

### 3. Consciousness

According to the pluralist, any (conscious) perception essentially involves two very different kinds of awareness relations. The first is deep awareness, which is the focus of this chapter: the pluralist uses it to provide a theory of the kind of consciousness distinctively associated with the hard problems. The second awareness relation is successful sensory representation, which is touched on here but is discussed in more detail in the next chapter.

#### 1. The pluralist theory of deep awareness

We experience visible qualities such as scarlet, auditory qualities such as middle-C, tactile qualities such as smoothness, and olfactory qualities such as the scent of vanilla. We also experience spatial qualities such as sphericity that are not tied to any particular modality. I will refer to such properties as the *sensory qualities*.<sup>1</sup>

When we perceive sensory qualities, our awareness of them first-personally seem to be *substantive* in some sense that is difficult to articulate.<sup>2</sup> Likewise when we vividly imagine or episodically remember the sensory qualities. I will refer to this peculiarly substantive kind of awareness as *deep awareness*. For the sake of contrast, suppose that you just think of scarlet without picturing it. Although there might be some sense in which you are aware of scarlet, your merely cognitive awareness is obviously not substantive; it is not deep. It is evidently very

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<sup>1</sup> In fact, I suspect that the sensory qualities are not ordinary qualities like scarlet, but less familiar appearance properties that bear some interesting relation to ordinary qualities like scarlet. It is easy enough to modify pluralism to accommodate this point. Still, for the sake of simplicity I will glide over this complication.

<sup>2</sup> Cite Levine, Levin, Johnston, Schroer (2010, p. 510), and others.

different in kind from the awareness of scarlet that you enjoy when you actually see or vividly imagine the bell pepper.

What is deep awareness like? The pluralist answers this question with three core posits:

DA1. Deep awareness occurs in all sensory experiences, and nowhere else.

DA2. The only targets of deep awareness are certain universals: the sensory qualities.

DA3. Deep awareness is a form of awareness-of that reveals to the subject a substantial part of the essence of its target.

This account of deep awareness need not be taken as providing a reductive analysis. It need not even be taken as complete: there may be more to the nature of deep awareness than is captured in DA1-DA3.

The pluralist goes on to posit a second form of perceptual awareness, *successful sensory representation*, that contrasts with deep awareness with respect to all of the posits just mentioned.

In particular, the pluralist makes these claims about successful sensory representation:

SSR1. Successful sensory representation occurs in all perceptions and in all (genuine) episodic memories.<sup>3</sup> It does not occur in any hallucinations, sensory imaginings, or failed episodic “memories.”

SSR2. The only targets of successful sensory representation are particulars, such as ordinary objects and their property-instances.

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<sup>3</sup> Although perceptions and episodic memories will turn out to involve very different kinds of successful sensory representations.

SSR3. Successful sensory representation is a form of awareness-of that does not reveal to the subject any portion of the essence of its target.

Let us examine DA1-DA3 more carefully, using the corresponding claims about successful sensory representation as a foil.

DA1 tells us when deep awareness occurs: not just in perceptions, but in all *sensory experiences*. I stipulate that these include perceptions, hallucinations, sensory imaginings, and episodic memories. The idea is that I am deeply aware of scarlet – really aware of it, not just apparently so – whether I am seeing a scarlet bell pepper, hallucinating one, or imagining one. By contrast, SSR1 tells us that successful sensory representation occurs only in perceptions (including illusions) and genuine episodic memories. It does not occur in hallucinations, sensory imaginings, or failed episodic “memories.”

The function of DA2 is to identify the targets of deep awareness: it says that these are always universals.<sup>4</sup> (In Appendices 3A-3B, I address a series of metaphysical objections to the idea that we can be deeply aware of universals.) This constitutes a further difference between deep awareness and successful sensory representation, for SSR2 tells us that the targets of successful sensory representation are not universals but *particulars*, such as objects and property-instances.<sup>5</sup> However, not every universal is a possible target of deep awareness. DA2 tells us that its only possible targets, at least for beings like us, are the sensory qualities. Deep awareness

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<sup>4</sup> What might I say to a nominalist? Let *moderate nominalism* be the view that universals exist, but their existence is fully metaphysically grounded in the existence of property-instances. This view is entirely compatible with pluralism. Let *extreme nominalism* be the view that properties do not exist at all. Some forms of extreme nominalism will be incompatible with anything like pluralism, but perhaps the extreme nominalist can accept something like pluralism by offering some substitute target of deep awareness other than universals.

<sup>5</sup> Note that *property-instances* are particulars: they are spatiotemporally located, and they can be qualitatively identical but numerically distinct. *Universals* such as redness and roundness are not particulars.

never targets natural kind properties (other than the sensory qualities)<sup>6</sup>, such as the property of *being a pine tree*.

DA3 characterizes the ontological structure and epistemic significance of deep awareness. As for ontological structure, DA3 tells us that deep awareness is not propositional; it is not a form of awareness-*that*. It is rather a form of awareness-*of*. SSR3 tells us that successful sensory representation is like deep awareness in this respect. To this, DA3 adds a claim about epistemic significance: deep awareness reveals a substantial portion of the essence of its target.<sup>7</sup> In other words:

*Partial Revelation:* Suppose that a rational, conceptually sophisticated subject is deeply aware of a sensory quality *Q*. Take all of the truths of the form *It lies in the essence of Q that* \_\_\_\_\_. A substantial portion of these truths (but not all of them!) will first-personally seem to her to be true purely on the basis of this deep awareness.

As SSR3 indicates, this is a final difference between deep awareness and successful sensory representation: the latter does not reveal any portion of the essence of its targets.<sup>8</sup>

Now you understand, in outline at least, the entire pluralist theory of deep awareness. The purpose of this chapter is to provide elaboration and defense. (It will become clear in the next chapter that there is much more to the pluralist theory of sensory representation than is

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<sup>6</sup> The parenthetical qualification will usually be left implicit.

<sup>7</sup> I have in mind the approach to essences made famous by Fine (1994).

<sup>8</sup> By itself, Partial Revelation is not meant to *exhaustively* characterize the sense in which deep awareness is substantive. Imagine a mental state that just brutally and reliably disposes its subject to believe certain essential truths about scarlet, thereby positioning her to know these truths. This mental event evidently falls short of deep awareness of scarlet. This is why the pluralist characterizes deep awareness not just in terms of Partial Revelation, but also in terms of awareness-of (and even then, the account need not be taken as reductive).

captured by SS1-SS3, but it will be helpful to have these posits in the background right away.) I will argue that the pluralist theory of deep awareness explains an impressive range of data – in particular, it explains some epistemic and semantic asymmetries (§2); some patterns involving the hard problems of the external world (§3) and consciousness (§4); some facts about known illusions (§5); and some facts about which truths about essences get revealed by which experiences (§6). I will conclude by comparing Partial Revelation, which is built into the pluralist theory of deep awareness, to its famous sibling Full Revelation. Full Revelation is an enormously appealing thesis, but it is subject to a class of powerful objections (§7). I will argue that Partial Revelation has all of the intuitive appeal of Full Revelation – more, in fact – while effortlessly avoiding any objections in this class (§8).

## 2. Some epistemic and semantic asymmetries

Our experiences reveal certain essential truths to us and position us to make certain forms of singular reference – but I will suggest there are some sharp asymmetries in how this plays out with respect to sensory qualities (understood as universals), objects, natural-kind properties, and property-instances. The pluralist theory explains these asymmetries.

*First asymmetry.* Here you are, seeing a scarlet bell pepper, an orange mango, and a green lime. You experience scarlet, mango-orange, and lime-green. All by itself, your perception reveals to you that the following truths lie in the essences of these colors: that nothing could be wholly scarlet and wholly lime-green at once; that scarlet is more similar to mango-orange than it is to lime-green; and that anything that is scarlet is spatially extended. Similar points carry over to cases in which you smell vanilla or hear middle-C. In general, then, any perception, by itself, reveals to us some – not necessarily all! – essential truths about the *sensory qualities* that we

experience. Note well: what is revealed is not just that these essential truths are *true*, but that they are *essentially* true.

Matters are very different when it comes to the *ordinary objects* that we experience. Return to your perception of the bell pepper. Discard all of your background empirical knowledge and consider what is revealed to you about the bell pepper purely on the basis of seeing it. Your perception reveals to you plenty of *accidental* truths about the bell pepper, such as its color. But does it reveal any *essential* truths about it? Not that I can tell. The bell pepper is essentially a fruit, but that fact is not revealed by your perception alone. For all your perception tells you, the bell pepper might essentially be a gigantic atom, an infinitely divisible crystal, or a Martian in repose. Take even a very minimal essential truth, such as the truth that the bell pepper is essentially spatially extended. Your perception does not even reveal this much. It is compatible with your perception that *this very object* might be able to turn into a dimensionless point or a packet of energy with no particular location.<sup>9,10</sup>

Some will object that this asymmetry between what perception reveals about the sensory qualities and what it reveals about objects should be expressed in terms of truths that are merely *necessary* rather than *essential*. I address this concern in Appendix 3C. Others will worry that there

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<sup>9</sup> Michael Tye argues that Full Revelation should be replaced with the thesis that perception *acquaints* us with objects, properties, and so on. Here, *acquaintance* is to be understood as a relation that provides knowledge-of-without, by itself, providing any knowledge-that (2009, pp. 142-143). Tye's view can explain why seeing a scarlet bell pepper does *not* position you to know anything about the essence *of the bell pepper*. What it cannot explain is why seeing a scarlet bell pepper *does* position you to know something about the essence of *scarlet*.

<sup>10</sup> Boyd Millar has suggested to me that your perception reveals to you that the bell pepper is *sometimes* spatially extended. Isn't this an essential truth? My first reply is that this does not constitute a *substantial portion* of the essence of the bell pepper. My second and more fundamental reply is that the example is beside the point. What is relevant is that your perception does not reveal *that it is essential to the bell pepper* that it is sometimes spatially extended. By contrast, it does reveal *that it is essential to scarlet* that anything that is scarlet is spatially extended.

is no asymmetry here at all, because the apparently essential truths about colors are not truths at all. I address this concern in Appendix 3D.

Assume that the asymmetry is genuine. Then pluralism has the virtue of explaining it. For DA1 tells us that we have deep awareness in cases of perception, and DA3 adds that deep awareness of a target  $x$  reveals a substantial portion of truths of the form “It is essential to  $x$  that \_\_\_\_.”<sup>11</sup> DA2 then tells us that the only targets of deep awareness are the sensory qualities. (Yes, in perception we *successfully sensorily represent* ordinary objects and property-instances, as per SSR1 and SSR2, but SSR3 tells us that successful sensory representation is not even partly essence-revealing.) That is why a veridical perception of a bell pepper, a mango, and a lime will reveal to you many essential truths about scarlet, mango-orange, and lime-green without revealing to you any essential truths about the fruits themselves.

*Second asymmetry.* Suppose that instead of really seeing these fruits, you merely hallucinate them. Your experience still reveals to you the same essential truths about scarlet, mango-orange, and lime-green, and it still fails to reveal to you any essential truths about bell peppers, mangos, and limes.

The pluralist explains this in just the same way as before, in fact. DA1 tells us that we have deep awareness in all sensory experiences, including hallucination. DA2 says that this is awareness of sensory qualities, nothing else. DA3 adds that this awareness is partly essence-revealing.

*Third asymmetry.* Turn now to property-instances. Seeing the bell pepper reveals to you part of the essence not only of the *universal* scarlet, but also of *all particular instances* of scarlet. For example, it reveals to you that it lies in the essence of any instance of scarlet to be spatially

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<sup>11</sup> We may be unable to take advantage of this position if defeaters are present, but still we are in such a position.

extended. At the same time, seeing the bell pepper does not by itself position you to identify any *differences* in essence between the distinct instances of scarlet that you see on its surface. It will not reveal to you anything about what it is to be this instance of scarlet *rather than that one*. Finally, hallucinating a scarlet bell pepper will reveal to you the same essential truths about particular instances of scarlet. Even your hallucination will reveal to you that it lies in the essence of any instance of scarlet to be spatially extended. That is surprising, given that you are not encountering any instances of scarlet.

The pluralist can explain all of these facts. She says that whether you are seeing or hallucinating a scarlet bell pepper, you are deeply aware of the *universal* scarlet. This reveals to you part of the essence of *all particular instances* of scarlet for free: it is *a priori* that all instances of a property share certain aspects of the nature of the property itself. However, you do not have any deep awareness of *instances* of scarlet. That is why you cannot identify any differences in essence between distinct instances of scarlet, no matter how carefully you look at them.

*Fourth asymmetry.* You are, let us suppose, very familiar with bell peppers. You see one and immediately recognize it *as* a bell pepper. Still, your experience does not reveal to you anything about *what it is* to be a bell pepper. For all your experience tells you, a bell pepper is by its nature an alien spaceship or a cocoon for large insects.

The pluralist explains this by saying that you are not deeply aware of the natural kind property of being a bell pepper, as per DA2. Thus nothing of the essence of that property is revealed to you.

*Fifth asymmetry.* Seeing a scarlet bell pepper positions you to form novel singular concepts. You can form the concept of *that object*, the bell pepper, as well as the concept of *that property*, scarlet, even if you have never before encountered that bell pepper, nor anything scarlet. You can also form novel singular concepts of the various instances of scarlet that you see. But suppose



that you merely hallucinate a scarlet bell pepper. Then matters are somewhat different! You can still form a novel singular concept that refers to scarlet, but you cannot form one that successfully refers to an actual bell pepper, nor to any instances of scarlet.<sup>12</sup> Why does hallucination sustain the capacity to form novel singular concepts of certain properties but not of any objects or property-instances?

The pluralist's answer is that deep awareness and successful sensory representation are both forms of awareness-of (as per DA3 and SSR3), and any form of awareness-of can position the subject to make successful singular reference. When you see a bell pepper, you successfully sensorily represent the bell pepper itself and its instances of scarlet, as per SSR1 and SSR2. You are also deeply aware of scarlet, as per DA1 and DA2. Thus you can refer to all of these entities. But when you hallucinate a bell pepper, although you continue to be deeply aware of scarlet (DA1 and DA2), you do not successfully sensorily represent a bell pepper or its instances of scarlet – there are no such entities there to be represented (SSR1 and SSR2). That is why only one referential ability survives in this case.

*Conclusion.* The many asymmetries that we have discussed are surprising, but they fall neatly into the pattern predicted by the pluralist theory of deep awareness.

### 3. Data about the hard problems of the external world

I believe that our experiences are bound up with two quite different kinds of hard problems: hard problems concerning the *external world* and hard problems concerning *consciousness*. The pluralist thinks that these hard problems have two quite different sources. In this section, I begin by characterizing what a hard problem is. I then describe the hard problems of the external world

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<sup>12</sup> This asymmetry is identified in Johnston (2004, pp. 129-131).

and explain their existence by appealing to the first source of hard problems. Later I will characterize the second source of hard problems.

What is a hard problem? Let us say that for the fact that  $p$  to *fully (or partly) ground* the fact that  $q$  is for  $q$  to hold fully (or partly) in virtue of  $p$ , metaphysically speaking. The idea is that grounding is a relation between facts (or perhaps states of affairs) that backs metaphysical explanations in something like the way that causation backs causal explanations.<sup>13</sup> Then for there to be a *hard problem* is for it to strongly initially seem impossible for one set of facts to be fully grounded in another.

There are no doubt many hard problems.<sup>14</sup> In this book I focus on those that have some interesting connection to experience, including, but not limited to, the hard problems of consciousness. I begin by examining some data concerning what I will call *the hard problems of the external world*.

*First datum.* Assume that perception is not massively illusory. Given this assumption, some bell peppers are scarlet, some violins produce notes of middle-C, and some puddings are vanilla-scented. But it is very hard to see how any of this could be explained in purely physical terms. How could the bell pepper's merely instantiating (say) certain surface reflectance properties *make it the case* that the bell pepper is scarlet? How could mere vibrations in the air *make it the case* that there is an instance of middle-C? That is our first datum: there are hard problems regarding the very existence of instances of the sensory qualities (if these do exist).<sup>15</sup>

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<sup>13</sup> See Schaffer (2016); A. Wilson (2017). Some will be skeptical of the very notion of grounding – see for example J. Wilson (2014). I trust that my ideas could be expressed in other terms.

<sup>14</sup> In my (2019), I discuss hard problems concerning consciousness, normativity, and the self and propose a unified, physicalist-friendly explanation of why these problems arise.

<sup>15</sup> This is my criticism – shared with Pautz (2013, p. 28) – of Fish (2008). Fish claims that naïve realists can solve the hard problems of consciousness by saying that to see a scarlet bell pepper and experience scarlet is to stand in the acquaintance relation to the bell pepper's instance of scarlet in the world. This just relocates the hard problem to the external world: how can a purely physical bell pepper instantiate scarlet?

Notice that, in and of itself, this datum has nothing to do with experience. It would be just as hard to explain the existence of scarlet bell peppers in a purely physical world with no subjects of experience. But the pluralist thinks that the explanation for the datum *does* have an interesting connection to experience.

The pluralist's explanation is this. When I perceive a scarlet bell pepper, I am deeply aware of scarlet. A substantial portion of its essence is thereby laid bare to me – e.g., it is revealed to me to be in the nature of scarlet, and hence all of its instances, to have a particular intrinsic character. But it is hard to see what this has to do with the bell pepper and its physical property-instances. It is hard to see how, say, the existence of the bell pepper's surface reflectance property-instances could fully ground the existence of a property-instance with the intrinsic character that is essential to scarlet.

More generally, the pluralist says that the hard problems of the external world arise because deep awareness lays bare a substantial part of the essences of various sensory qualities. We then often find it hard to see how purely physical entities could satisfy the essential conditions that have been revealed to us.

*Second datum.* There are no hard problems concerning the existence of ordinary objects *per se*. For example, when you see a bell pepper, there is no particular obstacle to understanding how the existence of *that particular object* could be fully grounded in the physical facts. (There is an obstacle to understanding how the bell pepper could be scarlet, but that is a separate matter from its existence.) The pluralist can immediately explain why there are no such hard problems: it is because we are never deeply aware of ordinary objects. Their essences are not even partly revealed to us in experience, so there is no possibility that we might have trouble seeing how those essential conditions could be met by purely physical entities.

*Third datum.* Suppose that you see a pine tree and recognize it as such. You then learn the botanical account of what a pine tree is. No hard problem will arise with respect to the property of being a pine tree: you will have no trouble squaring your scientific knowledge of pine trees with your experiential knowledge. You might have trouble understanding how the pine tree's needles can be pine-green, but you will have no trouble understanding how a pine tree could *just be* an evergreen, coniferous resinous tree of a particular family.<sup>16</sup> More generally, there are no hard problems associated with instances of natural kind properties.

The pluralist can easily explain this fact: she says that we are never deeply aware of natural kind properties. Thus, their essences are never even partly revealed to us, and there is no opportunity for any hard problems to arise about them.

*Fourth datum.* Consider spatial properties, such as sphericity. These do not generate any hard problems: there is no difficulty in seeing how the existence of a spherical object could be fully grounded in purely physical facts.

The pluralist explains this as follows. She grants that when we see spheres in ordinary conditions, we are deeply aware of sphericity – that much seems obvious. Consequently, she says that a substantial part (perhaps even all) of the essence of sphericity is laid bare to us. But it is very easy to see how purely physical entities could, when arranged in certain ways, meet those essential conditions. Thus no hard problem arises in this case. More generally, the pluralist does not predict that *every* target of sensory awareness is associated with a hard problem. Hard problems arise only when the targets of sensory awareness have natures that seemingly cannot be realized by purely physical entities.

*Conclusion.* There are hard problems surrounding instances of *some* sensory qualities, such as scarlet, but not others, such as sphericity. At the same time, there are no hard problems

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<sup>16</sup> So says Wikipedia.

surrounding ordinary objects or instances of natural kind properties. The pluralist's theory of deep awareness explains all of these facts. What is crucial is her claim that deep awareness is directed only at sensory qualities, never at ordinary objects or natural kind properties.

#### 4. Data about the hard problems of consciousness; an account of hard character and hard consciousness

We turn now to the hard problems of consciousness. Say what you like about neural firing rates and surface reflectance properties, your story will seem to leave out something about the experience of scarlet. More generally, it strongly initially seems impossible for the existence of sensory experiences to be fully grounded in the physical facts.

The pluralist has already identified one source of hard problems: in light of our deep awareness, we find it mysterious how the instantiation of *sensory qualities* could be fully grounded in the physical facts. To explain the data concerning the hard problems of consciousness, the pluralist identifies a second and independent source of the hard problems, which has to do with *deep awareness itself*. Here the pluralist's key thought is that it strongly initially seems impossible for the existence of deep awareness to be fully grounded in the physical facts. It strongly initially seems impossible for purely physical facts to make it the case that an instance of awareness *just reveals* a substantial portion of the essence of something.

To see why this source of hard problems is independent from the first source, imagine that we come to understand perfectly well how the existence of an instance of scarlet can be fully grounded in the existence of certain physical property-instances. Thus we understand exactly why a purely physical bell pepper might be scarlet. Still, it remains difficult to explain how it is possible for a purely physical being to be *deeply aware* of scarlet. It remains difficult to see how

purely physical processes could fully ground a kind of awareness that *just lays bare* part of the essences of things.<sup>17</sup>

The pluralist's view is that some hard problems of consciousness arise from just one of these two sources, while other hard problems of consciousness arise from both sources together. (The pluralist's theory of the hard problems *of the external world* is simpler: she says that they all arise from the first source alone.)<sup>18</sup>

Notice, by the way, that the pluralist's account is compatible with physicalism or anti-physicalism about the sensory qualities, and with physicalism or anti-physicalism about deep awareness. For the pluralist is attempting to explain why it *strongly initially appears* to be difficult to explain certain facts in purely physical terms, while leaving it open whether the difficulties can ultimately be surmounted.<sup>19</sup> I will maintain this neutrality throughout this book.<sup>20</sup> This reflects my own genuine uncertainty on these matters.<sup>21</sup>

Let us test the pluralist account against some data.

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<sup>17</sup> A similar point is made in Chalmers (2013, pp. 30–31), although he does not speak of essences.

<sup>18</sup> I am extremely grateful to Brian Cutter for pointing out some important deficiencies in my earlier treatment of the hard problems.

<sup>19</sup> One possible way to surmount the difficulties is to say that our incomplete awareness of the essences of sensory qualities misleads us; if we had complete awareness, the hard problems would be solved. Another possibility is to say that deep awareness sometimes causes us to *incorrectly take* certain essential falsehoods about the sensory qualities to be essential truths. This is perfectly compatible with the pluralist's claim that deep awareness lays bare a substantial portion of the essences of its targets: the latter claim does not entail that deep awareness is *infallible*.

<sup>20</sup> There is another kind of neutrality that will be maintained throughout the book: neutrality between *internalism about hard character*, the view that hard character (which the pluralist analyzes in terms of deep awareness) supervenes on the intrinsic properties of the subject, and *externalism about hard character*, the view that it does not. An intriguing argument for internalism about hard character can be found in Pautz (2013).

<sup>21</sup> I was once very confident in the truth of physicalism – again, see my (2019). Now I am much more impressed by the depth of the problems. I see very compelling arguments for physicalism and for anti-physicalism, and I cannot find any good resolution. Either way, however, I find pluralism is very attractive.

*First datum.* You see a scarlet bell pepper. Consider these contrastive questions about your experience:

Q1. Why do you experience scarlet rather than not experiencing anything?

Q2. Why do you experience scarlet rather than experiencing lime-green?

Both of these questions constitute hard problems of consciousness: it is difficult to see how any answer to them could be fully grounded in the physical facts. Facts about brain processes and surface reflectance properties just do not seem to provide a complete answer to either question.

To explain why Q1 constitutes a hard problem, the pluralist appeals to the second source – the fact that it is hard to see how the existence of deep awareness could ever be fully grounded in the physical facts alone. In this case, what is hard to see is how all of the physical processes that occur when I see a scarlet bell pepper could amount to my enjoying *deep awareness* of scarlet. It seems that all of those physical processes could occur even in the absence of any deep awareness.

The pluralist's story is different for Q2. This question presupposes that you are having an experience – an instance of deep awareness – and then asks what determines its target. To explain why this question constitutes a hard problem, the pluralist appeals to the first source – the fact that it is hard to see what physical facts could fully ground the difference between, e.g., an instance of scarlet and an instance of lime-green. Thus, even assuming that you are deeply aware of *something*, there seems to be nothing in the physical world that could fix the target of your awareness. There seems to be nothing physical that could ensure that you are deeply aware of scarlet rather than some other sensory quality. I elaborate on the difficulty in Appendix 3E.

*Second datum.* Consider:

Q3. Why do you experience this particular bell pepper rather than not experiencing anything?

This question constitutes a hard problem. Collect all the physical facts about your brain, the bell pepper, and the interaction between the two. None of these facts seem to fully explain why you are having an *experience* of that particular bell pepper. But consider this question:

Q4. Why do you experience *this* bell pepper rather than experiencing an intrinsically identical bell pepper somewhere in Vietnam?

I submit that there is not the slightest glimmer of a hard problem here. The question presupposes that you are experiencing something. Once you know the relevant facts – that is light *from this particular bell pepper* that is entering your retina, that it is *this particular bell pepper* that your visual system tracks as you move closer to get a better view, and so on – you can understand exactly why it is this bell pepper, not the Vietnamese one (or for that matter a Kenyan elephant), that you are experiencing.

This leaves us with a curious pattern. Q1 constitutes a hard problem about experienced sensory qualities, and Q3 constitutes a parallel hard problem about experienced objects: so far, so symmetrical. But whereas Q2 constitutes another hard problem about experienced sensory qualities, there is no hard problem constituted by Q4, the parallel question about experienced objects. What is going on?

The pluralist provides an elegant explanation. She has already explained why there are hard problems constituted by the question of why you are deeply aware of any sensory qualities



at all (Q1) and the question of why you are deeply aware of certain sensory qualities in particular (Q2). She then observes that experiencing a bell pepper requires experiencing it as having *some* sensory qualities or other. There is no such thing as experiencing an object as *utterly blank* with respect to all sensory qualities.<sup>22</sup> That is why Q3 constitutes a hard problem: this hard problem just *reduces* to the kinds of hard problems constituted by Q1 and Q2.

To come at the point from another angle, the pluralist says that if we bracket the hard problems surrounding your deep awareness and its targets, there are no *further* hard problems associated with experience. Thus ordinary objects, which are never targets of deep awareness, do not generate any hard problems in and of themselves.

Is this really the right approach? We find clear confirmation of it when we turn to Q4. If there were distinctive hard problems associated with experiencing ordinary objects as such, then Q4 would constitute a hard problem. It does not.<sup>23</sup> That is just what the pluralist predicts.

*Third datum.* Suppose that you see a pine tree and recognize it as such. Consider:

Q5. Why do you experience that object as a pine tree rather than not experiencing anything at all?

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<sup>22</sup> Or, if there is, there is no hard problem about how it is possible to experience such an object.

<sup>23</sup> The theory developed in Tye (2009) runs into an important problem at this point. Tye thinks that “the phenomenal character of a perceptual experience consists in, and is no more than, the complex of qualities the experience represents” (p. 119). He also thinks that in perception the subject stands in one and the same relation of acquaintance to objects and to sensory qualities: “I am acquainted with the color scarlet, the city of Athens, the Apple computer at which I am now typing, the feeling of pain, the urge to gamble a large sum of money, and the feeling of jealousy. I have encountered (or am now encountering) all these things in experience” (2009, p. 101). And, in his section on the explanatory gap problem, he says this: “our sense that something significant is left out from our account of the underlying physical facts can be explained at least in part by means of the distinction between knowledge by description and knowledge by acquaintance” (ibid, p. 139). Tye’s account thus makes the false prediction that the explanatory gap problem will also arise for Q4.

Q5 constitutes a hard problem. The pluralist's explanation for the existence of this problem has already turned up in our discussion of Q3: a hard problem is constituted by *any* question of the form, "Why do you experience *x* rather than experiencing nothing at all?" This is true simply because experiencing something requires having deep awareness of some sensory qualities or other.

But consider:

Q6. Why do you experience that object as a pine tree rather than experiencing it as a twine tree?

A *twine tree* is a tree that grows on some alien planet. Twine trees look just like pine trees, but they are botanically nothing like them: they are to pine trees as the water-like substance on Twin Earth is to water.<sup>24</sup>

Q6 does not constitute a hard problem. In light of the fact that you have had causal commerce with pine trees and not twine trees, it is perfectly obvious why you experience the pine tree *as a pine tree*. The pluralist can explain why there is no hard problem here: hard problems are generated by deep awareness and its targets, and we are never deeply aware of the property of being a pine tree. This is perfectly parallel to the explanation of why Q4 does not constitute a hard problem.

*Fourth datum.* We have seen that hard problems arise with respect to the sensory qualities. But let us turn to questions about *instances* of sensory qualities, which have a more complex

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<sup>24</sup> For further discussion of how cases of this sort bear on the idea that we experience natural kind properties, see Byrne (2009, pp. 449-450); Pautz (2010, p. 506).

profile: sometimes they generate hard problems and sometimes they do not. On the one hand, we have this question:

Q7. Why do you perceive an instance of scarlet rather than perceiving an instance of lime-green?

This question constitutes a hard problem of consciousness. It is hard to see what physical facts could make it the case that the bell pepper instantiates scarlet rather than lime-green. *A fortiori* it is hard to see what physical facts could make it the case that you *perceive* an instance of scarlet rather than lime-green.

On the other hand, there is this question:

Q8. Why do you perceive this instance of scarlet rather than perceiving some other instance of scarlet?

Assume for the sake of argument that we understand why bell peppers can instantiate scarlet in the first place. Then there is no particular mystery about why you might perceive *this* particular instance of scarlet rather than an instance of scarlet on a bell pepper across the globe. Such facts could be fully grounded in facts about the physical relationship between your brain and the relevant instance of scarlet. The datum, then, is that questions like Q7 constitute hard problems, but questions like Q8 do not. What explains this?

The pluralist answers that the hard problems of consciousness are generated by deep awareness and its targets. Those targets are always universals (in particular the sensory qualities) rather than property-instances. Thus questions about property-instances can

constitute hard problems if they concern instances of *different universals*. That is what happens in the case of Q7. But no hard problems will be constituted by questions, such as Q8, that concern *distinct instances of the same universal*.

*Fifth datum.* It is not just perceptions that have hard character. It is not even just perceptual experiences. Sensory imaginings and episodic memories have this, too.

It is effortless for the pluralist to explain this. I have already argued that there will be hard problems wherever there is deep awareness. DA1 tells us that all sensory experiences involve deep awareness. *QED.*

*Some theoretical results.* The arguments thus far lead directly to the pluralist theory of hard character and hard consciousness. Here, for a mental state or event to have *hard consciousness* (or, as I will sometimes say, to be *h-conscious*) is for it to have the kind of consciousness that is distinctively associated with the hard problems of consciousness – more simply, it is for it to have hard character. This is more commonly called *phenomenal consciousness*, but I wish to avoid any association with the problematic term *phenomenal character*.

The pluralist's account is this:

For a mental state or event to have *hard character* – equivalently, for it to be an *h-conscious* state or event – is for it to be at least partly constituted by deep awareness.

This account requires no particular separate defense. For, by definition, hard consciousness is the kind of consciousness distinctively associated with the hard problems of consciousness, and hard character is the natural kind property distinctively associated with those same problems. The

pluralist holds that the hard problems of consciousness are generated by deep awareness of certain targets. The account given above drops out of these claims with minimal friction.<sup>25</sup>

*A concern.* At this point, it is natural to worry that the pluralist has overlooked an important category of hard problems: the hard problems surrounding the distinction between perceptual experience and other kinds of experience. The idea is that perceptual experiences have *apparent presentational character*: they first-personally seem to *present* their targets to the subject; i.e., those targets seem to be *just there* for the subject in a concrete, here-and-now way. The targets of other experiences, such as sensory imaginings and episodic memories, do not first-personally seem to be presented to the subject in this sense. So consider this question:

Q9. Why does your perception of the scarlet bell pepper have the phenomenology associated with perception rather than having the phenomenology associated with sensory imagination?

The worry is that this question constitutes another hard problem of consciousness, one whose existence the pluralist has not yet explained.<sup>26</sup>

I ask you to reserve judgment about this worry until chapter 5. There I offer a fully reductive pluralist account of apparent presentational character in terms of categorization and

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<sup>25</sup> Some say that only sensory experiences are h-conscious. Others say that further mental states or events, such as thoughts, are h-conscious. As it stands, pluralism entails the first view. For the pluralist analyzes hard consciousness in terms of deep awareness, *whose only targets are the sensory qualities*, and it is obvious that thoughts do not involve deep awareness *of the sensory qualities*. If you wish to avoid this result, you can modify DA2 to say that *in sensory experience*, the only targets of deep awareness are sensory qualities. This leaves open the possibility that *in thought*, there is deep awareness of other targets, such as meanings.

<sup>26</sup> William Fish argues that there are hard problems of consciousness constituted by questions about apparent presentational character (2008, pp. 176-177).

deep awareness of sensory qualities. If this account is correct, then Q9 does not constitute a hard problem at all.<sup>27</sup>

*Conclusion.* Hard problems arise across all sensory experiences. In perception they arise in broad ways for certain universals – the sensory qualities – and more narrowly for objects, natural kind properties, and property-instances. The pluralist predicts exactly these patterns.

Her explanation is that there are two sources of hard problems. First, we are deeply aware of the *sensory qualities* and then find it mysterious how instantiations of them could be fully grounded in the physical facts. Second, we find it mysterious how the existence of *deep awareness itself* could be fully grounded in the physical facts. The hard problems of the external world are generated purely by the first source, while the hard problems of consciousness may be generated by either source or both together.<sup>28</sup>

Now consider some well-known debates about the hard character. First, is there any proprietary hard character associated with perceptual experiences of *thick properties* such as natural kind properties? Second, is there any proprietary hard character associated with *cognition itself*? At a certain crucial juncture, these debates have reached a dialectical impasse. Pluralism has given us a way of climbing over this impasse. See Appendix 3F.

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<sup>27</sup> The only hard problems in the vicinity are constituted by questions about deep awareness of sensory qualities – e.g., Q1 and Q2. The pluralist can of course account for the existence of these hard problems.

<sup>28</sup> It is worth comparing the pluralist's account to that of Byrne (2006). Byrne argues (i) that there are hard problems surrounding *color itself*, quite apart from color experience, and (ii) that there are no further problems concerning *experiences* of color; all such problems reduce to hard problems about color (ibid, pp. 242-243). I accept (i). As for (ii), I agree with Byrne that *some* hard problems of color experience reduce to hard problems surrounding color. But I have argued that *other* hard problems of color experience, such as the hard problem constituted by Q1, have nothing to do with the hard problems surrounding color. They have to do with the nature of deep awareness itself.

## 5. Some data about known illusions

There is another cluster of data to be explained. Consider a subject, Youngmee, who is about to see something. She knows antecedently that her experience will be illusory – the apparent color of the object will not be its actual color – but she does not know what either its apparent color or its actual color will be. Youngmee then sees a scarlet bell pepper that looks cobalt-blue to her. She experiences cobalt-blue.

Youngmee’s illusory experience positions her to make singular reference to the universal cobalt-blue. She can do this by fixing her attention on the apparent color that she experiences. She cannot, however, make singular reference to any instances of cobalt-blue, there being none in sight. In addition to this, Youngmee’s experience positions her to learn new essential truths about cobalt-blue. For suppose that she has experienced mango-orange and wine-purple before, but not cobalt-blue. Her experience will surely position her to know that cobalt-blue is more similar to wine-purple than it is to mango-orange.

When it comes to the actual color of the bell pepper, scarlet, Youngmee’s illusory experience puts her in a somewhat different position. On the one hand, she can make singular reference to particular instances of scarlet. She can do so by thinking of *those* instances of color, the ones that she is *really* encountering, rather than the ones that she seems to be encountering.<sup>29</sup> This positions her to make reference to the universal scarlet as well, for she can intend to generalize away from any particularity. On the other hand, her experience does not position her to know anything about *what it is* to be scarlet – no portion of the essence of scarlet even seems to be revealed to her in her experience. She is not, for instance, in a position to know that scarlet

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<sup>29</sup> Some readers will think that Youngmee *cannot* make singular reference to the actual color of the bell pepper – at least not in any especially direct way. I can only report that I find this implausible. But suppose that Youngmee did not know that her experience was illusory – what would happen then? I find it plausible that her putatively singular expression “that property” might refer indeterminately to scarlet and cobalt-blue.

is more similar to mango-orange than it is to wine-purple, even if she has experienced these other colors before. In this respect Youngmee’s illusory experience puts her in a worse position with respect to scarlet than to cobalt-blue.

How is all of this possible?

Let us return to this question once we understand the pluralist’s analysis of this case. The pluralist says that although Youngmee successfully sensorily represents the bell pepper, she also sensorily *mis*represents its particular instances of scarlet as instances of cobalt-blue.<sup>30</sup> Because of this misrepresentation, her experience is illusory. So far, however, there is nothing to ensure that Youngmee’s experience is h-conscious. The final piece of the puzzle is that Youngmee is deeply aware of cobalt-blue. This awareness “lights up” her sensory representations of instances of scarlet as cobalt-blue, making them h-conscious.

The way that this “lighting up” works will be laid out in much more detail in the next chapter.<sup>31</sup> In addition, it might seem redundant to posit sensory misrepresentation *and* a mismatch between what Youngmee is deeply aware of and what she sensorily represents. I briefly engage with this objection in Appendix 3G.

With this analysis in her pocket, the pluralist can explain the data about singular reference. Why is Youngmee able to make singular reference to both the universal cobalt-blue and to instances of scarlet? Because she stands in a relation of awareness-of to each of these targets, which in general is enough to position a subject to make singular reference to its targets. The precise awareness-of relation is not the same for these targets – it is deep awareness for the universal cobalt-blue and sensory representation for the instance of scarlet – but that is neither

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<sup>30</sup> Pluralism is officially neutral among the many possible accounts of how precisely this works. Unofficially, I am tentatively sympathetic to the account offered in Schellenberg (2018, pp. 90-91), modulo her remarks about “phenomenal character.”

<sup>31</sup> The pluralist need not give this kind of analysis of every case of illusion. There may be other illusions that are more like hallucinations or veridical perceptions.



here nor there. But how is it that Youngmee can make singular reference to the *universal* scarlet? She can do this by demonstrating an *instance* of scarlet with the intention of generalizing away from its particularity.

The pluralist can also explain the facts about what essences are revealed to Youngmee. Youngmee's experience positions her to know a substantial portion of the essence of cobalt-blue. The pluralist explains this by saying that Youngmee is deeply aware of cobalt-blue, where deep awareness is partly essence-revealing. However, the pluralist adds, Youngmee is not deeply aware of the universal scarlet, nor of any instances of it. She merely sensorily represents instances of scarlet, but sensory representation does not reveal any portion of the essences of its targets. Thus the essences of instances of scarlet, and of the universal scarlet, are not even partly revealed to her.

*Conclusion.* Youngmee's illusory experience positions her to make singular reference to the universal cobalt-blue (but not to any instances thereof), to the universal scarlet, and to certain instances of scarlet. However, only the universal cobalt-blue has part of its essence revealed to her.<sup>32</sup> Once more, this is just what the pluralist predicts.

I extend the pluralist account to cover veridical illusions in Appendix 3H [not yet written].

## 6. Some data about gradually revealed essences

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<sup>32</sup> Part of the essence of any *instance* of cobalt-blue will thereby be revealed to her as well: this comes for free with partial revelation of the essence of the universal. But no *particular* instance of cobalt-blue will have its essence revealed to her. Youngmee will not be in a position to know, *of* some particular instance of cobalt-blue, that part of its essence is \_\_\_\_\_. This occurs because Youngmee does not have any kind of awareness-of directed at an instance of cobalt-blue.

The pluralist says that deep awareness conforms to Partial Revelation: it is partly but not fully essence-revealing. In this section, I argue that this posit helps to explain a pair of otherwise puzzling facts about *which* experiences yield knowledge of *which* essential truths.

*First puzzling fact.* Suppose that I have never experienced any colors. I then see a splotch of paint and have my first such experience: I experience sky blue. Does this experience, by itself, position me to conceive of navy blue? Evidently not. (It is not even clear that experiencing sky blue positions me to conceive of *any* colors beside the one I see.) But suppose that I go on to see many other shades of blue, *but not navy blue*. As Hume observed, I will then be in a position to conceive of navy blue. What a curious fact! It is not surprising that I cannot conceive of navy blue just on the basis of experiencing sky blue. But why does it help to experience further shades of blue *other than navy blue*? You might answer: because these other colors are very similar to navy blue. But why then is it not enough to experience a *single* shade that is similar to navy blue? Why must we experience *many* shades of blue?

*Second puzzling fact.* Suppose again that I have my first color experience, an experience of sky blue. I then see another splotch of paint and have my second color experience, an experience of olive green. Sky blue and olive green differ in all three dimensions of the color quality space: they differ in hue, saturation, and brightness. It seems that my experiences do not position me to know that sky-blue and olive green differ in these three respects. They do not even position me to conceive of these three dimensions of color. But suppose that I go on to see many, many other colors – the entire Munsell color solid, perhaps. *Then* I will be positioned to know that sky blue and olive green differ in hue, saturation, and brightness. This pattern is puzzling: why do I need experiences of *other* colors to appreciate certain relationships that hold *just between sky blue and olive green*?

You might hope to explain this fact by saying that we need experiences of many different colors to form the very concepts of hue, saturation, and brightness. But this only postpones the difficult question. Sky blue and olive green each have a particular hue, saturation, and brightness. Why then can't I form the concepts of hue, saturation, and brightness just by experiencing these two colors?

*A schematic explanation.* I do not know of any theorist who has offered a systematic explanation of these two curious facts. A great advantage of Partial Revelation is that it reveals at least the outline of such an explanation.

Partial Revelation tells us that any experience of a color reveals a substantial *portion* of the essence of its target. Purely for the sake of illustration, then, suppose that an experience of sky blue reveals some truth of the form (i) if  $p$ , then  $q$ , and an experience of olive green reveals some truth of the form (ii) if not- $p$ , then  $r$ . Perhaps  $r$  is a claim about the relationship between sky blue and olive green. Still, these experiences alone would not position the subject to know whether or not  $r$  is the case. But perhaps an experience of sea green reveals that (iii) if  $p$ , then not- $q$ . *Now* the subject can know that  $r$  obtains!<sup>33</sup>

This illustrative suggestion has several desirable features. First, it is independently plausible that an experience of sea green does not *by itself* reveal much about the relationship between sky blue and olive green. The illustrative suggestion respects this: it allows that the truth revealed by the experience of sea green (if  $p$ , then not- $q$ ) might by itself have no particular bearing on the truth about the relationship between sky blue and olive green ( $r$ ).

It is also independently plausible that the truths revealed by each color experience have similar logical structures. The illustrative suggestion allows for this, too. It even allows that the revealed truths might be *identical* in logical structure. For it allows that experience might reveal

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<sup>33</sup> The point is that (i) and (iii) entail that not- $p$ . That, conjoined with (ii), entails that  $r$ .

further truths – the experience of sky blue might also reveal the truths that (iv) if not-*s*, then *r*; and (v) if *t*, then not-*u*.<sup>34</sup> More generally, every experience might reveal a truth with a positive antecedent and consequent, a negative antecedent and a positive consequent, and a positive antecedent and a negative consequent.

I very much doubt that these are really the logical structures of the essential truths revealed by every color experience. What precisely *is* revealed by an experience of scarlet, then? That is an excellent question, one to which I do not pretend to have an answer. I have merely proved that Partial Revelation makes it possible, in principle, to explain some otherwise puzzling data.

*Conclusion.* Experiencing more and more colors gradually reveals new essential truths to us, both about colors that we have already seen and about colors that we have not seen. It is hard to see what could be happening in each individual color experience to make this possible. Partial Revelation provides the outline of an answer.

## 7. Some problems for Full Revelation

Partial Revelation has a much more famous sibling, *Revelation*, which I will call *Full Revelation* for the sake of clarity. In this section, I remind you of some powerful objections to Full Revelation. In the next section I use these objections to mount an argument for Partial Revelation over Full Revelation.

Full Revelation is the conjunction of two ideas. The first idea is that deep awareness reveals the full essence of its targets. More precisely:

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<sup>34</sup> It is possible to make the truths revealed by each experience structurally *identical*.

*Self-Intimation:* Suppose that a rational, conceptually sophisticated subject is deeply aware of a sensory quality  $Q$ . Then: if a claim of the form *It lies in the essence of  $Q$  that \_\_\_* is in fact true, then this claim will first-personally seem to her to be true purely on the basis of this deep awareness.

The second idea baked into Full Revelation is that deep awareness does not permit error: it will never lead you astray about the essences of its targets. More precisely:

*Infallibility:* Suppose that a rational, conceptually sophisticated subject is deeply aware of a sensory quality  $Q$ . Then: if a claim of the form *It lies in the essence of  $Q$  that \_\_\_* first-personally seems to her to be true purely on the basis of this deep awareness, then this claim is in fact true.

Full Revelation is the conjunction of Self-Intimation and Infallibility. It is motivated simply by reflecting on experience: it is very initially plausible that seeing scarlet reveals the full essence of that color to the subject.<sup>35</sup>

However, Full Revelation faces a class of forceful objections. A recurring theme of these objections is that Full Revelation is too strong: deep awareness, powerful though it is, does not reveal *every* essential truth about its targets.

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<sup>35</sup> Contemporary interest in Full Revelation is due to Mark Johnston (1992, pp. 223-228). This thesis is usually restricted to vision, but the restriction is unnecessary: the idea is equally plausible when applied to the experiences of hearing a violin or smelling vanilla. Thus, the present formulation speaks of sensory qualities in general.

David Lewis (1995, pp. 141-142) discusses a related thesis that is about *experiences* rather than colors or sensory qualities. I take no stance on this thesis.

1. *The empirical objection.* It seems that scientific inquiry has a lot to teach us about colors. It may be disputed exactly which portions of scientific inquiry are most relevant – is it inquiry into surface-reflectance properties, neural properties, or something else? – but it is plausible that there are *some* essential truths about the colors that can only be learned empirically. Full Revelation is incompatible with this claim. If Full Revelation is true, then scientific inquiry can give us no new information; experience has beaten science to every punch. So much the worse for Full Revelation, it seems.<sup>36</sup>

2. *The objection from the elemental-compound distinction.* Some colors are *compound*: every hue of that color seems to be *composed*, in a special way, of other colors. Take orange, for example: every shade of it seems to be reddish and yellowish. By contrast, other colors – the canonical list being red, yellow, green, blue, black, and white – are *elemental*. That is, there is some shade of each of these colors that does not seem to be composed of any other colors. Pure red, for instance, seems neither orangish nor purplish.<sup>37</sup> It is presumably essential to any color whether it is elemental or compound.

It has been persuasively argued that this tells against Full Revelation. For, in the history of disputes about color, there was a recalcitrant, centuries-long disagreement – by theorists who were to all appearances attentive, well-informed, and tolerably rational – about which colors were elemental and which were compound. Some theorists held that *all* colors were elemental; some held that green was a compound of yellow and blue; some held that brown was elemental (it is now usually thought to be a compound of yellow and black). What ended up mostly resolving the disagreement were *empirical* results about opponent color-processing mechanisms in the

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<sup>36</sup> This objection is raised in McLaughlin (2003, p. 98). Byrne and Hilbert (2007, p. 77) identify some further consequences of Full Revelation that they find unpalatable.

<sup>37</sup> It is difficult to characterize the type of composition at issue here. A fruit salad might be composed of many different fruits, but the elements of the salad are separable in a way that does not seem to be true of the elements (say, red and yellow) of a compound color (orange).

brain. The moral is that deep awareness does not fully reveal the essential truths about which colors are elemental and which are compound.<sup>38,39</sup>

There is some room to resist this objection. After all, some *a priori* truths are extremely difficult to discover – think of the centuries that mathematicians spent trying to get a handle on various *a priori* truths about infinities. That said, in the mathematical case it is possible to demonstrate, in a conclusive way, the inconsistencies or errors in various lines of reasoning. I cannot see how anything analogous is supposed to be possible in debates over the elemental-compound distinction. Precisely which inconsistencies or errors of reasoning were some parties to the debate supposed to be committing? Or which first-personally accessible truths were they failing to notice? Seeing no good answers to these questions, I believe that the objection is sound.

3. *The objection from unknown grounds of similarity and quantity.* I lay out another objection, one that is structurally identical to the ones just discussed, in Appendix 3I. The idea is that there is *something* that grounds relations of similarity and quantity among the colors. This ground, whatever it is, is presumably essential to the colors, but it is not revealed by deep awareness.

4. *The objection from gradually revealed essences.* In the previous section, I observed that experiencing sky blue and olive green does not, by itself, make it possible to know that these colors differ in three distinct dimensions. However, experiencing further colors does make this possible. This is incompatible with Full Revelation. For Full Revelation entails that experiencing

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<sup>38</sup> This argument is laid out in detail in Allen (2011, pp. 163-167). Incidentally, while Allen thinks that these examples tell against both Infallibility and Self-Intimation, I think that they tell only against Self-Intimation. For on reflection it seems clear to me that experience does not speak to whether (e.g.) green is compound or elemental, *contra* Self-Intimation. However, it is not hard to see how subjects might over-interpret their experiences. This would yield false first-personal seemings about colors that are still not counterexamples to Infallibility, for these seemings would not have come about *purely* on the basis of deep awareness. As a consequence, I have strong sympathies for Infallibility: a similar maneuver could be used to defend it against other objections, and it is compatible with Partial Revelation. Still, I will not rely on this thesis.

<sup>39</sup> The objection works just as well regardless of which colors are elemental and which are compound. For, in each of the cases discussed, the first-personal seemings have been split.

sky blue and olive green reveals the full essences of these colors, which surely includes these three dimensions of variation.

There is a standard way to respond to this concern. The response is that Full Revelation is not quite right as it stands; what is right is that deep awareness of *many different colors* reveals the full essences of those colors.<sup>40</sup> I find it puzzling why this would be the case: what could be happening in our experiences of individual colors that would reveal the full essence of sky blue in this gradual way? I am unaware of any good answer to this question.<sup>41</sup>

I also observed in the previous section that merely having an experience of sky blue does not make it possible to conceive of navy blue, but this does become possible once the subject experiences additional shades of blue other than navy blue. Again, Full Revelation makes it difficult to explain why this would be the case. The trouble is that when I experience sky blue, the advocate of Full Revelation must say that I know in full what its hue, saturation, and brightness are. Navy blue differs from sky blue only along these dimensions. Why then can't I conceive of navy blue just by conceiving of the relevant variations?

Well, perhaps it is because I must experience at least two points along each dimension to conceive of the possibility of variation along that dimension. Suppose, then, that I experience my second color, olive green. Since olive green differs from sky blue in all three dimensions, I have now experienced at least two points along each dimension. So the advocate of Full Revelation should now say that I can conceive of navy blue. This is incorrect.

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<sup>40</sup> For example, Byrne and Hilbert say, "It is consistent with Revelation that the full nature of canary yellow will only be apparent after a diverse range of color experiences – including, perhaps, experiences as of transparent canary yellow volumes, canary yellow lights, and canary yellow objects against a variety of backgrounds" (2007, p. 77).

<sup>41</sup> One ingenious suggestion appears in Kappes (2020). Kappes' thought is that experiencing a color reveals its *individual* essence in full. But there are further truths about *collective* essences that are not revealed by an experience of an individual color, but only by experiences of many colors. I argue against this suggestion in Appendix 3J.



*Conclusion.* Full Revelation faces many serious objections. What unites them is the idea that deep awareness does not reveal the *full* essence of its targets.<sup>42</sup>

## 8. From Full Revelation to Partial Revelation

In this section, I argue that there is every reason to prefer Partial Revelation to Full Revelation.

As a prelude, let us get clear on the relationship between these claims. It should be obvious that Partial Revelation is *much* weaker than Full Revelation. For you will recall that Full Revelation is the conjunction of the following claims:

*Self-Intimation:* Suppose that a rational, conceptually sophisticated subject is deeply aware of a sensory quality  $Q$ . Then: if a claim of the form *It lies in the essence of  $Q$  that \_\_\_* is in fact true, then it will first-personally seem to her to be true purely on the basis of this deep awareness.

*Infallibility:* Suppose that a rational, conceptually sophisticated subject is deeply aware of a sensory quality  $Q$ . Then: if a claim of the form *It lies in the essence of  $Q$  that \_\_\_* first-personally seems to her to be true purely on the basis of this deep awareness, then that claim is in fact true.

Partial Revelation does not entail either of these claims. It does not entail Infallibility, since Partial Revelation allows for propositions that first-personally seem to be essential truths about  $Q$ , but that are not truths at all. Nor does Partial Revelation entail Self-Intimation: Partial

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<sup>42</sup> But suppose that the objections above can all be met; suppose that Full Revelation can be salvaged. It would be easy to modify pluralism so as to accommodate this.

Revelation permits there to be essential truths about  $Q$  that do not show up in the first-personal seemings.<sup>43</sup>

This brings us to the first compelling point in favor of Partial Revelation: it is untouched by the previous section's objections to Full Revelation. At best, what the objections show is that deep awareness does not reveal *certain* essential truths – for example, essential truths about the elemental-compound distinction or the grounds of similarity and quantity relations. That is no threat to the idea that deep awareness reveals *other* essential truths, such as the truth that it lies in the essence of certain colors that scarlet is more similar to mango-orange than it is to lime-green, or that it lies in the essence of scarlet that anything that is scarlet is spatially extended.

However, it is natural to worry that even if Partial Revelation avoids the objections to Full Revelation, it simultaneously loses some intuitive support. Look at a green lime and reflect. Your experience will not merely seem to reveal *some* of what it is to be green. It will seem to reveal what it is to be green *in full*. There will seem to be nothing about the essence of green that remains hidden from you – or so the worry goes.<sup>44</sup>

I agree that things may appear this way *at first blush*. On reflection, however, I believe that this initial appearance is overthrown, and Partial Revelation is shown to do *full* justice to the intuitions. We can come to appreciate this by reflecting on our color experiences in light of some of the objections to Full Revelation reviewed earlier. Here I am, looking at a green lime and experiencing green. I find it obvious that green must be either essentially elemental or essentially compound. Which is it? I report that prolonged reflection on my experience does not even *seem* to deliver up an answer. The same is true when I consider what grounds relations of similarity and quantity between various colors.

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<sup>43</sup> I am actually quite sympathetic to Infallibility. I think that Self-Intimation is what generates all of the problems. See fn. 38.

<sup>44</sup> See for example Johnston (1992, p. 223).

On reflection, then, an experience of green does not even *first-personally seem* to reveal the complete essence of lime-green. Certain essential truths about it *do* first-personally seem to remain hidden from us. On reflection, what the intuitions support is not Full Revelation, but Partial Revelation. That is the second compelling reason to prefer the latter thesis to the former one: it better respects the intuitions that motivate such claims in the first place.

*Alternative proposals.* Others have offered competing proposals for how to replace, or even defend, Full Revelation. I argue in the appendices that Partial Revelation is superior to a number of these, including the view that deep awareness fully reveals individual but not collective essences (Appendix 3J), the view that deep awareness is merely awareness of intrinsic characters (Appendix 3K), and the view that deep awareness is a matter of sensorily entertaining first-order and higher-order propositions (Appendices 3L and 3M).

*Conclusion.* Partial Revelation avoids the central class of counterexamples to Full Revelation, and it is the true beneficiary of the intuitions that were supposed to favor Full Revelation. This constitutes a strong case for the pluralist's claim that deep awareness is partly rather than fully revelatory.

Still, there remain some general issues that are worth discussing. To begin with, perception first-personally seems to involve a unified form of consciousness. It does not first-personally seem to involve two different kinds of awareness of targets in two different metaphysical categories. I address objections that turn on this point in Appendix 3N. Finally, it is not a new idea that sensory experiences involve awareness of universals. But this thought was seminally developed in conjunction with the *monist* view that seeing a scarlet bell pepper essentially involves at most one kind of direct awareness-of. I compare this approach to pluralism in Appendix 3O.

## 9. Conclusion

Experience is interesting. Sometimes it positions us to make singular reference and sometimes it does not; sometimes it reveals essential truths and sometimes it does not; and for certain questions, but not others, it generates hard problems. Such facts fall in intricate patterns. These patterns vary first across cases of veridical perception, illusion, and hallucination, and again with respect to sensory qualities, objects, natural kind properties, and instances of various properties. It is not clear how any monistic theory, whether it is representationalist or naïve realist, could explain such facts. Pluralism explains it all.

This chapter has focused on developing the pluralist's theory of deep awareness. The next chapter fills out her account of successful sensory representation.

### Appendix 3A. In defense of deep awareness of universals

The pluralist claims that we have deep awareness of universals. There is a battery of familiar objections against this idea. For the most part, my responses will also be familiar, but I will state them for the record.

*Objection.* When you see a scarlet bell pepper, it is very plausible on the basis of first-personal reflection that you are not aware of an airy universal in Plato's heaven. You are aware of *the particular instance* of scarlet instantiated by the bell pepper.<sup>45</sup>

*Reply.* First, a small point about talk of "Plato's heaven." What the pluralist posits are universals *that are not spatiotemporally located*. *A fortiori*, they do not reside in some Platonic heaven. The metaphor may entertain, but do not let it mislead. On to the substantive point, then: when I reflect in a first-personal way on my perception of a scarlet bell pepper, I too find it

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<sup>45</sup> This objection is pressed in Schellenberg (2018, p. 146-148); Sethi (2019, p. 2).

plausible that I am aware of a particular instance of scarlet. This plausible idea is folded into pluralism. But it is a further step to say that I am *not, in addition to this*, aware of the property scarlet. I see no support for this further step.

But wait a moment – don't I then predict that the perceiver is deeply aware of *both* the universal scarlet *and* an instance of it? Yes. And isn't it wildly implausible to posit two distinct instances of deep awareness here? No. As I argued in §5, cases of known illusion support the claim that we are separately aware of both property-instances and universals.

*A cluster of objections.* For us to be sensorily aware of an entity, the entity must be spatiotemporally extended *and* spatiotemporally located *and* causally efficacious. Universals have none of these features! That is three strikes against the claim that we are deeply aware of universals.<sup>46</sup>

*Reply.* This is a powerful cluster of objections. It will take some work to see where the objections go awry.

Cases of sensory imagination suggest that things have gone awry *somewhere*. For suppose that you vividly imagine a scarlet bell pepper and a mango-yellow fruit, where these are not any particular objects that you have seen before. First-personal reflection suggests that your imaginative experience makes you aware of scarlet and mango-yellow. It first-personally seems that this is awareness-of, not awareness-that. It also first-personally seems that this is *awareness*, full stop. To be sure, you do not seem to be aware of entities that are instantiated – this is a case of imagination, after all – but that is compatible with the conclusion that you are aware of the universals scarlet and mango-yellow.

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<sup>46</sup> This cluster of objections appears in Schellenberg (2018, p. 146). The first objection (pertaining to spatial extension) also appears in Pautz (2007, p. 517).

There is further support for this conclusion: your imaginative experience will position you to make singular reference to scarlet and mango-yellow, and to know essential truths about their relationship. It is hard to see how this is possible unless your experience makes you aware of scarlet and mango-yellow.

Your awareness will be sensory. What else could it be? – it is certainly not cognitive. And it will be awareness of the *universals* scarlet and mango-yellow, not of any particular instance of them. For we have stipulated that you are not imagining any particular bell peppers that you have seen before, so there is just no particular instance of scarlet or canary yellow that you could plausibly be imagining. Therefore, it is possible to have sensory awareness of universals.

None of this reveals exactly where the objection goes wrong. Remember the three alleged requirements on the targets of deep awareness: allegedly, they must be spatiotemporally extended, spatiotemporally located, and causally efficacious. Are the requirements spurious? Or can universals meet the requirements after all?

The pluralist does not have to give the same answer for each requirement, but I think she should. For reasons that I leave to Appendix 3L, my view is that the requirements are all rotten. This leaves a further question: how is it so much as possible to be aware of such entities? What could the underlying mechanism be?

I do not know, but here are some possible answers. The dualist might say that there is no underlying mechanism. It is just a nomologically primitive fact that when certain neural states occur, there is deep awareness of certain universals.<sup>47</sup> By contrast, the physicalist might identify a proper mechanism. She might say that my ancestors encountered *instances* of (e.g.) scarlet, which

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<sup>47</sup> This is a variant on the well-known dualist view that it is just a nomologically (or metaphysically) primitive fact that when certain neural states occur, there occurs the kind of representation that constitutes hard consciousness. See Chalmers (2004, The representational character of experience); Pautz (2010); Mendelovici (2018).

were of course spatiotemporally located, spatiotemporally extended, and causally efficacious. (She would thereby incur the burden of explaining away the appearance that this is impossible in a purely physical world.) My ancestors thereby developed the capacity to be deeply aware of the *universal* scarlet. My ancestors were then able to exercise that capacity – the capacity to be deeply aware of the universal scarlet – even when they were not causally interacting with instances of scarlet. Because I have a capacity with this evolutionary history, I, too, can be deeply aware of the universal scarlet even if I have *never* encountered an instance of scarlet.<sup>48</sup>

These are just two possible accounts. I am open to others.

I want to conclude my reply with a diagnosis of why this cluster of objections seems so compelling. I suggest that it is because my opponent has correctly identified some requirements on the relation of *successful sensory representation*. As I argue in chapter 4, successfully sensorily representing an entity requires the subject to be in causal commerce with that entity. This cannot happen if the entity is not spatiotemporally located and causally efficacious.<sup>49</sup> But we should not confuse requirements on successful sensory representation with requirements on deep awareness.

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<sup>48</sup> This idea is not particularly novel. It is closely related to this idea from Tye (2019): “A color is visually represented in virtue of the fact that the visual system has been so designed (by Mother Nature) that when it is operating in the conditions it is supposed to operate in, a certain brain state in the visual cortex tracks or causally co-varies with a certain surface color (at least in first approximation). Under abnormal conditions, there need be no surface and the color may be uninstantiated. So, uninstantiated colors can be visually represented” (p. 274). But where Tye wants to explain the possibility of *representing* uninstantiated universals, I want to explain the possibility of *being aware* of them.

In addition, Bengson, Grube, and Korman (2011) anticipate, at least in a schematic way, the possibility of an account like mine: “we [do not] deny that there is *some* causal story to be told about why it is that a subject is aware of a given color when that color is not instantiated by any perceived worldly object. We deny only that the story will be so crude as to require that *the property itself* be causally responsible for the subject’s state of awareness” (p. 173).

<sup>49</sup> It is less clear to me that a presented entity must be spatiotemporally extended. This requirement, I suspect, is simply spurious. Why couldn’t a creature with the right perceptual apparatus be presented with a spacetime point?

*Objection.* It is plausible that if you see an entity, then that entity at least *looks* spatially extended to you (even if it is not really spatially extended). Universals do not look spatially extended. Hence we do not see them – so says my opponent.

Why accept that universals do not look spatially extended to us? My opponent provides three supporting arguments here. First, universals are *necessarily* unextended, so it is hard to see how they could look extended. Second, if scarlet looks extended in cases of hallucination, then it also looks extended in cases of perception. But then when I see a scarlet bell pepper, there are two entities that look extended to me: the bell pepper *and* scarlet. That is evidently not the case. Finally, if an entity looks extended, then it looks to have a shape. But scarlet does not look to have a shape.<sup>50</sup>

*Reply.* The pluralist accepts the conclusion that we do not see universals. She says that to (consciously) veridically see a scarlet bell pepper *x* is (i) to successfully sensorily represent the bell pepper and its instances of scarlet, (ii) to be deeply aware of the universal scarlet, and (iii) to take the instances of scarlet to be instances of the universal scarlet. The idea is that the only entities that we can successfully sensorily represent – and thus the only entities that we can see – are particulars such as objects and property-instances. Universals cannot be seen. Nor can they look any way to us, since only something that is seen can have a look.

Perhaps an analogy will clarify the idea. Lance is riding a bicycle, and for the bicycle to be ridden it must have wheels. But what is ridden is the bicycle itself, not the wheels. Similarly, we see objects and property-instances, and if this occurs in an h-conscious way, then we must have deep awareness of universals. But universals are not themselves seen.<sup>51</sup>

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<sup>50</sup> See Pautz (2007, pp. 517-518).

<sup>51</sup> I agree with much of what is said in Tye (2019), but on this point we part ways. Tye agrees that a visually hallucinating subject is aware of certain uninstantiated properties, but he thinks that the subject *sees* these properties (2019, p. 272).



*Revised objection.* Grant that universals cannot be seen. Still, it is easy enough to slip a similar objection through the bars. Just appeal to the principle that if you are *visually aware* of an entity, then that entity at least *visually seems* spatially extended to you. Then point to the same three reasons as before, making this minor change where necessary, for thinking that universals do not visually seem to be spatially extended.

*Reply.* This objection gets to the heart of the matter. My response is to deny that if you are visually aware of an entity, then that entity visually seems to you to be spatially extended. For suppose that I veridically see a ball and attend to its shape. Set aside universals and focus on property-instances: surely I am visually aware of an instance of the ball's sphericity. But this instance of sphericity is not *itself* spatially extended. (If it were, it would have a shape, but it is spherical *objects*, not *sphericity itself*, that has a shape.) Thus, if we accept the principle at issue, then we must say that the instance of sphericity visually seems to me to be spatially extended despite essentially failing to be spatially extended. This is a strong reason to reject the principle.<sup>52</sup>

*Conclusion.* It is often thought that the ontological nature of universals precludes deep awareness of them. I appreciate the initial appeal of this idea, but, on reflection, I believe that the arguments do not adequately support it.

## Appendix 3B. An Aristotelian view of universals

In Appendix 3A, I considered this objection:

1. The targets of deep awareness are spatiotemporally extended, spatiotemporally located, and causally efficacious.

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<sup>52</sup> I take this response directly from Bengson, Grube, and Korman (2011, fn. 39).

2. Universals are not spatiotemporally extended, spatiotemporally located, or causally efficacious.
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3. Universals are not the targets of deep awareness.

I went on to deny premise 1. Here I examine an alternative response: denying premise 2.

The natural way to deny premise 2 is to take an *Aristotelian view* of universals. That is, you would say that the universal of scarlet (e.g.) is wholly present in any entity that is scarlet; that scarlet is located and extended over the surfaces of scarlet objects (or their volumes, for scarlet liquids and the like); and that scarlet has causal effects – say, upon light, or upon the retina.

Unfortunately, even if this view is true, it is powerless against a reformulated version of the objection. The reformulated objection does not say only that the universal scarlet should be extended and located *somewhere* and have causal effects on *something*. It says that scarlet should have causal effects *on the sense-organs of the subject who is experiencing it*; it is *this* universal, the one (perhaps wholly present in some scarlet object) exerting its causal power on the subject, that must be spatiotemporally extended and located. However, a hallucinating or sensorily imagining subject need not be in causal communion with any spatiotemporally extended and located universal scarlet. There need not be any scarlet object around for her to interact with.

The reformulated objection may be expressed as follows:

4. The targets of deep awareness are spatiotemporally extended, spatiotemporally located entities *that have causal effects on the sense-organs of the subject*.
  5. Universals are not spatiotemporally extended, spatiotemporally located entities *that have causal effects on the sense-organs of the subject*.
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6. Universals are not the targets of deep awareness.

Better, then, to meet these objections by denying their starting premises.

### Appendix 3C. Does deep awareness reveal necessary or essential truths?

I say that deep awareness positions the subject to know many *essential* truths about sensory qualities. Why is it not enough to appeal to *necessary* truths here?

My first argument for the stronger formulation is a simple appeal to intuition. Look again at the scarlet bell peppers. Doesn't that seem to make you aware of at least part of *what it is* to be scarlet?

My second argument that the datum should be expressed in terms of essences is that necessary truths are cheap. Take any case in which you know that an entity *E* has property *F*. This already positions you to know infinitely many necessary truths about *E* – for example, that, necessarily, it is possible for *E* to exist, and that, necessarily, it is possible for *E* to be *F*. Deep awareness seems to provide awareness of necessary truths that are not cheap in this way. These necessary truths seem to be substantial. Substantial in what sense? I answer: in the sense of being essential.

I will offer one last argument. When you are deeply aware of scarlet, what you seem to be aware of, in the first instance, is how scarlet is *in actuality*. This idea, difficult as it is to express precisely, is an intuitive one: the thought is that you do not, in the first instance, seem to be aware of the modal profile of scarlet, of how scarlet is across all possible worlds. This generates a puzzle. For your deep awareness positions you to know many truths about how scarlet is necessarily – where these necessary truths are not of the cheap variety described above. How, then, could your awareness of how scarlet is *in actuality* position you to know how it is *in all possible worlds*?

The puzzle is solved if deep awareness of scarlet involves awareness of the essence of scarlet. For, on the one hand, it is reasonable to think that the essence of an entity is something that is found in actuality, so there is no mystery about how your deep awareness could connect you with it. On the other hand, there are modal consequences to what an entity's essence is.

### Appendix 3D. Skepticism about knowledge of essences

I say that experiencing scarlet, mango-orange, and lime-green will position you to know that it is essential to these colors that the first is more similar to the second than it is to the third. Some will worry that this claim cannot be known because it is not even true. The worry is that colors are essentially something like surface reflectance properties – properties which do not stand in the similarity relations that experience would have us think they stand in. Although I myself reject this premise, let us grant it for the sake of discussion. I offer a primary response to the worry and a fallback.

My primary response is that even if colors are surface reflectance properties, the similarity relations among colors need not be the physically natural similarity relations that hold among these properties. They may instead be relations of *chromatic* similarity, which may be determined partly by the dispositions of perceivers such as ourselves. In that case scarlet will still be more *chromatically* similar to mango-orange than to lime-green.

But suppose that this response does not work. Then I would retreat a fallback position. I would replace Partial Revelation with:

*Apparent Partial Revelation:* Suppose that a rational, conceptually sophisticated subject is deeply aware of a sensory quality *Q*. Then a substantial number of *claims, whether true or*

*not*, of the form *It lies in the essence of Q that* \_\_\_\_, will first-personally seem to her to be true purely on the basis of this deep awareness.

This would still distinguish deep awareness from successful sensory representation, which does not so much as *seem* to reveal any essential truths about its targets. As a result, modified versions of the main arguments of this chapter would still go through. The main difference is that some of the data would turn out to pertain to *apparent* essences rather than *actual* essences.

## Appendix 3E. Why it seems hard to explain our awareness of sensory qualities

You look at a scarlet bell pepper and experience scarlet. Suppose that we know why the underlying physical processes fully ground the fact that you are deeply aware of something rather than nothing. I have claimed that it remains difficult to explain why you are deeply aware of scarlet rather than lime-green: there seems to be no physical fact that would ensure that scarlet is the specific target of your awareness. Here I develop that point. In particular, I examine several plausible models for physically-grounded awareness of universals and argue that none of them would seem to explain your awareness of scarlet.

First, consider the universal *being water*. Even supposing that you are a purely physical being, there is a plausible explanation for how you might become aware of the universal *being water*. After all, you have had causal contact with bodies of water, which instantiate this universal.<sup>53</sup> Even if you are currently in a desert, it seems that, in principle, you could still be

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<sup>53</sup> At least, assuming that it is possible to explain how a purely physical being could be aware of anything at all. The point is that, *modulo* the general problem of explaining awareness (intentionality), there is no further problem of explaining awareness of *being water*.

aware of the universal in virtue of having previously interacted with bodies of water. Or perhaps you have *never* encountered water. Still, it once more seems possible to explain how you could be aware of this universal: this might occur because your ancestors encountered water, so you are now in a state whose evolutionary function is to signal the presence of water. In light of the actual or apparent essential truths revealed by deep awareness, however, it seems that none of these explanations can be given for your awareness of the universal *scarlet*. For if physical truths cannot fully ground the existence of instances of this universal, then beings in a purely physical world cannot ever have been in causal commerce with scarlet, nor can they have ancestors who were in such commerce.

Here is another possible model of purely physically-grounded awareness of universals: you can be aware, in an abstract way, of the logical operations of disjunction, negation, and conjunction. Perhaps this occurs, not because of the causal effects of these operations, but because of certain inferential dispositions that you have: for example, the disposition to infer from  $p$  to  $p$  or  $q$ , for any propositions  $p$  and  $q$ . However, in light of the actual or apparent essential truths revealed by deep awareness, it seems that no such story could explain how it is possible for a purely physical being to be aware of scarlet *rather than lime-green*. The two seem in principle to be functionally interchangeable: that seems to be the lesson of inverted spectrum scenarios. Thus there seems to be no inferential disposition that could distinguish awareness of scarlet from awareness of lime-green.

Consider one last model: you can arguably be aware of the property of being magical even though you have never encountered any instance of it.<sup>54</sup> This is possible because your concept of being magical can be cobbled together from other concepts that you possess. You might conceive of it as the (fictional) natural kind that explains why certain characters are able to cast fireballs,

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<sup>54</sup> I thank Brian Cutter for bringing this example to my attention.

or as the property of being, among other things, caused in a way that is independent of the usual laws of nature. However, there does not seem to be any way to cobble together awareness of scarlet from awareness of other entities.

Thus none of these models would seem to explain how it is possible for a purely physical being to be aware of scarlet rather than lime-green.

## Appendix 3F. Further debates about hard character: liberalism/conservatism and cognitivism/non-cognitivism

In this appendix, I offer a novel way to resolve the liberalism/conservatism and cognitivism/non-cognitivism debates about hard character.

Let *liberalism about hard character* be the view that the hard character of some of our perceptual experiences is constituted partly by *high-level properties and relations*: for instance, by causation, natural kind properties, emotional properties, or affordances. Let *conservatism about hard character* be the contrasting view that of the properties and relations that we perceive, only low-level properties and relations – color, shape, texture, and so on – constitute the hard character of our perceptual experiences. Suppose for instance that you see a pine tree and recognize it as such. Liberals typically say that the hard character of your experience is constituted partly by the property of *being a pine tree*. Conservatives say that this is not the case. For this experience, the only pine-tree related constituents of hard character are the various colors, shapes, textures, and so on of the pine tree.<sup>55</sup>

Now consider another debate between a more permissive view of hard character and a less permissive one. Let *cognitivism about hard character* be the view that concepts or thoughts are

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<sup>55</sup> For liberalism about hard character, see Bayne (2009); Fish (2013); McClelland (2016). For conservatism about hard character, see Byrne (2009); Pautz (2010); Carruthers and Veillet (2011).

sometimes constituents of hard character. Let *non-cognitivism about hard character* be the contrasting view that concepts or thoughts are never *themselves* constituents of hard character thoughts; any hard character associated with thoughts reduces to the hard character associated with sensory experiences that occur together with those thoughts. Suppose for example that you entertain the thought that snow is white. Cognitivists will say that your thought itself has some proprietary hard character. Non-cognitivists will say that there is no such hard character. At best there will be hard character that occurs because you sensorily imagine coldness and whiteness.<sup>56</sup>

I emphasize straightaway that these are both debates about *hard* character. They are not debates about *conveyed* character. As documented in chapter 2, debates of this sort are often marred by a lack of clarity about this distinction.<sup>57</sup>

There is a standard strategy for attempting to resolve the conservatism/liberalism and cognitivism/non-cognitivism debates about hard character. The strategy is to check whether there are any novel hard problems associated with sensory experience of thick properties, or with cognition. Unfortunately, there is great disagreement on these points, which has resulted in something of an impasse.

The arguments of this chapter suggest a novel way of resolving the debates. I suggested in chapter 2 that hard character is a natural kind property – in particular, the natural kind property of experience that generates the hard problems of consciousness in certain paradigmatic cases. In this chapter, I have identified what this natural kind property is: it is the property of being an instance of deep awareness, which is a kind of awareness that reveals part of the essence of its targets. Thus, instead of testing for hard character, which is a *symptom* of deep awareness, I

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<sup>56</sup> For arguments on both sides of this debate, see the papers in Bayne and Montague (2011).

<sup>57</sup> This is why the previous footnotes do not cite such works as Siegel (2005) and Masrour (2011). As I have previously argued, what these thinkers have in mind is conveyed character. I will return to some related debates about conveyed character in an appendix to chapter 5.



suggest that we directly test for deep awareness itself – we should test whether the essences in question are partly revealed to us in our experiences.

In the body of this chapter, I have already applied this test to natural kind properties. As a reminder, suppose that you look at a pine tree and recognize it as such. Does the property of being a pine tree partly constitute the hard character of your experience? The pluralist says that we can make headway on this question by asking, What can you know, just on the basis of your experience, about *what it is* to be a pine tree? This question has a clear answer: nothing. You can know many accidental truths about the particular pine tree that you see, but your experience will not, by itself, give you the least insight into the biological essence of pine trees. Your experience is *on its own* perfectly compatible with the hypotheses that pine trees are, by their very natures, alien spacecraft, cocoons for gigantic insects, or enormous and cunningly disguised baked goods. From this I concluded that the property of being a pine tree does not figure in the hard character of such an experience.

This does not show that liberalism about hard character is false in general.<sup>58</sup> What is perhaps surprising, however, is that the present conclusion stands *even if* there are novel hard problems associated with experiences of pine trees.<sup>59</sup> For hard character is a natural kind property; the hard problems are merely its marks. Thus, just as something can be shiny and yellow without being gold, something can generate hard problems without having hard character. In other work I have given an argument that reinforces this last point.<sup>60</sup> I have argued that one of the hard problems, the explanatory gap problem, arises in precisely the same form for normativity and for the self. (Not for *experiences* of normativity and the self, but for *the entities*

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<sup>58</sup> Although it is bad news for liberalism if their program fails in what they take to be one of their strongest cases.

<sup>59</sup> For the record, my own view is that there are no such novel hard problems.

<sup>60</sup> See Mehta (2019).

*themselves*.) No one would claim that normativity and the self *themselves* have hard character. Again, we should conclude that it is possible for an entity to generate hard problems without having hard character. Thus I believe that the present test is not just different from, but in one sense better than, the test of which kinds of experiences generate novel hard problems.

I leave it to the reader to try out further applications of the new test. My aim has simply been to introduce the method.

### Appendix 3G. Some concerns about the pluralist theory of illusion

The pluralist says that when Youngmee experiences a scarlet bell pepper as cobalt-blue, she sensorily misrepresents its color. In addition, she is deeply aware of the universal cobalt blue and takes the property-instance to be an instance of this universal. This raises a concern: isn't it redundant to posit *both* sensory misrepresentation *and* a mismatch between what Youngmee is deeply aware of and what she sensorily represents?

I believe that this posit can do important work. The posit of sensory misrepresentation accounts for h-unconscious illusions; deep awareness would then make the illusion h-conscious. The idea that deep awareness is what distinguishes h-conscious experiences from h-unconscious ones is developed much further in the next chapter.

But there is a further concern. The pluralist says that a particular property-instance is represented as an instance *of* a certain property twice over: first at the level of sensory representation and again at the level of deep awareness. Thus pluralism seems to allow for experiences that are fully veridical at one of these levels but illusory at the other. For example, Youngmee might successfully sensorily represent the bell pepper *and* she might successfully sensorily represent its instances of scarlet as such. All the while, she might be deeply aware of

cobalt-blue rather than scarlet. Or she might sensorily misrepresent instances of scarlet as instances of cobalt-blue while being deeply aware of scarlet. Are these genuine possibilities?

One possible reply is that they are. Perhaps spectrum inversion is an extreme case of this. If Youngmee is spectrum inverted, then perhaps she might successfully sensorily represent all of the colors while getting things wrong at the level of deep awareness.

Another possible reply would be that *for a subject who has deep awareness*, the nature of her deep awareness would determine the content of her sensory representations. A sensory representation that is lit up with deep awareness of scarlet would thereby *be* a representation of scarlet. Thus the kinds of mismatches just described are not possible. However, the pluralist could add, for creatures who do not enjoy deep awareness, the content of their sensory representations will be determined in some other way. This move would preserve the pluralist's thought that h-unconscious creatures can enjoy veridical perceptions and suffer illusions.

I lean very slightly towards the latter reply, but I leave the matter for further investigation.

## Appendix 3H. Veridical illusion

[To be written. Here I will address Johnston's objection from veridical illusions.]

## Appendix 3I. The objection to Full Revelation from unknown grounds of similarity and quantity<sup>61</sup>

Sensory qualities stand in certain relations of similarity: scarlet is more similar to mango-orange than it is to lime-green. They also stand in certain relations of quantity: one sound might be

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<sup>61</sup> The objection discussed in this section is carefully developed in Broi (2020).

louder than another. Evidently, the obtaining of these relations is grounded in certain facts about the essences of the sensory qualities themselves.<sup>62</sup> There are two influential models for how this might occur. The concern is that neither of these models is compatible with Full Revelation.

Take for example the *partial identity model*, which says that it is essential to the sensory qualities that they have certain internal structures. The idea is that scarlet (e.g.) is essentially composed of further sub-qualities, such as a certain hue, brightness, and saturation; it essentially has these sub-qualities as proper parts. Relations of similarity and quantity obtain between scarlet and other sensory qualities because these proper parts sometimes overlap. For example, scarlet is more similar to mango-orange than it is to lime-green because scarlet and mango-orange share more sub-qualities than do scarlet and lime-green, and one sound is louder than another because the first sound instantiates every determinate of loudness that the second does, as well as some further determinates.

The problem is this. Take a particular sound that is especially loud. It seems *not* to be in the essence of that sound to instantiate a whole range of determinates of loudness. This is a counterexample to Full Revelation.<sup>63</sup>

There is another model for how to ground facts about similarity and quantity relations in facts about the essences of the sensory qualities. This is the *quality space model*. On this model, any sensory quality is essentially a point in a multi-dimensional quality space. Scarlet, for instance, is essentially a point in a space whose dimensions include hue, brightness, and saturation. Any such quality space is holistic: no dimension of the space is metaphysically prior to the others, nor can any dimension of the space exist independently of the others. Degrees of

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<sup>62</sup> Ibid, pp. 27-29. Broi is speaking of *phenomenal properties*, which he stipulates to be properties of experiences, rather than *sensory qualities*, which are unlikely to be properties of experiences (unless something like projectivism is true). Still, Broi's arguments work equally well when adapted to sensory qualities.

<sup>63</sup> Ibid, pp. 30-33.

similarity can then be analyzed in terms of distances between points in the same quality space, and quantities can be analyzed simply in terms of distances between points within particular dimensions.

On this model, it is an essential truth about scarlet that it has a particular hue, brightness, and saturation, where these are in turn essentially located with the entire color quality space. Suppose, then, that Self-Intimation is true. Then once the subject experiences scarlet, *even without ever having experienced any other colors*, she should have access *to the entire color quality space*. She should be positioned to determine the precise nature of the dimensions of this space and thus the possible locations within it; and that, in turn, should position her to know how scarlet is related to all other colors, and indeed to know what the other colors are. This is evidently not the case.<sup>64</sup>

Regardless of which model is true, then, Full Revelation is in trouble.

## Appendix 3J. Individual Revelation

Here is a proposal about how to defend Full Revelation, at least when it is understood in a particular way. The idea – call it *Individual Revelation* – is that experiencing a color reveals its *individual* essence in full. But there are further truths about *collective* essences that are not revealed by an experience of an individual color, but only by experiences of many colors. By analogy, it is an essential truth that Socrates is distinct from the Eiffel Tower. This is not an essential truth about either Socrates or the Eiffel Tower taken individually, but about the collection of the two.<sup>65</sup>

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<sup>64</sup> Ibid, pp. 33–35.

<sup>65</sup> This is the central proposal of Kappes (2020).

This suggestion is ingenious. It might be able to explain why experiencing cobalt-blue does not reveal its relationship to, or even the existence of, mango-yellow. But I believe that it is undermined by several e objections that we have already reviewed.

First, Individual Revelation is undermined by the objection from the elemental-compound distinction. It is surely part of the *individual* essence of green to be elemental (or compound, if you prefer). An experience of green does not reveal even this individual essential truth. Second, it is at least part of the individual essence of sky blue that it has a certain hue, a certain saturation, and a certain brightness. That is part of *what it is* to be sky blue, taken singly. However, an experience of sky blue does not by itself reveal these facts. It does not even allow the subject to conceive of these three distinct dimensions. Individual Revelation leaves us unable to explain why this is so.

## Appendix 3K. The intrinsic awareness account

One important observation about deep awareness is that it appears to entail some awareness of the intrinsic character of its object. When you see scarlet, for example, you seem to be aware, at least in part, of what scarlet is like intrinsically. This suggests:

The *intrinsic awareness account*: Deep awareness is substantive in the sense that it is awareness of at least part of the intrinsic character of its target.<sup>66</sup>

I agree that deep awareness *entails* awareness of at least part of the intrinsic character of its target. One possible explanation of this is to say that these intrinsic aspects are essential to

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<sup>66</sup> See Campbell (2005, p. 111). Campbell in fact speaks of *categorical* properties, but it is intrinsic properties that he has in mind: see Appendix 6D.

the target, and that deep awareness entails awareness of a substantial portion of its target's essence, which may include these intrinsic aspects.

But I see a problem with the intrinsic awareness account taken neat. Deep awareness positions the subject to know many essential truths about its target, and there is nothing in the account that explains this. The trouble is that intrinsic truths need not be essential: my desk has its mass and shape intrinsically but accidentally; that very desk could have had a slightly different shape and mass.

An ingenious response to this worry has been developed.<sup>67</sup> Yes, the intrinsic awareness theorist might grant, not every intrinsic truth holds essentially. But intrinsic truths *within a special class* do hold essentially, and intrinsic truths about sensory qualities – truths of the form “It is intrinsic to sensory quality *Q* that *p*” – fall into this special class. These ideas deserve a meticulous examination.

The intrinsic awareness theorist begins with a pair of principles about *real* properties. We will worry later about exactly what a real property is:

- I1. It is *a priori* that for any real property *G*, all possible instances of *G* resemble one another perfectly.<sup>68</sup>
- I2. It is *a priori* that any two entities resemble one another perfectly just in case they are intrinsically identical.<sup>69</sup>

Assume that all logical consequences of *a priori* truths are themselves *a priori*. Then I1 and I2 entail:

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<sup>67</sup> See Ivanov (2019).

<sup>68</sup> Ibid, p. 158.

<sup>69</sup> Perhaps *modulo* haecceitistic aspects (if haecceities are understood as intrinsic).

I3. It is *a priori* that for any real property  $G$ , all possible instances of  $G$  are intrinsically identical.

To express I3 in another way:

I4. It is *a priori* that for any higher-order property  $H$  of any first-order real property  $G$ , if  $H$  is an intrinsic property, then all possible instances of  $G$  have  $H$ .

We now arrive at the pivotal idea. The intrinsic awareness theorist advances a proposal about what essential properties are: they are simply *intrinsic properties that an entity has necessarily*. This proposal is moreover meant to be *a priori*:

I5. It is *a priori* that:  $F$  is an essential property of  $x$  iff (i)  $F$  is an intrinsic property, and (ii) necessarily, if  $x$  exists, then  $x$  has  $F$ .<sup>70</sup>

At this point, the intrinsic awareness theorist has all of the pieces that she needs. She is ready to explain how experience positions us to know many essential truths about the sensory qualities. To illustrate the idea, suppose that purple is just a combination of bluishness and reddishness. Then the intrinsic awareness theorist can say this:

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<sup>70</sup> Ivanov borrows this account from Denby (2014).



I6. Experiencing purple positions the subject to know that purple is a real property with the higher-order intrinsic properties of being bluish and being reddish.<sup>71</sup>

In short, I4 tells us that it is *a priori* that higher-order intrinsic properties of real properties are had necessarily, and I6 tells us that experiencing purple teaches us its higher-order intrinsic properties. So:

I7. Experiencing purple positions the subject to know that (i) being bluish and being reddish are intrinsic properties, and (ii) necessarily, if purple exists, then it is bluish and reddish.

This satisfies the condition described in I5 for *a priori* knowledge of essentiality. Thus:

I8. Experiencing purple positions the subject to know that being bluish and being reddish are essential properties of purple.

And truths like I8 are precisely what require explanation. In this way, the intrinsic awareness theorist hopes to do the requisite explanatory work. Call this the *intrinsicity-to-essence account*.

I find this proposal to be elegant, even brilliant. How does the intrinsicity-to-essence account compare to Partial Revelation? Briefly, my answer is that the pluralist might wish to accept this account *in addition to* Partial Revelation, although she need not do so.

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<sup>71</sup> There is a pressure point here: it is not immediately obvious how the subject will know that purple is a *real* property. But perhaps the solution is to say that it is *a priori* that any intrinsic property is a real property.

An initial observation is that the intrinsicality-to-essence account is intended to entail Full Revelation.<sup>72</sup> However, I have already argued that Full Revelation is false. But there is an obvious way to weaken the account in light of this: the intrinsicality-to-essence theorist can say that deep awareness reveals *a substantial portion* (but not all!) of the intrinsic character of its targets. It is this version of the intrinsicality-to-essence account that I will consider below.

So understood, the intrinsicality-to-essence account is not in competition with Partial Revelation – quite the opposite! The intrinsicality-to-essence account begins with what it takes to be metaphysically prior claims about awareness of intrinsicality. It then uses these to derive claims such as I8, which are instances of Partial Revelation. Thus the intrinsicality-to-essence theorist is offering an explanation of *why* Partial Revelation is true. The pluralist is welcome to help herself to this explanation.

I feel some temptation to do just that. But it is not entirely clear to me whether I should, for I see some objections to the proposal.

One objection is to I5 – again:

I5. It is *a priori* that:  $F$  is an essential property of  $x$  iff (i)  $F$  is an intrinsic property, and  
(ii) necessarily, if  $x$  exists, then  $x$  has  $F$ .<sup>73</sup>

The left-to-right direction of this claim seems to be subject to obvious counterexamples. It is often thought to be an essential property of Socrates that he had the particular parents that he did; it is often thought to be essential to any mammal that it have the right ancestry; it is often

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<sup>72</sup> Ivanov makes this explicit: “If Revelation is the case, experiencing such properties places us in a position to know exactly and fully what they are like. For example, supposing Purple is essentially compound in hue, experiencing Purple should put one in a position to know this” (ibid, p. 147).

<sup>73</sup> Ivanov borrows this account from Denby (2014).

thought to be essential to my concept of water that it stand in a particular relation (historical, nomological, or what-have-you) to actual water. None of these apparently essential properties are intrinsic.

However, only the right-to-left direction of I5 is actually needed to derive Partial Revelation. I cannot immediately think of any counterexamples to this direction of the claim. So perhaps the derivation goes through after all.

New problems arise when we turn to I6, which speaks of higher-order intrinsic properties of properties such as purple. I find this talk somewhat puzzling. I understand what it is for a property *of a particular* to be intrinsic to it. I do not understand in general what it is for a higher-order property *of a property* to be intrinsic to it. Consider the property of *being a parent*. To have this property is to stand in the relation of parenthood to another. What is intrinsic to this property? I do not even know how to make sense of this question, much less answer it.

But perhaps this problem can also be solved: perhaps it makes sense to speak of what is intrinsic or extrinsic *to an intrinsic property*. It is intrinsic to purple to be bluish, but extrinsic to it to be the color of a famous fictional dinosaur. If this idea is adopted, and if purple is an intrinsic property – which it might reasonably be taken to be – then again the derivation might go through.

In short, the intrinsicality-to-essence account is an intriguing proposal for how to ground the truth of Partial Revelation. I am tentatively sympathetic to it.

## Appendix 3L. The propositional awareness account

There are many mental attitudes that initially appear to resist analysis in propositional terms. Take Lauren Groff's novel *Fates and Furies*, for example, in which Lotto loves Mathilde. Lotto's love, it seems, cannot be analyzed propositionally. After all, it does not reduce to his loving that

Mathilde exists, or to his loving the fact that she looks the way that she does.<sup>74</sup> But perhaps appearances are misleading! It has been suggested that many apparently non-propositional attitudes, Lotto's love included, do in fact reduce to propositional attitudes. The idea is to analyze love of someone, not in terms of love of propositions about that individual, but in terms of a *syndrome of desires* – desires that certain propositions about that individual be true. On this approach, Lotto's love of Mathilde is nothing more than his desiring that he be near her, that she stay safe, that he have sexual encounters with her, that she reciprocate his love, and so on.<sup>75</sup>

In a kindred spirit, some have offered the following account of deep awareness in terms of propositional attitudes:

The *propositional account*: To have deep awareness of a sensory quality is to stand in a special relation, the relation of *sensorily entertaining*, to first-order and higher-order propositions involving that quality.<sup>76</sup>

The idea is that to be deeply aware of scarlet is to sensorily entertain various propositions, such as the proposition that it lies in the essence of scarlet to be reddish and yellowish to certain degrees.<sup>77</sup>

The propositional account has several important advantages. It allows for an immediate explanation of Partial Revelation: the latter thesis is true because being deeply aware of a sensory quality is a matter of sensorily entertaining certain propositions about that quality, *including some essential truths about it*. The propositional account also has the advantage of not entailing Full

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<sup>74</sup> For reasoning along these lines, see Tye (2009, pp. 99-100); xxx.

<sup>75</sup> See Sinhababu (2015).

<sup>76</sup> This view is defended throughout Pautz (2007), but see especially p. 508.

<sup>77</sup> Pautz does not mention essences, but this is an obvious way for him to account for the truth of Partial Revelation.

Revelation, a thesis that we have found to be too strong. Finally, the account is perfectly compatible with pluralism.<sup>78</sup> Should we accept it, then?

I worry that the account faces a number of serious objections.

*First objection.* Experiencing scarlet positions the subject to make singular reference to that sensory quality. However, it does not position the subject to make singular reference to mango-yellow or pure yellow. If a subject has never experienced any colors, then enjoying her first experience of scarlet will not by itself position her to conceive of these other colors at all. The propositional account struggles to explain why not. It says that seeing scarlet is a matter of sensorily entertaining various propositions, such as the proposition that it lies in the essence of scarlet to be reddish and yellowish to certain degrees. But mango-yellow is just a color that is reddish and yellowish to a different degree. Likewise for pure yellow, which is perfectly yellowish but not at all reddish. Why then can't the subject conceive of them simply upon experiencing scarlet?

*Second objection.* It is counterintuitive to say that experiencing scarlet is *just* a matter of representing propositions about scarlet. Experiencing scarlet does not seem to *just brutally* position the subject to know truths about scarlet. It seems to confront her with the *basis* for that knowledge.

*Third objection.* Deep awareness of scarlet is *substantive* in some hard-to-articulate sense. The propositional account reduces deep awareness of scarlet to the relation of sensorily entertaining propositions concerning second-order properties of scarlet, such as reddishness and yellowishness. Presumably, then, it is because we sensorily entertain these propositions that our

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<sup>78</sup> Pautz develops the account by saying sensorily entertaining is a form of representation: we can sensorily entertain false propositions about sensory qualities. This commitment is incompatible with pluralism, since the pluralist regards deep awareness as a non-representational relation. However, the commitment is optional, and even if we take it on board the resulting position might still be very similar to pluralism.

deep awareness of scarlet is substantive. I say that this generates a dilemma that turns on the following question: is our awareness of reddishness and yellowishness substantive or not?

On the first horn, we answer that it is. Since the propositional theorist says that awareness of a property  $F$  is *substantive* in virtue of the subject's sensorily entertaining propositions involving higher-order properties of  $F$ , she must now postulate that we sensorily entertain propositions involving third-order properties of these second-order properties. Is *this* awareness substantive or not? If so, then the propositional theorist must posit fourth-order awareness to explain that, and so on infinitely. However, it is not plausible that we have an infinitely-layered awareness of this kind. Meanwhile, if the propositional theorist answers at any point that such awareness is *not* substantive, then she will be thrown onto the second horn of the dilemma.

On the second horn of the dilemma, the propositional theorist answers that no, our awareness of the relevant second-order properties is *not* substantive. The trouble is that deep awareness cannot be assembled purely from pieces of non-deep awareness.

By analogy, suppose that I am sitting in a windowless room looking at a computer screen. Outside my room, there is a radar that scans the objects passing by and detects the degree to which each object has various gradable properties. I have no idea what properties these are. But as the radar does its work, all of this information is collected and sent to my computer screen. Now, the radar might tell me that it has just detected an object with property  $F$ , which by its nature has 20% of property 1 and 83% of property 2. Next, it might tell me that it has detected a second object with property  $G$ , which by its nature has 75% of property 1 and 54% of property 2. Finally, it might tell me that it has detected a third object property  $H$ , which by its nature has 97% of property 1 and 3% of property 2. Seeing the results of the radar will position me to know certain essential truths about properties  $F$ ,  $G$ , and  $H$ , but my awareness of these properties will obviously fail to be *substantive* in the sense that we have been discussing.

I find this point obvious. Still, Appendix 3J spells out the details for the skeptical reader. In any case, these are my reasons for rejecting the propositional account.

### Appendix 3M. The propositional account, cont.

Here I continue to argue that the propositional account is inadequate. I am considering the version of the account that says this: (i) sensorily entertaining propositions about higher-order properties of a sensory quality amounts to substantive awareness of that sensory quality, but (ii) it does not amount to substantive awareness of the higher-order properties. I submit that on this view, it is very difficult to explain why deep awareness positions the subject to know certain *non-identities*.

For example, suppose that I see the color scarlet and then hear the sound of a cello playing middle-C. On that basis, I will find it thunderingly obvious that scarlet is distinct from cello middle-C. Why?

On the propositional account, what I am doing is sensorily entertaining the proposition that scarlet has certain higher-order properties (*inter alia*), and likewise for cello middle-C. I might represent scarlet as having 20% of property 1, 50% of property 2, and 80% of property 3, and I might also represent the sound of the cello as having 20% of property 4, 50% of property 5, and 80% of property 6. *But, for all I know, property 1 is identical to property 4, property 2 is identical to property 5, and property 3 is identical to property 6.* For we are currently considering the horn of the dilemma on which awareness of higher-order properties is *not* substantive, but rather blind. And, in this case, the *percentages* match. So it should be an open question for me whether scarlet is identical to cello middle-C. This is not an open question.

I have no doubt that this particular example is not well-constructed. Still, it is easy to see how to revise the case so that these explanations cannot be given.

*First revision.* The percentages of hue, saturation, and lightness found in scarlet no doubt fail to match the percentages of frequency, pitch, and volume found in cello middle-C. That information would be enough for a subject to tell that scarlet is not cello middle-C. But that is not relevant, since as long as these higher-order properties come in percentages, we can find *some* sound such that its frequency, pitch, and volume *do* match the exact percentages of the corresponding properties found in scarlet.<sup>79</sup>

*Second revision.* It is very likely that sound perception involves awareness of a greater number of higher-order properties than color perception. Experience of color arguably involves awareness of only three types of higher-order properties: hue, saturation, and lightness. But sound perception might well involve awareness of pitch, loudness, phase, timbre, and more. If scarlet is composed of fewer higher-order properties than every sound, and if these facts are sensorily entertained, then this would also be enough for a subject to tell that scarlet is distinct from any sound.

But this concern can be avoided. For surely there are possible subjects who perceive *sub-sounds*: sound-like properties that are composed of some but not all of the higher-order properties that compose sounds. Thus there is a sub-sound that is composed only of pitch, loudness, and timbre. And it is perfectly obvious that there are possible subjects who would be able to know just on the basis of experience that scarlet is distinct from any sub-sound.

*Third revision.* The higher-order properties that compose colors do not have the same structure as the higher-order properties that compose sounds. For example, loudness arguably has no maximum bound – for any sound, there is a possible louder sound – and so loudness cannot be aptly represented as a percentage. By contrast, hue, saturation, and brightness arguably each

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<sup>79</sup> Note that Pautz (2007, p. 508) does express the propositions in question in terms of percentages.



have a maximum bound. That information would allow the subject to tell that scarlet is distinct from any sound.

This is probably true, but it is not of much consequence. For, again, there are possible creatures who detect sub-sounds – sound-like properties that are composed of some but not all of the higher-order properties that compose sounds – such that each of these higher-order properties has the same structure as hue, saturation, and lightness. In fact, the point comes out most clearly in a stripped-down case: imagine a creature who can detect *sub-colors* (understood analogously with sub-sounds) that are composed only of a single higher-order property that comes in percentages. And imagine that this creature can also detect sub-sounds that are likewise composed only of a single higher-order property that comes in percentages. It is still perfectly obvious that these possible creatures would be in a position to know that any sub-color is distinct from any sub-sound.

Thus we can reconstruct our objection as follows. There are various pairs of sub-colors and sub-sounds that are structurally identical, but substantively different, in terms of the higher-order properties that compose them. And on the present horn of the dilemma, the propositional theorist says that we experientially distinguish such properties only on the basis of their structures, so she predicts that it will be impossible to experientially distinguish these sub-colors from the matching sub-sounds. But this is false: for any such matching pair, there is a possible creature who can distinguish the sub-color from the sub-sound just on the basis of her experience, in much the same way that we can tell that scarlet is distinct from cello middle-C.

Perhaps the higher-order theorist will respond that any sub-sound must have a different spatial profile than any sub-color: the former seem to occupy volumes of space, while the latter seem to occupy surfaces of space. But this claim is simply false. Scarlet can also appear to occupy a volume of space – just think of a glass of water that has been dyed scarlet.

Finally, the higher-order theorist might suggest that just as we have brute knowledge of certain higher-order properties of scarlet, we also have brute knowledge that any color is distinct from any sound, from any taste, and so on. We also have brute knowledge that hue, saturation, and lightness are all distinct from timbre, pitch, and loudness. And this brute knowledge would just amount to knowledge of the relevant non-identities.

But even if this suggestion is true – and I would find this surprising – it does not help. Let us grant that there is just a *brute* way to tell, without any further reflection, that (say) hue is distinct from timbre. I find it obvious that there is *also* a *non-brute* way to tell that hue is distinct from timbre. In particular, I find it obvious that I can reflect on what hue and timbre are each like, substantively. I can see a range of colors that are all the same hue, while differing in their saturation and brightness, and likewise I can hear a range of sounds that are all of the same timbre, while differing in their other sound properties. And I can conclude *on this basis* that hue and timbre are distinct. Yet the present proposal predicts that I can know this *only in a baseless way*.

For these reasons, I stand by my third objection to the propositional account of deep awareness.

## Appendix 3N. Objections from the unity of perceptual consciousness

It is first-personally clear that perceptual consciousness is *unified*. Here I consider some objections to pluralism based on observations in this vicinity.

One objection is simply that the pluralist has no way to account for the unity of perceptual consciousness. I will give an analogy from philosophy of language to explain where I think this objection goes wrong. Consider *declarative sentences*, which are syntactically unified in an obvious sense: they express propositions. Sentences consist of words that belong to very different

categories: nouns, verbs, etc. That is evidently not an obstacle to the syntactic unity of the sentence. Why should a similar fact be an obstacle to the conscious unity of a perception?<sup>80</sup>

There is another objection worth considering. The pluralist says that perceptions involve two different kinds of awareness, namely successful sensory representation and deep awareness, with targets belonging to two different metaphysical categories, namely particulars and universals. However, neither of these differences show up in the first-personal appearances. This might seem to put pressure on pluralism.

I grant the premise of this objection: I do not find it first-personally evident that there are two kinds of awareness here, nor that there are two different kinds of targets. If such facts were evident, pluralism would not be a novel theory, but a part of commonsense. However, I deny that this is problematic, for the pluralist does not predict that any of this would show up in the first-personal appearances.

The pluralist is committed to saying that the *targets* of perceptual awareness are first-personally evident. And they are! Suppose that I see a brown sofa. The pluralist says that I am presented with the sofa and its instance of brown, that I am deeply aware of the universal brown, and that I take the property-instance to be an instance of the universal. Thus she predicts that the sofa, its instance of brown, and the universal brown will all be first-personally evident. That is correct. She further predicts that there will appear to be an intimate relationship between the instance of brown and the universal brown, insofar as I take the former to be an instance of the latter. This is also correct. What is more, she predicts that I will be able to mentally separate the instance from the universal. This, too, is correct, as I argued in §5 of this chapter. Finally, the

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<sup>80</sup> Or take *propositions*. These are semantically unified in an obvious sense: they are the bearers of truth or falsity. On some views, however, the constituents of a single proposition might belong to quite different metaphysical categories. Take the proposition <this ball is round>: a Russellian might say that this proposition is constituted of a *particular*, a certain ball, and a *property*, roundness. This is no obstacle to the semantic unity of the proposition.

pluralist says that my deep awareness will (correctly) seem to position the subject to know certain truths about the essences of brown. I have been arguing throughout this chapter that this prediction is correct.

These are all genuine commitments of pluralism. But there is nothing in the pluralist theory to suggest that it will be first-personally evident that perception involves two kinds of awareness, or that the targets of perceptual awareness belong to two different metaphysical categories. The first-personal appearances do not directly speak to these claims. They only leave data that permit us to give a theoretical argument for these claims. This is another respect in which perceptions are like sentences: a native speaker does not have direct first-personal access to the different syntactic types of words (nouns, verbs, ...) that her sentences contain.

## Appendix 3O. Johnston's theory of perception

I owe a deep intellectual debt to the work of Mark Johnston. Johnston has famously argued that perceptions involve perceptual awareness of states of affairs in which certain particulars instantiate certain complexes of universals, while hallucinations involve perceptual awareness of those complexes of universals alone:

Your seeing the scene before your eyes is your being visually aware of a host of spatio-temporal particulars instantiating parts of such a profile or complex of sensible qualities and relations. The suggestion is that in the corresponding case of a subjectively indistinguishable hallucination you are simply aware of the partly qualitative, partly relational profile. (2004, p. 135)

The pluralist accepts a picture very much like this. The pluralist also takes obvious inspiration from Johnston's defense of Full Revelation.

Still, there are two important differences between our theories. First, Johnston is sympathetic to Full Revelation. I prefer Partial Revelation. I have already given direct arguments for this preference.

The second important difference between Johnston's theory and mine is that Johnston seems to accept *monism*, the view that seeing a scarlet bell pepper essentially involves at most one kind of direct awareness-of. Johnston seems to take monism for granted that in the quotation given above: he refers to what appears to be a *single* relation of visual awareness that is directed at particulars and complexes of universals alike. Even if he does not explicitly commit to this claim, I cannot find any hint in his work to the contrary.

I have given many arguments in §2-§4 of this chapter for the pluralist's claim that there are two very different awareness relations instead. For instance, I have said that this would explain why experience reveals essential truths about sensory qualities but not ordinary objects; why there are hard problems about the external world for sensory qualities but not for ordinary objects; and why there are *more* hard problems regarding consciousness of sensory qualities than consciousness of ordinary objects. I would add that because Johnston accepts Full Revelation, his own theory puts pressure on him to adopt the pluralist's way of thinking. It is very hard to see how a single kind of relation could reveal the complete essences of the colors while revealing nothing of the essences of ordinary objects or natural kind properties.<sup>81</sup>

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<sup>81</sup> Conduct (2012) develops a view very similar to Johnston's, although he does not commit to any version of Revelation. Again, I would argue that this view cannot explain all of the data described in §2-§4 of this chapter.