versa. Perhaps blue-purple similarity and blue-green dissimilarity is like that. Variability at the level of reflectance profiles underlies objective similarity at the level of objective colour, and vice versa.

But this looks unacceptably ad hoc. In the end, the supposed objective colour similarities and dissimilarities don’t look like anything except a projection of our subjective responses. After all, nothing ties the chromatic properties of blue objects more closely to those of purple objects than green ones apart from the perceptual systems of humans and similar organisms. In the physical world, the blue objects have no special affinity with the purple ones. The only respect in which they go together is that they prompt similar responses in organisms like ourselves. True, we can project these similar responses back out onto the world, and to that extent recognise a sort of response-dependent worldly similarity in the objects themselves. But that projected similarity will be no help to a naïve realist who wants to ground similarities among conscious sensory experiences in worldly similarities rather than internal neural ones.

After all, the worldly similarity in blue and purple surfaces is now being explained in terms of the fact that they prompt similar responses in observers like ourselves. And the similarity of these responses is clearly due to blue and purple objects prompting similar neural activities in V4, and not to any prior worldly similarity. So bringing in relations to projected “objective” surface similarities is no real alternative to explaining the conscious similarity between experiences of blue and purple in terms of internal neural activities. It’s simply a detour that brings us back to the same point. Explaining the conscious similarity in terms of the surface similarity that’s explained in terms of the neural similarity is just a long version of explaining the conscious similarity in terms of the neural similarity.

**1.7 Mental Contact with Reality**

In the next section I shall return to the central difficultly raised by naïve realism, namely its commitment to conscious differences that can never manifest themselves introspectively. But first I would like to locate naïve realism within the context of some more general philosophical issues.

Naïve realism can usefully be seen as one among a wider class of philosophical positions that take factive mental states like *knowledge* and *perception* to be more fundamental than generic mental states like *belief* and *sensory experience*.

Factive states successfully relate subjects to features of the world. Knowers and perceivers are in their different ways in contact with worldly facts. Factive mental states enable our minds to reach out, so to speak, and grasp aspects of the further world. By contrast, the more generic mental states cover both successful and unsuccessful attempts to engage with the world. Believers include not just knowers but those with mistaken opinions. Sensory experiencers include not just perceivers but those subject to illusions and hallucination.

Now, factive states are certainly more important that the more generic ones in one respect. They allow us to explain the *success* of actions. Agents who *know* various facts—about where they left the screwdriver, say, or about which shops sell bananas, or so on—will be able to tailor their actions to their circumstances and so achieve their ends, where those acting on false beliefs are likely to fail. Similarly agents who *perceive* the nature and location of nearby objects are able to interact with those objects, in ways that are not available to misperceiving agents.

Still, these factive categories on their own only give us a limited understanding of agents. They allow us to discriminate the *informed* from the *ignorant*. But they do not yet allow us to distinguish, among the ignorant, those who are positively *mistaken*, in that they are subject to *false beliefs* or *non-veridical experiences*.

By bringing in the possibility of this kind of mental *mistake*, we greatly expand our ability to anticipate the actions of others. By dividing the ignorant into those who lack any view and those who are positively in error, we are able to appreciate that the latter will behave similarly to well-informed subjects—not in achieving their goals, of course, given their mistaken views, but at least in embarking on the same course of action. (You won’t find the screwdriver, if you’re mistaken in thinking it’s in the drawer, but at least that’s where you’ll look for it. You won’t succeed in picking up a yellow ball, if you mistake a green apple for one, but at least that’s what you’ll reach for.)

The idea of mental mistakes leads naturally to the thought that there is a substantial *commonality* between informed and mistaken subjects. Both kinds of subjects will act in the same way, and to this extent might both be thought of as sharing a common intrinsic mental state, a *belief* or *sensory experience*. Both kinds of subjects are in states that are intrinsically akin to the corresponding factive states, but minus the worldly facts themselves. You can be intrinsically like someone who sees a yellow ball, whether or not a yellow ball is present. Or you can be intrinsically like someone who knows the screwdriver is in the drawer, whether or not it’s there. The intrinsic likeness manifests itself in deluded subjects behaving similarly to well-informed ones. Those who mistakenly see the ball to be yellow, or mistakenly believe the screwdriver to be in the drawer, will engage in the same immediate behaviour as agents who have these matters right.

So where the factive states of knowledge and perception are good specifically for explaining success, the generic states of belief and sensory experience have a wider explanatory range, accounting for the immediate behaviour of mistaken as well as veridical subjects.

A number of important philosophical issues are raised by this idea of a common generic factor uniting the knowers with false believers and the perceivers with non-veridical experiencers. (1) Can the factive states be *reduced* to the common factor, plus truth, plus other conditions? (2) Can we *explain* anything by appeal to the factive states that can’t be explained just by the common factor plus truth? (3) Are the factive states in any way more *valuable* than just the common factor plus truth? (See Itchikawa 2017, Pritchard et al 2018.)[[10]](#footnote-10)

Fortunately we can by-pass all these issues here. What matters for present purposes is rather the prior question of whether such common factors exist, not with what further consequences follow if they do. And, on this prior question, it is very hard to deny that some common intrinsic factor unites the factive states with their erroneous counterparts. After all, the whole idea is that we can explain the immediate behaviour of the mistaken subjects in terms of their intrinsic similarity to the informed subjects. The two kinds of subjects will behave the same proximal way because they are intrinsically alike, even if only those whose views are accurate will meet with distal success. So the very idea of explaining behaviour in terms of mental mistakes would seem commits us to an intrinsic commonality between mistaken and informed subjects.

**1.8 The Instability of Naïve Realism**

Let us now return to the *conscious* properties involved in sensory experience. The points made in the last section cast a useful light on the way naïve realists think about these.

Sensory *perception* is factive. It enables subjects to grasp features of the world and to act successfully in the light of them. The importance of this kind of contact no doubt encourages the thought that the perceived facts are an element in the conscious character of veridically perceiving subjects.

Once we recognize the possibility of *non-veridical* sensory consciousness, however, it becomes difficult to resist the conclusion that misperceiving subjects will share at least some conscious sensory properties with their veridical counterparts. After all, by hypothesis people who misperceive a yellow ball are intrinsically like subjects in actual perceptual contact with a yellow ball, save that no yellow ball is there. And the conscious states of these misperceivers will presumably be determined entirely by their intrinsic properties, failing any contribution from a real yellow ball. So, since the veridical perceivers will share those intrinsic properties, they will presumably also share whatever conscious states are experienced by the misperceivers. (Robinson 2013.)

Given the strength of this argument, one might wonder why naïve realists do not allow that the good and bad sensory cases do share a common conscious factor, but then add that there is a *further* conscious aspect to the experience of veridical perceivers, courtesy of their successful contact of with perceived facts. (Perhaps, to make the idea graphic, we might think of a certain vibrancy or intensity being added to the common experiential factor the veridical perceivers share with the misperceivers.)

This “moderate realism”, as we might term it, would seem to offer many of the same attractions as full-fledged naïve realism (cf Johnston 2004, Byrne and Logue 2008). In particular, it would incorporate the observed facts themselves into the consciousness of veridically perceiving subjects, and to that extent would presumably do as much as naïve realism to bridge any philosophically worrying gaps between the mind and world. If a conscious connection with the world plays a crucial role in enabling subjects to engage with it, as naïve realists maintain, why should it cease to do so just because it is accompanied by another conscious property shared with misperceivers?

Of course, from my own point of view, this position would still suffer from the basic flaw in naïve realism, of positing conscious differences between good and bad cases that are never introspectively available to experiencing subjects. But this is scarcely something that should worry anybody attracted to naïve realism in the first place. After all, the whole project was premised on the possibility of such differences from the start.

Even so, the dominant strand in naïve realism steers resolutely clear of this moderate option. Despite the compelling argument for a conscious commonality between the good and bad cases, mainstream naïve realists insist on denying any such common conscious factor[[11]](#footnote-11). (And so mainstream naïve realists find themselves driven to the somewhat desperate measure of denying that there is any positive substance to the conscious experience of misperceivers, lest they be forced to attribute it also to intrinsically matching veridical perceivers.[[12]](#footnote-12))

This intransigence is puzzling. Given the attractions of moderate realism, and the difficulty of denying a common factor, you might expect naïve realists to embrace the moderate option. Their refusal to do so, if you ask me, reflects a basic instability in their position. In particular, as we shall shortly see, it shows that they are not always than whole-hearted in their commitment to conscious differences that are introspectively undetectable.

Naïve realist do have an official reason for rejecting moderate realism. This is that any common factor would *“screen off”* any contribution the world itself might make to conscious sensory experience. Once we admit a common conscious factor, so the thought goes, it will leave no explanatory role for a further worldly component in sensory consciousness. (Martin 2004 2006.)

It is not easy to understand this worry. Consider the analogy with knowledge and belief. We can all agree that knowledge is a world-involving state, unlike belief, and because of this that it explains things that mere belief cannot, like your succeeding in finding the screwdriver, and not just your going to the drawer looking for it. But we don’t have to stop agreeing on these things if we also hold, as many of us do, that belief is a common factor uniting the knowers and the mere believers. This common factor clearly fails to “screen off” the extra explanatory significance of knowledge, precisely because knowledge reaches out into the world and explains worldly facts that mere belief cannot. Similarly, why should the extra conscious contact afforded by veridical perception cease to play a role in explaining subjects’ ability to engage with and navigate the world, just because it is accompanied by a common factor shared with misperceivers?

The naïve realist response to this challenge is that knowledge and belief aren’t *conscious* states, and so are not subject to the same “screening off” danger. The danger, we are told, relates specifically to conscious sensory states and our introspective awareness of them. A common conscious sensory factor threatens to “screen off” any worldly involvement in consciousness, not because it will render that worldly element irrelevant to engagement with the world, but because it will leave the worldly element with no role to play in explaining subjects’ *internal awareness of their own conscious states*. That is, naïve realists fear that this common factor will fully account for subjects’ own awareness of their conscious states, without any help from the world.[[13]](#footnote-13)

This may indeed be a good worry. But note that it is tantamount to holding that a difference that can’t be discerned from the inside is not a *conscious* difference. We can’t allow that an extra conscious element is added to the common factor in the good case, so the thought goes, because a real conscious difference would have to reveal itself to introspection, and a putative extra conscious contribution from the external world cannot do this.

Quite so. That’s what I have been saying from the start. We are in danger of losing our hold on the idea of consciousness if we allow conscious differences that depend on the external world and so are not introspectively detectable. Still, if this is the objection to weak realism, it is hard to see why it didn’t bite earlier. If we are going to rule out conscious differences that have no impact on self-consciousness, as I think we indeed should, then this would seem to call the whole naïve realist project in question from the start. For that project was always committed to the idea that good and bad cases differ consciously in ways that are internally indiscernible. If we are now going to block weak realism because we reject such undetectable conscious differences, then we would have done better never to have set off down the naïve realist road in the first place.

**1.9 Sense-Datum Theories**

Sense-datum theories concur with naïve realism in holding that conscious sensory properties are *relational* properties involving sensory awareness of facts. To possess a given sensory property, the subject must again bear a certain sensory relation to a certain kind of fact.

But the relation and the relatum are different for sense-datum theories. Where naïve realism explains sensory consciousness in terms of subjects bearing the relation of *perception* to ordinary *worldly facts*, such as a ball being yellow, sense-datum theories explains it in terms of subjects bearing a special relation of *sensory awareness* to facts involving *sense data*. (Ayer 1967, Jackson 1977, Robinson 1994.)

Sense data are special mind-dependent objects, distinct from the ordinary material objects, present in cases of illusion and hallucination as well as veridical perception. Consider someone who misperceives a yellow ball as blue. Since the physical ball itself is not blue, sense datum theorists posit an extra ball-shaped object, a sense datum, which is indeed blue, to account for the subject’s experience. In their view, the subject is sensorily aware of the blueness of this sense datum, not of a fact involving the physical ball itself.

More generally, sense-datum theorists explain all sensory experiences, good cases as well as bad, not in terms of ordinary sensory perception of ordinary material objects, but as involving the special relationship of sensory awareness to facts involving special sense data.

(As for the material world itself, sense-datum theorists diverge. Some are realists about a mind-independent material world, and hope to show how we can find out about it indirectly, by inference from our knowledge of sense data. Others favour a phenomenalist option, according to which ordinary objects are metaphysical constructions of sense data, and therefore knowable about more directly. We can by-pass these issues here, however, given that our concern is with sense-datum theories of sense experience themselves, not with these further metaphysical issues.)

Because they take sense data to be present in good cases as well as bad, sense datum theorists, unlike naïve realists, can subscribe to a *common factor* account of illusions and hallucinations, holding that illusions and hallucinations consist of just the same kind of sensory experiences as occur in matching veridical perceptions. As we saw, naïve realists are barred from saying that illusions or hallucinations of a yellow ball involves the same sensory experience as actually seeing a yellow ball, since they take that latter experience to demand the presence of a real yellow ball. But since sense-datum theorists equate all experiences, both veridical and non-veridical, with relations to sense data, there is no barrier to their offering a uniform account of good and bad cases.

The cost, however, is the commitment to sense data. It is very difficult to find space for such objects within any sensible ontology.

Most traditional defenders of sense data took them to be non-physical entities to which we have direct mental access. This account of sense-data, however, is undermined by modern arguments in favour of physicalism. If sense-data are non-physical, then either they will violate the “causal closure of the physical realm” or they will be condemned to an epiphenomenal status. Neither option seems attractive. (Papineau 2001 2002.) In the heyday of sense-datum theories, in the first half of the twentieth century, the strength of the case for physicalism was perhaps not widely recognized. But non-physical sense data have few defenders left nowadays.

Might not sense data be identified with physical brain states to which we have introspective access? As a physicalist, I myself accept that sensory experiences can be identified with neural brain states, and moreover that we can be introspectively aware of these states (though this awareness will not of course reveal their neural nature). However, such brain states are not qualified to play the role of sense data. It is essential to sense data that they can bear such properties as yellowness and roundness. They are introduced precisely to bear such properties in the bad cases where no external physical objects do this. But neural brain states cannot play this role. The brain states occasioned when I have an experience of a yellow ball are not themselves yellow or round.

So, whichever way we turn it, there seems no way to make sense data ontologically respectable.

**1.10 Representationalism: Weak and Strong**

Representationalist accounts of sensory experience equate conscious sensory properties with representational properties: to have a given conscious sensory property is one and the same as mentally representing things to be a certain way. So, for example, representationalism would equate the conscious sensory property that results from viewing a yellow ball in normal conditions with the property of mentally *representing* a yellow ball.

The initial attractions of this view are obvious enough. It offers a uniform account of bad cases as well as good. I can represent there to be a yellow ball in front of me even when the ball before me is green, or when there is no ball there at all. I may be representing falsely in such cases, but I will still be representing.

Moreover, representationalism delivers this common factor committing us to any ontologically suspicious extra entities along the lines of yellow ball-shaped sense data. My *representing* the presence of something yellow and ball-shaped doesn’t require the actual existence of anything yellow and ball-shaped, any more than my *saying* “a yellow ball is in front of me” requires such a thing. So representationalists have no need to posit special entities, such as sense data, to serve as objects of perception in the bad cases.

At first sight, representationalism might seem highly plausible. But I shall be arguing that it rests on unsound metaphysical foundations. Despite its initial attractions, there is no good way of developing representationalism into a metaphysically coherent theory.

As a first step towards showing this, we need to clarify the commitments of representationalism. As I said in the Introduction, the strong representationalism of the philosophers of perception needs to be distinguished from a far less contentious weak representationalism. Strong representationalism is a thesis about the nature of conscious sensory properties—they are one and the same as representational properties. Weak representationalism, by contrast, takes conscious sensory properties as given, and simply asserts that they happen contingently to be representations.

I have no objection to weak representationalism. There seems little doubt that conscious sensory experiences are representations. After all, they typically co-vary with features of subjects’ environments, serve to guide subjects’ behaviour in ways appropriate to the presence of those features, and in general have all the features needed to qualify them as representations.

Still, while I accept that conscious sensory experiences are in fact representations, I do certainly not want to follow representationalists in *equating* conscious sensory properties with representational properties. In my view, it is an extra feature of sensory experiences, over and above their conscious nature, that they represent what they do. The conscious and representational aspects of experience are only contingently connected. The same conscious properties that actually represent such-and-such could well have has a quite different representational significance.

In the Introduction I offered the analogy with words. Sentences, considered as sequences of marks on paper, are representations all right. They are true or false depending on whether the facts fit what they say. But their representational properties are only contingently connected to their typographical properties. In themselves, those typographical marks don’t possess any representational significance. Their representational power derives from the way they happen to be used by linguistic communities. But just those marks could easily not have been used in those ways.

Representationalists don’t think of conscious sensory experiences as akin to marks on paper. In their view, sensory experiences represent in their own right, in virtue of their intrinsic natures, without the need of any assistance from their surroundings.

I reject this strong representationalism. I think of conscious sensory properties as closely analogous to written marks on paper. They represent only in virtue of the contingent way they are embedded in the wider world.

Now that I have distinguished the strong from weak representationalism, I shall drop the qualification “strong”. From now on, “representationalism” will refer to the view that sensory experience is essentially representational. When I want to characterize views, like my own, on which sensory experience is representational, but only contingently so, I shall explicitly describe them as “weak representationalism”.

**1.11 Representationalism: Naturalists and Intentionalists**

As it happens, there are two quite different philosophical programmes that endorse representationalism. Some philosophers want to explain sensory consciousness in terms of sensory representation (eg Tye 1995, Dretske 1995, Lycan 1996). Others are attracted by the idea of explaining sensory representation in terms of sensory consciousness (eg Siewert 1998, Horgan and Tienson 2002, Crane 2003, Kriegel 2013, Mendelovici 2018, Mendelovici and Bourget forthcoming). At bottom, these two approaches are opposed to each other but they are not always clearly distinguished. It is not uncommon to find elements of both approaches in writers who are more concerned to defend “representationalism” against putative counter-examples than to articulate its foundations.

The first programme of explaining sensory consciousness in terms of representation typically begins by endorsing some generally naturalist analysis of representation in non-representational terms, for example by reducing representation to correlations between internal states and environmental conditions. It then explains conscious sensory properties in term of such naturalist representational powers. The normal strategy is to propose some sub-species of naturalist representation as necessary and sufficient for sensory consciousness. (For example, Michael Tye’s 1995 “PANIC” theory equates sensory consciousness with representations that are *poised*, *analogue*, and *non-conceptual*.)

In what follows, I shall characterise those who explain sensory consciousness in terms of naturalist representation in this way as *naturalist representationalists*. As I shall explain in the next chapter, I myself accept a naturalist account of representation. However, I reject the equation of conscious sensory properties with naturalist representational powers. So where I agree with naturalist representationalists about the nature of representation, I deny their account of conscious sensory properties.

The alternative programme reverses the direction of explanation. Now we start with the structure of conscious sensory experience itself, as revealed in introspection, and aim to explain sensory representation in terms of that. From the perspective of this programme, no naturalist analysis in correlational or causal terms can take us to true representation. At best it will deliver some notion of “registration” or “detection” that is open to machines and unconscious animals as well as conscious beings. Representation properly so-called derives from the structure of conscious experience. It is only minds that are illuminated by consciousness that possess the power to portray the world.

Many philosophers in this camp look back to Brentano and his dictum that “intentionality is the mark of the mental”. Uriah Kriegel has proposed the umbrella term “Phenomenal Intentionality Research Program” for those who so follow Brentano in holding that the fundamental species of representation derives from the intrinsic directionality of conscious (Kriegel 2013). In line with this, I shall call I shall call this second version of representationalism *intentionalist* *representationalism.*

Many of the adherents of these two representationalist programmes have ambitions that extend beyond the realm of specifically *sensory* experience. Thus many naturalist representationalists want to explain all consciousness, not just sensory consciousness, in terms of naturalist representation. Analogously, many intentionalist representationalists want to explain all representation, not just sensory representation, in terms of the introspectible structure of consciousness. These broader ambitions lie beyond the scope of this book. I shall be concerned with representationalists of both kinds only insofar as they aim to relate sensory consciousness to sensory representationalism.

As I said, not all of defenders of representationalism affiliate themselves clearly to either the naturalist or the intentionalist camps. But we will need to keep the two approaches separate when we come to examine the metaphysical foundations of representationalism in the next chapter.

**1.12 Representationalism: Content and Mode**

Both naturalist and intentionalist representationalists endorse the basic equation of conscious sensory properties with representational properties. This equation raises some immediate questions, in response to which representationalism can be qualified in various ways. In this and the next section I shall run through these fairly quickly, as they do not matter to my basic objections to representationalism.

Representationalists say that conscious sensory properties are one and the same as representational properties. The existence of different sensory modalities poses a prima facie challenge to this equation. I can *see* a square table in front of me. But I can also *tactually feel* the same table. In the first case, I will be representing its shape visually, in the second, tactually. Arguably the same feature is being represented in both cases. Yet seeing a square is phenomenologically very different from touching one. How so, if conscious sensory properties are representational properties, and the same thing is being represented in both cases?

There are two options here. One is to appeal to differences in *content*, in what it represented. Representationalists can maintain that seeing the square table and feeling the square table each represent a rather different range of features. Where sight tells us about shades and lighting as well as shape, touch adds information about features like hardness and impenetrability. So the first representationalist option is to account for the phenomenological differences between different sensory modalities by reference to the different kinds of information they carry. Sight represents visible features, touch represents tactual ones. The distinctive phenomenology of different senses is constituted by the distinctive bodies of information they convey. (See eg Tye 1995, Byrne 2001, Pautz 2010.)

The other option for representationalists is to account for the difference between different sensory modes in terms of the *mode* or *format* of representation, rather than content. The idea here would be that, even though sight and touch might in principle represent the same things, they would do so in different ways. Both senses might represent that a square surface is in front of me, but differ consciously because the medium of representation is different. On this option, then, the conscious character of a given sensory mode is the product of two factors: first, the representational content—*what* is being represented; second, the mode of representation—*how* that content being represented. (See eg Lycan 1996, Crane 2003.)

On this latter option, representationalists are not equating conscious phenomenal character with representational properties alone, but with a combination of representational properties and further facts about the mode or format of representation. Still, all the arguments that follow will apply equally to this qualified form of representation, and so I shall ignore this complication in what follows and continue to understand representationalism as a simple equation of phenomenal character with representational content.[[14]](#footnote-14)

**1.13 Representationalism: Broadness, Supervenience and Identity**

So far I have presented representationalism as a property *identity* thesis: conscious sensory properties are one and the same as representational properties. But not all who count themselves as representationalists are committed to this strong identity thesis. Some hold that conscious character is fixed by representational properties but not vice versa. This is because they think that conscious experiences sometimes have representational contents that are “broad”. So they restrict their representationalism to the supervenience claim that representational properties necessarily determine conscious character, but without endorsing the converse implication.

Let me explain this more slowly. It will be helpful to say more about both representational contents and broadness. Throughout this book I shall understand representational contents in terms of the possession of *truth conditions*.[[15]](#footnote-15) The essential feature of any representational state is that is lays down a condition for the world to satisfy. It portrays the world as being a certain way, by drawing a line in logical space between the possibilities into that verify it and those that do not. (Some representations are very dense, with very rich truth conditions. Maps or pictures are like this. So are sensory experiences. Because of this, some prefer not to speak of “truth conditions” in such cases, and instead refer to “correctness conditions” or “veridicality conditions”. But I do not take this to be a substantial issue. It is not that pictures, maps and sense experiences lack truth conditions. It is just that they have dense and complex ones.)

Now for “broadness”. The truth conditions of a representational state are said to be broad if they depend on factors external to the thinker as well as the thinker’s intrinsic properties. The idea is that the intrinsic features of subjects only provide part of what determines truth-conditional content—an internal “pointing out”, as it were—with the subject’s context then deciding which entity is picked out by this pointing. (So, for example, imagine that I am thinking about my wife: *Rose has green eyes*. My intrinsically identical doppelganger in Australia has a corresponding thought about his wife, also called “Rose”: *Rose has green eyes*. His thought will be true if *his* wife has green eyes, whereas mine will be true if *my* wife has green eyes. Despite our intrinsic identity, our thoughts have different truth conditions.)

I shall have a lot more to say about broadness in subsequent chapters. For the moment we can start by noting that there is certainly reason to agree that many *thoughts* have broad truth conditions. The case for such broad thoughts has been widely accepted ever since Putnam’s “twin earth” tale (1975) of subjects on different planets referring to different liquids with their “water” concepts, and Burge’s story (1979) of subjects in different societies referring to different ailments with their “arthritis” concepts. Kripke’s causal theory of reference (1972 1980) was also influential in persuading philosophers that “proper name” concepts are broad.

It is a matter of debate, however, whether the case for broad contents carries over to sensory experiences as well as cognitive thoughts. I myself think it does, and will argue as much in what follows. But representationalists have strong reason to deny this. If sensory representation is broad, and conscious sensory properties are one and the same as representational properties, then consciousness will be broad too. Conscious sensory properties will depend on external contexts as well as intrinsic properties, and so intrinsically identical subjects can fail to share conscious states. Two subjects can be just the same inside their skin, but consciously different.

Not surprisingly, few representationalists are prepared to embrace this consequence. One option at this point is for them to argue that sensory experiences do not have broad contents, even if cognitive thoughts often do, perhaps on the grounds that sensory experiences, unlike thoughts, never represent particular objects or natural kinds. (An experience can’t represent that *my wife Rose* has green eyes, even if a thought can.)

An alternative option is to allow that the truth conditions of some experiences are broad all right, but to insist that nevertheless the conscious character of such experiences itself constitutes a different kind of “content”, something that yields a truth condition once it is given the assistance of an external context. On this view, the kind of “content’ associated with conscious character will be determined by truth-conditions, without determining truth-conditional content on its own. Only a certain kind of conscious experience can represent that my wife Rose has green eyes, yet that experience will have a different truth condition in my Australian doppelganger. Two experiences that have the same truth-conditional content must thus be consciously the same, even if that type of conscious experience can have different truth conditions in different contexts.

We shall look at these moves in more detail later. For the moment I shall restrict myself to one basic observation. If conscious sensory character does not determine truth-conditional content on its own, then what justifies saying that it has a representational nature? The fact that it constitutes a truth-condition when combined with a context does not guarantee that it is representational on its own. This issue is not to be decided simply by adopting the term “content” to refer to the contribution that conscious sensory character makes to truth conditions. There remains a question of whether this representational terminology is justified.

After all, the qualitative view that I myself embrace also holds that conscious sensory character, plus a certain kind of environmental embedding, together metaphysically determine truth-conditional content. Yet, from the perspective of my qualitative view, conscious sensory character is no more essentially representational than are marks on paper.

Having noted that some versions of representationalism restrict themselves to a supervenience claim, I shall now mostly ignore this refinement and continue to discuss representationalism as if it were a simple equation of sensory and representational properties. This will greatly streamline the subsequent exposition. We will return to the issue of broadness in due course.

**Chapter 2 Representationalism**

**2.1 The Metaphysical Challenge**

For the most part, defenders of representationalism do not spend a great deal of time explaining the metaphysical basis of their position. Instead they typically appeal to its intuitive plausibility, before quickly moving on to the elaboration of details and responses to counter-examples.

From my point of view, this puts the cart before the horse. Remember that representationalism is the strong thesis that the conscious character and the representational content of sensory experiences are one and the same, not the weaker thesis that conscious sensory states contingently happen to possess a representational content. This stronger claim is metaphysically extremely ambitious, and as such cries out for further elucidation.

On the initial face of things, conscious sensory character and representational content are very different. The conscious character of an experience is what it is like for its subject, a here-and-now illumination of the subject’s mind. The representational content of a sensory experience is the way it answers to some worldly condition, to some specification involving objects and properties in the environment.

Given this prima facie difference between character and content, it is not enough simply to invoke the intuitive plausibility of representationalism. We need some metaphysical analysis of how character and content can be the same. How is it possible for the conscious features of a subject’s mind to bear a necessary connection to conditions involving worldly objects and properties? Strong representationalism stands in need of some explanation of why character and content should be metaphysically intertwined.

But instead, as I said, we are typically offered brisk appeals to intuition. This is not enough to establish strong representationalism. At best it offers some support for weak representationalism. As I have stressed throughout, it is relatively uncontentious that conscious sensory experiences are contingently representational. This does not show that their character and content are necessarily tied together.

I should make an exception for those representationalists who appeal to the “transparency” of experience to argue that worldly properties like colour and shape are in some sense *present in* the conscious character of experience. Later in this chapter I shall argue that this line of thought is fundamentally flawed. But it does at least attempt to explain how character and content are constitutively tied together. This argument is the exception, however. Other defences of representationalism simply fail to take up the metaphysical challenge.

**2.2 Initial Representationalist Thoughts**

Let me quickly run through some of the initial observations offered in support of representationalism and show that none of them suffices to establish strong representationalism. After that I shall consider whether either the naturalist or the intentionalist representational programmes possesses the underlying resources to forge a metaphysical link between sensory character and representational content.

*Conscious Character Fixes Accuracy Conditions*

Some representationalists motivate their position with the simple observation that sensory experiences have accuracy conditions. Imagine someone who is visually experiencing a yellow ball, they say. Is it not obvious that this experience is accurate if the subject is confronted with a yellow ball, and illusory otherwise—that is, that the experience represents a yellow ball? (Siewert 1998 221, Horgan and Tienson 2002 525, Kriegel 2011 47.)

Well, yes. But this does not establish strong representationalism. Weak representationalism agrees that visual experiences represent colours, shapes and other things. What is more, it can agree that this is intuitively obvious. The idea that sensory experiences represent subjects’ environments is scarcely alien to common sense. The possibility of illusions and hallucinations goes hand in hand with the everyday thought that misperceivers and matching veridical perceivers represent the world in the same way.

So we can all agree with the intuitive thought that sensory experiences have accuracy conditions. But this does not take us to strong representation. To show that accuracy conditions are fixed by phenomenology alone, we cannot simply appeal to truisms that are equally consistent with weak representationalism.

*Conscious Character Fixes Belief*

Some representationalists stress the way that sensory experiences automatically lead to beliefs with given contents. Imagine someone having an experience as of a yellow ball, they say. Won’t this experience immediately incline the subject to form the belief *that a yellow ball is in front of them*? And does this not show that the experience is connected with a specific representational content? (Horgan and Tienson 2002 526, Jackson 2007 58-9.)

Well, yes again. But this too is consistent with weak representationalism. I take it to be uncontentious that the role of experience is to inform subjects about their environments, and that subjects will therefore tend to form beliefs whose contents match those of their experiences. There is no reason why this truism should weigh against weak representationalism.

What if conscious experiences are *constitutively* tied to corresponding belief states? One can imagine accounts of experience and belief on which transitions from the former to the latter are built into the nature of experience. Would that not forge a constitutive link between conscious experiences and representational contents, deriving from the contents of the belief states they are linked to?

It is not to be taken for granted, however, that belief states have their contents essentially. This is complex issue to which we shall return in chapter 4. At this stage we can simply note that weak representationalists like myself are likely to take a similar line with belief states as with experiences. We will say that they too have their representational contents contingently, and so will resist any idea that essential links between experiences and belief states might carry us through to essential links with representational contents.

*Conscious Character Fixes How The World Appears*

Some representationalists appeal to way that changes in conscious character are inevitably accompanied by representational changes in how the world appears to the subject, and vice versa. I have an experience as of a yellow ball. My experience changes in some respect. I now represent the world as appearing to me differently. (Siewert 1998 219-20, Byrne 2001 210.)

I agree about this correlation between changes in character and changes in content. But once more this fails to take us to strong representationalism. Weak representationalism also recognises a tight correlation between character and content. For any given subject, a difference in character betokens a difference in content, and vice versa. But this does not require any essential connection between character and content.

Consider the analogy with sentences once more. Putting cases of synonymy and homonymy to one side, a difference in sentence typography signifies a difference in sentential meaning, and vice versa. But nobody thinks that typographical sentences have their meaning essentially. It’s just that they covary within any given language. In just the same way, the conscious character and representational content of any given subject’s sensory experiences will generally march in step, even though their covariation is not essential.[[16]](#footnote-16)

Sometimes we talk about the way things “look” or “seem” or “appear” to subjects, leaving it open whether we are referring to phenomenal character or how thing are experientially represented. At first pass, this usage might suggest an essential interdependence between these two aspects of experience. But there is no need to understand it in this way. Instead weak representationalists can view it as a natural consequence of the way changes in phenomenal character are normally accompanied by changes in representational content, and vice versa. Given this pattern of co-occurrence, no harm is done by using the same words for both aspects of experience. In effect, the use of “seems” or “looks” or “appears” to describe both character and content functions as no more than a convenient pun.

*Conscious Character is Described Representationally*

Some representationalists point to the fact that we normally identify the conscious character of experiences by citing their representational contents. We talk about seeing *that the yellow ball is on the lawn*, or feeling *that the bar of soap is slippery*. (Strawson 1979 97, Bayne 2016 107.)

The analysis of talk about experiences raises many issues, to which we shall return in the last chapter. But let us grant for the moment that such talk typically works by citing the representational contents of experiences. Even if this is granted, it provides no real argument for strong representationalism.

I have just explained how even weak representationalism recognises a tight correlation between the conscious character of experiences and their representational contents. This is enough in itself to explain the practice of identifying conscious sensory experiences by citing what they represent. Since the content is contingently correlated with the character, we can conveniently use the latter to identify the former. “Reference by contingent description” is a familiar enough phenomenon. We often identify things by citing properties that they possess only contingently.

*Conscious Character Represents Independently of Thought*

Some representationalists rest their case on the fact that experience does not need the assistance of higher conceptual faculties to becomes representational. (Siewert 1998 sect 7.5.)

At one level I agree with these representationalists. Along with many other contemporary philosophers, I think there are good reasons to reject the view, associated with Kant and Reid, that sensory experience as such is not representational, and only becomes so when worked up into something richer with the help of conceptual thought. (For one thing, it seems likely that sensory states play a genuinely representational role in many animals who have no powers of conceptual thought. For another, knowingly experienced illusions—illusions that persist even when recognized—seem to involve sensory representations that actively resist any guidance by conceptual cognition. Both these considerations argue against the Kant-Reid position.)

But this does show that conscious sensory experiences are *essentially* representational. As I observed in the last chapter, the representational power of conscious experiences might still depend on other things, even if it doesn’t depend on conceptual thought. Strong representationalism requires that sensory experiences represent entirely in their own right, in virtue of their conscious nature. This doesn’t follow just because sensory representation does not depend on interaction with conscious thought. For it may still depend on other things that are not metaphysically guaranteed by the conscious nature of sensory experience, such as embedding in wider environmental contexts

*Conscious Character is Manifestly Representational*

Some representationalists simply appeal to the structure of sensory experience as revealed by introspection. “Just reflect on your current experience,” they urge. “Is it not obvious that it represents aspects of the world to you?” (Cf Horgan and Tienson 2002 520.)

I am happy to grant that introspection shows conscious sensory experience to have a rich structure. But we can scarcely read representationalism straight off from this. Sensory experience does not wear its metaphysical nature on its sleeve. After all, the findings of introspection are equally available to all the different theories of sensory experience, including the naïve realist, sense datum and qualitative theories. It is not as if defenders of these alternative theories have simply failed to notice the manifest representational nature of their sensory consciousness.

Much of what follows will be concerned to understand the structure of sensory experience. But we will need to move beyond intuitions and first impressions. Serious analysis is needed to decide which theory of sensory experience best accommodates its introspectible structure.

**2.3 Naturalist Theories of Representation**

So let us now turn to possible metaphysical foundations for representationalism. As we saw in the last chapter, there are two alternative approaches that seek to forge a metaphysical link between sensory character and content: the naturalist programme that aims to explain sensory consciousness in terms of a naturalist theory of representation; and the intentionalist programme that aims conversely to explain sensory representation in terms of the structure of consciousness. Let us begin with the naturalist programme.

In this subsection I shall explain the naturalist approach to representation assumed by this programme. Naturalists are not always explicit about the theory of representation that is supposed to provide the metaphysical underpinnings for their programme, often simply gesturing at the availability of various naturalist accounts. But in the present context it will be necessary to say more, as the success of the naturalists’ programme hinges crucially on the way they think about representation.

As it happens, I think that naturalists think about representation itself in the right way. Still, my concern at this point is not to defend this approach to representation, but rather to highlight the problems facing the naturalist approach to *sensory experience*. This approach might start by thinking about representation in the right way, but it is quite wrong, in my view, to think that representation so understood can account for sensory experience. Naturalistic representation just doesn’t provide the right kind of materials to ground sensory consciousness.

So my aim in this section will simply be to say enough about the naturalist approach to representation to show why it is unsuited to explaining sensory experience.

Much naturalistic work on representation starts with the “representational theory of the mind”. On this view, humans, animals, and any other thinking systems manage to represent the world by housing internal “mental representations”, intrinsic states which stand for other states of affairs. Thus some organism might have some brain state, some arrangement of neurons, say, which stands for the presence of a yellow ball, or for some other observable circumstance.

When Jerry Fodor and others first elaborated the representational theory of mind in the 1960s, their primary aim was to account for the internal cognitive workings of thinking systems (Fodor 1975 1980). They focused on the internal causal role of mental representations in reasoning and the generation of behaviour, modelling their interactions on the workings of a digital computer. Different mental representations would relate to each other in ways appropriate to their representational content, thus giving rise to further mental representations and to physical action. For example, a representation of a given yellow ball might combine with a desire to score a goal to yield an intention to kick the ball and hence a bodily movement.

Initial advocates of this approach were more concerned with psychological processing than the nature of representation itself. They tended to taker the latter for granted, and focused instead on the ways in which the intrinsic states, the “vehicles of representation”,

might combine causally to generate thought and behaviour. Their aim was to show how the vehicles could interact mechanistically in ways appropriate to their representational contents, not to explain where those contents came from in the first place.

But attention soon switched to representation itself. Paradoxically, the initial focus on psychological processing highlighted the need to explain the idea of representation. As a number of writers pointed out, if the explanatory significance of “mental representations” is exhausted by the way such “representations” interact causally to generate further such “representations” and eventually behaviour, then why does it matter that these states *represent* circumstances that (in nearly all cases) lie outside the organism? (Field 1978, Loar 1981.) If two brain states cause a further brain state that causes my leg to move, then shouldn’t it be possible to specify how this process works without bringing in representation at all? How can a supposed relation of internal states to yellow balls outside the head make any difference to the way they interact causally inside the head? By focusing exclusively on the role of “mental representations” in internal processing, the representational theory of mind thus seemed in danger of leaving out *representation* itself.

This challenge led a shift in focus among naturalist philosophers of mind. They came to recognize that representation relations are primarily concerned with the way subjects are embedded in their environments, rather than with internal cognitive mechanisms. For a vehicle to have a given representational content is in the first instance for it to bear some natural relation to some normally external state of affairs, not for it to interact causally with other vehicles. The brain state represents the presence of a yellow ball because of some causal or historical or biological connection with yellow balls in the outside world.

This is not to deny that internal vehicles of representation do interact causally with each other, nor that they tend to do this in line with their representational contents, as conveyed by our ordinary ways of describing such vehicles (“a representation of a yellow ball ”). A fully developed naturalist theory of mental representation would thus attend to both the internal interactions of the vehicles as well as their relations to external circumstances. But without these external relations we would have nothing worth calling representational content.

The simplest naturalist account of the relevant external relations would be a crude causal one. An internal state represents a given external circumstance if the latter is included in the causes of the former.

This crude causal account suggests that representation is explanatorily significant because it helps us keep track of when different vehicles will be tokened. If ascriptions of representational content type vehicles by their causes, then they will tell us which vehicles will occur in what circumstances. By characterizing a state as a representation of a yellow ball, we imply that it will be formed by a subject who is confronted by a yellow ball.

The basic problem facing the crude causal account is that it seems to leave no room for *misrepresentation.* Some representations are false. But this wouldn’t be possible if their content coincided with the set of circumstances that can cause them. For then their content would be satisfied whenever they are caused to occur. (Papineau 1984, Fodor 1984.) For example, supposed that you represent that a yellow ball is in front of you, but there isn’t (you are fooled by a realistic picture). Your representation is false. But if the representational content of your mental state coincided with all its causes, then this state wouldn’t be false (since a realistic picture is one of its causes). Its content would be: a yellow ball *or* a realistic picture of a yellow ball *or* neural malfunctions that cause the representation *or* . . . And this condition *would* be satisfied in the case at hand.

Some respond to this problem by adding further requirements to the *kinds* of causes that count as part of a representation’s content, aiming to isolate “normal” or “characteristic” causes (Fodor 1987). This is one option, but an alternative is to switch attention from the causes of representational states to their effects. A range of “output-oriented” approaches, including teleosemantics (Millikan 1984, Papineau 1984), success semantics (Ramsey 1927, Balckburn 2005), and convention-based signalling theories (Lewis 1969, Skyrms 1996), focus on the behavioural effects of representations rather than their causes.. They then equate the contents of representations with the conditions required for the responses they prompt to achieve their ends.

A simple example will illustrate the idea. Suppose a species of monkeys has some brain state that is prompted by leopard-like appearances and makes them scamper into trees. According to output-oriented theories, this state represents *leopard*, even if it is prompted far more often by deceptive appearances than by real leopards, because that is the condition under which the monkeys’ behaviour is appropriate to their ends. Running into trees in the absence of a leopard is just a waste of time. (Seyfarth et al 1980.)

In effect, output-based theories assign contents to vehicles of representations on the basis of how subjects *interpret* them – not in the sense of how they *think* about them (that would be regressive in a theory of representation), but on the basis of how they *act* in response to them. The monkeys interpret their brain state as standing for a leopard in that they respond to it in a way that would be sensible if a real leopard were present. More generally, the content of a representation is the condition under which the behaviour it prompts will be successful.

Naturalist theories of representation, of any stripe, face substantial challenges. It is perhaps not hard to see how they might work for simple animal representations. But a fully developed theory would need to accommodate more complicated representations in conceptually sophisticated beings. I myself am optimistic. In particular, I think that a teleosemantic focus on the biological history and individual development of cognitive systems promises to explain how complex representations can be built from recombinable components (and so in particular can allow subjects to represent previously unencountered and possibly unobservable circumstances). (Papineau 2016.)

Still, we need not pursue these issues here. This is because our current concern is not with naturalist theories of representation as such, but with their role in a naturalist account of conscious sensory experience. And we are already in a position to see why any naturalist theory will be ill-suited for this role.

**2.4 The Implausibility of Naturalist Representationalism**

Naturalist theories of representation invoke general correlations between types of internal vehicle and worldly conditions. On input-orientated theories like the causal theory and its refinements, these will be correlations between vehicle types and their causes. On output-orientated theories like teleosemantics and success semantics, these will be correlations between vehicle types and conditions required for the success of behaviours prompted by those vehicles. Still, however these details are filled in, all theories of a naturalist stripe hinge on some sort of general correlation between vehicles and environmental conditions. I shall speak of these as “environmental correlations” henceforth.[[17]](#footnote-17)

So naturalistic representation is to do with the way that subjects’ representational vehicles are related to environmental conditions. This creates a prima facie problem for any attempt to explain conscious sensory experience in terms of naturalist representation. Initial intuition favours the view that conscious properties are determined by the intrinsic properties of subjects, by how matters are inside their skins. For example, when I have a conscious experience as of a yellow ball, we might expect my conscious state to be fixed by what is going on inside my head. But not so, according to naturalist representationalism. On that view, my mind consciously lights up as it does, not because the intrinsic properties of the vehicle I am housing, but because that vehicle is externally correlated with yellow balls. A vehicle with *different* intrinsic properties (a different arrangement of neural firings, say) would constitute the *same* conscious feeling if it were correlated with the same environmental condition, and a vehicle with the *same* intrinsic properties would constitute a *different* conscious feeling if it were correlated with a different environmental condition.

Given only the points made so far, this seems a very odd suggestion. How can an environmental correlation between a vehicle and an external condition make a difference to the way the experience feels? Later in this chapter we shall see how naturalists appeal to the “transparency of perception” to add plausibility to their view. But given only the naturalist account of representation itself, with representation constituted by correlations between internal vehicles and environmental conditions, it is hard to see why anybody should find it at all plausible that conscious sensory properties are representational.

Is the naturalist thesis that conscious experience depends on extra-cranial matters really so counter-intuitive? What about naïve realism, which construes conscious sensory properties as dependent on external circumstances? We might in the end wish to reject this view, for the reasons given in the last chapter, but it would be unreasonable to say that it runs counter to everyday intuition. In particular, its claim that the external facts I am observing are literally constituents of my consciousness, far from detracting from the intuitive appeal of naive realism, is what makes it initially attractive.

Naturalist representationalism, however, is a far stranger view than naïve realism. On the latter view, my sensory consciousness is constituted by local features of my immediate surroundings. I am in visual contact with a yellow ball, and the actual colour and shape of this object contribute to the phenomenal character of my experience. But naturalism thinks about sensory consciousness quite differently. This is because naturalist representationalism is a common factor view. It allows, indeed insists, that illusions and hallucinations can have the same phenomenal character as matching veridical perceptions. So, for naturalist representationalists, it’s not the presence of an actual yellow ball that delivers the conscious character, but the vehicle’s general correlation with the properties of yellowness and roundness. I will have the feeling even in illusory or hallucinatory cases where no actual yellow ball is present, provided I am tokening a vehicle with the right environmental correlation.

This is strange indeed. The phenomenal character of my visual experience is here-and-now. My conscious experience as of a yellow ball is immediately present to me. Yet according to naturalist representationalism this feeling does not depend on the intrinsic properties of my mental vehicle, nor even on any features of my local environment, but on whichever environmental conditions that vehicle happens *generally* to be correlated with. I find it hard to take seriously the idea that my here-and-now feeling derives from such a distant correlation.

The issue I am raising is not often addressed head-on in the literature on naturalist representationalism. Still, when it is, some naturalists have proved ready to grasp the nettle and allow that our here-and-now phenomenology can hinge on general environmental correlations. (See Tye 1998 sect II, and forthcoming.) I take it that most will find this a highly counter-intuitive move. But I don’t want to rest any argumentative weight on that. In the end, the verdict on naturalist representationalism will hinge on its overall success at explaining the agreed evidence, not on any brute trading of intuitions. So for now let me just content myself with the observation that naturalist representationalism about sensory experience would be unlikely to recommend itself to anybody if its only source of support were the naturalist theory of representation. Without further argument, why ever should we think that our representational vehicles light up consciously as they do, not because of their intrinsic properties, but because they happen to be generally correlated with certain features of the environment?

Before proceeding, I would like to point out that the difficulty I am raising for naturalist representationalism does not hinge on any presumption of materialism. A naturalist theory of representation assumes that certain intrinsic states of subjects function as “vehicles of representation”. As a materialist, I myself think of these as certain sorts of brain state, and so I imagine do most other advocates of naturalist theories of representation. Even so, all the points I have made in the last two sections would apply in just the same way even if the intrinsic vehicles were made of some distinctive mind-stuff. The approach to representation I have been discussing would still view the representationalist content of such intrinsic dualist states as due to whichever environmental conditions they happen to be generally correlated with. And it would still be very hard to understand why the conscious nature of these dualist states should be necessarily tied to whichever environmental conditions they happen to be correlated with, rather than their intrinsic constitution as mind-stuff.

**2.5 The Distractions of Broadness**

In the literature on naturalist representationalism, the difficulty raised in the last section has largely been eclipsed by a more immediate concern with “broad contents”—that is, cases where different truth conditions attach to the corresponding mental states of intrinsically identical subjects. Broad contents are a predictable consequence of a naturalist account of representation, and the two issues raise closely related problems for representationalist theories of sensory experience. In my view however, it is the naturalist account of representation itself that poses the underlying difficulty. Broad contents are just a symptom, and we will fail to understand the real source of the ailment if we focus on them alone.

As pointed out at the end of the last chapter, broad contents pose an obvious threat to representationalism. If contents are broad, and conscious character is identical to representational content, then some conscious states will be broad. They will depend on environments as well as on intrinsic properties. While some few representationalists are prepared to allow that consciousness can depend on environments—I cited Tye in the last section—the vast majority seek to avoid this conclusion. Their standard line is to argue that *sensory* contents are not broad, however it is with the representational contents of other mental states. The idea here is to show somehow that the truth conditions of sensory states never involve particular objects (like *Rose*), or natural kinds (like *water*), or socially mediated kinds (like *arthritis*), but only observable qualitative categories (colour and shape are popular candidates), and so will always be shared by intrinsic identicals, whatever their environments.

The reason I have so far by-passed the voluminous literature on broad contents is that it makes the challenge facing naturalist representationalism seem relatively superficial. The normal procedure is to trade intuitions about the specific contents of different sensory representations on a case-by-case basis. This makes it look as if all we need to save representationalism is an intuitively acceptable account of specific sensory contents.

The basic problem, however, is far more fundamental. Even if sensory contents were not broad, it would still make little sense to reduce conscious sensory properties to naturalist representational contents. The environmental correlations constituting naturalist representational contents do not offer the right kind of materials to compose the here-and-now character of sensory experience.

Suppose it were somehow possible for naturalist representationalism to finesse broadness as suggested above, by somehow showing that sensory representational contents only involve observable qualities (like *yellow* or *round*) and so are always shared by intrinsic duplicates, even if non-sensory representational contents often aren’t. As we shall see at the end of this chapter, this is no easy project to carry through. Still, even if it were possible, it wouldn’t really help. It would still leave us trying to weave conscious properties out of general environmental correlations.

If intrinsic duplicates did always share sensory representational contents, then this would eliminate any awkward cases of intrinsically identical subjects that naturalist representationalism implied to be consciously different. However, this still wouldn’t allow naturalist representationalists to hold that sensory consciousness is *constituted* by intrinsic properties. Indeed naturalist representationalists would remain committed to denying this. In their view, sensory consciousness hinges, not on intrinsic properties, but rather on their contingent correlation with environmental conditions. And, for all that has been said so far, this thesis would remain quite unmotivated.

We might wonder how many of those who profess naturalist representationalism are actually thinking in these terms. I suspect that few of them really hold that sensory consciousness is independent of the intrinsic properties of the vehicles of representation, and instead determined by whatever external conditions those vehicles happen to be correlated with. As we shall see in the section after next, nearly all naturalist representationalists are primarily motivated, not by reflection on the nature of naturalist representation, but rather by “transparency”, by the apparent present of worldly properties within perception, which they take this to be revealed by introspection and to show directly that sensory experience is representational. For most of them, I suspect, the commitment to naturalism is only tagged on afterwards—since introspection shows us directly that experiential states are representational, and since the best theory of representation is no doubt a naturalist one, sensory consciousness must therefore reduce to naturalist representation. Little attention is paid to the implication that sensory consciousness is constituted by environmental correlations rather than intrinsic properties, and awkward consequences threatened by broad contents are dealt with on a piecemeal basis. As a result, the underlying implausibility of naturalist representation passes unnoticed.

**2.6 Broadness in Context**

Now that the topic has been raised, and given its significance for this book, it will be worth saying something more about broadness itself. Many philosophers regard broad representational contents as some kind of quirk, some oddity that gains intuitive support from a few spurious thought experiments, but which is out of line with the true nature of representation. This attitude then lends support to the general representationalist faith that that the problems posed by broadness can somehow be finessed by showing that paradigm representational states, including sensory experiences, do not in fact have broad contents, and that broadness is a superficial feature of certain idiosyncratic kinds of representation.

But I think that this is quite the wrong attitude. It is true that the recognition of broadness is relatively new. Until about fifty years ago nobody doubted that content was determined by internal intrinsic factors. We shall consider why in a second. But this late recognition should not be taken to count against the significance of broadness. In truth, broadness flows from the nature of representation. It is not some superficial veneer resulting from distorted intuitions, but an essential aspect of representation itself.

If we accept a naturalist theory of representation, as I think we should, then broadness is just what we should expect. Content is not fixed by the intrinsic properties of subjects or their representational vehicles, but by correlations with features of their environments. And so it is quite unsurprising that the mental states of intrinsically identical subjects in different environments should end up with different contents. My mental state is correlated with my wife Rose; my Australian duplicate’s state is correlated with his similarly-named wife. Here on earth my mental state is correlated with H20; on twin earth my duplicate’s state is correlated with XYZ. In this society my mental state is correlated with arthritis; in a different society my duplicate’s state would be correlated with a different ailment. And, in general, the conditions any mental states are correlated with, including paradigm mental states like sensory experiences, will be a function of subjects’ environments as well as their intrinsic features.

Why might anybody have supposed otherwise? Why have philosophers been so resistant to broadness? What’s wrong with the idea that truth conditions depend in part on which entities the subjects’ environments make available?

Let me first mention a relatively quirky local reason for the philosophers’ resistance. After that I shall turn to a more fundamental point.

I said that broadness is a natural consequence of any naturalist approach to representation. Even so, the idea of broadness met strong resistance from one strand in naturalist thinking about representationalism. In his influential “Methodological Solipsism”, Jerry Fodor argued that, since the role of mental representations is to explain internal cognitive processing, any supposed environment-dependent differences between representations can only be superficial. After all, the internal states of two intrinsically identical subjects will interact causally in the same way and will result in the same bodily behaviour. So they should be classified alike for any serious explanatory scientific purposes, notwithstanding any tendencies of everyday thought to individuate them by reference to their environments. (Fodor 1980.)

We have already seen what is wrong with this line of thought. Fodor’s exclusive concern with internal processing led him to misunderstand the nature of representation. The explanatory significance of representation was never to do with internal processing and bodily behaviour. As I observed earlier, if that were all we were interested in, we could dispense with representation altogether. Rather representational notions allow us to connect subjects to their environments, to keep track of when representations will be formed and when the behaviours they prompt will yield distal results. Representation is essentially to do with how subjects are embedded in their environments rather than with internal processing alone. Given this, we should positively expect representation to be broad and the states of intrinsic identicals to have different representational contents.

Let me now turn to the more fundamental reason why representation is widely thought to be broad. (No doubt this aided the anti-broadness resistance of Fodor and his followers.) This is simply the dominant position that *intentionalist* representationalism has occupied in the philosophical tradition. It is implicit in nearly all traditional thinking about mental representation. For pretty much every philosopher prior to the middle of the twentieth century, the intentionalist idea that representation arises from the structure of consciousness has been so obvious as not to be worth mentioning. Just reflect on the conscious structure of your mental states. Isn’t it obvious that this fixes their representational content?

At the same time it also went without saying that the conscious structure of mental states depended on the intrinsic properties of subjects. And this, I take it, is why the philosophical tradition has been closed to broadness. The reason was simply that intentionalist representationalism was taken for granted, and this, when combined with the natural thought that consciousness is fixed by intrinsic factors, rules out any representational broadness. If representational content depends on consciousness, and consciousness is intrinsic, then environmental factors cannot make a difference.[[18]](#footnote-18)

**2.7 The Appeal to Transparency**

Let us go back to naturalist representation. As I said, the naturalist understanding of representation itself lends little support to the identifications of conscious sensory properties with representational ones. After all, this understanding makes representation a matter of correlations with environmental properties, and that seems a very unlikely candidate for reducing conscious properties. Why should my sensory consciousness constitutively depend on which features of the external world my intrinsic states happen to be correlated with?

Unsurprisingly, few naturalist representationalists try to justify their view by a direct appeal to a naturalist theory of representation. Instead, they typically start by appealing to the structure of sensory experience itself, as revealed in introspection. They contend that introspection shows experience to be “transparent” (or “diaphanous”), in that it constitutively involves worldly properties like yellowness and sphericity, and they then argue that this on its own suffices to show that experience must be representational. (Harman 1990, Tye 2002, Dretske 2003, Jackson 2007.)

This line of argument brings naturalist representationalists together with their intentionalist cousins. Intentionalists also aim to ground their representationalism on the manifest structure of experience as revealed by introspection. Moreover many of them—though not all, as we shall see later—agree with the appeal to “transparency” and hold that sensory experience is representational because of the way it constitutively involves worldly properties.

So for the time being I shall view the appeal to “transparency” as a resource that is available to naturalist and intentionalists alike. How is it supposed to work? The idea is normally introduced as part of an argument against the idea that sensory experiences involve “qualia”, where this means intrinsic properties inherent in experience itself, as opposed to the kinds of properties possessed by ordinary objects.

Suppose you are looking at a yellow ball. The advocates of transparency then invite you to attend to the “qualia” present in your experience. The natural response is simply for you to focus harder on the properties of the ball itself. When you try to attend to the properties of experience, you only succeed in focusing your attention on the properties of the ball. At first pass, then, this suggests that experiences themselves have no properties other than the worldly properties possessed by the objects you are observing.

Here is a well-known quotation from Gilbert Harman to this effect:

“When you see a tree, you do not experience any features as intrinsic features of your experience. Look at a tree and try to turn your attention to intrinsic features of your visual experience. I predict you will find that the only features there to turn your attention to will be features of the presented tree. . . . ” (Harman 1990 667)

And here is a similar quotation from Michael Tye:

“Focus on some object that you recognize, a blue disk, say. Now turn your attention inwards and try to pick out intrinsic features of your experience, inside you, over and above what it is an experience of. Try to discern intrinsic features of the mental paint. The task seems to me impossible. In turning one’s attention inwards, one seems inevitably to end up focusing on external features one’s experience represents the object as having, to the blueness and roundness as out there in the world covering or framing the surface of the object. In this way, the experience seems diaphanous or transparent.”

So the idea is that the only properties present in experience, the only properties we can focus on when we introspect the nature of our experiences, are ordinary worldly properties like colour and shape, the kinds of properties possessed by physical objects like trees and disks.

As I said, similar ideas can be found among intentionalist representationalists, as well as among reductionists like Harman and Tye. Thus consider the following passage from Horgan and Tienson’s influential “The Intentionality of Phenomenology and the Phenomenology of Intentionality” arguing for the involvement of worldly properties in experience:

“Consider too the experience of seeing an apple on the table, picking up the apple, and taking a bite out of it. There is the look and smell of the apple. Then (as you grasp it) there is the feel of the apple, its smoothness, roundishness, and firmness” (2002 521).

Now, a number of issues are raised by these appeals to experiential transparency. One is the relation to *representationalism*. Suppose we agree that the only properties present in sensory experience are ordinary worldly properties like colour and shape. Why should it follow that sensory experiences are representations? Presumably the idea is that the experiences then represents the observed external world as instantiating those selfsame worldly properties. Still, this further idea is not exactly obvious, even if it were granted that sensory experiences involve nothing but ordinary worldly properties.

However, I shall not pursue this issue, as I have a far more basic objection about the argument from transparency. I just don’t see how it shows that experience contains worldly properties in the first place. Note that my objection is not just to the view that *all* the properties present in experience are worldly ones. Rather, I don’t see how *any* worldly properties can be present in experience. The whole idea strikes me as quite misplaced.

Transparency is normally presented as a challenge to the view that experience contains some qualia, in addition to any other features it may involve. As we shall see in the next chapter, orthodox defenders of “qualia” typically maintain that *some* of the features of experience are purely qualitative, while allowing that other non-qualitative properties may also be present. Their opponents, appealing to transparency, insist “the *only* features there to turn your attention to” are ordinary worldly properties. However, I reject the shared presupposition sides here, namely that some worldly properties at least are present in experience. I can make no good sense of this idea. So, from my perspective, it’s not just that some of the features of experience are qualitative—they all are.

**2.8 Free-Floating Properties**

What might it mean to say that properties like *yellow* or *round* are “present” in an experience? (Harman: “I predict you will find that the only features *there* to turn your attention to . . .”. Tye: “Now turn your attention *inwards* . . .”. Horgan and Tienson: “Then (as you grasp it) *there* is the feel of the apple, its smoothness roundness and firmness”. My italics throughout.)

A first natural thought would be that this involves some element in the experience *possessing* the property. Something *is* yellow, or round, or whatever, and as a result the property is instantiated in the experience. We are aware of the property in our experience because it is instantiated there.

But the representationalists who invoke transparency cannot endorse this natural thought. This is because they don’t think that the relevant properties are *instantiated* whenever they are “present” in experience. On the representationalist view, we can represent a yellow ball even when the ball is green, or indeed when there is no ball there. And in such cases, I take it, nothing *possesses* the property of yellowness. No ball is yellow, I am not yellow, my experience is not yellow, neither my mind nor my brain are yellow. Nothing in the vicinity is yellow. So, if yellowness is “present” in my experience, it cannot be because anything nearby instantiates this property.[[19]](#footnote-19)

Representationalism is in striking contrast with both naïve realism and sense datum theories on this point.

Naïve realists restrict their claims about the nature of sensory experience to good cases of veridical perception. So for them the relevant worldly properties will always be instantiated in the scene observed by the subject. Experiences of a yellow ball, for naïve realists, require an observed ball that is actually yellow. In line with this, naïve realists will explain the conscious nature of such experiences by appeal to the observed ball’s actual yellowness.

Sense-datum theorists similarly account for conscious sensory experiences in terms of actual instantiations of observed properties. True, for them it is not worldly objects like physical balls that possess the yellowness, roundness and other observable properties that are present in our consciousness. Rather it is the instantiation of such properties by sense data, in both good cases and bad, that determines the conscious nature of experience. Still, sense datum theorists can agree with naive realists that it is always actual instances of observable properties that fix the conscious nature of our sensory states.

You might be unpersuaded of naive realism and sense datum theories, for the kinds of reasons rehearsed earlier. But at least on this point they make a kind of sense. We are consciously aware of an object that instantiates yellowness and sphericity. Our consciousness is thus constituted by the local presence of these properties.

But representationalists who appeal to transparency see things quite differently. On their view, a property can be “present” in sensory consciousness even in a bad case where it is not instantiated. Yellowness and roundness can constitute my sensory experience even if they are nowhere to be found nearby. Somehow my mind reaches out and grasps the property of yellowness itself, in abstraction from any worldly incarnation, and this lights up my consciousness.

I find it hard to make any sense of this. As I have had occasion to observe before, my consciousness is here-and-now. It resides within the spatiotemporal order, as something with causes and effects. But uninstantiated properties are outside space and time, abstract entities that cannot engage with the spatio-temporal world until they are instantiated. I must say I do not understand how some supposed relation between my mind and an uninstantiated property can possibly constitute my here-and-now consciousness.

**2.9 Mysteries of Mental Contact**

It is not as if the representationalist advocates of the transparency argument are unaware of this strange consequence of their views. But curiously they do not seem to regard it as a problem.

Here is Michael Tye:

“Along with (most) other representationalists, I am happy to say that, in the hallucinatory case, the perceiver is conscious of an un-instantiated property. This seems to me to be part of naïve commonsense” (Tye 2014 304).

Fred Dretske is if anything even more explicit:

“In hallucinating pink rats we are aware of something--the properties, *pink* and *rat-shaped* that something is represented as having—but we are not aware of any object that has these properties—a pink, rat-shaped, object. We are aware of pure universals, uninstantiated properties” (Dretske 2003 73).

Given the centrality of this issue, it is probably worth elaborating further on why I find Tye and Dretske’s position here so unsatisfactory.

My objection is not to any idea of human subjects bearing relations to uninstantiated properties. I am happy to recognize some relations of this form. Rather, my problem is more specific: I don’t see how such relations can constitute the here-and-now substance of consciousness.

I have already in effect recognized some relations between human subjects and abstract properties, in explaining the naturalist approach to representation. I said that subjects have the power to represent yellow balls because they can deploy representational vehicles that are environmentally correlated with yellowness and roundness. This in itself implies relations between such subjects and the abstract properties of yellowness and roundness.

Still, as I observed when discussing the naturalist account of representation earlier, it is hard to see how this kind of relation can make any difference to consciousness. Representational vehicles might relate subjects to possible properties of their environments, but it seems eccentric to hold that this relation affects their conscious sensory properties. The natural thought is that their conscious states will depend on the intrinsic properties of their representational vehicles, not on which environmental properties those vehicles happen to be distally correlated with.

Now we are told, by naturalist representationalists who appeal to transparency, that not only do conscious sensory properties depend on which distal properties subjects are environmentally correlated with, but that this dependence manifests itself by those selfsame distal properties being *present* in those subjects’ consciousness.

But this only deepens the puzzlement. How do these environmental properties find their way into the subjects’ consciousness? I house a vehicle that is generally correlated with yellowness. When this vehicle is activated, my consciousness is illuminated by the presence of the property of yellowness (and does so even if I am suffering an illusion and nothing nearby is yellow at all). It sounds little better than magic. How do these properties to which I am so distantly related tunnel their way into my immediate consciousness?

As I said, naturalist representationalists are not the only philosophers who argue on the basis of transparency that worldly properties are “present” in sensory experiences. Some thinkers in the intentionalist camp also hold that introspection shows familiar worldly properties like yellowness and roundness to be present in sensory consciousness. As intentionalists, they do not think that this relationship derives from naturalistic representational correlations with those properties. Rather they understand representational relations as resulting from the presence of these properties in consciousness, not conversely, and so will need to tell some other story about the basis of the mind’s ability to incorporate worldly properties in consciousness.

As it happens, intentionalists are not generally forthcoming about how this story might go. We might well wonder how and when, on their account, given worldly properties will appear in sensory experiences. Still, we need not pursue this issue here, since the basic worry I am raising will remain however it is dealt with. Intentionalists who appeal to transparency must hold that worldly properties like yellowness are present even in the bad cases of illusion and hallucination where nothing local is actually yellow. So, in their view too, sensory consciousness will not be constituted by relations to instantiations of worldly properties, but by relations to the worldly properties themselves, abstracted from any spatiotemporal instantiations. The same puzzle therefore remains. How can a supposed relation to an *uninstantiated* property constitute my here-and-now consciousness? How does the property manage to “appear” in my consciousness if it is not instantiated anywhere near me?

David Chalmers is one of those who hold that the phenomenal character of experience is a matter of worldly properties being present to subjects. In “Perception and the Fall from Eden” he maintains that “Phenomenologically, it seems to us as if visual experience presents simple intrinsic qualities of objects in the world, spread out over the surface of the object” (Chalmers 2006 section 6). However, Chalmers also holds that real colours are not intrinsic surface properties of objects, but relational properties. So he concludes that the phenomenal character of experience is constituted by the presentation of “Edenic” properties, like intrinsic colour properties, that are not just sometimes uninstantiated, but *never* actually instantiated.

This position poses a particularly acute form of the question I have been pressing in this section. How can a relation to a never-instantiated property possibly constitute the here-and-now character of my sensory experience? Chalmers is not insensitive to the issue, but his response does little to resolve my puzzlement. He appeals to the idea of a “distinctive sort of ‘phenomenal intentionality’ that is grounded in phenomenology, rather than being grounded in extrinsic causal connections . . . one might naturally hold that perceptual phenomenology simply consists in certain primitive relations to certain primitive properties: the presentation of perfect redness, for example.”

The mystery only deepens. Somehow the mind has the power (not grounded in extrinsic causal connections) to conjure up the kind of properties that objects might possess, and indeed to do this for properties that are never actually instantiated in any objects. If this is where the argument from transparency leads us, I say we should have rejected it from the start.[[20]](#footnote-20)

**2.10 Here-and-Now**

In his paper “On Representationalism, Common-Factorism, and Whether Consciousness is Here and Now” Pär Sundström has raised a difficulty for my claim that the supposed involvement of uninstantiated properties in sensory experience is inconsistent with the “here-and-now” character of experience (Sundström 2018).

Sundström’s strategy is to argue that my own positive view is itself committed to the involvement of abstract properties in sensory experience, and so that I am ill-placed to object to other views on the grounds that they render experiences insufficiently here-and-now.

As Sundström points out, I view sensory experiences as a species of mental state, constituted by an experiencing subject instantiating some conscious sensory property like *visually experiencing a yellow ball*, or *hearing a loud bang*. But properties as such are not spatio-temporally localised, he observes. So my position would itself seem to imply that experiences consist of relations between subjects and non-localised properties—and so are not here-and-now after all.

Sundström argues that this point goes through on any theories of properties. If properties are Platonic universals, then by their nature they are outside space and time, something extra to the objects that instantiate them. But even if properties are somehow tied to the totality of their spatio-temporally located instances, as on an Aristotelean approach, or a trope theory, or various kinds of nominalism, a given property will never be connected to any one spatiotemporal location (except in the untypical special case where it only has one instance). So whatever view of properties I adopt, Sundström concludes, I am in no position to object that other views of experience on the grounds they render experience insufficiently here-and-now.

My response to this line of argument is that it fails to distinguish between subjects *instantiating* properties and other relations they might bear to properties.[[21]](#footnote-21) As I see it, when I *instantiate* the property of *visually experiencing a yellow ball*, this results in a local fact, a state which is here-and-now, in line with the immediate nature of my sensory consciousness. By contrast, if I am mentally related to some property, but without instantiating it, then the resulting relational fact is by no means local, but extended into whatever distal realm the property in question inhabits. That is why I say mental relations to properties as such, abstracted from their instances, cannot constitute the here-and-now nature of sensory experience.

It is worth being more specific. Let us say that *concrete* facts are constituted by some spatio-temporal particular (or particulars) *instantiating* some first-order property (or relations). *A ball being yellow* (or *on the table*) are concrete facts. These concrete facts are the kinds of items that can enter into causal relations. They are localised in space and time and have causes and effects.

*My visually experiencing a yellow ball* is thus also a concrete fact along with *the ball being yellow*. It is constituted by a particular person—myself—instantiating the property of *visually experiencing a yellow ball.* In line with this, it results from concrete causes, such as the yellow ball being nearby, and gives rise to concrete effects, such as my kicking the ball.

But relations between humans subjects and properties as such, abstracted from their instances, do not amount to concrete facts. If I bear some mental relation to the property of yellowness as such, even though yellowness is not instantiated anywhere nearby, this cannot be the kind of concrete local fact that is capable of entering into causal relations. Since yellowness as such lives in the realm of abstract properties, this relational fact involves me, the abstract property of yellowness, and some mental relation joining the two. This relational fact is by no means here-and-now.

Sundström is of course right that I take sensory experiences to involve conscious properties like the property of *visually experiencing a yellow ball.* But it is crucial to my position that I take subjects to *instantiate* these properties, not to be otherwise related to them. It is because people instantiate these properties that their experiences are constituted as here-and-now concrete facts.[[22]](#footnote-22)

**2.11 The Efficacy of Mental Representation**

It might seem that I am in danger of proving too much. I have just argued that conscious sensory states constitute the kind of here-and-now concrete facts that can feature as causes and effects. But what about the *representational* aspect of sensory experience? In my view the representational powers of sensory experiences are distinct from and only contingently connected to their conscious nature. Still, I certainly want to allow that sensory experiences do have representational contents. And moreover I want to allow that the possession of representational contents has a causal impact in the concrete world.

But this last thought now seems under threat. As I observed two sections back, on my view the representational powers of sensory experiences depend on relations between subjects and such abstract properties as yellowness and roundness. Subjects have the power to sensorily represent yellow balls in virtue of being able to deploy representational vehicles that are environmentally correlated with yellowness and roundness. So the possession of representational content involves a non-concrete relation between subjects and properties as such, abstracted from their instances. This is by no means a here-and-now concrete causal fact. How then can it make a causal difference to anything?

This is a good question—in effect, the question of the causal significance of representational properties. But before answering it, it will be helpful to be a bit more precise about the ontology of representation.

In much of this book so far I have talked about intrinsic states of subjects bearing natural relations to *properties*, like *yellowness* and *roundness*. But if we really want some intrinsic vehicle to represent the world, it will need to bear a relation to a complete *truth condition*, rather than to an ordinary property. An intrinsic item related to properties like yellowness and roundness doesn’t yet *say* anything. *Yellow* or *round* doesn’t in itself amount to a claim. Even a simple atomic truth condition needs some object of which these properties are predicated. *Some specific object* is yellow and round. Now we have a full truth condition, a claim that is either true or false.

Of course, representational vehicles that answer to such full truth conditions will typically be complex, composed of one element that picks out some specific object, and other elements that denote the properties yellow and round. Combining these elements appropriately then yield a complex vehicle that is related to the proposition that some given object is yellow. This kind of familiar compositionality will work similarly in more complicated cases.[[23]](#footnote-23)

So when I talk of representational vehicles that are related to properties like yellowness and roundness, I should strictly be understood as talking about *elements* of full representations, the mental equivalent of predicates that need to be attached to subject terms, or otherwise involved in more complex constructions, to give us a complete claim that can be assessed as true or false. Still, no great harm is courted by this looseness, and so I shall revert to speaking of natural representational relations between vehicles and *properties* in much of what follows, leaving it to readers to remember that such vehicle elements need to enter into more complex wholes to yield full representations of complete truth conditions.

Let us now return to the causal significance of representation. As I see it, the causal role of representational contents—of truth conditions—lies in the way that they explain *success* in action. I take the attribution of representational contents to mental states to perform two explanatory tasks. In the first instance, it indicates how the states will interact with each other to produce further such states and eventually behaviour. However, as I observed in the last chapter, if these were our only explanatory purposes, there would no real need to think of mental states as *representations*, as opposed to internal states with interactive causal powers.

The real point of representational thinking—of ascribing truth conditions to representational vehicles—is to perform a second explanatory task, that of accounting for the ability of behaviour to succeed in producing distal results. You visually experience a yellow ball, and so move your foot, with the intention of kicking a yellow ball. But you will only *succeed* in this intention if your experience is veridical, if the proposition it represents is made true by the actual *fact* that a yellow ball is before you. If your experience is illusory, what you kick won’t be a yellow ball; if it’s a hallucination, you won’t kick anything at all. Your conscious experience causes your behaviour whether it’s veridical or not, but that behaviour only causes its intended result with the assistance of the external fact that renders the experience veridical.

Note that this causal contribution of representation to success does not come from the abstract non-local fact that the vehicle of representation is related to a certain truth condition (it *says* a yellow ball is present) but rather from the local concrete fact that makes that truth condition obtain when it does (a yellow ball *is* present). In effect, the ascription of truth conditions to mental states “programmes” for a certain kind of causal explanation. It tells us about a condition which, if true, will be made so by a concrete fact that will cause success. Attributions of representational contents might in the first instance relate subjects to abstract conditions that might not have an actual truthmaker in any particular case. But once we understand how such attributions contribute to positive causal explanations of actual success, we see that they do so in precisely those cases where the truth conditions *are* made true by concrete facts—thus respecting the principle that only concrete facts can function as causes or effects.[[24]](#footnote-24)

**2.12 Transparency Denied**

Let us return to transparency and the idea that introspection shows us that worldly properties like yellowness and roundness are in some sense “present” in our experience. In my view, we need to resist this idea. Whatever introspection reveals, it can’t be that our consciousness sensory experience constitutively involves worldly properties.

I do not dispute that when we turn out attention from the observed world to the nature of our sensory experience, it *seems* to us as if our experience relates us, as observing subjects, to worldly properties like yellowness and roundness. But I shall argue in the next two chapters that the apparent involvement of worldly properties in experience is a kind of illusion. In truth, what we are aware of when we introspect are properties of ourselves, conscious properties that we instantiate in having sensory experience. True, these properties have a complex structure, a structure that makes it extremely natural to think of sensory experience as constitutively involving external worldly properties. But even so the properties we are introspectively aware of are properties of us, and not the kind of properties other objects can have.[[25]](#footnote-25)

I also do not dispute that the resulting position is highly counterintuitive. Precisely because it denies the involvement of worldly properties in consciousness, it gains no support from common sense. As I have said from the beginning of this book, nothing seems more obvious than that properties like yellowness and roundness feature in our experience.

Still, even though my qualitatively position is ugly, there is no good alternative. None of the theories that take transparency at face value is metaphysically acceptable.

Representationalists are not the only philosophers who endorse transparency by taking introspection to reveal the presence of worldly properties in experience. So do sense datum and naïve realist theorists. Indeed, it was the original advocate of sense data, G. E. Moore, who first appealed to transparency (he used the term “diaphanous”):

 “. . . the moment we try to fix our attention upon consciousness and to see what, distinctly, it is, it seems to vanish: it seems as if we had before us a mere emptiness. When we try to introspect the sensation of blue, all we can see is the blue: the other element is as if it were diaphanous” (“The Refutation of Idealism” 1903).

In one way, sense datum and naïve realist theories of experience offer a rather better account of transparency than representationalism. As observed earlier, they at least take the worldly properties present in experience to be *instantiated*, rather than the free-floating abstracta required by representationalism. Sense-datum theories take the colours, shapes and other properties in our experience to be possessed by sense data. And naïve realism takes them to be possessed by ordinary objects, at least in the good cases of veridical perception.

However, as we saw in chapter 1, sense datum and naïve realist theories are open to a range of further metaphysically objections. Sense datum theories commit us to an unacceptable ontology. Naïve realism struggles to accommodate the subjective nature of sense experience, given its reliance on relations to external facts, not to mention its difficulties with non-veridical sensory experience.

Representationalists sometimes argue that among the theories that respect transparency and allow that worldly properties are present in experience, representationalism is to be preferred because of the metaphysical difficulties that beset the others (Tye 2000). But this is to ignore the metaphysical difficulties that attend the representationalist account of transparency itself. Where sense-datum and naïve realist theories at least have worldly properties instantiated when they appear in experience, the representationalist account of transparency leaves the properties dangling without any objects to possess them. Once this is taken into account, it is by no means clear that representationalist offers any better account of transparency than sense datum or naïve realist theories.[[26]](#footnote-26)

In truth, none of the three theories that respect transparency stand up to serious examination. The solution is to reject transparency and with it the idea that worldly properties are present in experience. If the cost of transparency is sense data, or naïve realism, or a representationalism that takes uninstantiated properties to be constituents of consciousness, I say we are better off without it. Happily, the qualitative view of experience offers a transparency-free alternative. Despite first appearances, what we are aware of when we introspect are not properties of worldly objects, but properties of ourselves, conscious properties that we instantiate in having sensory experience.

**2.13 Pure Intentionalism**

A number of philosophers associated within the intentionalist camp reject the transparency thesis agree that worldly properties are themselves part of experience. (For example, Siewert 2004 doubts that “how things look” can be purged of subjective elements, while Kriegel 2011b argues that the involvement of possibly uninstantiated properties would place a “veil of abtracta” between experience and the world.)

But intentionalists who deny transparency face an immediate challenge. Mental representation requires truth conditions. These conditions normally involve matters outside the mental subject, often in the spatial and temporal distance. For intentionalists, these representational contents are grounded in the conscious character of sensory states. But how can phenomenal character reach out and lay down some condition for the rest of the world to satisfy? What can possibly forge a link between conscious feelings and worldly properties?

Of course, if some worldly properties were literally part of our conscious sensory experiences, then an obvious line of answer would suggest itself. The properties “present in” the experience would represent their own instantiation. But we are now considering intentionalists who deny transparency and agree that worldly properties cannot themselves be part of sensory experiences. And for them the possibilities for linking character truth conditions with character seem highly limited. It’s not clear what magic might forge this link.

Note that intentionalists cannot look to the external world at this point to relate types of conscious sensory experience to whatever environmental circumstances they are generally correlated with. This is simply the naturalist approach to representation once more, and that is not how intentionalists think about the matter. In their view, experiences have their representational contents in virtue of their intrinsic phenomenal character, independently of their environmental surroundings. We ought to be able to read the content off the character without asking how the subject is embedded in the wider world.

Still, to repeat, it is hard to see what could bridge the gap between consciousness and content once we abandon the transparency idea worldly properties can be components of experience. Locke attempted to answer the challenge by suggesting that our ideas *resembled* the qualities they represented (at least in the case of primary qualities). But, as Berkeley observed, “an idea can be like nothing but an idea” (1710 section 8). It is hard to make sense of conscious sensory properties bearing any substantial similarity to the size, shape and solidity and other qualities or ordinary physical objects.[[27]](#footnote-27)

In the face of these difficulties, some philosophers in the intentionalist camp abandon any attempt to forge an essential tie between conscious character and truth conditions, and instead rest their case entirely on the internal structure of sensory consciousness itself. Their position is that sensory experience is intrinsically directed, pointing out to a world beyond itself, even if this directedness fails to fix any definite truth conditions independently of any contribution form the subject’s environment. (See Loar 2003, Kriegel 2008 section 7, and Mendelovici 2018 part 5 for versions of this position.)

The trouble with this position is that it is hard to see why it qualifies as strongly representationalist. It seems in danger of collapsing into the weaker view that conscious sensory experiences are typically but only contingently representational, in virtue of contingent relations to environmental conditions.

After all, even weak representationalists can agree that the various forms of sensory experience have a distinctive structure that make them very well-suited to representing certain features of the world. Indeed weak representationalists will be happy to add that the human capacity to have such experiences was no doubt designed by evolution precisely for this representationalist purpose. But that doesn’t mean that the experiences in themselves are essentially representational. (The sounds and marks comprising the English language are well suited for this representational role, and have no doubt been preserved in the language because of this, but they aren’t essentially representational.)

So in my view those “intentionalists” who abandon truth conditions and focus solely on the intrinsic structure of experience are not entitled to count themselves as strong representationalists. We shall return to this issue in the last two sections of the next chapter.

**2.14 What are the Truth Conditions?**

So far in this chapter I have focused on the abstract foundations of representationalism. What might account for a necessary connection between phenomenal character and representational content? How might these two different aspects of sensory experience be essentially intertwined? My conclusion has been that there is no good answer to these questions. Neither the naturalist nor the intentionalist representationalists have any good explanation of why character and content should be metaphysically connected.

I now want to drive the point home by turning from the *how* to the *what* of representationalism. Suppose it were granted, contrary to my argument so far, that character and content were somehow necessarily linked. What exactly would sensory experiences then represent? What specific truth conditions would sensory experiences possess?

By contrast with most of the existing literature on representationalism, I have so far avoided this issue of assigning specific contents to experiences. This is because I feel the focus on specific contents has served to obscure the lack of any principled foundations for representationalism. As I said earlier in this chapter, this focus has encouraged the view that any difficulties attending assignments of specific experiential contents are relatively superficial, to be dealt with on a case-by-case basis, rather than symptoms of an underlying malaise. Still, it will be worth backing up my foundational doubts with a brief discussion of the challenges that representationalists face when they do try to attach truth conditions to sensory experiences. As we shall see, it is very difficult for representationalists to carry out this project. This will provide yet further confirmation of the misguidedness of their programme.

The primary problem facing representationalists of all stripes is the need to avoid ascribing broad contents to sensory experiences. Such broadness would mean that the matching experiences of intrinsic duplicates can have different representational contents. If consciousness marches hand in hand with representational content, as all representationalists maintain, then broad experiential contents will have the infelicitous consequence that intrinsic duplicates can be consciously different. The natural strategy for representationalists is to stop this argument at the start, by denying that experiences ever have broad contents.[[28]](#footnote-28)

But this strategy turns out to be extremely costly. For a start, it puts pressure on the idea that sensory experiences can have *singular* contents. Singular truth conditions involve particular objects. At first pass, you might suppose that experiences can have such singular contents. I see that *my wife* is wearing a blue dress. I see that *the ball* in front of me is yellow.

Such contents, however, will inevitably be broad. We have already met one reason for this—the problem of *lookalikes*. It might seem plausible that I can visually experience that *my wife* has green eyes. But when my intrinsically identical Australian doppelganger has just the same conscious experience, the corresponding content would have to be that *his wife* has green eyes. So my particular wife can’t after all be part of the content of my visual experience, if we want to avoid sensory experiences having broad contents that can differ between intrinsically identical counterparts.

A related argument for the broadness of singular experientials contents arises in connection with *hallucinations* of newly observed objects. I come across a yellow ball. It might seem plausible that I can visually experience that *this ball* is yellow. But an intrinsically identical subject could have just the same conscious experience in a hallucination with no ball present. So a particular ball can’t after all be part of the content of my visual experience, if that content has to be shared by intrinsically identical counterparts.

In the face of these difficulties, representationalists find themselves driven to deny that experiences can have singular contents. From my perspective, this is a highly unattractive move, with no independent motivation—apart from some priori commitment to representationalism, there seems no reason to doubt that visual experiences can represent particular objects like my wife. (I shall return to this issue at the end of chapter 4.) Still, even if they are prepared to swallow the denial of singular contents to experiences, representationalists are not yet out of the woods. For they still face the challenge of explaining what contents ordinary sensory experiences do have, if they are not singular. None of the options is attractive.

A natural first thought is to appeal to a general existential content. Thus in the above cases we might take the contents to be that *there is* some woman over there with green eyes, or that *there is* some ball over there that is yellow. But then there are objections involving cases where these existential claims are true by accident: imagine that there is indeed a yellow ball in the relevant direction, but this isn’t the cause of your experience; there’s in fact a screen between you and the ball, and your experience is in fact produced by ingenious scientists stimulating your optic nerve. Intuitively, this is not a veridical sensory experience, even though the suggested existential content is satisfied—we take the experience to be aiming to refer to some more directly related object than the ball behind the screen, and so not to be vindicated merely by the presence of the obscured yellow ball.

This kind of example might suggest that we should build some causal requirement into the desired content, along the lines of *there is a ball before me that is yellow and is causing this experience*. But this would render the content of experiences implausibly complex and over-intellectual. It seems unattractive to understand experiences as making meta-claims about their own aetiology.[[29]](#footnote-29)

In response to these difficulties, many representationalists settle for “gappy contents”. They say that sensory experiences don’t themselves have fully-fledged truth conditions, but only determine them in conjunction with particular situations. The experience contributes a property profile, so to speak, and the situation a particular object. Thus the experiences of me and my Australian doppelganger both contribute: *– is a woman and has green eyes*; and the experiences of me and my hallucinating counterpart both contribute: *– is round and is yellow*; with full truth conditions only emerging when the gaps are filled by whatever particular object, if any, is present in the experiencer’s environment. (Tye 2014.)

This avoids the awkwardness of the existential and causal suggestions, but at the cost of threatening the theory’s claim to be properly representationalist. On the “gappy” suggestion, sensory experiences never determine full truth conditions on their own, but only with the help of environmental circumstances. One might wonder what then distinguishes the resulting position from the weak representationalist view that experiences, like words, are items that acquire representational significance because of their environmental surroundings.

Still, I shall not pursue this point, as singular contents are just the start of the difficulties besetting representationalist attempts to identify specific truth conditions. To see why, note that all the above suggestions for avoiding broad experiential contents take it for granted that sensory experiences can at least represent worldly *properties*, like *woman*, *round*, *blue* or *yellow*. However, all the same issues arise for the representation of properties. Which worldly properties are represented by sensory experiences also turns out to be a broad matter, and so representationalists are forced to deny that sensory experiences represent these too.

The classic demonstration of the point is Ned Block’s “Inverted Earth”. On Inverted Earth the sky is yellow and daffodils are blue, and so on. You are kidnapped, drugged and taken there, but while you are drugged you have inverting lenses inserted in your eyes so you don’t notice the difference when you wake up. Your instrinsic properties when you look at the sky on Inverted Earth will be just the same as those you had when you looked skywards on Earth. But on Earth your experience represented blueness, yet (once you have been there for a while) your Inverted Earth experience arguably represents yellowness. (Block 1990.)

So it now looks as if representationalists can’t even allow that colours contribute to the contents of visual experience, given their commitments to experiential contents being shared by intrinsically identical counterparts. Your Inverted Earth later self is intrisincally identical to your pre-kidnapped earlier self, yet it seems that the colours available for your respective experiences to represent will be different.

What about worldly shape properties? It is not as easy to construct inversion scenarios for shape properties as it is for colours, for reasons I shall explain in the next chapter, but the sensory representation of shape properties is also arguably broad. Consider Neo and the other envatted beings in the film *The Matrix*. Their brains are stimulated by a master computer in such a way as to render them consciously identical to ordinary humans walking through a cityscape with their eyes open. Yet, despite this conscious identity, it is not unreasonable to suppose that, where ordinary humans are representing the normal shape properties of their surroundings, Neo and his envatted colleagues are representing the configurations of the computer.

The issue of shape experience deserves further discussion, and I shall return to it at the end of the next chapter. But let us suppose for the moment that, like colour experience, shape experience is also representationally broad. If that is right, then the only option left to representationalism, as far as I can see, is to hold that the properties represented by sensory experiences are all radically response-dependent. On this option, sensory states would always represent properties like “being disposed to cause *this* kind of sensory response in observers”. By so limiting experiences solely to claims about powers to produce certain sensory responses in observers, representationalism would thus be able to avoid experiences having the kind of broad contents that depend on subjects’ environments.

Now, dispositionalism is a respectable enough theory of colour *properties*. The ontological status of colours has been a matter of controversy ever since Galileo and Descartes relegated colours, along with sounds, smells and tastes, to secondary status. One respectable (but by no means uncontested) option is to understand colours *dispositionally*: a physical object is yellow, say, just in case it is disposed to produce “yellow” sensations in an observer (Maund 2018).

Still, it is one thing to say that colours in the objects are dispositions to produce certain responses in observers. It is another to say that sensory experiences *represent* such dispositional properties. This is a further claim, and open to a number of objections.

For a start, the claim that sensory experiences *represent* dispositional colour properties makes the contents of colour experiences implausibly complex once more. Note that the claim at issue is not that colour experiences represent those physical properties in the objects (molecular structures or reflectance profiles, say) that happen to cause “yellow” responses in subjects’ typical environments. That would be reductive physicalism about colours, not dispositionalism, and would threaten to make the contents of colour experiences broad once more. Rather the claim at issue is that experiences represent a complex property, the property of being *disposed* to *cause* certain *responses*. And once this claim is made clear, it is hard to see what recommends it. As with the corresponding claim that experiences self-referentially represent those particular objects are causing them, it seems wrong to hold that colour experiences, which on the face of it represent simple surface properties, are in truth self-referentially making claims about the powers of surfaces to cause experiences.[[30]](#footnote-30)

A more specific worry is the threat of circularity. If we analyse colours as dispositions to produce certain responses, this threatens to block also analysing the responses in terms of the colours. Different versions of colour dispositionalism have different things to say about this threat of circularity. But it presses particularly hard on dispositionalists who are also representationalists about colour experience. Representationalists metaphysically equate sensory colour experiences with the property of representing worldly colours. This would seem to preclude their then turning round and analyzing worldly colours as the property of causing colour experiences.

I am currently considering the suggestion that representationalism might avoid broadness by taking sensory experience to represent dispositional properties across the board. This suggestion becomes even less plausible when we move away from colours to more primary properties lie shape and hardness. Not only do the worries about complexity and circularity continue to apply, but the suggestion is manifestly at odds with the nature of the properties represented. At least with colours, and perhaps with sounds, smells and tastes, it is not implausible that the relevant qualities of objects are best understood as ontologically dispositional. But it makes little sense to hold that shape, hardness and so on, are not intrinsic to the objects themselves, but only dispositions to produce sensations in observers. If this is the extreme to which representationalism drives us, then perhaps we will do better to explore an alternative account of sensory consciousness.

**Chapter 3 Structure**

**3.1 The Qualitative View**

In this chapter and the next I shall develop my own positive account of sensory experience.

On my view, conscious sensory properties are intrinsic qualitative properties of subjects. It is not essential to sensory experiences that they relate subjects to objects or properties beyond themselves.

Of course, it is not to be denied that introspection shows sensory experience to be richly organized. Moreover, it is not to be denied that this organization naturally invites the belief that sensory experience has a structure which relates experiencing subjects to objects and properties beyond themselves. I shall say more about this in three sections time.

From my perspective, however, the apparent relational structure of experience is a kind of illusion. The internal organization of sensory experience might invite the belief that it essentially relates us to independent objects and properties beyond ourselves. But this invitation must be declined. Sensory experience is not really relational.

To a large extent, my view coincides with the “adverbialism” of the middle of the last century (Ducasse 1942, Chisholm 1957). Adverbialists held that sensory experiences were constituted by modifications of the conscious properties of subjects. To visually experience a yellow ball is to visually experience in a yellow-ball-like manner. Adverbialists thus held that sensory experiences were simply qualitative conscious properties that did not relate their subjects to any further objects beyond themselves. At the metaphysical level, that is just what I think.

However, the mid-century adverbialists were also committed to a specific view about ways of *talking* about sensory experience. In particular, the adverbialists held that we should equate talk of “seeing a yellow ball” with such *adverbial* descriptions as “visually experiencing *yellowly* and *roundly*”. This commitment laid them open to a series of well-known objections which I shall discus in next chapter. At this point I will only observe that it is not obvious why the qualitative metaphysical view of sensory experience that I share with the adverbialists should be tied to any particular account of possible ways of talking about experiences. As we shall see, there are plenty of options, apart from the specific proposal favoured by the adverbialists, for understanding talk about experiences.

**3.2 No Problems**

Note how my weak representationalism simply by-passes most of the difficulties and counter-examples that beset strong representationalism.

The initial challenge facing strong representationalism was to explain why phenomenal character and representation content should be metaphysically intertwined. On the initial face of things, the way an experience *feels* and which *truth conditions* it answers to are very different things. Strong representationalism needs to show why they necessarily go together. I have argued that they have no good way of doing this.

Weak representationalists, by contrast, have no difficulty explaining the connection between phenomenal character and representational content. Since they take this relationship to be contingent, not necessary, they can simply say that conscious sensory properties are instrinsic properties of subjects, with no essential connection to anything beyond those subjects, and then add that these properties normally gain representational contents courtesy of their contingent naturalistic correlations with environmental conditions.

Then there is the issue of broad and narrow contents. Strong representationalism is under extreme pressure to view the representational contents of sensory experiences as narrow. If representational content and conscious character were one and the same, then broad sensory contents would imply that intrinsically identical subjects can be consciously different. A brave few strong representationalists have flirted with this possibility, but the vast majority understandably prefer to ascribe narrow representational contents to all sensory states. However, as we saw at the end of the last chapter, this interpretative project faces a series of formidable obstacles.

Again, none of this is any problem for weak representationalists. Since weak representationalism takes representational content to be fixed by contingent environmental circumstances, broadness of sensory content is just what it predicts. A given conscious state can represent different things, depending on the environmental circumstances of its bearer. Weak representationalism thus has no difficulty in allowing that the sensory state that represents *blue* on actual earth can come to represent *yellow* on “inverted earth” once it is sufficiently embedded in its new inverted environment. Similarly, it is open to weak representationalism to hold that the sensory state that represents *my wife Rose* to me can also represent my Australian doppelganger’s quite distinct but similar-looking wife to him.

Having said this, I do not mean to take it for granted at this stage that sensory experience does have the power to represent particular people or other specific candidates for broad contents. It remains a substantial question what features of the world different kinds of sensory experiences can represent. As I mentioned in passing in chapter 1, while some theorists hold that sensory experience can represent particular people like my wife, others deny that sensory experiences have such “rich contents” and insist they are limited to representing a limited range of “thin” features like shapes and colours. I shall return to this issue at the end of the next chapter. For the moment I shall limit myself to observing that, where strong representationalism runs into difficulties once it allows the content of conscious sensory states to depend on subjects’ environments, weak representationalism suffers no such constraint, and to this extent has the freedom to recognize a far wider range of representational contents for sensory states. (Note that, while they raise related issues, the *rich* versus *thin* contrast is not to be identified with the *broad* versus *narrow* one. Someone could allow broad contents, in the face of inverted earth, say, and yet limit the content of vision to thin properties like colours and shapes. Conversely, one could resist broad contents, and yet hold that vision represents the *look* of Rose, say, in addition to basic colours and shapes. More on this in the next chapter.)

**3.3 Block, Peacocke and Qualia**

Both Ned Block and Christopher Peacocke are long-standing defenders of the view that conscious experience involves “qualia”. However, their position is different from mine. Where I deny that *any* conscious sensory properties are essentially representational, Block and Peacocke hold that sensory experiences involve “qualia” *in addition* to elements that are constitutionally representational.

It will be helpful to introduce some of Block’s terminology. He distinguishes “mental paint” and “mental oil” as different species of sensory qualia (“Mental Paint” 2003). “Mental paint” is his term for conscious sensory properties that do have a representational content, but only contingently, in that a different conscious property could well have played the same representational role, with inverted colour experiences as the standard example.[[31]](#footnote-31) “Mental oil” then signifies aspects of sensory experience, like blurry vision, or orgasmic experience, that arguably serve no representational purpose at all, not even contingently.[[32]](#footnote-32)

From my perspective, sensory experience is exhausted by paint and oil. As is see it, *no* conscious sensory properties can be equated with the property of representing some worldly condition. My view is that conscious sensory experience is *all* paint (plus possibly some blurry, orgasmic, etc oil).

This does not seem to be Block’s position. He thinks oil and paint are additions to those conscious sensory properties that are constitutionally representational.

Thus Block, in “Mental Paint”:

“. . . friends of qualia can agree that experiences at least sometimes have representational content too . . . The recent focus of disagreement is on whether the phenomenal character of experience is *exhausted* by such representational contents. I say no” (2003 165, his italics).

Block is clearly here committed to the idea that representational contents contribute something to phenomenal character. His claim is only that there is *more* to phenomenal character than this. (Phenomenal character is not “*exhausted* by such representational contents”.)

Christopher Peacocke is another well-known friend of qualia. But he too seems to think that conscious sensory experience contains qualia *in addition* to representational properties.

Thus Peacocke, in “Sensational Properties: Theses to Accept and Theses to Reject”:

“The *subjective* properties of an experience are those which specify what having the experience *is like* for its subject. The *sensational* properties of an experience are those of its *subjective* properties that it does *not* possess in virtue of features of the way the experience *represents* the world as being (its representational content)” (2008 7, my italics this time).

Here too Peacocke is clearly committed to some subjective (“what it is like”) properties that are due to the representational contents of experiences. His position, like Block’s, in only that there are *further* subjective properties that are not so representational.

From my point of view, recognizing some mental paint and possibly oil is an advance on denying that there is any. Still, we might find it puzzling that, having come thus far, Block and Peacocke continue to countenance conscious sensory properties that are neither paint nor oil. Given that they admit some sensory properties that are not intrinsically representational, and given all the problems generated by the idea of essentially representational sensory properties, why don’t simply accept that sensory experience is all paint and oil?

More generally, it is puzzling that the kind of thoroughgoing qualitative view that I endorse has few, if any, supporters among contemporary philosophers of perception. As I said, the adverbialism that flourished a few decades ago coincided with the view I am defending, at least on a metaphysical level. But, once adverbialism fell out of fashion, the view that sensory experience is purely qualitative has rather puzzlingly disappeared from debate.

**3.4 Functionalism and “Role Semantics”**

Much of the reason for this disappearance, I would say, is that views about the connection between sensory and representational properties have become entangled with a different debate. In the second half of the last century, a great deal of attention, in physicalist circles at least, was devoted to the question of whether conscious properties should be equated with “functional” brain properties or strictly physical ones. Are all our conscious states determined just by the way the brain is organized (by its “software”) or do some also depend on the materials it is made of (its “hardware”)? “Functionalists” defended the former view, their opponents (with Block prominent among them) the latter. The anti-functionalists thus sought to show that, even if some conscious properties could be equated with functional properties, there were others that could not (colour experiences again being a favourite example). (See eg Block and Fodor 1972, Block 1980, Levin 1985.)

So far so good. The debate about the “functionalizability” of conscious properties raised many important issues. One aspect of this debate, however, did much to muddy the waters of our current concerns. The trouble was that the debate characteristically failed to distinguish clearly between the notions of a *functional* property and a *representational* property.

A number of those involved in the debate were also advocates of *conceptual role semantics*, or the closely related *inferential role semantics*. On these views, the representational contents of mental states are supposed to derive from the internal structure of inferential or causal relations they entered into. Both Block and Peacocke have advocated views of mental representation along these lines.[[33]](#footnote-33) (Block 1986, Peacocke 1992.)

Role semantic theories thus see little difference between functional and representational properties: functional properties are constituted by structural mental roles, by the way mental states causally interact with sensory inputs, other mental states, and dispositions to action: at the same time, according to role semantic theories, just this kind of structure is responsible for the possession of representational content by mental states.

This conflation of representational with functional properties casts a different light on the views expressed in the above quotations from Block and Peacocke. When they say that they recognize “qualia” in addition to the “representational” elements of sensory experience, they are best understood in the first instance as arguing for sensory properties that go beyond those that can be analysed in *functional* terms.[[34]](#footnote-34) That is, they are interested in sensory properties whose conscious nature can vary independently of the casual or inferential links into which they enter. Colour experiences provide the most obvious example. It seems highly plausible that the felt natural of colour experiences is metaphysically independent of their internal causal or inferential relations. Block has argued similarly for the qualitative status of attentional contrasts (2010), and Peacocke for visual field properties (2008).

By this stage, however, a number of things have gone wrong. For a start, internal roles do not amount to representation. On their own, conceptual or inferential relations between sensory states are not enough to breathe semantic content into sensory properties. Genuine representation requires a relationship between mental items and environmental circumstances. The purely internal role of cerebral states simply leaves out the crucial aspect of representation.[[35]](#footnote-35)

Because of this, the whole debate about functionalism is simply irrelevant to the question of whether mental states are intrinsically *representational*. Suppose that there are indeed two kinds of sensory states, those that are functionalizable, with their conscious nature determined by the “software” of the brain, and those whose conscious natures transcend functionalization and depend instead on brain “hardware”. From my perspective, this is no reason at all to think of the functionalizable states as representational. As I see it, the functionalizable and unfunctionalizable states are simply two species of mental materials, neither of which has any essential representational content. As far as representation goes, these states are all simply paint or oil, which will gain representational contents, if they do, only in virtue of their contingent embeddings in the wider world.

Moreover, we can now see how the confusion of representational with functional properties has served to sideline the thoroughgoing qualitative view of sensory properties I am defending. It is very widely accepted, including by Block and Peacocke, that some, even if not all, sensory properties are constitutionally functional. If “functional” and “representational” are then run together, it follows that some sensory properties are constitutionally “representational”. And this then eliminates any possibility of my thoroughgoing qualitative theory, which is precisely the view that *no* conscious sensory properties are automatically representational.

Still, as I said, this is all a misunderstanding. My aim is not to show that sensory properties are not essentially functional. I am very happy to agree that many are. My thesis is rather that none is essentially representational—and that, as I hope I have now made clear, is a different matter.

By this point, some readers might be wondering where I myself stand on the software-hardware issue. Should sensory properties be identified with structural brain properties or with strictly physical ones? As I happens, I have no strong views on this matter. I regard it as a complex topic which raises a number of delicate issues about causation and the metaphysics of “structural” properties.

Fortunately, the arguments of this book do not require me to take a stance on this issue. My position is solely that conscious sensory states are not essentially representational, and this position is compatible with a wide range of issues about their physical grounding, including both functionalist and non-functionalist options.

Indeed, to repeat a point made earlier, none of the arguments of this book need even presuppose physicalism. Suppose that sensory experiences were not physical at all, but constituted by the modifications of some distinctive kind of dualist mind-stuff. There would still be an issue about the relation between their phenomenal character and their possession of truth conditions, and I would still say these two aspects of experience have no essential connection with each other, for all the reasons I have offered so far.

**3.5 The Organization of Experience**

Experience has a rich organization which makes it natural to think of it as relating us to mind-independent objects and their properties.

In “Constructing a World for the Senses”, Katalin Farkas raises an interesting question (Farkas 2013). Why do we intuitively think of certain experiences, but not others, as relating us to mind-independent aspects of the world? In the last chapter I argued that we should not take the supposed “transparency” of experience at face value. Still, I did not deny the intuitive pull of the idea that ordinary visual experience somehow involves the colours and shapes of independently existing objects. However, this apparent relation to mind-independent objects and properties does not arise uniformly for all kinds of sensory experiences. We don’t intuitively think of pains as relating us to the surfaces of “painish” objects, not even when they are caused by stinging nettles. Again, while we think of touch as telling us about the worldly shapes, textures and temperatures of objects, and even of smell and taste as relating us to properties of independent existing objects, we don’t think of visual afterimages as involving properties of anything beyond the mind.

Farkas argues that these differences can be explained by differences *within* the world of experience. As she sees it, the experiential realm itself is richly structured in ways that underpin these contrasts between elements that appear mind-independent and those that don’t.

A first point she makes is that the temporal duration of many experiences precisely matches that of their putative non-mental causes. I see the yellow colour and round shape of the ball, but cease to do so when the ball is removed or obscured. I can feel the smoothness and coldness of the ice, but these experiences stop when I remove my hand. By contrast, the pain caused by the stinging nettles continues even after I am no longer touching the nettles, and the afterimage persists independently of what objects I am looking at.

This temporal contrast gives us an initial dimension in which some elements of experience appear more mind-independent than others. A related phenomenon is the predictable way in changes in the former are tied to aspects of the putative external environment. I turn my head, or walk about, and the surfaces and colours I see alter accordingly, in just the manner I would expect if they were attached to stable objects in my environment. Similarly, I move the rose towards my nose, and the scent I experienced becomes more intense. Not so with pains and afterimages. They vary, when they do, in ways that suggest they depend on me rather than the environment. The pain fades away only slowly and independently of my movements. The afterimage too wanes slowly and traverses the wall along with the direction of my gaze.

A further aspect of the apparently mind-independence elements of experience is their coordination across different sensory modalities. We can feel the same shapes as we can see. We hear the noise made by our hand hitting the table top at the moment we see and feel the contact. By contrast, pains and afterimages are available to no other sensory modality beyond those that initially present them.

All these factors combine to suggest that certain elements in our experience are mind-independent where others are not. This is certainly a noteworthy contrast. Still, it is crucial for my purposes that it is a contrast drawn purely within the realm of experience. None of Farkas’s observations show that show that the elements of experience distinguished by their coherence are mind-independent in any constitutive sense. All the arguments from earlier chapters still apply. Worldly facts, objects, and properties cannot themselves be constitutive elements of conscious experience. The relative coherence of certain elements of experience might at first pass suggest that the non-mental world is here intruding into consciousness, but that would be a mistake. In itself the coherence is a feature of the qualitative properties of subjects and has no constitutive connection with a world beyond experience.

Of course, in almost all cases the coherence is *caused* by worldly objects and properties that exist independently of the mind. The reason my experiences display so much constancy and stability is normally that they are causally tracking stable features of the non-mental world. But causation is not constitution. The effects produced by external objects are still subjective features of me.

To drive the point home, recall the “cosmic swampbrain” described earlier in the Introduction, a perfect duplicate of my brain that coagulates by cosmic happenstance in interstellar space together with sustaining vat, and for some minutes operates just like my brain, matching the afferent activity of my sensory transducers, efferent activity of my motor cortex, and all the neuronal processes in between. I take it that this being would have just the same subjective experiences as I do. In particular, elements of its experience would display just the kind of apparent mind-independence Farkas draws attention to. They would display all the constancy, predictability and temporal variation that gives rise to the appearance of mind-independence. Yet in the case of the swampbrain there would be nothing further behind this apparent mind-independence. It would consist of nothing but happenstantial patterns in the intrinsic qualitative properties of the swampbrain.

Farkas does not disagree. The aim of her paper is specifically to identify a structure *within* experience that makes it *seem* to point beyond itself. She explicitly brackets any further questions about the relation of experience to things outside the experiential realm. (She does, it is true, use the term “intentionality” to describe the structure she identifies. But, again, she is careful to explain that she is not claiming that intentionality in this sense involves representational relations to anything beyond experience. In the final section of this chapter I shall return to the question of how far the intrinsic structure of experience is appropriately characterised as “intentional”, if this is to imply that it is genuinely “directed at” or “pointing at” something beyond itself.)

**3.6 Quasi-Objects and their Quasi-Properties**

It will be helpful at this point to emphasize a further aspect of sensory experience that Farkas only mentions in passing. As well as appearing to present us with mind-independent *properties* like colours and shapes and smells, I would say that experience similarly appears to present us with mind-independent spatiotemporal *objects*. Spatiotemporal objects are re-identifiable particulars that retain a distinctive set of properties from occasion to occasion. My jersey displays the same colour, texture, shape, size and distinguishing marks as it moves through time and space. Other physical objects are similarly characterized by a relatively stable suite of distinguishing properties.

We find elements with a corresponding structure within experience. The apparently mind-independent properties present in experience form themselves into re-identifiable clusters. As I move around, turn my head, reach out and touch things, and so on, it is not just single properties that display a predictable coherence, but clusters of them. The subjective properties that signal the presence of my jersey reappear together when they are found within my experience, and similarly for the clusters of properties that signal the presence of other physical objects.[[36]](#footnote-36)

In what follows I shall speak of the “quasi-objects” present within experience, and the “quasi-properties” that characterize them. The point of this terminology is to emphasise that these apparent objects and properties are elements *within* the realm of experience, and metaphysically independent of any corresponding objects and properties beyond the mind that might be causing them.

An analogy will help explain how I am thinking of these matters. Consider the display on a typical television screen. It will involve relatively stable clusters of visible properties moving around the screen and standing in various visible relations to other such clusters. It is natural to think of these stable clusters of properties visible on the screen as objects with associated properties. But note that these visible quasi-objects and quasi-properties do not themselves constitutively involve anything beyond the television screen. They might be caused via the relevant technology by the properties of screen-independent objects in the wider world, but the features on the screen do not themselves constitutively incorporate these further objects or properties. After all, we could have just such quasi-objects and quasi-properties in a cartoon, or in a computer-generated moving picture, and in such cases there will be no screen-independent objects and properties beyond the quasi-entities visible on the screen.

I want to think of the quasi-objects and quasi-properties present in experience as having an ontological status akin to the television screen entities. They display a coherence and continuity that invites us to think of them as mind-independent, in a way that a disorderly pattern of colour experiences would not. But this apparent independence is not real, just as the figures moving around on the television screen are not real people.

Having introduced this analogy, I should emphasise that it needs to be treated with extreme caution. Note that the quasi-objects on a television screen have many properties, such as sizes, shapes, colours and spatial relations, that can also be possessed by non-screen physical objects. But this is not true of the elements of sensory experiences. Experiences do not have the same kind of properties as physical objects. They are not themselves small, or round, or yellow, or to the left of each other, in the way that physical objects can be.

True, we naturally talk about experiences using the same terminology as we use to talk about physical objects. I describe my visual experience as “of a yellow ball”, and I might say that experience the ball “to the left of a red cube”. But, as I shall explain at length in the next chapter, these ways of talking do not mean that elements of consciousness constitutively involve the properties referred to in the cited phrases. Rather, such phrases are here being used to identify elements of sensory consciousness indirectly, by invoking various contingent relations they bear to ordinary worldly properties.

Is there not a case to be made that elements of conscious experience can enter into *spatial* relations at least, even if they cannot themselves have other worldly properties like colours? When I see a yellow ball to the left of a red cube, as we say, am I not aware that the element of my experience corresponding to the yellow ball is literally to the left of the red cube element? But I don’t think we can make any good sense of this. The relation between the elements of my experience that I am introspectively aware of is not itself a spatial relation.[[37]](#footnote-37) As a physicalist, I am happy to identify elements of sensory experience with brain states. I accept that there is a repeatable pattern of brain activation that constitutes my visually experiencing a yellow balland another that constitutesmy visually experiencing a red cube. And perhaps instantiations of these patterns bear physical relationships to each other in the brain. But I very much doubt that it is *spatial* relationships in the brain that constitute the conscious relationship between quasi-objects that we report as “visually experiencing a yellow ball to the left of the red square”.

It is worth being clear here. Let us symbolise the worldly properties of *yellow ball*, r*ed cube* and *left of* by YB, RC and L respectively. Then we can use YB\*, RC\* and L\* for the elements of sensory consciousness that respectively are normally caused by, and in any case contingently represent, these worldly properties. And we might use YBB, RCB and LB for the physical properties in the brain that I suppose to constitute these YB\*, RC\* and L\* conscious properties. Now, it is in principle possible that, in the brain, it is actually the worldly property L (that is, *left of*) that plays the LB role, and so that when, when I *visually experience a yellow ball to the left of a red cube*, this visual experience is physically realized by an instance of YBB literally being to the left of an instance of RCB. And this would them mean that the conscious YB\* element of my experience is literally to the left of the RC\* element, given that these conscious elements are constituted by the brain states YBB and RSB brain respectively.

Still, while all this is possible, it is not at all credible. For a start, it is not to be taken for granted that the brain uses some physical *relationship* between states like YBB and RCB to play the LB role; perhaps there is some further unary brain state that plays this role (and which then will need to be further bound together with YBB and RSB to constitute my seeing a yellow ball to the left of a red square). Moreover, even if the brain does use a physical relationship between states like YBB and RCB to play the LB role, brain science gives us no reason to think it will be *left of* itself. Perhaps some of the retinotropic neural maps in early stages of visual processing use spatial relationships between neurons to represent the same spatial relationships between regions of retinal stimulation.[[38]](#footnote-38) But this processing is far too early to constitute conscious sensory experience. Later stages of vision, by contrast, work in a far more holistic manner. The brain progressively discards information about local retinal stimulation, as it strives to discern spatiotemporally non-local features of the world about us, such as orientations, shapes, motions, and colours, prior to “binding” together features that are co-instantiated in the same objects. By the time the brain is representing objects as *cubes* and *squares* and *yellow* and *red*, the relevant patterns of activation are no longer spatially arranged into neat maps in a way that would allow one literally to lie to the *left of* another. It might well be that some physical relationship between these patterns represents *left of*. But it surely won’t be *left of* itself.[[39]](#footnote-39)

**3.7 Intentional Objects**

The presence of “quasi-objects” within the realm of experience is often associated with talk of “intentionalobjects” that *might or might not exist*. Many philosophers, and in particular many representationalists, hold that sensory experiences are always directed at an “intentional object”. In their view, part of what makes an experience representational is that is directed at something beyond itself. In a normal perception, this intentional object will be the actual physical object that the observer perceives. But in an hallucination, where there is no such physical object, the experience will have a “merely” intentional object, in that the experience will be directed at something that doesn’t exist.

I myself am suspicious of merely intentional objects, for reasons I shall shortly explain. Still, I regard the debate about intentional objects as largely a technical matter, in itself of no great significance for other philosophical issues. However, many of those who defend merely intentional objects do not stop there, but make the additional move of identifying intentional objects with the *quasi-objects* discussed in the last section. This combination of views certainly does have philosophical consequences, of a most unfortunate kind. This section and the next will be devoted to showing how things go wrong if we make the mistake of identifying intentional objects with quasi-objects.

The following quotation from Brian Loar’s “Phenomenal Intentionality as the Basis of Mental Content” nicely illustrates the seductive attractions of this identification:

“Now imagine having one of the lemon-experiences without knowing whether it is veridical. You are strongly tempted to say ‘that object’ . . . you seem both to commit yourself, by using a demonstrative, and to take it back at the same time: ‘that object may or may not exist’. The phenomenology gives you the feel of a sort of ontologically neutral object that could have the property of existing or not-existing; and directedness is phenomenologically very like a relation to that neutral object, which could turn out to be real. Suppose you then discover that it is real” (Loar 2003 254).

Note how Loar here first invites us to focus on an element within the realm of experience. “The phenomenology gives you the feel of a sort of ontologically neutral object . . .” This looks like a reference to one of my quasi-objects, a stable element within the field of experience. But then Loar goes on to talk of this selfsame entity as something that “may or may not exist”. Now the quasi-object is being equated with an intentional object, with something that might or might not turn out to be a real physical object.

In truth, this kind of equation is deeply incoherent and philosophically damaging. It might be tempting, as Loar says, to equate quasi-objects with intentional objects. But that does not make the conflation acceptable. (It should be said that Loar himself does not endorse this conflation. He himself does not take intentional objects seriously. His aim in the passage quoted is only to develop the idea that sensory phenomenology is intrinsically “directed”. I shall examine this idea at some length in the final section of this chapter.)

The rest of this section will now be devoted to intentional objects themselves. The next section will then explain why, even if we do admit intentional objects, we should resist any temptation to think of quasi-objects as somehow equivalent to them.

For some philosophers, talk of “intentional objects” is only a form of words. Consider a thought or an experience that can be correct only if a certain object exists. John’s thought *that King Arthur lived in Wales* can be true only if King Arthur existed. John’s visual experience *of a pink elephant in the garden* can be veridical only if a pink elephant exists. We might say that these mental states have a “merely intentional object” and mean by this only that there are no objects of the kind required for their correctness. (I am supposing Arthur was a merely mythical king, so to speak.) Understood in this way, talk of “intentional objects” means no more that the mental states fail to secure the kind of reference that is needed for their correctness.

But other philosophers want to go further. They want to uphold the idea that these mental states, despite their non-veridicality, are nevertheless *directed at* something. They want to say that these states are *about* certain objects—albeit “objects that do not exist” as I put it in the first paragraph of this section.

Talk of things that don’t exist might make philosophers uneasy, but it is in reasonable initial accord with common sense. It seems perfectly natural to hold that people often think about or experience things that don’t exist—King Arthur and pink elephants, for example.

A first challenge facing philosophers who want to take this everyday way of talking seriously is to show that it does not to fall into contradiction. After all, if “there are” means the same as “there exist”, then it certainly won’t do to say that *there are things that don’t exist*. But there are ways round this. For example, William Lycan (1987) and Tim Crane (2013) argue that the everyday construction “there are” does not imply existence, and so are perfectly happy to endorse the claim that there are some things—King Arthur, pink elephants—that don’t exist.[[40]](#footnote-40)

Still, it is one thing to show that everyday talk about non-existent intentional objects can be rendered coherent. It is another to show that we should positively endorse it. As Bertrand Russell observed, it offends against a “robust sense of reality” to recognize non-existent objects (Russell 1919 169-70). One can reasonably ask what advantages are supposed to compensate for this offence.

In response, the friends of intentional objects can argue that they offer an attractive solution to a real philosophical problem. Consider claims like:

(1) *John thought that King Arthur lived in Wales* and

(2) *John visually experienced a pink elephant in the garden.*

These claims seem true enough, but how are we to understand them? If we recognized non-existent intentional objects, then we could take these claims at face value, as simply telling us which objects John’s mental states are directed at. But if we reject intentional objects, then we are forced to construe these claims in some other way, and it is not obvious there is any good alternative.

One possibility is to follow Frege and hold that referring terms shift reference in the context of mental state ascriptions. When used to attribute thoughts and other mental states, they refer to some sort of *means of reference* rather than to their normal referents. So terms like “King Arthur” and “pink elephant” never refer to people or animals when used to attribute mental states, but rather to senses, concepts, mental terms, words in the language of thought, or some such. On this account, then, there is no special challenge posed by the truth of claims like *John thought that King Arthur lived in Wales* and *John visually experienced a pink elephant in the garden.* In such contexts, the relevant terms simply function to tell us something about John’s way of thinking, as opposed to what he is thinking about. So the truth of claims (1) and (2) is in no way threatened by the non-existence of King Arthur and the pink elephant.

The cost of the Fregean option, however, is its inability to license respectable-looking inferences that hinge on referring terms functioning normally in mental state attributions. We are generally happy to read such ascriptions as *de re* claims about the objects of thought, and so to “quantify into” them and derive existential conclusions. For example:

(3) *John thinks Lloyd George lived in Wales*, is naturally understood as implying that

(4) *Lloyd George is thought by John to have lived in Wales* and so as licensing the inference to

(5) *Someone is thought by John to have lived in Wales.*

On the Fregean option, however, these moves are invalid. The mental state ascription no longer implies that John is thinking about anything, just that he is thinking in a certain way. At best the inferences are enthymematic, rendered valid only with the help of some implicit premise about John’s thought having a reference. But this seems to make our inferential practice unnecessarily complex.

Perhaps then we will do better to reject the Fregean line and read claims like (1) and (2) *objectually*. On this reading, referring terms function normally in mental state attributions, identifying their normal referents *de re* as what the mental states are about (while perhaps at the same time also indicating something about the thinker’s means of reference).

This objectual option would then license *de re* inferences like those from (3) to (4) and (5) above. Still, unless we admit non-existent objects of thought, the problem facing this option is that it undermines the truth of such apparently unobjectionable claims as (1) and (2):

(1) *John thought that King Arthur lived in Wales* and

(2) *John visually experienced a pink elephant in the garden.*

If “King Arthur” and “pink elephant” are functioning normally in these claims, they will fail to secure any referents, and the overall mental state attributions will therefore fail to express truths.

This now brings out the attraction of recognizing non-existent intentional objects. They allow us to avoid the Fregean line and uphold the *de re* inferences, but without the just-noted cost of dismissing apparently true mental state ascriptions as false. The friend of intentional objects can take referring terms to operate normally in mental state attributions, and then add that, when they lack an existing referent, they still serve to specify what non-existent entity the attributed mental state is about.

I myself am not persuaded. I would prefer to avoid non-existent entities. I don’t like positing entities whose only virtue is to make certain things we say true.

If forced to choose, I think I would prefer to embrace the objectual reading of mental state ascriptions, on which referring terms function normally *de re* in mental state attributions, but without committing myself to the further idea that they refer to non-existent intentional objects in the bad cases. This then commits me to saying that claims like (1) and (2), despite first appearances, are literally false. Still, how bad is that? There are plenty of other familiar cases where we systematically convey useful information by uttering sentences we know not to be true. So I am happy to say that we use claims like (1) and (2), even when we know them not to be literally true, to convey information about the way subjects are thinking. We pragmatically imply that they are *mentally* like subjects of whom these claims would be true, even though the reference failures undermine the literal reading of our claims.[[41]](#footnote-41)

In any case, there is no need to decide this issue here. I have no ambition to resolve the long-standing debate about the right way to read mental state attributions. My purpose in rehearsing the above options is simply to clarify the notion of “intentional object” in play when some philosophers say mental states are about objects that might or might not exist.

**3.8 A Dangerous Confusion**

As I said, I regard a commitment to intentional objects as in itself philosophically fairly harmless. Allowing intentional objects is one not unreasonable way of dealing the issues discussed in the last section.

Still, trading in intentional objects courts danger. As I said, once we admit intentional objects of experiences, it then becomes very tempting to equate them with the “quasi-objects” I recognized earlier, following Farkas—loci of stability within the experiential realm associated with clusters of relatively invariant experiential properties. And once this move is made, then things go badly wrong. In particular, we are inevitably led to the strange doctrine that so occupied us in the last chapter, the doctrine that in non-veridical experience we are aware of worldly properties that are not instantiated anywhere in our vicinity.

In this section I want to show what is wrong with identifying quasi-objects with intentional objects. So I shall allow, for the sake of the argument, that it makes sense to talk of intentional objects. The real danger lies, not with the intentional objects themselves, but with the idea that they are somehow the same as the quasi-objects within experience.

The last section’s quotation from Loar is worth repeating:

“Now imagine having one of the lemon-experiences without knowing whether it is veridical. You are strongly tempted to say ‘that object’ . . . you seem both to commit yourself, by using a demonstrative, and to take it back at the same time: ‘that object may or may not exist’. The phenomenology gives you the feel of a sort of ontologically neutral object that could have the property of existing or not-existing . . .”

Suppose we do succumb to Loar’s temptation, and identity the quasi-lemon in our experience with an intentional object of experience “that may or may not exist”. Now we are in a mess.

After all, in some cases (the non-hallucinatory cases) the intentional object *does* exist; we are seeing a real lemon. So if the quasi-lemon in our experience is identified with the intentional object, we must in those non-hallucinatory cases identify it with the real lemon, and conclude that it has just the same kind of worldly colour and shape properties that real lemons possess.

But, at the same time, the quasi-object “may or may not exist”. So just the same quasi-object would be present even if it did not exist and we were undergoing an hallucination. There it would be, the perceived lemon, with just the same properties that we experience it to have in the good case—except that in the hallucinatory case it doesn’t actually exist and the properties it possesses are not actually instantiated.

And this then takes us through to the perplexing idea that in experience we are aware of worldly properties that are “present” even when they are uninstantiated. Because we equate the quasi-lemon and its quasi-properties with the real lemon and its worldly properties in the good case, we are led to conclude that the quasi-lemon somehow “has” the worldly properties even in cases where it does not exist and those properties are therefore not instantiated.

But this is all nonsense. It is simply incoherent to identify quasi-objects with intentional objects.

Let me go more slowly. The questions at issue is whether that the quasi-objects present in our experience can be identified with intentional objects that might or might not exist. The basic problem with this is that there is no question of the quasi-objects themselves not existing, even in the bad cases where we are hallucinating. As a feature of experience, we can be introspectively certain that the quasi-lemon is there, whatever is going on in the rest of the world. Perhaps we can’t be absolutely certain. I don’t want to rule out any possibility of introspective mistakes about our own experiences. Still, we are at least relatively certain of the presence of the quasi-lemon, in the sense that our knowledge of the quasi-lemon is not threatened by the possibility that we are hallucinating.

By contrast, the existence of the supposed intentional object *is* threatened by precisely this possibility. The intentional object of a given experience is by no means guaranteed to exist by that experience per se. In the non-hallucinatory cases, the intentional object will exist as a real physical object. But in the bad hallucinatory cases, it will be a non-existent merely intentional object.

This now makes it clear why intentional objects cannot be the same as quasi-objects. It makes no sense to identify intentional objects which *might or might not exist*, depending on whether we are hallucinating, with quasi-objects which *definitely do exist*, even if we are hallucinating.

By their nature, intentional objects lie beyond experience, as items which might or might not exist given a certain kind of experience, depending on the wider world. The existence of the mental quasi-objects, by contrast, is guaranteed by an experience of the relevant kind. They are constituted by the intrinsic material of the experience.

Go back to the line of thought, rehearsed above, that since quasi-objects are sometimes the same as real objects, they must therefore have the same kind of worldly properties—both in the good cases where those properties are instantiated, and in the hallucinatory cases where they are not. However, once we see that quasi-objects aren’t at all the same kind of thing as intentional objects, this line of thought is blocked at source. Since quasi-lemons are internally guaranteed elements of experience, as opposed to intentional items that might or might not exist, they are never identical to real lemons, and so never have the same kinds of worldly shapes and colours that real lemons have. They are nothing but elements of experience and as such have no necessary relations to any objects or properties in the world beyond.

Despite the deep incoherence of identifying quasi-objects with intentional objects, we find a surprising number of representationalists invoking “intentional objects” at precisely the point where they need to explain how uninstantiated worldly properties can be “present in” experience.

Here, for example, is William Lycan in his “Phenomenal Objects”:

“It is, after all, no surprise to be told that mental states have intentional objects that may not exist . . . And that is why we can consistently admit that phenomenal-color properties qualify individuals without granting that there exist individuals that are the bearers of phenomenal-color properties” 1987 519.

And here is Gilbert Harman, shortly after the passage quoted in the last chapter about the “transparency” of experience, explaining that in hallucinatory cases worldly properties are present in virtue of being possessed by non-existent intentional objects:

“It is very important to distinguish what are experienced as intrinsic features of the intentional object of experience from intrinsic features of the experience itself” 1990 39.

And here finally is Frank Jackson, in the course of constructing an argument for strong representationalism:

“we have shown that minimal representationalism plus diaphanousness implies that the properties of the experience are properties of an intentional object” 2007 61.

Despite this shared appeal to “intentional objects” to account for the presence of possibly uninstantiated worldly properties within experience, none of these writers offers any coherent developed account of how these special objects manage to make this contribution. I hope I have done enough to persuade you that no such account is to be had.

**3.9 Paint that Doesn’t Point**

As I mentioned at the end of the last chapter, some philosophers of intentionalist inclinations distance themselves from the idea that worldly veridicality conditions are necessarily attached to experiences. But even though they do not think of sensory experiences as bearing any necessary relationship to matters beyond themselves, they continue to maintain that experience is essentially “intentional” (Loar 2003, Kriegel 2008, Mendelovici 2018).

If by this they mean no more than that experience has the kind of internal organization that I have highlighted, following Farkas, then I have no objection. There is certainly a distinctive structure to the experiential properties we instantiate. They display the kind of constancy and coherence that warrants talk about the presence of “quasi-objects” and their “quasi-properties” in normal experience.

However, intentionalists generally want say more than this, even after they allow that experience has no essential connection to anything beyond itself. In particular, they continue to maintain there is a sense in which experience is intrinsically “directed”, and continue to speak about the intentional “contents” of experiences.

I don’t think that the internal organization of experience warrants such talk. Even given its rich structure, I say that sensory experience is in itself no more intrinsically “directed” or “contentful” than are linguistic marks on paper or vibrations in the air. As it happens, sensory experiences do represent, but this is because of the way they are contingently embedded in environments, not because of their intrinsic nature.

Brian Loar is a leading proponent of the view that experience is intrinsically “directed”. In the paper cited earlier, “Phenomenal Intentionality as the Basis of Mental Content” 2003, he agrees with many of the points I have made. When he emphasizes the rich internal organization of sensory experience, he takes care to distances himself from any idea that we are directly aware of worldly properties in experience; and he is explicit that internal organization is not the same as answering to external veridicality conditions. But even so he maintains that there is something intrinsic about experience that orientates it to a world beyond itself. As he puts it, sensory experience might be composed of mental paint, but it is still a “paint that points”.

However, I don’t see how this claim can be made good. True, the internal structure of experience makes it very seductive to think of it as intrinsically directed at a world beyond itself. But that doesn’t show that it is really directed at anything.

Indeed, on reflection, it is difficult to see how “paint” itself could ever get to “point”. Imagine that the Martian winds carve out an excellent likeness of Winston Churchill in the sands of a desert. I take it that this pattern in the sand does not *represent* Winston Churchill. It lacks any connection to the man himself. This deficiency would not be rectified if the Martian winds had in addition inscribed the words “Winston Churchill” or “This is an image of a man that looks like this” or perhaps some schema of marks resembling an image next to an arrow pointing at a man. This would all be nothing but more happenstance in the Martian desert, with no power to represent anything beyond itself. (Cf Wittgenstein *Philosophical Investigations* 86.)

Entities get to be representational because of their relationship to things beyond themselves. So if we take a system of entities that are not yet so related, we cannot render them representational just by adding further such entities.[[42]](#footnote-42)

What about Farkas’s idea that the intrinsic structure of experience appears to relate us to various mind-independent entities? Is this not a matter of experience intrinsically *seeming* to relate us to a world beyond experience? And would that not make good the idea that experience is intrinsically “directed”, that it “points to” something beyond itself?

But we need to take care with this terminology of experience “seeming” to relate us to mind-independent entities. This can be taken in two ways. (Raleigh 2009.)

First, we can take it to mean that the intrinsic structure of experience *itself* somehow asserts that experience is somehow directed at an independent world. However, this is the idea we have just seen not to work. A medium that is not intrinsically representational cannot render itself representational by somehow trying to say that it is. Content can’t be manufactured simply by adding contentless arrows to a set of marks that are not yet themselves contentful.

The other way of reading “experience seems to represent” is to understand it as saying that the intrinsic structure of experience is such as to encourage people to *form the belief* that experience is intrinsically directed. On this reading, however, talk of how experience “seems” only tells us what judgements people are inclined to make about it, not how it is in itself—for after all the judgements that people are inclined to make about experience are by no means guaranteed to be true.

Recall Farkas’s analysis. She shows effectively how certain elements within experience display a stability across different conditions of observation. This stability might well encourage people to think of these elements as somehow both beyond the mind yet intrinsically connected to experience. But nothing in her analysis establishes that it is genuinely intrinsic to experience so to reach out beyond itself. As she herself agrees, the structure she points to is all entirely *within* experience, whatever people might be inclined to make of it.

We can make the same kind of point about Loar. As he says, it is strongly tempting to identify the quasi-objects present in sensory experience with intentional objects that might or might not exist. And once we do this, then we are led to identify the quasi-properties “present in” experience with the kind of properties that worldly objects can have. And given all that, it is then a natural enough step to view the experience as representing the instantiation of those worldly properties. But this is no basis for holding that sensory experience is essentially directed at something beyond itself. After all, the whole seductive line of reasoning is *mistaken*. The worldly properties aren’t present in experience, and so aren’t able to render it representational. We are being invited to reason on the basis of a confusion. In truth, the only properties instantiated in experience are intrinsic properties of subjects that have no essential connection with anything beyond themselves.[[43]](#footnote-43)

**3.10 Spatial Experience**

Let me conclude this chapter by addressing an issue that might have been worrying some readers. My view is that sensory properties only represent contingently, like words. One implication is that sensory “inversions” should be possible. For example, just as the English words “red” and “green” could have had reversed semantic roles, naming the opposite colours, so could the conscious sensory properties that we use to represent worldly red and green have been swapped around.

Now, this implication seems acceptable enough in the case of colour experiences. It is not implausible to imagine that evolution might well have wired us up differently, and co-opted the experiential state that is normally prompted by red surfaces to serve instead as our internal representation of greenness, and vice versa. And this then supports my weak representationalism over strong representationalism. It is not built into their conscious nature that our conscious colour experiences represent what they do. Rather their representational content derives from their contingent correlation with certain environmental properties.

However, things seem to come out differently with *shape* experiences. As I observed in passing at the end of the last chapter, it is not as easy to construct “inversion” scenarios for shapes as for colours. While we can easily imagine the representational roles of “red” and “green” experiences being reversed, we run into trouble when we try to do the same for visually “square” and “circular”, say. It doesn’t seem at all possible that evolution might have used “square” experiences to represented circles and “circle” experiences to represent squares. Switching the representational roles of visual shape experiences just doesn’t seem to leave everything the same, in the way it does with colours.

And this now suggests that, while colour experiences might not have their representational contents essentially, visual shape experiences do. Perhaps the reason that visual shape experiences can’t be inverted is that strong representationalism is true of them, even if it isn’t for colours. It is built into the conscious nature of certain experiences that they represent worldly squares, and into that of other experiences that they represent circles, and this is why shape experiences can’t be inverted.

However, this is not the only possible explanation for visual shape experience being more resistant to inversion scenarios than colour experience. Let me outline an alternative.

Visual shape experience is far more richly structured than colour experience. Any given type of visual shape experience has built-in connections with other shape experiences. Experiences of square are also experiences of straight lines and right angles. Someone who sees a square from one angle anticipates having related visual experiences from different angles, and also anticipates having related tactual experiences on touching the relevant object, all in the manner highlighted by Farkas. There are also systematic relationships between visual shape experiences and tendencies to behaviour. Seeing a square disposes you to move your limbs quite differently from the way that seeing a circle does.

Now, it is plausible that these liaisons are constitutive of the conscious nature of visual shape experience. Experiences that didn’t enter into the same structures of relationships that are respectively characteristic of our “square” and “circle” visual experiences would be consciously different from those experiences.

By contrast, colour experiences seem to display far less essential structure. No specific inclinations to behaviour attach to different colour experiences, nor are there any built-in relationships between colour experiences and other experiences, apart from the basic patterns of similarity and exclusion involving colour experiences themselves.[[44]](#footnote-44)

And this is arguably the real reason why we can “invert” colour experiences but not shape experiences. If we suppose “red” and “green” experiences to switch roles, everything else can stay the same, including the minimal patterns of similarity and exclusion that are the only possible structural requirements on the conscious nature of colour experiences. But when we posit a corresponding transposition for “square” and “circle” visual experiences, the differing structural constitutions of these experiences are necessarily transposed too. This then renders the transposed shape experiences unsuitable for their new representational roles. Square and circular shapes in the world themselves have a structure that an adequate system of symbols for representing them needs to match. Just as the linguistic representation of numerical facts, say, needs a system of ordered numerals, so does the visual representation of geometrical facts need a system of structured experiences. The structure implicit in our “square”, “circle” and other shape experiences is part of the means by which they succeed in representing their geometrical objects and guiding behaviour accordingly, and evolution has no doubt selected these structures for just that purpose. That’s why “shape” experiences can’t represent circles, and vice versa.

So I am happy to agree that our visual shape experiences are intrinsically well-suited to represent the shapes they do represent and moreover have been naturally selected for that specific purpose. But note that this is not yet to say that they represent those shapes *essentially*, in the sense that it is metaphysically guaranteed by their conscious natures alone that they represent those shapes.

For one thing, the points made so far do not rule out the possibility that just those same conscious experiences could have represented structures other than shapes. At the end of the last chapter, I mentioned Neo and the other envatted bodies in the film *The Matrix*. These beings are wired up to a computer that gives them conscious experiences of the same kind as our own. Yet it is arguable that the “visual” experiences of these beings do not represent real physical shapes, but rather states of the computer that are structured similarly to real physical shapes.

Perhaps there is room to argue that Neo and his envatted colleagues are really representing real shapes after all, given the role that shapes played in the evolutionary history of their bodies and indeed in the design of the computers they are wired up to. Still, it is not clear what principled argument might show that it will always come out like this, and that real physical shapes are the *only* things that our visual shape experiences could possibly represent. I myself am doubtful that any such argument can be constructed.

In any case, even if it could be shown that our visual shape experiences can represent nothing but shapes, this still wouldn’t show that they essentially represent shapes. What would have been established would be the conditional: necessarily, *if* our visual experiences represent anything, *then* they represent shapes. But this does not allow us to detach the conclusion that in truth those experiences do necessarily represent shapes.

Recall the cosmic swampbrain who assembles by chance in interstellar space and duplicates my conscious experiences for some short while. In my view, the states of this being would not represent shapes nor anything else. It might be located in physical space, but nothing in its location or short history would have set up any systematic correlations between its conscious states and any aspects of the world beyond. Without such correlations, there is no good sense in which the swampbrain’s states represent. The conscious character of those states does not on its own link them with anything.

Some might be tempted at this point to argue that spatial and other structured sensory experiences are nevertheless intrinsically representational in the *dispositional* sense that they *would* represent certain structured worldly properties *if they were* embedded in a suitable environment. If this were granted, then the cosmic swampbrain would be representing after all, given that that its states would indeed represent geometrical properties if they were appropriately related an environment.

But this will not do. Counterfactual representation is too cheap. If we understanding representation in a dispositional way, everything will count as representational. After all, it is not hard to imagine possible contexts in which sea urchin shells, say, would signify danger, or marital status, or . . . But that wouldn’t mean that sea urchins shells are intrinsically intentional.

The same point applies the intrinsic mental structures which we use to represent spatial and other structured features of the world. They are not rendered intrinsically intentional just by the fact that contingent environmental settings are capable of imbuing them with representational contents. After all, as I have had occasion to observe before, my own purely qualitative view itself allows—indeed insists—that sensory properties derive representational contents from their environmental embedding. If we allow ourselves to conclude on this account that qualitative sensory properties are intrinsically intentional on this account, we will have emptied the notion of intrinsic intentionality of any philosophical significance.

**Chapter 4 About Experience**

**4.1 Why I am not a Sense-Datum Theorist**

I say sensory experiences are constituted by instantiations of qualitative sensory properties in people. These intrinsic non-relational properties have no necessary connection to any worldly objects or properties. Some readers might wonder whether this is not just the old sense-datum theory in a new guise. Sense-datum theorists held that sensory experiences involve mental sense-data, and moreover that experiencing subjects are directly aware of these sense data and only indirectly, if at all, aware of the non-mental world. At first pass, it might not be obvious where my qualitative theory differs from these claims.

Well, it is true that my qualitative view holds that sensory consciousness is constituted purely from mental materials, with no contribution from the non-mental realm. So my view certainly bears some resemblance to the sense-datum theory. Even so, it differs in two crucial respects.

First, traditional sense data were standardly supposed to possess ordinary properties like yellowness and roundness, just the same kind of properties that physical balls can have.[[45]](#footnote-45) That is no part of my view. As I have stressed, I do not take such worldly properties to contribute anything to sensory consciousness. True I have talked of sensory experience as involving “quasi-properties” and “quasi-objects”. Still these “quasi-properties” are quite distinct, on my view, from any worldly properties that are represented by experience. Recall the typology introduced in the last chapter, with *yellow\** the property present in experience that represents worldly *yellow*, and *round\** the experiential property that represents *round*. In my view, *yellow\** and *round\** are quite distinct from, and only contingently related to, *yellow* and *round* After all, it is central to my view that, in cases of illusion and hallucination, the former starred mental properties are instantiated, even though nothing nearby instantiates the unstarred worldly properties. When I misperceive a ball to yellow, I instantiate the mental *yellow\** property all right, but nothing in the vicinity, and certainly not my mental state, instantiates *yellow*. Contrary to the sense-datum view, the properties that constitute experience are not the same properties that characterise ordinary objects.

Second, and equally importantly, I don’t think that ordinary sensory experiences are in any sense *about* mental items. Sense datum theorists understood sensory experience in terms of subjects being *aware of* sense data and their properties. Subjects observed the sense data—not with the ordinary senses of vision, touch, etc, of course, but with the introspective “mind’s eye”—and this introspective relation to sense data then constituted their conscious state.

That is not the view I hold. I don’t think of ordinary experiencing subjects as aware of their own sensory states. They aren’t observing, or seeing, or sensing, or anything like that . . . their own sensory consciousness. Rather they are observing, or seeing, or sensing, . . . ordinary objects, like yellow balls, *in virtue of* being in conscious sensory states. They *have* the sensory experiences, and thereby become *aware of* the external world.

**4.2 Awareness**

But how can subjects not be *aware of* their own conscious states? Isn’t it built into the idea of a state’s being conscious that the subject is “aware of” it?

No. I take *awareness of* some X to imply some mental state or act that is focused on or refers to X. So I am happy to say that we are aware of the worldly ball, and its worldly shape and colour, in ordinary sensory experience. But, unless we are specifically introspecting, we aren’t aware of our own sensory states. Our experiential states are *conscious*, but we aren’t aware *of* them. We are aware of other things, like balls and their properties, in virtue of being in conscious sensory states.

Of course, we are on occasion also capable of introspecting our sensory states, of deliberately turning our minds towards them, and thereby forming thoughts about them. The next two sections will say a lot more about how introspection might work.

Introspection certainly gives rise to mental states that are about our own sensory states, and thus leads to our being aware *of* our sensory states. But introspecting our sensory states is not the same as consciously observing the world by *being* *in* our sensory states, and so this is no reason to suppose that conscious sensory experience itself involves awareness of our own sensory states.

Some philosophers hold that consciousness always involves some level of self-awareness.[[46]](#footnote-46) I have my doubts about this, but it would take us too far afield to pursue the question here. Let me content myself by observing that, even if sensory consciousness did happen always to be accompanied by introspection, a sensory state that reported on the observable world would still not be the same as an introspective state that reported on a sensory experience. Even if they always accompanied each other, the two states would be different. The former would make us aware of ordinary objects and their properties, the latter would make us aware of our own sensory states.

What about hallucinations? If we are hallucinating, then there is no ordinary object for us to be aware of. Suppose that in such a case we are not introspecting, and so are not aware of our own (hallucinatory) sensory state. What are we then aware of? I say we are aware of nothing. Our hallucination is still conscious all right, but it fails to make us aware of anything in the world, and, given we aren’t introspecting, we aren’t aware of our sensory state either.

Some readers might feel that I am being disingenuous in asserting that, in normal veridical cases, sensory experience makes us *aware of* world objects and their properties, like balls and their shapes and colours. Surely talk of “awareness” implies that something is *consciously available* to us, whereas on my view the worldly ball and its features lie beyond the realm of consciousness. On a normal understanding of awareness, the objection thus runs, I cannot claim that sensory experience makes us aware of tennis balls.

I do not want to fight about words. For what it is worth, I would hold that everyday usage, as opposed to specialist philosophical idiom, allows us to be aware of things even when conscious experience is nowhere in play. (“I am perfectly well aware, thank you, of the implications of the Coase theorem.”) Moreover, even when conscious experience is in play, as when I consciously see a yellow ball, I doubt that everyday usage is specific on whether the things it makes you “aware of” have to be *part of* your conscious state.

Still, as I said, I don’t want to fight about words. If someone feels that we can only properly be “aware of” things strictly within the conscious realm, I am happy to let it pass. What matters for me is that sensory experience represents things outside consciousness and guides our thoughts and actions accordingly. Sensory experience is not directed at our own conscious states. We can turn our minds to our own conscious sensory states, but that is a matter of introspection, not sensory experience itself. Having made this clear, though, I shall now continue to talk in terms of sensory experience making us “aware of” worldly things, but only introspection making us “aware of” our own experiences. Those who are uneasy with this way of talking can translate my claims into their own preferred terminology.

**4.3 Transparency Revisited**

As we saw in chapter 2, a number of strong representationalists appeal to the “transparency” of experience to argue that sensory experience constitutively involves worldly properties. In their view, introspection reveals the presence of properties like yellowness and roundness in experience. Sometimes, in the bad cases, they admit that these properties are not instantiated anywhere in the vicinity of the relevant subjects. But even then, they insist, the subjects are aware of these properties “as uninstantiated”, or perhaps as in some sense possessed by “intentional objects”.

I have argued that no good sense can be made of these ideas. The only properties “present in” experience are conscious properties of people, not worldly properties.

Still, what about “transparency” itself, about the supposed fact that we seem unable to focus our minds on the intrinsic qualitative aspects of experience? The phenomenon of transparency is normally introduced via an invitation to introspect the intrinsic properties of our experience. We are invited to turn our minds away from the world and towards the supposed qualia inherent in sensory experience. But when we try to do this, we are told, we fail. All that happens is that we look harder at the ball itself, at its yellow colour and round shape.

Let me explain what I take to be going on in such cases. I agree that nothing much happens at the sensory level when we try to shift focus from the world to the sensory experience itself. But at first pass this is simply a psychological phenomenon, not an argument. The standard explanation of this phenomenon hinges on the presupposition that sensory experience contains at least *some* worldly properties, and then concludes that, since nothing changes when we try to turn our mental focus away from them, experience can contain nothing *but* worldly properties. But I deny the presupposition. I don’t accept that introspection makes us aware of any worldly properties to start with, as opposed to intrinsic qualitative properties. So of course, when we try to shift focus from one kind of property to another, we fail. After all, on my view there is nothing except qualitative properties to focus on introspectively. The failure to shift focus does not show that we can’t introspect qualia. It just shows that there’s nothing else there to introspect.

From my point of view, it is entirely to be expected that nothing much happens to sensory consciousness when we start introspecting. I take introspection to be a *cognitive* act. While sensory experience normally leads to beliefs about the world, in introspection we deliberately turn our cognitive focus away from the world and form beliefs about our sensory experience instead. Why should sensory experience be substantially altered just by our starting to think about it in this way? After all, the function of sensory experience is to inform subjects about the observable world. It would not be well designed if it stopped performing this role whenever it itself became the focus of our thoughts.

Perhaps it would be different if sensory experience were composed of two different kinds of properties, as Block and Peacocke seem to believe, properties that are somehow “representational”, on the one hand, and those that are merely “qualia”, on the other. In that case, we might expect to be able to turn our cognitive focus away from the representational properties, and towards the merely qualitative ones—to direct our thinking away from the colour and shape of the ball as represented in experience, so to speak, and towards the qualia that are also present in the experience. On the face of things, the fact that we can’t do this is a problem for Block and Peacocke. I shall say a bit more about their responses in a moment. Still, it is no problem for me, given that I take there to be only one kind of property in experience, and so no question of switching cognitive focus from representational to merely qualitative properties.

**4.4 The Complications of Attention**

Let me address a complication. I said above that it would be odd if sensory processing were altered just by our thinking about it. But in fact there is one way in which this does happen.

The nature of sensory *attention* is much debated, but for present purposes we can think of it as the application of extra resources to given elements of sensory processing. In attention the stimulus input to certain neural processes is amplified. (Cf Fazekas and Nanay 2018.)

Now, such shifts of attention can certainly make a difference to sensory consciousness. For example, when we attend to particular features of an observed scene, this can induce heightened contrasts and apparent changes in size, colour and position (Block 2010).

At the same time, sensory attention is often cognitively directed. True, some shifts of attention do not involve cognition. These occur “bottom-up”, or exogenously, as when some observed movement or change of colour automatically redirects our sensory resources. But there are also “top-down”, or endogenous, shifts of attention, which occur we make an active cognitive decision to direct our sensory resources on something. (To keep things clear, I am using “attention” specifically for the deployment of resources *within* *sensory processing*, whether exogenously or endogenously caused; when I want to talk about the *cognitive* guiding of sensory resources, I employ other terms like “focus”.)

In the present context, it is worth distinguishing two different kinds of top-down endogenous control of sensory attention. The first might occur when we simply decide to observe something more carefully. For example, we might decide to look more closely at some bird on the feeder. This is one way in which cognitive focus can affect the workings of sensory experience itself. Our decision to look more closely leads to increased attention which highlights the bird’s features. But, second, note that the same result is also likely to occur if we decide, not to look more closely at the bird, but to *introspect the sensory states* the bird is causing in us. This too is likely to lead to heightened sensory processing of visual information from the bird, with the same resulting changes in our sensory experience.

So now I have allowed that cognitively directed introspective focusing can make some difference to our sensory consciousness after all. Does this not now commit me to something like the idea I associated with Block and Peacocke above, of being able to shift our introspective focus from one aspect of sensory experience to another? No. Their idea was that experience contains two kinds of elements, representational and qualitative, and that introspection allows us to turn our cognitive focus from the former to the latter. My position is still that all the elements of experience are qualitative, and none intrinsically representational, so there is no question of shifting introspective focus from one to the other. All I have conceded is that introspection can make a difference to *which* qualitative elements are present in experience, not that it can add qualitative elements to non-qualitative ones.

When Block and Peacocke do discuss transparency, they follow through the logic of their position, and deny the basic transparency thesis that we are unable to shift our focus to the qualitative elements in experience. As they see it, sensory experience contains two kinds of elements, the representational and the qualitative. They take it that, when we introspect the representational elements of our experience, we somehow “see through” to the possibly uninstantiated worldly properties themselves (however that is supposed to work). But they also hold that we can introspectively shift the focus of our minds to the qualia in experience, to the mental paint or oil that is not essentially representational. Peacocke emphasises the way that we can turn our introspective minds to elements of our visual field (2008); Block highlights the way we can introspect putative cases of mental oil, like orgasms and visual phosphenes (2003); he also maintains that the above-mentioned attention-driven heightened contrasts and apparent observable changes are further instances of introspectible mental oil (2010).

Weksler et al (forthcoming) argue interestingly that cognitive science recognises no mental resources that could possibly allow us to shift introspective focus in this way from represented worldly properties to qualia. Be that as it may, on my own view the question of such shifts simply does not arise. The whole idea that conscious experience is partly constituted by represented worldly properties is a confusion. Sensory experience is constituted by paint and oil alone, by intrinsic qualitative properties that are at best only contingently representational, and not by any worldly properties. So when we introspect our sensory experience, the only properties available for us to discern are qualia.

**4.5 Introspection of Experience**

So far I have taken it as given that we can direct our cognitive focus introspectively at our sensory experience. It is by this means that we can become aware *of* our experiences themselves, as opposed to merely *having* the experiences (and thereby, in the good cases, becoming aware of the world).

But how does this work? What mechanism allows us to know about which sensory experiences we are having? This question has received surprisingly little discussion from philosophers (see Byrne 2012 section 1). The literature contains various well-developed competing accounts of how we might introspectively know about our own *beliefs* and other cognitive states. But there is little specifically about our introspective knowledge of our own *sensory* states.[[47]](#footnote-47)

In truth, there is no reason to suppose that sensory introspection always works in the same way. It is quite possible that we use different introspective processes to form beliefs about our sensory experiences in different cases. I shall say something more about this possibility later. But first I would like to explore one particular suggestion about our ability to introspect our sensory states. This is the hypothesis that we identify our sensory experiences by noting what beliefs these experiences incline us to form. I come to know I am having an experience to the effect *that a yellow ball is before me* via noting that my current experience inclines me to form the *belief* that there is a yellow ball before me.

I take it to be uncontentious that our sensory experiences do typically incline us to form beliefs. Moreover, it seems uncontentious that we are introspectively aware of this influence; after all, if we are challenged about some belief we have formed on the basis of experience, we have no difficulty in explaining that our belief has the backing of first-hand sensory experience.

The suggestion that we identify experiences by identifying associated beliefs might only seem to push our explanatory problem back. Our current question is: how do we know what experiences we are having? My suggestion is: by noting what beliefs they incline us to form. But then there is another question: how do we know what beliefs we are inclined to form?

Still, as I observed a moment ago, a number of well-developed accounts of the introspection of beliefs are available. In particular, we can usefully appeal at this point to Gareth Evans’ well-known suggestion that the best way to ascertain whether we *believe p* is simply to address the question of *p* itself (Evans 1982 225). To take Evans’ own example, if someone asks you “Do you believe there will be a third world war?”, the natural reaction is to put your mind to the question of whether there will in fact be a third world war. An immediate positive answer will show directly that you believe this, and a lack thereof that you don’t.

So my suggestion is that our introspective identification of sensory experiences piggy-backs on our identification of the beliefs they give rise to. We know we are having an experience *as of a yellow ball* because we note the experience is inclining us to a belief to this effect, and we know about this belief as a result of applying Evans’ belief-identifying procedure.[[48]](#footnote-48)

You might wonder why it is necessary to make this detour through beliefs. Why can’t subjects apply Evans’ procedure directly to sensory experiences themselves? The trouble is that, while the move from *p* to *I believe p* is generally reliable, the corresponding move from *p* to *I experience that p* clearly is not. If you find yourself giving an immediate positive answer to the question whether *p*, then this per se shows that you believe *p*. But if doesn’t of course show that you are experiencing *p*, since there plenty of other ways of coming to believe that *p* apart from having an experience that shows you this.

What about the *modality* of our current experience? How do we know we are *seeing* a yellow ball? After all, not all sense experiences are visual. We also feel things, hear things, taste things, and so on, and these other modes of sense experience also give rise to beliefs. So just identifying which beliefs our experiences give rise to will not automatically determine which mode of sense experience is in play.

This is a reasonable query, but there are two obvious lines of response. We can appeal either to content or to mode. (Recall the analogous options for representationalism discussed earlier in chapter 1.12.) The first option would be to read the nature of our sensory experience off from the *content* of the belief it gives rise to. If we have a belief about colours, then the underlying experience must be visual, if it is about surface texture, then the experience must be tactual, and so on. (Cf Byrne 2012.) As with the corresponding representationalist move earlier, this first option is open to the objection that the same kind of information can sometimes be derived from different sense modalities—shape is made available by both vision and touch, for example. If so, we can turn to the alternative response in terms of *mode*. The idea would now be that we can identify the mode of the underlying sensation directly. I said above that we generally know introspectively when our beliefs have the backing of sensory experience. Perhaps we can also know introspectively *which* mode of sensory experience has given rise to a belief. When you find yourself believing that the ball is round on the basis of experience, you won’t just know that your belief is grounded in experience, but more specifically whether it is grounded in vision or touch.[[49]](#footnote-49)

Some readers might be worried that the richness of sensory experience will inevitably outstrip the kinds of contents that can be possessed by the beliefs they give rise to. Beliefs about the world are composed of discrete concepts, so the worry would go, whereas sensory experience has an indefinite richness of detail. How can the former be adequate to the latter?

But this is no objection to the analysis of sensory introspection I am suggesting. My current concern is not to characterise the phenomenology of sensory experience itself, in whatever rich detail it may possess, but just to understand how we are able to arrive at cognitive knowledge of certain aspects of that phenomenology. If sensory experience does have a richness of detail that inevitably outruns any “conceptual” characterization at the cognitive level, then so be it. It is not as if this is an unfortunate consequence of the particular position I am defending. Many philosophers take the view that introspective judgements at the cognitive level are always more coarse-grained than sensory experience itself, and accordingly allow that cognitive introspection can never deliver more than limited information about experience.

For what it is worth, I myself am doubtful that sensory richness must always outstrip cognition in the way. I think it makes more sense to view the representational powers of cognition as adequate to the structure of experience, due to the elements of experience always being redeployable as concepts in cognitive representations of the observable world. If I am sensorily able to recognize a certain shape, or colour, or type of bird, or any other observable item, then along with that I become able to represent these things in cognition as well. Of course cognition also uses concepts that outstrip sensory experience. We can think about non-observable features of the world. But I see no reason to suppose the experience outstrips the representational powers of cognition. (See Papineau 2006 section 2 for a defence of this view.)

On this view, conscious sensory experience does not have the indefinitely decomposable analogue structure of a photograph, but is more like a graphic representation built up from a limited repertoire of repeatable elements. Perhaps certain aspects of early sensory processing do need to be understood as involving analogue information. But sensory processing works hard to discard surplus information and form discrete classifications that allow stored information to guide appropriate responses. Given this, I am inclined to suppose that, by the time sensory processing manifests itself in consciousness, its deliverances are exhausted by elements that can always be redeployed in cognition too.[[50]](#footnote-50)

So I see no reason to accept that the fullness of conscious sensory experience must always overflow any cognitive representation. Still, as I said, this issue is independent of my suggested account of introspection.

**4.6 Contentful Mental States**

On the account of introspection just outlined, our introspective thoughts about experiences characterise them in the same way as we characterise beliefs. That is, we characterise them in terms of their representational contents, in terms of their truth conditions. We start by noting that experience gives rise to some belief *that p*, and then conclude that we have an experience *that p*. For example, I start with the belief that there is a red ball in front of me, and so judge that I have a visual experience to that same effect.

Introspection thus invokes concepts which pick out types of conscious sensory experience by citing what they represent. From the perspective of my overall position, there is nothing wrong with this. Conscious sensory experiences do have representational contents. I have argued that this is a contingent matter, resulting from the environmental correlations the types of conscious experiences happen to enter into. But this doesn’t mean that the representational contents aren’t real, nor does it prevent us referring to the conscious sensory experiences by invoking them. As I have remarked before, reference by contingent description is a common enough phenomenon.

Still, there are some aspects of this situation worth remarking on. Beliefs and sensory experiences are both representational mental states. In case of conscious sensory experiences, I have argued that the representational content is extraneous to the intrinsic nature of the state, a contingent feature that enables us to refer to the conscious state indirectly. But in the case of beliefs, it seems to work differently. We think of the representational content as built into the state. That is, we take their contents to be constitutive of belief states, not some kind of contingent add-on. So, for example, while we can make sense of the suggestion that the “red\*” conscious sensory property might have represented something different from the redness of surfaces, there seems no corresponding possibility that *the belief that there is a yellow ball in front of me* might have represented something different from what it does. If it did, surely it would just be a different belief.

However, this contrast is more apparent than real. With all mental representation, cognitive as well as sensory, we can focus on two different aspects, two related kinds of mental states. We can think of the mental states as constituted by the instantiation of *vehicle* properties, or as constituted by the instantiation of *content* properties. In the first case, we are interested in the instantiation of certain *intrinsic* and not essentially representational properties. These properties might happen to be correlated with certain environmental conditions, but our focus is on the subjects having the intrinsic properties, not on any relations to further matters. In the second case, by contrast, we are interested in the way subjects represent the wider world, by housing some intrinsic state or other that has a given worldly circumstance as a truth condition. Now we are thinking of mental states as instantiations of *representational* properties. The subject has the property of representing some truth condition.

This book is about the *conscious* properties involved in sensory experience. I have argued that these are intrinsic vehicle properties. So when we refer to instantiations of these properties by citing representational contents, we are referring to them indirectly, via descriptions that mention matters with which they are contingently associated. Still, there is nothing to stop us focusing on *representational* sensory properties instead, so to speak, if we wish. Then we would be concerned, for example, with subjects instantiating the property of *sensorily* *representing that a yellow ball is in front of them*, rather than with their instantiating the conscious sensory vehicle that enables them to do this. And these representational states would of course have their representational contents essentially rather than contingently, just as in the case with beliefs normally understood.

And conversely we could, if we so wished, focus on the intrinsic vehicle properties involved in the possession of beliefs. To the extent that this is unusual, this is no doubt because the possession of beliefs does not have a salient phenomenology. In the case of sensory experience, a manifest phenomenology is occasioned by the deployment of sensory vehicles. In line with this, it is natural to think of sensory experiences as in the first instance constituted by this phenomenology, and therefore as depending on vehicle properties, and only secondarily as involving representational properties. But with beliefs no such phenomenology presses itself upon us, and so we naturally resort to thinking of beliefs as essentially representational. Still, for all that, intrinsic vehicle properties do underpin the possession of these representational belief properties, and there is no reason why we should not refer to these vehicle properties if we wish. And the natural way to do this, as with sensory states, is to identify them via the representational properties with which they are contingently associated. It is an interesting question, which I shall not pursue here, how far our everyday discourse about beliefs involves such references to vehicle properties alongside treating beliefs as states constituted by representational properties.

Many philosophers in the intentionalist camp hold, contrary to my suggestion, that beliefs do have a rich phenomenology.[[51]](#footnote-51) While such phenomenological richness seems doubtful to me, I have no reason to take issue with it as far as the other arguments in this book go. If beliefs were phenomenologically rich, then I would regard them in just the same way as I regard sensory experiences. That is, I would distinguish between the phenomenal character and the representational contents of beliefs. The phenomenal character would be intrinsic to subjects, and would only be contingently connected to the representational contents, courtesy of the subjects’ environmental surroundings. We would be able to talk about the intrinsic phenomenal character of the beliefs by invoking the associated representational contents, but that would again be a matter of referring by contingent description. Everything about the relation between phenomenal character and the representational contents of sensory experiences would apply *mutatis mutandis* to beliefs.

Let me now go back to introspective concepts of experience. I have now explained that concepts like *the experience that p* can be pressed into service to refer to two different mental states. On the one hand we can use such concepts to refer to intrinsic conscious states constituted by phenomenal properties that are only contingently representational; on the other we can use them to refer to essentially representation states constituted by properties with their representational powers built in. This contrast naturally prompts an obvious question. What determines which of these distinct states we are referring to on any specific occasion we use such a concept?

The simple answer is, “Normally, nothing”. Mostly when we think about sensory experiences in this way, we refer indeterminately to both the intrinsic and the representational state. And mostly this doesn’t matter, since our judgements will come out as having the same truth value either way.

Here is an analogy. When someone judges *X’s statement was . . .* are they referring to the words uttered, items that contingently happen to have a certain representational content, or to the act of conveying that content by means of some words or other? There’s no reason to suppose that in everyday cases anything fixes which of these two readings is right. And this is of no great consequence, in that the truth or falsity of such judgements is normally insensitive to the choice. The truth value of *X’s statement was timely, upsetting, made at 3 pm, in English, about football . . .* will normally come out the same on either interpretation.

This is not to say that we can’t render such thoughts more determinate. Judgements about words abstracted from their contents are different from judgements about contents conveyed, and sometimes this difference does matter, particularly when philosophical points are at issue. So philosophers and others sometimes take pains to distinguish these things (classically in Lemmon 1966), and thereby give us the tools to make our judgements about “statements” more specific.

Similarly, I say, with judgements about experiences. In everyday contexts we use the construction *the experience that p* to refer indeterminately to both intrinsic and representational sensory states, with no adverse consequences. But sometimes it is worth being more careful, as for instance when we want to steer clear of philosophical confusion, and then we can secure more determinate reference by making our thoughts more explicit.[[52]](#footnote-52)

**4.7 Phenomenal Concepts and the Knowledge Argument**

Much philosophical debate in the past two or three decades has focused on “phenomenal concepts”. These are supposed to be special way of thinking about conscious states in terms, loosely speaking, of what they are subjectively like.

Phenomenal concepts are normally introduced as the kind of concepts whose possession derives from having undergone the relevant conscious state itself. Once you have consciously seen a certain colour, say, you will thenceforth become able to recreate that experience in imagination, and to recognize further instances of that type of experience directly when you encounter them. We might suppose that the original experience instils a sort of sensory template in your brain, and that this template is reused when you imagine or recognize that type of experience on future occasions. Phenomenal concepts are then those concepts whose primary uses depend on the activation of such stored traces of earlier experiences. (Papineau 2002 2008.)

Phenomenal concepts feature centrally in the standard *a posteriori physicalist* response to Frank Jackson’s “knowledge argument”. In Jackson’s well-known thought experiment, Mary is a future vision scientist who knows all there is to know about colour experiences from a third-personal point of view but has never had any colour experiences herself. Then one day she emerges from her cloistered environment and sees a ripe tomato. Surely, argued Jackson, she learned something new at this point—what it is like to see red, the phenomenal aspect of red experience, its conscious character. The thought experiment thus suggests this argument against physicalism:

1. Beforehand, Mary knew about *all* the physical properties involved in colour experience
2. After her exposure, she came to know about a *new* property involved in colour experience
3. So, at least one property of colour experience is not physical.

Armed with the notion of phenomenal concepts, the posteriori physicalist has a ready answer. Mary gains new knowledge only at the level of concepts, not at the level of reality.

The idea is that the property she learns about—the what-it’s-like of red experience, the phenomenal feature—is a property she already knew about under some functional or physical concept—as *activity Φ in cortical area V4*, let us suppose. She has now simply acquired a new phenomenal concept that refers to that old property.

Suppose we represent this new phenomenal concept by ‘P’. Then the result of Mary’s exposure is that she learns that

1. *ripe tomatoes cause P*

But this information is only new in a conceptual sense. After all, Mary always knew, given her scientific omniscience, that

1. *ripe tomatoes cause activity* Φ *in V4*

And so, on the physicalist assumption that

1. *P = activity* Φ *in V4*

the claim that (4) *ripe tomatoes cause P* reports just same fact as that (5) *ripe tomatoes cause activity* Φ *in V4.*

The only sense in which Mary has new knowledge, says the a posteriori physicalist, is that she has acquired a new way of presenting this old fact—via her newly acquired phenomenal concept *P*. She now has two concepts that refer to the experience caused by ripe tomatoes, whereas before she only had one. But this does not show there is some *extra element of reality* that her old third-personal concepts failed to, and so provides no argument against physicalism.[[53]](#footnote-53)

According to a posteriori physicalism, mind-brain identities are quite analogous to other identities established by science. Just as science has shown us that *water = H2O*, so it might show us that *P = activity* Φ *in V4.* In line with this, Mary’s knowledge that *ripe tomatoes cause P* no more implies that some element of mental reality is left out by brain science than *rivers are full of water* implies that some element of liquid reality is left out by chemistry.

Now, it is not my intention here to add to the intricate literature on this “phenomenal concept strategy” (cf Stoljar 2005) for dealing with Jackson’s Mary argument. My current concern is not to defend this strategy, nor even to defend physicalism.[[54]](#footnote-54) Still, I would like at least to show that the approach to introspection I have developed in the last two sections is consistent with the phenomenal concept strategy.

At first pass, this might seem problematic. As I said, phenomenal concepts are normally understood as simple sui generis concepts that pick out their experiential referents in some direct way. Mary’s initial experience instils in her an ability to think about similar experiences directly—she activates her sensory imagination and thereby thinks about her new type of experience.

But the account of sensory introspection developed in the last two sections seems to be viewing of phenomenal concepts quite differently. On that account, by contrast, we use complex concepts to think subjectively about our sensory experiences. We refer introspectively to our sensory experiences at second hand, by referring their representational contents, which themselves are articulated using concepts that refer to worldly objects and properties. I have a visual experience *that a yellow ball is before me.*

If this is how phenomenal concepts work, then it is by no means clear that Mary would have lacked them before her exposure. After all, her scientific training would presumably already have equipped her to think about such worldly properties as the colours of surfaces. So if phenomenal concepts pick out experiences in terms of what worldly properties they represent, it looks as if we must abandon the strategy of explaining Mary’s new illumination in terms of her acquiring a new phenomenal concept.

Not necessarily. The substance of the phenomenal concept strategy can still stand. This is because Mary’s exposure will arguably lead to her acquiring new *perceptual* concepts of properties of *surfaces*, apart from any impact it might have on her thinking about experiences. And this itself will give her a new way of thinking about experiences—an experienceof a *red* surface, where *red* is her new perceptual concept—and everything can proceed as before.

To see how this might work, note first that the knowledge argument could as well have been applied to Mary’s knowledge of red *surfaces* as to her knowledge of “red” *experiences*.

Thus imagine someone insisting that, as a result of her exposure, Mary learns about a new feature of red *surfaces*. “While she always knew about red surfaces from a scientific third-personal point of view, she didn’t know what they’d be *like*.” This would then suggest the argument that, since (1) Mary had always known about all the physical properties of red surfaces and (2) she has now learned about a new property of red surfaces (3) at least one property of red surfaces is not physical.

Now, I trust that all will agree that this argument is proving too much. We can’t disprove physicalism about surface properties so easily. And the natural way to show what is wrong with this argument is to redeploy the strategy used against the original Mary argument. That is, we can say that Mary’s exposure gave her a new *perceptual* concept of red surfaces, *R*, in addition to all the old third-personal concepts of red surfaces that she previously possessed (such as *having* *reflectance profile θ*). She acquires this concept as a result of first seeing a red surface, and thereby becoming able to recreate that colour in imagination, and to recognize further instances directly when she encounters them . . .

And now we can explain that her new knowledge of surfaces is only new at the level of concepts. On her exposure, Mary newly learns that *ripe tomato surfaces are R*. But in truth *R* and *reflectance profile θ* pick out just the same property. So her new knowledge reports a fact that she always knew, namely that *ripe tomato surfaces have reflectance profile θ*. Her new knowledge does not relate her to some new non-physical feature of surfaces, just to an old physical feature referred to in a new way.

Let us return to experiences, rather than surfaces. I trust it now clear how my more complex approach to subjective thinking about experience will still allow us to run a version of the phenomenal concept response to Jackson’s original argument. Recall that on my account of introspection we naturally characterise “red” experiences as those experiences that prompt beliefs about red things. So when Mary comes out of the room and acquires a new *perceptual* concept of red *surfaces*, *R*, she will also therewith acquire a new way to think about red *experiences*—the kind of experience *prompted by* *beliefs about R*.

And this new way of thinking about red *experiences* will satisfy all the earlier requirements for phenomenal concepts. It will be a concept of experience that is a priori distinct from all the third-personally available concepts Mary had before her exposure; it is available only as a result of her new experiences; and it is an upshot of imaginative abilities derived from those new experiences. True, this concept will now be piggy-backing on a *perceptual* concept that satisfies the selfsame requirements (not third-personal, derived from exposure, and dependent on new imaginative abilities). But that just means that there are two sets of concepts that share these features. (In effect, my story now analyses *phenomenal* concepts as concepts of types of experiences that represent *perceptually* conceived properties.[[55]](#footnote-55))

And all this will then allow us physicalists to explain once more that there is a sense in which Mary does gain new knowledge, in the first instances of surfaces, and then derivatively of experiences. She can now think, in a way she could not think before, that *ripe tomatoes have R surfaces*, and thus that they cause *experiences that represent R surfaces*. But neither the features of surfaces nor the experiences that she is here thinking about are non-physical. They are just old physical items that she is thinking about in new ways.

Let me finish this section by making two final points about phenomenal concepts. First, it should be noted that a clear separation of third-personal and phenomenal concepts is not a general phenomenon, but rather an artefact of the peculiar set-up of Jackson-like thought experiments. These scenarios are expressly designed to ensure that Mary acquires *new* ways of thinking, of both experiences and observable worldly properties, that are different from all her old conceptual powers. But for ordinary people the ways of thinking newly acquired by Mary will have been conflated throughout their lives with their other third-personal ways of thinking about experiences and observable properties. They won’t have two separate mental terms, so to speak, for red surfaces, but merely one which incorporates recognitional and imaginative powers along with other less direct ways of identifying red surfaces. And the same will therefore go for their mental term for experiences of red. In both cases they will have a single “merged file” which incorporates into one conception the different elements which are teased apart by the Mary thought experiment. And so in particular, when it comes to introspective judgements about their own experiences, ordinary thinkers will simply use this one merged concept rather than be faced by some choice between two.

As for the second point, note that the model of introspective phenomenal concepts I have outlined will not necessarily work for all aspects of sensory experience.[[56]](#footnote-56) Take any element in experience that qualifies as “mental oil”, that is, any conscious features of experience that plays no representational role, not even contingently. Blurry vision and orgasms are popular examples. To the extent that items like these lack any representational significance, we won’t be able to refer to them by citing their contingent representational contents, for they will have none. Nor will we be able to arrive at introspective knowledge of such conscious states by noting what beliefs they incline us to form, for again there will be no such beliefs.

Or take elements of experience that do (contingently) have representational significance, but which occur in subjects who are unaware of this. Imagine subjects who experience unfamiliar noises, or smells, or odd visual sensations, without knowing what worldly properties they signify. Here too the subjects will not be able to refer to the experiences by citing their worldly referents, nor will they be able to identify them introspectively by noting what worldly beliefs they prompt.

This is not to say that we cannot come to know introspectively about experiences of these two kinds. Surely we can. But such introspection must involve different processes from those explored above. Perhaps in these cases we do coin simple sui generis phenomenal concepts that pick out their referents directly, rather than by contingent description. We are able to recreate these states in imagination, and thereby form mental terms that refer to them. (*That* kind of experience, we might say to ourselves.) And perhaps correspondingly we are able to recognize such experiences directly when we have them, and thereby gain introspective knowledge of them. If that it right, we will then face the problem of explaining what processes that might facilitate such direct introspection. Still, this is not the place to develop a full account of all the modes of introspective sensory knowledge.

**4.8 Talking about Experience**

Having discussed ways in which we think about experiences, let me now say something about the ways we talk about them. As we shall see, this is a large and messy topic, and I won’t try to resolve all the issues it raises. But it is a topic that features prominently in the literature of sensory experience, and so it will be useful to make some comments.

Much of the discussion of this topic experience centres on “adverbialism”. As I mentioned at the beginning of chapter 3, the adverbialist account of sensory experience is metaphysically very similar to my own qualitative view, but is widely held to have been discredited by its inability to deliver a cogent account of linguistic reports of sensory experiences. Given this, I would like to explain why my own position does not founder on this same reef.

Let me begin by briefly rehearsing the adverbialist approach and the difficulties it ran into. The adverbialists held that sensory experiences are constitutionally non-relational. Sensory experiences are constituted by the *way* subjects are experiencing, not by any relations between subjects and further entities. I take this to be metaphysically equivalent to my view that experiences are simply a matter of subjects instantiating intrinsic qualititative properties.

But adverbialists conjoined this metaphysical position with an account of *linguistic descriptions* of experiences. They held that reports about experiences should be analysed adverbially. As they saw it, a claim that “X is seeing something red” is more accurately understood as saying “X is seeing *redly*”—that is, as reporting the mode of X’s visual experience, rather than by specifying some object to which X is visually related.

But this then opened adverbialism to the following well-known objection, originally due to Frank Jackson (1975 1977). *Seeing a red square and a green circle* is different from *seeing a* green *square and a* red *circle.* Yet is not clear how an adverbial characterisation can capture this distinction. If we lose any relations to the red square and the green circle as objects, then all we seem to be left with is a subject who is *seeing redly and squarely and greenly and circularly*, with the redness is no longer tied specifically to the squareness, nor the greenness to the circularity.

My aim in this section is to show that my own view of sensory experience is not undermined by this line of argument. Let me start by raising a question about the adverbialist “analysis” of sensory reports. Was this supposed to be a description of existing usage, or a revisionary proposal? We might understand it in either of these ways. That is, we could read it as an analysis of ordinary language, as an attempt to show what is meant when ordinary people attribute sensory experiences to themselves or others. Alternatively, we could read it as an attempt to construct a new improved language for describing sensory experiences, a language that is faithful to our theoretical recognition that these are metaphysically intrinsic qualitative states. I shall consider these two options in turn.

It does not take much reflection to realise that the first suggestion is highly implausible. Ordinary people describe sensory experiences in a wide range of different ways, none of which seems to correspond to any adverbial construction. Rather, everyday language almost always describes sensory experiences in some relational way or other, by invoking the relations of experiences to items beyond themselves. Given this, the most natural way to understand such reports is not in the first instance as describing the conscious phenomenology of sensory experiences, but simply as detailing the extrinsic relations of the experiences to various further matters. At the same time, it is true, we can also read these reports as conveying something about the conscious phenomenology of the experiences. But the reports certainly don’t give us a direct adverbial characterization of this phenomenology.

Thus, for a start, many sensory reports are simply objectual, citing a perceptual relation between a subject and some particular object. “X saw the apple”, “X felt the keys”, and so on. Reports like these specify how the subject was in sensory contact with some spatiotemporal particular.[[57]](#footnote-57)

Then there are factive perceptual reports. The vast majority of human sensory experiences are veridical rather than illusions or hallucinations. Our language for describing them reflects this. As I remarked back in chapter 1, we generally lack terms that stand to *perception* as *belief* stand to *knowledge* (no doubt because non-veridical experiences are so much rarer than false beliefs). So it is unsurprising that we standardly attribute experiences using factive constructions relating subjects to their circumstances, such as “X saw *that the apple was on the table*”, “X felt *that the keys were in the drawer*”, and so on, where the “that” clauses name facts. Reports like these specify how the subject was in observable contact with some spatiotemporal fact.

Such factive constructions, however, will not serve to describe *non*-veridical sensory experiences. We can’t report that someone is misperceiving a ball to be blue by citing their contact with a fact to that effect if no such fact is to be had. In such cases, everyday discourse has to resort to further and less natural constructions. In particular, it can appeal to the representational content of the experience, via such reports as “X visually experienced *that the ball was blue*”, “X tactually experienced *that the keys were under the purse*”—with the “that” clauses now naming *truth conditions* rather than facts. We pick out the experience by naming its mistaken veridicality condition.

Now, as I said, none of these kinds of reports gives any direct characterizations of the phenomenal character of sensory experiences. In the first instance, they simply tell us that the subject is sensorily related to some further item, an object, or a fact, or a truth condition. Still, it is natural enough to read these reports as indirectly expressing something about conscious vehicles of representation too. Under this understanding, they also tell us that subjects are in the kinds of conscious sensory state that are typically sensorily related to the relevant kinds of object, fact, or truth condition.

Let me now turn to the other possible way of interpreting the adverbialist account of sensory reports, that is, as offering a new improved language faithful to the metaphysics of conscious sensory states. Perhaps one of the just-described everyday devices for reporting sensory experiences comes close to fitting this bill. Consider the practice of describing sensory states by citing their propositional contents, as in “X visually experienced that the ball was green”. On the face of things, this kind of construction can be read as systematically telling us, not just that X was in a representational state with a certain propositional content[[58]](#footnote-58), but also that X housed a vehicle of sensory representation built up from conscious elements referring to the items constituting the proposition represented. This specification of sensory states by citing propositional contents might involve somewhat clumsy and unnatural formulations, but it does have the advantage of applying across the board, to non-veridical as well as factive states.

It is an interesting question why the original adverbialists did not explore this suggestion. If they simply wanted some effective way of specifying the intrinsic character of sensory experiences, why didn’t they consider the familiar possibility of reference by contingent description? To the extent that conscious sensory states contingently possess representational contents, one would have thought the most obvious way of referring to those states would be via descriptions that cited those contents.

No doubt part of the reason was the philosophical context within which the adverbialists were working. Their central concern was to deny that sensory experience had any relational “act-object” structure, whether in the form of relations to sense-data or otherwise. At the time, naturalist theories of representation were not yet on the philosophical horizon. So the idea of appealing to the representational powers of sensory consciousness would have struck the adverbialists as a step backwards. They were not yet in a position to view such powers as contingent naturalist add-ons to the intrinsic nature of sensory experience, and so would have seen them as inevitably reintroducing a relational structure to sensory experience itself.[[59]](#footnote-59)

Be that as it may, perhaps the original adverbialists were right to seek some alternative way of referring to conscious experiences. The idea of identifying sensory states via their contingent representational powers is not as straightforward as it might at first seem. In the end, it is doubtful whether it can fully satisfy the demands of the adverbialist project. Let me first mention two relatively minor difficulties, before turning in the next section to a more substantial one.

An obvious first point is that the suggestion won’t work for any “mental oil” elements of conscious experience. To the extent that these don’t have any representational significance, there will be no question of identifying them by citing their referents. Instead everyday discourse will have to make do with analogies and metaphors. “It was like looking at a blurred picture.” “It was as if there was a high-pitched noise inside my ears.”

Second, the suggestion will be insensitive to any individual variability in intrinsic sensory properties. It is not to be taken for granted that different subjects use the same conscious properties to represent given worldly items. I am not here thinking of the mere conceivability of physically identical subjects having different “inverted” experiences. As a materialist about conscious experience, I do not regard this kind of variation as metaphysically possible. Rather I have in mind the ample psychophysical evidence that in many cases real subjects vary in their physical reactions to given observable items, and in consequence in their conscious responses (Kanai and Rees 2011, Mollon et al 2017). To the extent that this kind of interpersonal conscious variation lies behind the representation of observable items, it will escape any characterization that appeals solely to the representational content of sensory experiences.

**4.9 Red Squares and Green Circles**

Now for the more substantial worry about identifying intrinsic sensory properties via their representational contents. This worry is related to Jackson’s original challenge to adverbialism. While the representational suggestion might seem initially to deal with Jackson’s challenge, a follow-up objection will turn out to be more damaging and to expose the representational strategy as at best a partial technique for identifying the intrinsic nature of sensory states.

Jackson’s initial challenge was that the adverbial way of characterizing experiences can’t distinguish between *seeing a red square and a green circle* and *seeing a green square and a red circle.* At first pass this might not seem like a problem for the idea that we can identifying sensory properties via their contingent representational contents. After all, representing that *a red square and a green circle are present* is different from representing that *a green square and a red circle are present*. So, if we characterise an experience as a *visual experience that a red square and a green circle are present*, we will adequately distinguish it from the transposed experience.

But a deeper difficulty is lurking. To bring this out, it will be useful to consider a different line of response that has been offered to Jackson’s challenge, one that adheres more closely to the original adverbialist programme. This is the idea that we might “fuse” some of the adverbs in experiential characterizations (cf Kriegel 2008). For example, “redly+squarely” might be viewed as a distinctive sui generis way of seeing. By introducing fused adverbs like these, it looks as if adverbialists might be able to make *seeing redly+squarely and greenly+circulary* come out differently from *seeing greenly+squarely and redly+circulary.* In effect, the “fusing” produces the same result as the just-outlined representationalist suggestion, by tying the right colours to the right shapes in the characterization of the experience.

But this suggestion then faces a further problem. We take it that, if someone is *seeing a red square*, then it follows they are *seeing a square*. But this inference is lost if we are working with “fused” adverbs. The point of fusing the adverbs was to eliminate the logical structure that licensed the unwanted adverbial rearrangements. But if that logical structure is no longer present, then the inference from *seeing redly+squarely* to *seeing squarely* is blocked, and therewith the wanted inference from *seeing a red square* to *seeing a square*. (Kriegel 2008, D’Ambrosio 2019.)

Does the suggested representationalist device for identifying experiecnes deal with this further problem? You might initially think so, on the grounds that an item that *represents a red square* will thereby *represent a square*. If that’s right, we will get the desired inference from a *visual experience of a red square* to *a visual experience of a square*.

However, the crucial assumption here is not generally valid. A state that *represents* *F & G* does not thereby automatically *represent F*. Here is an example that makes the point. Necessarily, something is *ice* if and only it is *water and frozen*. Now imagine some community who don’t know that, and don’t even know about freezing, but can recognize ice and have a single word for it (“silg” let’s suppose). When they say something is “silg”, the truth condition of their claim is that it is *water-and-frozen*, and so they are representing it to be *water-and-frozen*. But they aren’t representing it to be *frozen*—after all, they have no way of representing things to be frozen.

Inferences like those from *S represents F & G* to *S represents F* require, not just that there be structure in the representational content, but that there be corresponding structure in the vehicle of representation. If, in the example just given, *ice* had been represented using some complex construction along the lines of “water *and* frozen”, then the inference would have been secured. Someone who describes something as *ice* by saying it is “water and frozen” is thereby representing it to be *frozen*, in a way that someone who describes it as “slig” is not.

What then about the inference from a *visual experience of a red square* to *a visual experience of a square*? These last remarks show that this inference presupposes that the experience represents the red square in some structured way, by somehow deploying one sensory element that represents red and another element that represents square.

As it happens, I don’t see anything wrong with this particular presupposition. It seems highly plausible that visual experience does represent in this manner. There is plenty of evidence that the visual system processes different visual features independently, combining judgements about shape, colour and other aspects into a total representation only at a late stage. To this extent, it does seem as if its syntax, so to speak, has independent terms for colours and shapes.

I would say it is precisely the existence of such a syntax that warrants inference like that from *visual experience of a red square* to *a visual experience of a square.* If vision did not represent colours and shapes independently, such inferences would be illegitimate.

There is a general moral here. I have been arguing that we talk about sensory experiences by invoking their (contingent) representational contents. But exactly how this kind of talk works, and in particular what inferences it allows, will hinge not just on the truth-conditional contents represented, but on the structure of the representational vehicles.

This means that a full account of sensory experience cannot just rest with the claim that sensory experiences are constituted by intrinsic qualitative properties of subjects that contingently have such-and-such representational contents which we use to characterize them. We need to know more about the structure of those intrinsic properties and how they represent those contents.

By way of analogy, imagine that we wanted to give a full account of the workings of some foreign language. It would not be enough simply to specify the truth conditions p1, p2 . . . that are borne by all the items in some numerical list of the language’s sentences. Such a pairing of sentences with truth conditional contents, even if accurate enough, would fail to display the language’s structure, and hence would fail to tell us about the logical relations between sentential representations that are a consequence of that structure. A satisfactory account of the language must also describe the sub-sentential elements of the language and the systematic contributions that they make to the truth conditions of the sentences they enter into.

So it is with sensory representation. A full account of the way humans represent the world sensorily, and in particular of which sensory representations ensure which others, will require a detailed understanding of the elements of sensory representations, of the repeatable items which make systematic contributions to the veridicality conditions of sensory states. This is not something that can be achieved from the armchair. Rather, an account of sensory experience that delivers this understanding will need to draw on the resources of cognitive neuroscience.

This means that the ambitions of the original adverbialists take us beyond what can be achieved by philosophy alone. A satisfactory system for reporting sensory states cannot be developed simply by introducing adverbial constructions.[[60]](#footnote-60) Nor will it serve on its own to invoke the veridicality conditions of full sensory experiences, since without a scientific understanding of the internal structure of experiences this will fail to tell us which experiences imply which others.[[61]](#footnote-61)

Still, none of this is necessarily a problem for the position I have defended in this book. My primary concern has been to establish that sensory experiences are metaphysically qualitative and non-relational. I take it that by now I have mounted a strong case for this metaphysical conclusion. The development of an ideal language for describing such experiences is a further issue, and one that I am happy to leave to future scientific investigation.

Having said that, I allow it would be odd if current everyday language offered no way at all of referring to the intrinsic properties of experience. Apart from anything else, one might wonder how it is possible to philosophise about a subject matter that so lies beyond any reach of normal linguistic characterization. However, it is no part of my view that we can’t talk about the intrinsic properties of experience at all. As I explained in the last section, we standardly identify such properties indirectly, as the conscious properties typically involved in sensory experiences that relate us to certain objects, or facts, or truth conditions. These references by contingent description might be rough and ready, and in particular might sometimes be insensitive to fine-grained relations between sensory experiences in the way highlighted in this section. Still, I would say they are quite enough to allow metaphysical theorising about the nature of sensory experience to get off the ground.

**4.10 Rich Sensory Contents**

Let me conclude this book with some discussion of the *richness* of the contents of sensory experiences (Siegel 2010 2016). Philosophers differ on this issue. We might rank them along a spectrum from “conservative” to “liberal” (Bayne 2009). The most conservative faction say that sensory experience only represents colours and shapes and similar low-level properties. More liberal philosophers allow that it can also represent causation and movement and the meanings of spoken words. Extreme liberals hold that it can even represent people and other particular objects along with natural kinds like kestrels and pine trees.

The standard form of argument for recognizing rich contents is an appeal to phenomenology. Consider the difference between people who can and can’t recognize kestrels, say. It is agreed on all sides that there are characteristic conscious differences between expert birdwatchers and other people. The kestrel will “pop out” for the expert, while it is simply a melange of colours and shapes for the lay observer.

Liberals then argue that this conscious difference betokens a representational difference. The pop-out phenomenon occurs because the expert’s sensory experience is representing something that lay observer’s experience is not. The expert’s sensory experience is representing the kestrel as such, in addition to representing the colours and shapes that ordinary observers also represent.

Conservatives typically resist this conclusion by giving an alternative account of the phenomenological differences. They do not deny that there are conscious differences between those who can recognise kestrels and other observers. But they don’t agree that this is because the expert’s sensory experiences represent kestrels as such. Perhaps the expert is simply attending sensorily to more detailed low-level features; the expert has learned to identify fine-grained features of the bird’s shape and colour that escape the notice of ordinary watchers (Tye 1995 2000). Or perhaps the conscious difference lies at the cognitive rather than the sensory level; the observations of the expert is typically accompanied by *thoughts* about kestrels, and these thoughts bring with them some distinctive “cognitive phenomenology”. If either of these hypotheses holds good, then the expert’s sensory experiences themselves need represent nothing but colours and shapes.

It is an interesting question how far this debate presupposes strong representationalism about sensory experience. The participants are not always explicit on this issue (though see Prinz 2013 Bayne 2016). Still, most seem implicitly to be committed to a constitutive tie between conscious character and representational content. After all, it is generally agreed in the debate that, if the conscious difference between experts and novices cannot be explained away as attentional or cognitive, then this conscious difference must of necessity signify that something extra is represented by the experts. And, conversely, it is also generally agreed that whatever is so expertly represented must depend only on the experts’ sensory consciousness and not on anything environmental. In short, the debate generally assumes that (1) any non-attentional conscious sensory difference must constitute a representational difference and (2) any difference in what is sensorily represented must be due to a conscious difference.

Since I deny both these assumptions, I approach the debate about broad contents rather differently. From my own perspective, there is no guarantee that every non-attentional conscious sensory difference betokens a representational difference. Different people can use different sensory states to represent the same things. Conversely, I see no reason to deny that a given conscious property can represent different worldly items in different subjects. As I have stressed throughout, broadness in sensory representation is just what we should expect, once we free ourselves from the grip of strong representationalism.

Still, much of the debate about rich contents can be recovered within my framework by relativizing the debate to specific subjects. This is because, even from my perspective, normally functioning subjects will generally enjoy a one-to-one match between conscious sensory states and items represented, even if this correlation breaks down across subjects. In principle, it is true, there can be exceptions in both directions, even within individuals. My perspective allows “Frege cases” where someone represents the same item in two different sensory ways, and also “confused” sensory ideas when someone uses a given sensory state to refer indeterminately to two different items. (I shall look at examples in a moment.) Still, such mismatches are exceptions to the general rule, and for good reason. Frege cases prevent us unifying our behavioural and cognitive responses to a single given item, while confused ideas prevent us developing distinct such response to different items. Given this, we can expect our mental processes to eliminate such intra-individual mismatches between contents and conscious character whenever they can.

In consequence, many of the arguments from the debate about rich contents will apply, even given my assumptions, to sensory changes within a given individual. Let us now rerun the kestrel thought experiment, but now within a particular individual. Some given individual acquires an ability to recognize kestrels, when they couldn’t before, and this ability manifests itself in kestrels now coming to “pop out” in their visual consciousness. The natural explanation for this change is that they have acquired a new kind of sensory state which functions as a unit for the purposes of gathering and storing information about kestrels and guiding actions accordingly. At the subjective level, this state manifests itself as a gestalt feeling unifying the low-level shape and colour experiences characteristic of kestrels. In effect, the subject has added a new “word” for kestrel, so to speak, to their repertoire of conscious sensory states, and their deployment of this word in response to kestrels accounts for the pop-out phenomenology they newly experience.

Now, as before, there are other possible explanations for the change in phenomenology. Perhaps the subject has just become better at attending to low-level details. Or perhaps the phenomenological change is at the cognitive rather than the sensory level. But let us put these alternatives to one side, and instead follow through the consequences of the idea that gestalt sensory changes can signal new abilities to represent items like kestrels.

**4.11 Very Rich Sensory Contents**

Note that my own position allows me to recognise a far richer range of such contents than most other theorists. This is because orthodox commentators take themselves to be concerned the kinds of narrow contents that are determined by conscious character alone. So they resist the idea that any element of sensory experience might represent the *natural kind* kestrel, the biological species constituted by a certain ancestry. After all, so the thought goes, conscious subjects on some distant planet might represent a similar-looking but a quite distinct species by just that same type of experience, so the representation of any particular biological species cannot be metaphysically determined by conscious character alone. The orthodox view, therefore, is that sensory experience itself can at best represent the presence of a *kestrel-looking* item (Siegel 2010 chapter 4). This could still be a rich content, in involving some extra kestrel-type *gestalt*, and not just some arrangement of specific shapes and colours. But it would be limited to representing an appearance type, and not some natural kind that might lie behind the appearance.

Since I don’t recognise any contents that are determined by conscious sensory character alone, but only those that derive from environmental embeddings, I have no difficulty with the idea of a sensory state representing the natural kind kestrel itself, the species that is restricted to certain regions of this earth. Sure, just the same kind of sensory state might represent some different organism on some alien planet in a distant galaxy. But for me that is no reason to deny that in normal human beings it represents the kestrel species itself, and not just its appearance.

Moreover, I will say the same about experiences of particular people and other particular objects. Suppose some gestalt visual experience is occasioned in me when I see my wife Rose. In line with the argument so far, I take it that this experience will represent Rose, that particular person. Orthodox commentators will disagree. How can my experience represent that specific woman, they will query, given that I could have an Australian doppelgänger in whom just that type of experience would represent someone different? At best, orthodoxy will say, my doppelgänger and I are representing the shared *look* of these women, not their specific identities.

But once more I see no reason to accept this limitation. Nothing recommends the view that sensory experience can’t represent particular people, apart from the representationalist presupposition that a given sensory state’s representational content depends only on its conscious nature, and not on its environmental correlations. Without this presupposition, the claim that I can’t visually represent my wife seems ad hoc and unmotivated. Human beings and other animals have detailed visual structures that are expressly designed to recognise particular people and facilitate appropriate responses to them. What reason is there to deny that the activation of these states represents the particular people in question?

Still, how can I be representing my particular wife, some might persist, given that a good look-alike would produce just the same sensory response? (Perhaps my doppelgänger’s wife has made a trip to London and is shopping on the Strand.) Doesn’t that show that I am representing the look the two women share, rather than my particular wife? After all, it doesn’t look as if my visual system has made a *mistake* when I take the lookalike to be by wife. There isn’t be anything wrong with my eyes. My visual system is functioning perfectly well.

My response is that my visual system has indeed made a mistake. My eyes and the rest of my visual system might indeed be perfectly healthy, but mistakes can be due to misleading circumstances as well as internal malfunction. The particular circumstance has activated a state that is designed to register my particular wife and guide me accordingly. If it has been triggered by someone other than my wife, that is indeed a sensory mistake.

Here is an analogy. I take it that my visual system is capable of representing three-dimensional form, for example the presence of a ball. But note that a good look-alike, such as a convincing tromp l’oeil painting, could well produce the same response, even if my eyes and the rest of my visual system are perfectly healthy. It would seem perverse to conclude that my visual system doesn’t represent three-dimensional form after all, but just the look shared by balls and convincing tromp l’oeil paintings of balls, on the grounds that it shouldn’t be convicted of a mistake when it is healthy. In truth, my visual system has made a mistake, not because of any internal malfunction, but because it has been tricked by a deceptive scenario. The painting has activated a state that is designed to register balls, even though no such ball is present.

Now we have come this far, plenty of further questions arise. I have posited a case where my gestalt visual state is plausibly designed to represent my wife Rose, despite that fact that she has a lookalike on the other side of the world. But what if I am unknowingly acquainted with two lookalikes whom I meet with equal frequency? I develop a visual gestalt state that is triggered by their distinctive look, but now there is no obvious reason to suppose that this state represents one lookalike rather than the other. Does this not argue once more that we should interpret this state as representing their shared look, rather than any particular individual?

Not necessarily. One option is to hold that the gestalt state represents whichever of the lookalikes was encountered first, and that the state *mis*represents this first individual when triggered by the other lookalike. (Cf Papineau 2008 section 2.3.) Alternatively, if my encounters with the two lookalikes have always been too uniform to make any such asymmetrical interpretation plausible, we might hold that the gestalt state refers indeterminately to both the individual lookalikes.

But what now if I have always known that there are two indistinguishable lookalikes around? I still develop the gestalt state, but now I am perfectly aware from the start that it is ill-designed to track one lookalike rather another.

Well, in that case it will be natural to suppose that I will treat the state as representing the shared category of the two lookalikes, rather than as a term for any particular person. After all, there is nothing in my weakly representationalist position to rule out someone sensorily representing some general category that has a plurality of particular instances.

Come to think of it, I have already supposed as much, in holding that people can sensorily represent biological species like kestrels. People who can recognize birds as kestrels will typically represent them as members of the general biological category rather than as particular individuals.

But now we face yet another question. What I have said so far implies that a given visual gestalt might be used to represent either some particular individual or some more general category to which it belongs. I might treat a distinctive visual gestalt as standing for some particular woman, or alternatively (in the case where I’m aware that a plurality of lookalikes are about) for a group of women. Indeed I might analogously treat a given gestalt as representing a particular bird (the kestrel whose territory includes the field next to my house) or the whole kestrel species. So what determines which content is possessed by the gestalt in any given case?

I would suggest that this hinges on further features of mental architecture. In particular, which items of information does the subject associate with the gestalt and anticipate to recur in future encounters with its referent? The features that it reasonable to project across all encounters with an individual member of some biological species, for example, are not the same as those it is reasonable to project across all members of that species. It makes to expect an individual bird to still have a crooked leg next time you meet it, but not to expect all kestrels to be like that.

So the subject’s dispositions to attach information to the gestalt can determine whether they are using it to refer to a particular or a general category (Papineau 2008 section 2.3). Perhaps in some cases subjects will temporarily use a given gestalt in both ways. But by the nature of the case they will tend to develop a more discriminatory gestalt to refer to the particular individual if they can, incorporating features that distinguish it from others in the general category.

By this stage some readers might be wondering how far the distinctive representational powers associated with visual gestalts are in the sensory rather than the cognitive realm. Is not the accumulation of information to inform future encounters a cognitive rather than a sensory matter? But this is not the place to pursue this issue. It raises empirical questions about the workings and interactions of the sensory and cognitive realms that lie beyond the scope of this book. (But for some relevant considerations see Burge 2010, Prinz 2013, Papineau 2013, Block 2014.)

More generally, the topic of rich sensory contents opens up a wide range of questions for further investigation. For now it will be enough if I have shown how this investigation is best conducted under the assumption that sensory states possess their representational contents contingently rather than necessarily.

**References**

Ayer, A. J., 1967 "Has Austin Refuted the Sense-Datum Theory?" *Synthese* 17: 117-40

Bayne, T. 2009 “Perception and the Reach of Phenomenal Content” *Philosophical Quarterly* 59: 385–404

Bayne, T. 2016 “Gist” *Proceedings of the Aristotelian Society* 116: 107–26

Bayne, T. and Montague, M. eds 2011 Cognitive Phenomenology Oxford: Oxord University Press.

Ben-Yami, H. forthcoming “The Time-Lag Argument, Special Relativity, and Beyond”

Berkeley, G. 1710 *Principles of Human Knowledge*

Bermudez, J. 2013 Transparent Minds: A Study of Self-Knowledge Oxford: Oxford University Press

Blackburn, S. 2005 “Success Semantics” in Lillehammer, H. and Mellor, D. eds *Ramsey's Legacy* Oxford: Oxford University Press 22-36

Block, N., 1980 “Troubles with Functionalism” in Block, N. ed Readings in the Philosophy of Psychology, Volumes 1 and 2 Cambridge Mass: Harvard University Press 268–305

Block, N. 1986: “Advertisement for a Semantics for Psychology” *Midwest Studies in Philosophy*10: 615-78

Block, N. 1996 “Mental Paint and Mental Latex” in Villanueva, E. ed *Philosophical Issues: Perception* 7: 19-49

Block, N. 2003 “Mental Paint” in Hahn, M and Ramberg, B. eds, *Reflections and Replies: Essays on the Philosophy of Tyler Burge* Cambridge Mass.: The MIT Press 165-200

Block, N. 2010 “Attention and Mental Paint” in Sosa, E. and Villanueva, E. eds *Philosophical Issues; Philosophy of Mind* 20: 23-63

Block, N. 2014 “Seeing-As in the Light of Vision Science” *Philosophy and*

*Phenomenological Research* 89: 560-72

Block, N. 2016 “The Anna Karenina Principle and Skepticism about Unconscious Perception” *Philosophy and Phenomenological Research* 93: 452–59

Block, N. and Fodor, J. 1972 “What Psychological States Are Not” Philosophical Review 81: 159–181

[Bourget](https://philpapers.org/s/David%20Bourget), D. and Chalmers, D. 2014 **“**What Do Philosophers Believe?” Philosophical Studies 170: 465-500

Bourget, D. and Mendelovici, A. 2019 “Phenomenal Intentionality” *Stanford Encyclopedia of Philosophy*

Burge, T. 1979 “Individualism and the Mental” in French, P. Uehling, T. and Wettstein, H. eds *Midwest Studies in Philosophy* IV Minneapolis: University of Minnesota Press 73–121

Burge, T. 2010 *Origins of Objectivity* Oxford: Oxford University Press

Byrne, A. 2001 “Intentionalism Defended” Philosophical Review 110: 199-240

Byrne, A. 2005 “Introspection” Philosophical Topics 33: 79–104

Byrne, Alex. 2012 "Knowing What I See" in Smithies, D. and Stoljar, D. eds *Introspection and Consciousness* Oxford: Oxford University Press 183-210

Byrne, A. and Logue, H. 2008 “Either/Or” in Haddock, A. and Macpherson, F. eds *Disjunctivism: Perception, Action, Knowledge* Oxford: Oxford University Press 57–94

Chalmers, D. 2006 “Perception and the Fall from Eden” in Gendler, T. and Hawthorne, J. eds Perceptual Experience Oxford: Oxford University Press 49-125

Chalmers, D. 2010 *The Character of Consciousness* New York: Oxford University Press

Chisholm, R. 1957 *Perceiving: A Philosophical Study* Ithaca: Cornell University Press

Crane, T. 2003 “The Intentional Structure of Consciousness” in Smith, Q. and Jokic, A. eds *Consciousness: New Philosophical Perspectives* Oxford: Oxford University Press 33–56

Crane, T. 2013 *The Objects of Thought* Oxford: Oxford University Press

Dainton, B. 2017 “Temporal Succession” *Stanford Encyclopedia of Philosophy*

# D’Ambrosio, J. 2019 “A New Perceptual Adverbialism” Journal of Philosophy 116: 413-46

# Dennett, D. 2016 “Illusionism as the Obvious Default Theory of Consciousness” *Journal of Consciousness Studies* 23: 65-72

# Dinges, A. 2015 “The Many-Relations Problem for Adverbialism” *Analysis* 75 :231–37.

Dretske, F. 1994 “Introspection” Proceedings of the Aristotelian Society 94: 263–278.

Dretske, F. 1995 *Naturalizing the Mind* Cambridge, Mass: Bradford Books

Dretske 2003 “Experience as Representation” *Philosophical Issues* 13: 67-82

Ducasse, C. 1942 “Moore’s Refutation of Idealism” in Schilpp, P. ed *The Philosophy of G.E. Moore* Chicago: Northwestern University Press 223–52

Evans, G. 1982 The Varieties of Reference Oxford: Oxford University Press

Farkas, K. 2013 “Constructing a World for the Senses” in Kriegel, U. ed *Phenomenal Intentionality* Oxford: Oxford University Press 99-115

Fazekas, P. and Nanay, B. 2018 “Attention is Amplification, not Selection” *British Journal for the Philosophy of Science*

Field, H. 1978 “Mental Representation” *Erkenntnis* 13: 9-61

Fish, W. 2009, *Perception, Hallucination, and Illusion* Oxford: Oxford University Press

Fodor, J. 1975 The Language of Thought New York: Thomas Y. Crowell.

Fodor, J. 1980, “Methodological Solipsism Considered as a Research Strategy in Cognitive Psychology” Behavioral and Brain Science, 3: 63–73

Fodor, J. 1984 “Semantics Wisconsin Style” *Synthese* 59: 231-50

Fodor, J. 1987 *Psychosemantics* Cambridge Mass: Bradford Books

Foster, J. 2000, The Nature of Perception Oxford: Oxford University Press

# Frankish, K. 2016 “Illusionism as a Theory of Consciousness” *Journal of Consciousness Studies* 23: 11-39

Fumerton, R. 2005 “Speckled Hens and Objects of Acquaintance” *Philosophical Perspectives* 19: 121–39

Gertler, B. 2010 *Self-Knowledge* London: Routledge

Glüer, K. 2009 “In Defence of a Doxastic Account of Experience” *Mind and Language* 24: 297–327

Goff, P. and Papineau, D. 2014 “What's Wrong with Strong Necessities?” *Philosophical Studies* 167: 749-62

Goldman, A. 2006 Simulating Minds, Oxford: Oxford University Press

Gow, L. 2016 “The Limitations of Perceptual Transparency” *Philosophical Quarterly* 66: 733–44

Grzankowski. A. 2018 “The Determinable-Determinate Distinction Can’t Save Adverbialism” *Analysis* 78: 45–52

Harman, G. 1990 “The Intrinsic Quality of Experience” in Tomberlin, E. ed *Philosophical Perspectives: Action Theory and Philosophy of Mind* 4: 31–52

Hinton, J. 1967 “Visual Experiences” *Mind* 76: 217–27

Horgan, T. and Tienson, J. 2002 “The intentionality of phenomenology and the phenomenology of intentionality” in Chalmers, D. ed *Philosophy of Mind: Classical and Contemporary Readings* Oxford: Oxford University Press 520-33

Horgan, T. 2012 “Introspection about Phenomenal Consciousness: Running the Gamut from Infallibility to Impotence” In Smithies, D. and Stoljar, D. eds *Introspection and Consciousness* Oxford: Oxford University Press 405-22

Ichikawa, J. 2017 “The Analysis of Knowledge” *Stanford Encyclopedia of Philosophy*

Jackson, F. 1975 “On the Adverbial Theory of the Objects of Visual Experience” *Metaphilosophy* 6: 127-35

Jackson, F. 1977*Perception: A Representative Theory* Cambridge: Cambridge University Press

Jackson, F. 2007 “The Knowledge Argument, Diaphanousness, Representation” in Alter, T. and Walter, S. eds *Phenomenal Concepts and Phenomenal Knowledge* Oxford: Oxford University Press 52-64

Johnston, M. 2004 “The Obscure Object of Hallucination” Philosophical Studies 103: 113–83

Kammerer, F. forthcoming “The Illusion of Conscious Experience” *Synthese*

Kanai, R. and Rees, G. 2011 “The Structural Basis of Inter-Individual Differences in Human Behaviour and Cognition” *Nature Reviews Neuroscience* 12: 231-42

Kriegel, U. 2007 “Intensional Inexistence and Phenomenal Intentionality” *Philosophical Perspectives* 21: 307–340

Kriegel, U. 2008 “The Dispensability of (Merely) Intentional Objects” *Philosophical Studies* 141: 79–95

Kriegel, Uriah 2009 *Subjective Consciousness: A Self-Representational Theory* New York: Oxford University Press

Kriegel, U. 2011a *The Sources of Intentionality* Oxford: Oxford University Press

Kriegel, U. 2011b “The Veil of Abstracta” *Philosophical Issues* 21 :245-267

Kriegel, U. ed 2013 *Phenomenal Intentionality* Oxford: Oxford University Press

Kripke, Saul. 1972 “Naming and Necessity” in Davidson, D. and Harman, G. eds *Semantics of Natural Language* Dordrecht: Reidel 253-355

Kripke. S. 1980 *Naming and Necessity* Blackwell

Langton, R. and Lewis, D. 1998 “Defining ‘Intrinsic’” Philosophy and Phenomenological Research 58: 333–45

Lemmon, E. 1966 “Sentences, Statements and Propositions” in Williams, B. and Montefiore, A. eds *British Analytical Philosophy* London: Routledge and Kegan Paul

Le Poidevin, R. 2007 The Images of Time Oxford: Oxford University Press

Levin, J., 1985. “Functionalism and the Argument from Conceivability” *Canadian Journal of Philosophy* 11: 85–104

Lewis, D. 1983 “Extrinsic Properties” Philosophical Studies 44: 197–200

Lewis, D. 1969 *Convention* London: Wiley

Loar, B. 1981 *Mind and Meaning* Cambridge University Press

# Loar, B. 2003 “Phenomenal Intentionality as the Basis of Mental Content” in Hahn, M. and Ramberg, B. *Reflections and Replies: Essays on the Philosophy of Tyler Burge* Cambridge Mass: MIT Press 229-258

Lycan, W. 1987 “Phenomenal Objects” *Philosophical Perspectives* 1: 513-26

Lycan, W. 1996. *Consciousness and Experience* Cambridge Mass: Bradford Books

Lycan, W. 2000 “Representational Theories of Consciousness” *Stanford Encyclopedia of Philosophy*

Macpherson, F. 2010 “Taxonomising the Senses” *Philosophical Studies* 153: 123-42

Marshall, D. and Weatherson, B. 2018 “Intrinsic vs Extrinsic Properties” *Stanford Encyclopedia of Philosophy*

Martin, M. 2002 “The Transparency of Experience” *Mind and Language* 17: 376–425

Martin, M. 2004 “The Limits of Self-Awareness” *Philosophical Studies*120: 37-89

Martin, M. 2006 “On being Alienated” in Gendler, T. and Hawthorne, J. eds *Perceptual Experience* Oxford: Oxford University Press 354-410

Mendelovici, A. 2018 The Phenomenal Basis of Intentionality New York: Oxford University Press

Mendelovici, A. and Bourget, D. forthcoming “Consciousness and Intentionality” in Kriegel, U. ed *Oxford Handbook of Consciousness* Oxford: Oxford University Press

Millikan, R. 1984 *Language, Thought and other Biological Categories* Cambridge Mass: Bradford Books

Millikan, R. 1993 *White Queen Psychology* Cambridge Mass: MIT Press

Millikan, R. 2000 *On Clear and Confused Ideas* Cambridge: Cambridge University Press

Millikan 2017 *Beyond Concepts* Oxford: Oxford University Press

Mitchell, K. and Johnson, M. 2000 “Source Monitoring: Attributing Mental Experiences” in Tulving, E. and Craik, F. eds *The Oxford Handbook of Memory* New York: Oxford University Press 179-95

Mollon. J. , Bosten, J ., Peterzell, D., Webster, M. 2017 “Individual Differences in Visual Science: What Can be Learned and What is Good Experimental Practice?” *Vision Science* 141: 4-15

Moore, G. 1903 “The Refutation of Idealism” *Mind* 12 :433-53

Moran, A. 2019 “Naive Realism, Seeing Stars, and Perceiving the Past” *Pacific Philosophical Quarterly* 100: 202-232

Nichols, S. and Stich, S. 2003 Mindreading Oxford: Oxford University Press

Nida-Rümelin, M. 2011 “Phenomenal Presence and Perceptual Awareness: A

Subjectivist Account of Perceptual Openness to the World” *Philosophical Issues* 21: 352—83

Nudds, M. 2004 “The Significance of the Senses” *Proceedings of the Aristotelian Society* 104: 31–51

O’Callaghan, C. 2012 “Perception and Multimodality” in Margolis, E., Samuels, R., and Stich, S. eds *Oxford Handbook of Philosophy of Cognitive Science* Oxford: Oxford University Press 92–117

Papineau, D. 1984 “Representation and Explanation” *Philosophy of Science* 51:550-72

Papineau, D. 1996 "Theory-Dependent Terms" *Philosophy of Science* 63: 1-20

Papineau, D. 2001 "The Rise of Physicalism" in Loewer, B. and Gillett, C. eds *Physicalism and its Discontents* Cambridge: Cambridge University Press 3-36

Papineau, D. 2002 *Thinking about Consciousness* Oxford: Oxford University Press

Papineau, D. 2006 “Naturalist Theories of Meaning” Lepore, E. and Smith, B. eds *Oxford Handbook of the Philosophy of Language* Oxford: Oxford University Press 175-88

Papineau, D. 2008 “Phenomenal and Perceptual Concepts” in Alter, T. and Walter, S. eds *Phenomenal Concepts and Phenomenal Knowledge* Oxford: Oxford University Press 145-67

Papineau, D. 2013 “Comments on François Recanati’s Mental Files: Doubts about Indexicality” *Disputatio* 36: 159-75

Papineau, D. 2014 “Sensory Experience and Representational Properties” *Proceedings of the Aristotelian Society* 114: 1-33

Papineau, D. 2016 "[Teleosemantics](https://www.davidpapineau.co.uk/uploads/1/8/5/5/18551740/teleosemantics_preprint.docx)" in Smith, D. ed*How Biology Shapes Philosophy* Cambridge: Cambridge University Press 95-120

Papineau, D. 2019 “The Disvalue of Knowledge” *Synthese*

Papineau, D. forthcoming “The Problem of Consciousness” in Kriegel, U. ed *The* *Oxford Handbook of the Philosophy of Consciousness* Oxford: Oxford University Press

Pautz, A. 2010 “An Argument for the Intentional View of Visual Experience” in Nanay, B. ed *Perceiving the World* Oxford: Oxford University Press 254-309

Pautz, A. 2018 “Experiences are Representations” in Nanay, B. ed *Current Controversies in the Philosophy of Perception* 23-42

Peacocke, C. 1983 *Sense and Content* Oxford: Oxford University Press

Peacocke, C. 1992 *A Study of Concepts*. Cambridge, Massachusetts: MIT Press.

Peacocke, C. 2008 “Sensational Properties: Theses to Accept and Theses to Reject” *Revue Internationale de Philosophie* 243: 7–24

Pendelbury, M. 1998 “In Defence of the Adverbial Theory of Experience” in Orilia, F. and Rappaport, W. *Thought, Language and Ontology: Essays in Memory of Hector-Neri Castaneda* Dordrecht: Kluwer 95-106

Phillips, I. 2018 “Unconscious Perception Reconsidered” *Analytic Philosophy* 59: 471-514

Priest, G. 2005 *Towards Non-Being. The Logic and Metaphysics of Intentionality* Oxford: Clarendon

Prinz, J. 2013 “Siegel’s Get Rich Quick Scheme” *Philosophical Studies* 163: 827-35

Pritchard, D., Turri, J. and Carter, J. 2018 “The Value of Knowledge” *Stanford Encyclopedia of Philosophy*

Putnam, H. 1975 “The Meaning of Meaning” Gunderson, K. ed *Language, Mind and Knowledge: Minnesota Studies in the Philosophy of Science* VII Minneapolis: University of Minnesota Press 131-93

Quine, W. 1956 “Quantifiers and propositional attitudes” *Journal of Philosophy* 53: 177–86

Raleigh, S. 2009 “Understanding How Experience ‘Seems’” *European Journal of Analytic Philosophy* 5: 67-78

Ramsey, F. 1927 “Facts and Propositions” *Aristotelian Society Supplementary Volume* 7: 153-70

Robinson, H. 1994 Perception London: Routledge

# Robinson, H. 2013 “The Failure of Disjunctivism to Deal with ‘Philosophers' Hallucinations’” in Macpherson, F. and Dimitris, P. eds Hallucination Cambridge, Mass: MIT Press 313-30

Rosenthal, D. 2005 *Consciousness and Mind* Oxford: Clarendon Press

Rumfitt, I. 2014 “Truth and Meaning” *Aristotelian Society Supplementary Volume* 88: 21-55

Russell, B. 1919 *An Introduction to Mathematical Philosophy* London: George Allen and Unwin

Sethi, U. forthcoming “Sensible Overdetermination” *Philosophical Quarterly*

# Seyfarth, R., [Cheney, D](http://www.ncbi.nlm.nih.gov/pubmed/?term=Cheney%20DL%5BAuthor%5D&cauthor=true&cauthor_uid=7433999)., [Marler, P](http://www.ncbi.nlm.nih.gov/pubmed/?term=Marler%20P%5BAuthor%5D&cauthor=true&cauthor_uid=7433999). 1980 “Monkey Responses to Three Different Alarm Calls: Evidence of Predator Classification and Semantic Communication” *Science* 210: 801-3

Shah, N. and Velleman, D. 2005 “Doxastic Deliberation” Philosophical Review 114: 497–534

Shea, N. 2018 *Representation in Cognitive Science* Oxford: Oxford University Press

Siegel, S. 2010 *The Contents of Visual Experience* Oxford: Oxford University Press

Siegel, S. 2016 “The Contents of Perception” *Stanford Encyclopedia of Philosophy*

Siewert, C. 1998 *The Significance of Consciousness* Princeton: Princeton University Press

Siewert, C. 2004 “Is Experience Transparent?” *Philosophical Studies* 117: 15–41

# Skyrms, B. 1996 *Evolution of the Social Contract* Cambridge: Cambridge University Press

# Skyrms, B. 2010 *Signals: Evolution, Learning and Information* Oxford: Oxford University Press

Snowdon, P. 1980 “Perception, Vision and Causation” *Proceedings of the Aristotelian Society* 81: 175–92

Snowdon, P. 2005 “The Formulation of Disjunctivism: A Response to Fish” Proceedings of the Aristotelian Society 105: 129–141

Soteriou, M. 2000 “The particularity of visual perception” *European Journal of Philosophy* 8:173-189

# Soteriou, M. 2014 “The Disjunctive Theory of Perception” *Stanford Encyclopedia of Philosophy*

Stoljar, D. 2005 “Physicalism and Phenomenal Concepts” *Mind and Language* 20: 469–494

Stoljar, D. forthcoming “Is There a Persuasive Argument for a Reflexive Theory of Consciousness?” *Manuscript*

Strawson, G. 2013 “Self-intimation” *Phenomenology and the Cognitive Sciences* 12: 44–73

Strawson, P. 1959 *Individuals* Routledge

Strawson, P.F., 1979, “Perception and its Objects”, in G. Macdonald (ed.) Perception and Identity: Essays Presented to A.J. Ayer with His Replies London: Macmillan 41-60

Sundström, P. 2018 “On Representationalism, Common-Factorism, and Whether Consciousness is Here and Now” Philosophical Studies 176: 1-12

Tye, M. 1984 “The Adverbial Theory of Visual Experience” *Philosophical Review* 93: 195–225

Tye, M. 1989 The Metaphysics of Mind Cambridge: Cambridge University Press

Tye, M. 1995 *Ten Problems of Consciousness*, Cambridge Mass: Bradford Books

# Tye, M. 1998 “Inverted Earth, Swampman, and Representationalism” Philosophical Perspectives 12:459-78

Tye, M. 2000 *Consciousness, Color, and Content* Cambridge Mass: Bradford Books

Tye, M. 2002 *“*Representationalism and theTransparencyof Experience” Nous 36 137-151

Tye, M. 2014 “What is the Content of a Hallucinatory Experience?” in Brogaard, B. ed *Does Perception have Content?* Oxford: Oxford University Press 291-330

# Tye, M. forthcoming “Phenomenal Externalism, Lolita, and the Planet Xenon” in Horgan, T. and Sosa, D. eds Qualia and Mental Causation in a Physical World: Themes From the Philosophy of Jaegwon Kim Cambridge Mass: MIT Press

Weksler, A. Jacobson, H. and Bronfman, Z. forthcoming “The Transparency of Experience and the Neuroscience of Attention” *Synthese*

Wittgenstein, L. 1953 *Philosophical Investigations* Anscombe, G. and Rhees R. eds Oxford: Blackwell

Zeimbekis, J. and Raftopoulos, A. 2015 *The Cognitive Penetrability of Perception* Oxford: Oxford University Press

1. Some representationalists allow that, in addition to their built-in representational contents, some sensory experiences also have “broad contents” that do depend on environmental circumstances extraneous to their conscious nature. But, on pain of abandoning their representationalism, they also hold that such “broad” contents are always additional to built-in “narrow” representational contents that are determined by conscious sensory properties alone. We shall return to this issue at a number of points in what follows. [↑](#footnote-ref-1)
2. It is unhelpful that English and other languages have no simple word that stands to “perception” as “belief” stands to “knowledge”. Ruth Millikan has suggested that we introduce “visaging” to serve this role in the visual realm (2000 111). This would allow us to say that someone is “visaging a yellow ball” even in illusory or hallucinatory cases where there is no yellow ball to be seen. However, I fear that any such neologism would be more distracting than helpful. So when necessary I shall simply talk of “visually experiencing a yellow ball”; this should be understood non-factively (by contrast with “seeing” or “perceiving” a yellow ball). [↑](#footnote-ref-2)
3. I take *thought* to cover a range of attitudes, including states like hoping, expecting, doubting, and supposing, as well as believing. Thoughts can either be *occurrent*, when they are activated in cognition, or *standing*, in the sense of dispositions to form occurrent thoughts. In what follows talk of belief and other thoughts should be understood occurrently unless it is otherwise specified. [↑](#footnote-ref-3)
4. A *relational property* is a property of bearing a relation another thing. So, for example, if aRb, where a and b are things, and R is a relation, then a has the relational property – Rb (and b has the relational property aR –). [↑](#footnote-ref-4)
5. This dating uses “cosmic time”, the standard convention for dating astronomical events. [↑](#footnote-ref-5)
6. Hanoch Ben-Yami (forthcoming) has defended naïve realism against the time-lag objection by arguing that relativity theory does not imply any timelike separation between events connected by light waves in a vacuum, and therefore that events seen with the help of such light waves cannot be deemed to be in the observer’s past. This is an interesting point that deserves fuller discussion, but in the present context I shall put it to one side, on the grounds that few if any of the events we observe, not even distant astronomical ones, are seen through a vacuum. [↑](#footnote-ref-6)
7. Johnson 2004 138-9 grasps the nettle and maintains that visual experiences do stretch back in time “to the object seen”. I am afraid that I have difficulty with the idea that many of my conscious experiences began before I was born. [↑](#footnote-ref-7)
8. The literature on naïve realism contains surprising little discussion of the time-lag problem. But see Moran 2019. [↑](#footnote-ref-8)
9. Pautz reports Bill Brewer and Keith Allen as taking this line at the 2014 meeting of the Central Division of the American Philosophical Association. [↑](#footnote-ref-9)
10. For what it is worth, I myself hold, in order of roughly increasing controversiality, that the answers to these questions are respectively ‘perhaps, ‘no’, and ‘no’. (See Papineau 2019.) I would like to emphasise, however, that the points made in the main text are quite consistent with different answers to these questions. [↑](#footnote-ref-10)
11. Naïve realists are not always explicit in denying that some *conscious* factor is common to good and bad cases. Sometime their view is formulated instead as the denial that good and bad cases constitute a “*fundamental kind*” (Snowdon 2005 136, Martin 2006 361). To the extent that this denial has no implications for the conscious character of sensory experiences, I have no reason to contest it. [↑](#footnote-ref-11)
12. Thus Martin 2004 argues that hallucinations are inevitably conceptualised in terms of their introspective indistinguishability from matching veridical perceptions (though in truth this seems quite consistent with the metaphysical case for holding that veridical perceptions inherit the conscious character of matching misperceptions.) Fish 2009 denies that hallucinations are phenomenally conscious at all. [↑](#footnote-ref-12)
13. See Martin 2006 373, which explicitly argues that sensory perception is different from knowledge in that it is threatened by “screening off” specifically in relation to explaining the “subject's stream of consciousness, that temporal extension of episodes and conscious processes which make up a central core of his or her biography”. This passage clearly needs to be read as about subjects’ *meta*-awareness of their conscious states. After all, it would be no argument against weak realism simply to claim that external facts can’t add to the “stream of consciousness” in the sense of ordinary first-order conscious states, given that this is just what weak realism asserts.

 [↑](#footnote-ref-13)
14. A similar issue arises for representationalists who seek to relate cognitive as well as sensory representation to consciousness. What accounts for the phenomenal difference between cognitive and sensory states when both represent the same contents? Here too the options are to appeal either to differences of content or of mode. (See Bayne and Montague 2011.) [↑](#footnote-ref-14)
15. Some hold that representation must involve *senses* that fix *how* things are represented as well as *references* that fix *what* is truth-conditionally represented. Such senses will play no role in this book. While we certainly need to recognise *vehicles* of representation, like words and sensory states, in addition to referents, no explanatory advantage is gained, and much confusion sowed, by introducing some further level of non-referential semantic content (cf Millikan 1993 2019, Papineau 2013). This is not the place to argue this large issue, but I hope this book will implicitly add to the case that we don’t need any semantic typing of vehicles that cuts finer than reference. [↑](#footnote-ref-15)
16. Some might say that there is no analogue of synonymy and homonymy for sensory experiences, and that this in itself shows that experiences represent essentially in a way that words don’t. However, this begs the question in favour of strong representationalism. From my weak representationalist perspective, nothing stops two types of experiences having the same representational content (Frege cases) nor the same type of experience having two different contents (“confused ideas” in Millikan’s 2000 sense). These possibilities are only ruled out if you already presuppose that some kind of distinctive kind of sensory representational content is fixed by sensory phenomenology alone. [↑](#footnote-ref-16)
17. The “environment” at issue is that of the vehicle, and not necessarily of the subject. I can be in a mental state that represents my temperature or my eye colour, for instance. [↑](#footnote-ref-17)
18. To be fair, philosophers would always have allowed, though few remarked on it, the broadness of truth conditions for types of mental states involving such manifestly indexical elements as *I*, *now*, *here* and *this*. But the recognition that broadness extends to the general run of concepts is far more recent and had to wait for the above-mentioned contributions of Kripke, Putnam and Burge. Before them P.F. Strawson had also queried whether non-indexical constructions could fix reference without environmental assistance (1959 p 20). [↑](#footnote-ref-18)
19. Some representationalists appeal at this point to the idea of the properties being possessed by “intentional objects” (Harman 1990, Lycan 2000, Jackson 2007). On its own, this does little more than give a name to the puzzle I am raising. I shall have a lot more to say about intentional objects in the next chapter, but none of it will help with the current puzzle. [↑](#footnote-ref-19)
20. Some philosophers move from the incoherence of the idea that worldly properties are present in experience to the conclusion that consciousness is an “illusion” (Frankish 2016 Dennett 2016 Kammerer forthcoming). While I of course agree that the presence of the properties is an illusion, I see no reason to build this presence into the concept of consciousness. At most it is arguable that the everyday concept of consciousness is indeterminate between a reading that requires such presence and one that does not; if so, the natural response is to refine the everyday concept so as not to require the presence (Papineau 1996). After all, we certainly need some concept to identify those states that are normally counted as conscious. [↑](#footnote-ref-20)
21. Strictly we should deny that *instantiation* is a *relation* at all, for well-known Bradley-regress reasons: if we need a relation to join objects to the properties they instantiate, then it looks as if we’ll need further a relation to join *that* relation to the objects and properties they relate . . . But we can let this point pass here. [↑](#footnote-ref-21)
22. Uriah Kriegel shares my resistance to the idea that conscious properties might involve relations to uninstantiated properties. As he sees it, this idea violates the “explanatory closure of the realm of concreta” (Kriegel 2011 141). [↑](#footnote-ref-22)
23. Does sensory experience display this kind of compositionality as well as cognition,? As I happens, I am inclined to attribute a significant amount of compositionality to experiences (cf sections 3.6 and 4.9 below). But nothing much in my arguments hangs on this. Note that structured truth conditions need not always be represented by correspondingly structured vehicles (Shea 2018 section 6.3). [↑](#footnote-ref-23)
24. Many formally-minded philosophers take it as given that representational mental states are “relations propositions”, without stopping to explain the metaphysical grounds of these relations. This has no doubt encouraged complacency about the idea that sensory experience involve relations to possibly uninstantiated properties. In an earlier paper, I took the view that propositions are too abstract and set-theoretical to feature in serious theorising about the concrete realm (Papineau 1914). I now think that was a mistake. Propositions, at least in the sense of referential truth conditions, are no more problematic than properties, and indeed can be thought of a 0-adic properties of the universe (Rumfitt 2014). The problem does not lie with propositions themselves, but with a failure to think through their precise metaphysical role. [↑](#footnote-ref-24)
25. Despite the difficulties attendant on the idea that worldly items are “present” in experience, surprisingly few commentators question whether “transparency” shows this. One exception is Laura Gow, whose “The Limitations of Perceptual Transparency” distinguishes “perceptual” from “metaphysical transparency”. Gow grants the former, allowing that experience *seems* to involve mind-independent properties, but denies that such properties are really metaphysical constituents of experience (Gow 2016). [↑](#footnote-ref-25)
26. In her “Sensible Over-Determination” Umrao Sethi combines the naïve realist view subjects are related to worldly property instances in good perceptual cases with the idea that they are acquainted with “mind-dependent” instances of the same worldly properties in the bad cases (Sethi forthcoming). While this position has the virtue of allowing some commonality to the good and bad cases, it faces many of the worries I have raised about the non-concreteness of mental relations to abstract properties. [↑](#footnote-ref-26)
27. Of course the difficulty I am pressing would dissolve if idealism were true and worldly objects and properties were made of the same materials as sensory experiences and their properties. But here and throughout this book I am assuming that idealism is false. [↑](#footnote-ref-27)
28. Some few representationalists have been prepared to countenance the possibility that consciousness itself might be broad. I mentioned Tye in this connection in section 2.4 above when discussing naturalist representationalism. Logical space also has room for a species of broad intentionalist representationalism—that is, for a position that grounds representational content in conscious character yet allows conscious character to be broad. Kriegel 2013 rules out this option by listing narrowness about phenomenal intentionality as the fourth of the six defining characteristics of the “phenomenal intentionality research program”. Even so the intentionalist Siewert notes that he is open to the possibility of broad conscious intentionality (1998 244 304). [↑](#footnote-ref-28)
29. See Soteriou 2000 for the problems facing attempts to read sense experiences as having general existential contents. [↑](#footnote-ref-29)
30. But see Gluer (2009) who offers independent reasons for overriding the intuitive resistance to this view. [↑](#footnote-ref-30)
31. One might wonder whether “paint” is the best term for experiential properties that are only contingently attached to a representational content. After all, it is scarcely an accident that the colour of the paint in a figurative painting is normally taken to represent the same colour in the object depicted. Perhaps in the end this is a contingent convention, but it is by no means obviously so. [↑](#footnote-ref-31)
32. In the earlier “Mental Paint and Mental Latex” 1996, Block used “latex” rather than “oil” for elements of experience that serve no representational purpose [↑](#footnote-ref-32)
33. Such role semantic theories have obvious affinities with the “solipsist” Fodorian idea that the significance of “mental representations” is exhausted by their contribution to internal cognitive processing (Fodor 1975 1980). [↑](#footnote-ref-33)
34. Block is often explicit in running “representational” together with “functional”. At the beginning of “Mental Paint” he specifies that “qualia” are states whose “phenomenal character outruns not only representational content but also the functional and the cognitive” 2003 165. And in the second section of the paper he expressly says functionalism is one species of representationalism. [↑](#footnote-ref-34)
35. A further oft-remarked difficulty facing role semantic theories is to explain *which* of the inferential relationships involving a subject’s mental states determine their representational content. To select some relationships over other would seem arbitrary, yet including them all threatens to make the contents of mental states peculiar to each subject. Still, this is a minor objection compared with the inability of role theories to relate mental states to the external world. (Papineau 2006 section 2.) [↑](#footnote-ref-35)
36. Howard Robinson, following Hume, holds that humans would be unable to form any conception of an objective world beyond the mind were it not for the “constancy and coherence” displayed by elements of their sensory experience (Robinson 2013 322-3). This is an interesting suggestion, but I shall take no view on this issue in developmental psychology. [↑](#footnote-ref-36)
37. Christopher Peacocke holds that visual sensations literally have spatial properties in virtue of their location in the visual field, which is itself a real curved plane in ordinary physical space (Peacocke 1983 51-3 2008 10-15). I must say I find it hard to see how this suggestion might be integrated into any causally cogent metaphysics. [↑](#footnote-ref-37)
38. I would like to thank Bence Nanay for pressing me on this point. [↑](#footnote-ref-38)
39. Perhaps the elements of *temporal* experience bear systematic temporal relations to each other, even if spatial experience is not similarly spatially constituted. Some hold that we experience temporal succession of events in virtue of the temporal succession of our experiences of these events. I am doubtful, but will take no position here on this long-standing issue. For discussion see le Poidevin 2007 Dainton 2017. [↑](#footnote-ref-39)
40. An alternative, favoured by Graham Priest, another friend of intentional objects, is to leave “there are” tied to existence, and instead to resist the inference from *some* things don’t exist to *there are* things that don’t exist (2005). [↑](#footnote-ref-40)
41. A further fourth option, once made popular by Quine but no longer widely supported, is to hold that mental state attributions are *ambiguous* between the Fregean and the *de re* readings (Quine 1956). But perhaps there is no great difference between this Quinean thesis and my view that we often make attributions that are known to be false in order to convey pragmatic implications. I would like to thank Gary Ostertag for helping me to become clear on these issues. [↑](#footnote-ref-41)
42. At the end of the last chapter I queried whether sensory states with “gappy contents” are genuinely representational, on the grounds that they fail to determine complete truth conditions without environmental assistance. But at least the advocates of gappy contents supposed that the predicative elements in sensory experience, so to speak, are essentially attached to worldly items, even if the singular elements are not. The view we are now considering, however, takes the more extreme view that sensory states can be “contentful” even though none of their parts are essentially related to worldly items. [↑](#footnote-ref-42)
43. I would like to thank Amir Horowitz for helping me to get clear about the problems facing the idea of paint that intrinsically points. [↑](#footnote-ref-43)
44. These points are relevant to the debate about the functionalizabiity of mental states mentioned in section 3.4 above. In particular they support the idea that colour experience is less functionalizable than spatial experience. But note that they do not positively commit me to functionalism about spatial experience: a set of structural relations can be necessary for some conscious property without being sufficient for it. [↑](#footnote-ref-44)
45. How is it possible, on the sense datum view, for such very different items as mental sense data and worldly physical objects to share the same properties? Phenomenalist can answer that “physical objects” are in truth constructions of sense data, and so naturally eligible to possess the same properties (see eg Foster 2000). This answer is not available to indirect realist sense-datum theorists. Even so, indirect realists maintain that, at least for primary qualities, sense data are somehow able to possess the same properties as physical objects. This places strong constraints on their conception of sense data (see eg Jackson 1977 chapter 5). [↑](#footnote-ref-45)
46. Stoljar (forthcoming) lists Chalmers (2010), Gertler (2010), Horgan (2012), Kriegel (2009), Lycan (1996), Nida-Rümelin (2011), Rosenthal (2005), and Strawson (2013) as among those who hold that consciousness necessarily involves reflexive self-awareness, before arguing against this view himself. [↑](#footnote-ref-46)
47. Fumerton 2005 appeals to *acquaintance* in this context, while Nichols and Stich 2003 talk of causal *monitoring*. But both of these suggestions stand in need of further elaboration of the mechanisms involved. In what follows I draw on the more detailed accounts offered by Goldman 2006 and Byrne 2012. [↑](#footnote-ref-47)
48. For further discussion of Evans’ idea, see Dretske 1994, Byrne 2005, Shah and Velleman 2005, Bermudez 2013. [↑](#footnote-ref-48)
49. There is an extensive psychological literature on “source monitoring” understood as the ability to introspectively identify the causal provenance of mental states (see Mitchell and Johnson 2000). The consensus in this literature is that the modal provenance of a belief, and indeed whether the belief has a sensory provenance at all, are decided on the basis of the belief’s content. [↑](#footnote-ref-49)
50. Does not our ability to consciously perceive very fine-grained differences in colour, length, temperature, and so on, show that we sensorily represent far more properties than we can cognitively classify? No. In Papineau 2015 I show how such “difference detection” can be a gestalt phenomenon that does not rest on prior sensory representations of the properties discriminated. [↑](#footnote-ref-50)
51. Most intentionalists hold that *all* fundamental representation, and not just sensory representation, derives from phenomenology. So they need the phenomenology of belief to be as articulated as its content, if they are not to relegate the representational powers of belief to some kind of second-order status. (See Mendelovici and Bourget forthcoming section 4.) [↑](#footnote-ref-51)
52. Note that I am not committed to an *error* theory of everyday introspective judgements like *I am visually experiencing that a yellow ball is before me*. My view is that such judgements are typically indeterminate between two readings, but even so nearly always supervaluationally true, so to speak, in virtue of being true on both admissible readings. Everyday thinkers are mistaken, if they are, only in failing to recognize that their reports are only supervaluationally and not unequivocally true. I would like to thank Erhan Demircioğlu for pressing me on this issue. [↑](#footnote-ref-52)
53. Note that the crucial feature of phenomenal concepts, for the purpose of this response to Jackson, is simply that they are a priori distinct from all Mary’s previous concepts, not that they can only be acquired from experience, or that their peculiarities can somehow resolve the “explanatory gap”. [↑](#footnote-ref-53)
54. A full defence of physicalism would have to address the further “two-dimensional” argument that, because of the special *directness* of phenomenal concepts, any phenomenal mind-brain identities, unlike ordinary a posteriori scientific identities, would have to be a priori, which they aren’t. I find no reason to accept that phenomenal concepts yield this kind of epistemological directness. Papineau 2006 and forthcoming, Goff and Papineau 2014. [↑](#footnote-ref-54)
55. I view this as an improvement on the accounts of the relationship between phenomenal and perceptual concepts offered in Papineau 2002 and Papineau 2008. [↑](#footnote-ref-55)
56. I would like to thank Chris Brown for pressing me on this point. [↑](#footnote-ref-56)
57. What about apparently objectual reports of hallucinations, as in “X saw a pink elephant”? In line with my discussion of intentional objects in the last chapter, I am inclined to view such claims as not true, but as nevertheless conveying something about X’s intrinsic mental state. [↑](#footnote-ref-57)
58. Again, following my earlier discussion of intentional objects, I think that reports like “X visually experienced that a pink elephant was in the room” are not literally true, since they fail to specify a propositional content for any constitutively representational state. Still, this need not stop them conveying something about the intrinsic conscious natures of sensory states. [↑](#footnote-ref-58)
59. More recently some philosophers have noted that it is consistent with the basic commitments of adverbialism that sensory states should have representation contents contingently (Kriegel 2008, Sieglel 2016). However Michael Pendelbury’s “In Defence of the Adverbial Theory of Experience” (1998) is the only paper I know of that explores the idea that this offers adverbialists a systematic way of accounting for sensory reports. [↑](#footnote-ref-59)
60. The classic attempt to meet Jackson’s challenge head on is due to Tye 1984 1989. Dinges 2015 argues that Tye’s response cannot deal with more complex versions of Jackson’s challenge. Kriegel 2008 appeals to the determinable-determinate structure of adverbs to develop an alternative response to Jackson. Grzankowski 2018 raises problems for this approach. D’Ambrosio’s 2019 view that perceptual adverbs should be assimilated formally to intensional transitive verbs seems open to the worry raised in this section. [↑](#footnote-ref-60)
61. While strong intentionalists often observe that adverbialism has difficulty accounting for sensory reports, they tend not to offer any positive account of such reports themselves, presumably because they take it for granted that something of the form “an experience representing that such-and-such” will do the job. The argument in this section shows that this intentionalist complacency is unjustified and that such reports will be inadequate unless supplemented by an account of the structure of the vehicles of sensory representation. [↑](#footnote-ref-61)