IN DEFENSE OF PERCEPTUAL CONTENT

Susanna Schellenberg Rutgers University

This paper defends the thesis that perception is constitutively a matter of representing the environment.

Content Thesis: A subject S's perceptual state M brought about by being perceptually related to a particular α is constituted by content c in virtue of S representing α .

The content thesis figures prominently in the work of thinkers as different as Evans (1982), Searle (1983), Peacocke (1983), McDowell (1994), Dretske (1995), Tye (1995), Chalmers (1996), and Byrne (2001) and can be traced back to at least Kant.¹

It has, however, been questioned by austere relationalists such as Campbell (2002), Travis (2004), Soteriou (2005), Brewer (2006), Fish (2009), Logue (2012), and Genone (2014) among others.² According to austere relationalists, perception is not representational, but rather constitutively a matter of a subject being perceptually related to mind-independent objects, properties, or events; alternatively, perception is understood as the event in which such relations obtain. Needless to say, one can endorse the content thesis while holding that, at least in the case of accurate perception, we are perceptually related to particulars in our environment. As I will explain in more detail, the question at stake is how much is built into the perceptual relation and, in particular, whether this relation is an acquaintance relation.

I will defend the content thesis against austere relationalists. The aim is twofold: to consider in detail the austere relationalist objections to the content thesis and to develop and defend a version of the content thesis that does not fall prey to these objections. I will argue that on a relational view of perceptual content, the fundamental insights of austere relationalism do not compete with representationalism. I contend that the objections to the content thesis either do not pass muster or are objections only against austere representationalism—that is, the view on which perceptual relations to the particulars perceived make no constitutive difference to perceptual content.

Against austere relationalists, I argue that perceptual relations to particulars neither ground nor explain perceptual representations: being perceptually related to particulars in one's environment is neither metaphysically nor explanatorily more basic than representing those particulars. Nor is it the case, however, that perceptual representations ground or explain perceptual relations to the particulars perceived. I argue rather that perceptual relations and representations are mutually dependent: in being perceptually related to particulars in one's environment, one employs perceptual capacities, thereby yielding representational states. So with austere relationalists, I argue that perception is constitutively relational. But against austere relationalists, I argue that it is constitutively both relational and representational.

In Section 1, I discuss what is at stake in the debate over whether perception has content and critically examine one way in which one might attempt to argue for the content thesis. In Section 2, I distinguish three central choice points for any account of perceptual content. In Section 3, I identify the five main objections that austere relationalists have articulated against the content thesis. In Section 4, I defend the content thesis. In Section 5, I qualify the notion of content established by the argument for the content thesis by arguing that perceptual content is relational content. I defend the view that perceptual content is relational content by considering each austere relationalist objection in turn.

1. What is at Stake?

Why should we be concerned with defending the content thesis? There are at least seven intuitive reasons to think that perceptual states have content.

One reason is to account for the fact that our environment can either be or fail to be the way it seems to us. In other words, the way our environment seems to us is assessable for accuracy. If perceptual states have content, then we can explain this phenomenon in terms of the content of the perceptual state.

A second reason is to account for the fineness of grain of perceptual experience. The very same scene perceived from the very same angle can be perceived in a number of different ways. Take Mach's example of perceiving a shape first as a square and then as a diamond, with no change in vantage point. Arguably, in such a situation, the phenomenal character of the two perceptual states differs despite there being no difference in the perceiver's environment. If perceptual states have content, this difference in phenomenal character can be accounted for by appealing to differences in the way the subject represents her environment. If all we had were the fact that we were perceptually related to the shape, then it is not clear how we could explain this difference in phenomenal character. After all, there is no difference in the environment. There is only a difference in the way in which the environment is perceived.

A third reason is to explain how we can remember past perceptions. If perceptual states have content, then we can account for the memory of a perception in terms of recalling or reconstructing its representational content.

A fourth related reason is to explain the phenomena of fading and distorted memories. If perceptual states have content, then we can explain these phenomena in terms of changes in the stored perceptual content or changes in the way the stored content is retrieved or reconstructed. If perception is not understood as a matter of representing one's environment, this option is not available and it is not clear how else to explain these phenomena.

A fifth reason is to account for the phenomenal character of illusions and hallucinations. Austere relationalists argue that phenomenal character is constituted simply by (perceptual relations to) the particulars perceived. In orthodox cases of hallucination, we fail to be perceptually related to the mind-independent object that it seems to us we are perceiving. Likewise, in orthodox cases of illusion, we fail to be related to a property-instance that it seems to us we are perceiving. If phenomenal character is accounted for simply in terms of (relations to) perceived particulars, it is on the face of it mysterious how to account for the phenomenal character of illusions and hallucinations. If experiential states have content, however, we can account for the phenomenal character of illusions and hallucinations in terms of their content.

A sixth reason is to give a unified account of the phenomenal character of perception, hallucination, and illusion. An elegant way to do so is to argue that all three experiential states have content and that this content grounds their phenomenal character.

A seventh reason is to account for the phenomenal impact of top-down effects on perception. A sentence uttered in Urdu sounds different to a native speaker than it does to somebody unfamiliar with the language. If I possess the concept of a skyscraper, then one can argue that a tall building looks different than if I do not possess the concept.⁴ If perceptual states have content, then these differences can be accounted for in terms of the impact of possession of such concepts on perceptual content.

2. Perception and Representation

As austere relationalists point out, the content thesis is often assumed, but rarely argued for. Representationalists typically do not bother to defend the thesis that perception is representational, but rather immediately proceed to develop a specific way of understanding the nature of perceptual content. I use the label "representationalism" for any view that endorses the content thesis. So as to avoid terminological confusion, it is important to distinguish this view from the more specific view according to which phenomenal character is grounded in perceptual content. Such views are sometimes labeled "representationalism" rather than the more traditional "intentionalism." I will reserve

"representationalism" for any view that endorses the content thesis irrespective of how the view conceives of the relationship between perceptual content and phenomenal character.

The most minimal representationalist commitment is that perception is a matter of a subject representing her environment. There are many different ways of understanding the nature of content given this constraint. More specifically, there are three critical choice points for any view of perceptual content.

One choice point concerns how to understand the nature of perceptual content. Any view of perceptual content must take a stance on at least four questions. One is whether the content is understood in terms of a Russellian proposition, a possible world proposition, a Fregean sense, an indexical content, a map of the environment, an image-like representation, or in some other way. A second is whether perceptual content is conceptually or nonconceptually structured. A third is whether or not perceptual content is propositionally structured. A fourth is whether the content is constituted by the particulars perceived, or whether it is only internally individuated and so in no sense constituted by the particulars perceived.

I will consider the fourth question in more detail, since it is crucial in the debate on whether perception is representational, relational, or constitutively both representational and relational.⁶ According to austere representationalism, perceptual content is internally individuated—internally individuated in the sense that it is not in any way constituted by the mind-independent particulars perceived.⁷ The view is austere since it leaves no room for perceptual relations to make a constitutive difference to perceptual content. The only difference between subjectively indistinguishable experiences in distinct environments is a difference in the causal relation between the experiencing subject and her environment and this difference in causal relation has no repercussions for the content of the experiencing subject's mental state. On such a view, perceptual content can be analyzed in terms of existentially quantified content of the form that there is an object x that instantiates a certain property F: $(\exists x)Fx$. So perceptual states represent only that there is an object with the relevant properties in the perceiver's environment. No element of the content constitutively depends on whether such an object is in fact present. Austere representationalism has it that the content lays down a condition that something must satisfy to be the object determined by the content. The condition to be satisfied does not constitutively depend on the object that satisfies it. Of course, the object perceived does not fall out of the picture altogether on an austere representationalist view. The content of a perceptual state is accurate only if there is an object at the relevant location that instantiates the properties specified by the content. But the important point is that whether an object of the right kind is present has a bearing only on the accuracy of the content, not on the content proper.

We can contrast such a generalist view of perceptual content with a relational content view. While general content is the very same regardless of the perceiver's

environment, relational content differs depending on which environmental particulars (if any) the subject perceives. The token relational content covaries with the environment of the experiencing subject. In the case of a successful perception, the token content determines a referent and is constituted by the particular perceived. Thus, it is singular content. When I say that A is constituted by B, I mean always partial constitution, allowing that A may be constituted by both B and C. Moreover, if A is constituted by B that does not imply that A is materially constituted by B.

So far, we have distinguished different ways of understanding the nature of perceptual content. A second choice point for any view of perceptual content concerns how to understand the relationship between the content of a perceptual state and its phenomenal character. One might argue that any facts about phenomenal character are facts about content. Alternatively, one might maintain either that content is grounded in phenomenal character or that phenomenal character is grounded in content. Or, one might treat content and phenomenal character as independent elements of perceptual states, thereby denying that there is any grounding relation between them.

A third choice point concerns how to understand the relationship between the perceiver and the content of her perceptual state. To avoid verbal disputes, this choice point is critical in the discussion of whether perceptual states have content. Therefore, I will address the different options in some detail.

The content thesis must be distinguished from a thesis on which the relation between the perceiver and the content of her perceptual state is one of mere association. We can call this the association thesis.

Association Thesis: Every perceptual state can be associated with content in the sense that sentences can be articulated that describe how the environment seems to the subject. The content so expressed need not be constitutive of the perceptual state.

Any account of perception can accept the association thesis. After all, any account can accept the fact that a perceptual experience can be at least partially described. But this fact does not entail that the perceptual state has the content that is expressed with the description. Likewise, a painting can be described, but it does not follow from this that the painting has the content that is expressed with the description. So the association thesis does not entail the content thesis. According to the content thesis, perceptual content is not merely associated with a perceptual state, but is constitutive of a perceptual state.

To explain in more detail how the content thesis and the association thesis differ, consider the following attempt to establish the content thesis by appealing to the relation between sensory awareness, accuracy conditions, and perceptual content.¹²

The Association Argument

- 1. If a subject S perceives a particular α (while not suffering from blindsight or any other form of unconscious perception), then S is sensorily aware of α .
- 2. If S is sensorily aware of α , then α sensorily seems a certain way to S due to S perceiving α .
- 3. If α sensorily seems a certain way to S due to S perceiving α , then S is in a perceptual state M with content c, where c corresponds to the way α sensorily seems to S.

From 1–3: If S perceives α (while not suffering from blindsight or any other form of unconscious perception), then S is in a perceptual state M with content c, where c corresponds to the way α sensorily seems to S.

- 4. α is either the way it sensorily seems to S or it is different from the way it sensorily seems to S.
- 5. If S is in a perceptual state M with content c, where c corresponds to the way α sensorily seems to S, then the content c of S's perceptual state M is either accurate or inaccurate with regard to α .

From 1–5: If S perceives α (while not suffering from blindsight or any other form of unconscious perception), then S is in a perceptual state M with content c, where c corresponds to the way α sensorily seems to S, and the content c of S's perceptual state M is either accurate or inaccurate with regard to α .

Note that the conclusion of this argument is not the content thesis. The association argument establishes that if the environment seems a certain way to a perceiver, then she is in a perceptual state that can be characterized with content where that content corresponds to the way the environment seems to her. So while the argument establishes that there is a link between phenomenal character and perceptual content, it does not establish the content thesis.

We can accept that there is a notion of content on which perceptual content corresponds to the phenomenal character of the relevant perceptual state. Let's call this connection between perceptual consciousness and content the *consciousness-content link*. While we can accept that there is such a consciousness-content link, accepting such a consciousness-content link does not show that perception is constitutively representational. Accepting such a consciousness-content link is compatible not only with almost any view of the nature of perception, it is compatible with almost any notion of perceptual content. Indeed, the notion of perceptual content established by the association argument is compatible with accepting only the association thesis. So it does not give support to the thesis that perception is constitutively a matter of representing the environment.

Any account that endorses the content thesis needs to explain not only the structure and nature of perceptual content, but also in virtue of what this content

is a constitutive aspect of the relevant perceptual state. A view of perceptual content that fails to give an account of what it is about perception such that the perceptual state is characterized by content does not establish more than the association thesis.

Now, there are different versions of the content thesis, some more controversial than others. A controversial version of the content thesis has it that the relationship between the perceiver and the content of her perceptual state is that of a propositional attitude:

Propositional Attitude Thesis: A perceiver stands in a propositional attitude to the content of her perceptual state.

The propositional attitude thesis posits both that perceptual content is a proposition and that perception is a matter of standing in a certain attitudinal relation to this proposition, analogous to the sense in which one might say that belief is a matter of standing in the believing relation to the propositional content of the belief. English does not have a word to denote such a perceptual attitudinal relation. Byrne (2009: 437) calls the relation the ex-ing relation; Pautz (2010: 54) calls it the sensorily entertaining relation; Siegel (2010: 22) calls it the A-relation. While the propositional attitude thesis is a version of the content thesis, we can accept the content thesis without accepting the propositional attitude thesis. The content thesis is committed neither to perceptual content being a proposition nor to the perceiver standing in a propositional attitude to that content.

An even more controversial version of the content thesis has it that the relation between the perceiver and the content of her perceptual state is an awareness relation:

Awareness Thesis: A perceiver stands in an awareness relation to the representational content of her perceptual state.

The awareness thesis originates with Russell (1913), who argued that a perceiver is acquainted with particulars that are constituents of the representational content of her perceptual state. ¹³ While Russell did not explicitly argue that a perceiver is aware of representational content, some representationalist views that claim descent from Russell are formulated in a way that suggests a commitment to the awareness thesis. As in the case of the propositional attitude thesis, the awareness thesis entails the content thesis, but not vice versa: we can accept the content thesis without accepting that perceivers stand in any kind of awareness relation to the content of their perceptual states, or indeed the constituents of that content.

It is important to emphasize that endorsing the content thesis does not commit one to endorsing either the awareness or the propositional attitude theses, since at least some austere relationalist arguments against the content thesis make the mistake of assuming exactly that (e.g. Travis 2004). Once one recognizes that

the content thesis does not in fact entail these controversial versions of the thesis, those arguments lose their force.

To establish the association thesis is to establish almost nothing. To commit to the awareness or propositional attitude thesis is to commit to too much. Fortunately, there is a middle way between these two options. Perceptual states can be understood as representing the subject's environment where the representational content is constitutive of the perceptual state, without the subject either being aware of that content or bearing a propositional attitude to it. We can call this middle way the *representation thesis*.

There are several possible ways of precisifying this thesis. One such way is the following: representing perceived particulars is a matter of employing perceptual capacities by means of which one discriminates and singles out those particulars. More precisely, the content of the perceptual state is constituted by the perceptual capacities employed and the particulars thereby singled out. So far there is no need to say that one is either aware of that content or bears a propositional attitude to it

What happens in the case of hallucination or illusion? In those cases, one employs the very same perceptual capacities that one would employ in a perception with the same phenomenal character, but one fails to discriminate and single out a mind-independent particular. The content of the relevant state is constituted by the perceptual capacities employed. As in the perceptual case, there is no need to say that one is aware of this content. Rather, one is intentionally directed at what seems to one to be a particular in one's environment in virtue of employing perceptual capacities. Moreover, the version of the representation thesis that I will defend is not committed to any version of the propositional attitude thesis. It is neither committed to the experiencing subject bearing a propositional attitude to the content of her experiential state, nor indeed is it committed to that content being a proposition. It is committed merely to the thesis that perceivers represent particulars under a mode of presentation. ¹⁴

In what follows, I will take a stance on all three choice points. I will argue that while some accounts of perceptual content fall prey to the austere relationalist objections, a view on which perceptual content is constituted by relational Fregean modes of presentation does not (1st choice point). On this view, the phenomenal character of a subject's perceptual state is grounded in its content (2nd choice point) and perceptual content is constitutive of perceptual states (3rd choice point). First, however, let's take a closer look at the nature of perceptual relations and the austere relationalist objections to the content thesis.

3. Perception and Relations

Austere relationalists have formulated at least five different objections to the content thesis. They can be summarized as follows:

The Phenomenological Objection: Representationalist views misconstrue the

phenomenological basis of perceptual states insofar as they detach the phenomenal character of perceptual states from relations to qualitative features of the environment (e.g. Campbell 2002, Martin 2002,

Brewer 2007).

The Epistemological Objection: Representationalist views do not properly account for

the epistemological role of perception. Only if perception is itself not representational can it constitute the evidential basis for perceptual knowledge of particulars (e.g. Campbell 2002,

Johnston 2014).

The Semantic Grounding Objection: Representationalist views cannot adequately account

for the fact that perception grounds demonstrative thoughts and singular thoughts about particulars in the environment. Moreover, they cannot adequately account for the fact that perceptual relations to the environment provide the ground for the possibility of thought and language (e.g. Campbell 2002, Brewer

2006).

The Accuracy Condition Objection: Perception is a relation between a perceiving subject

and her environment or, alternatively, an event in which such a relation obtains. Relations and events do not have accuracy conditions. So perception is not the kind of thing that can be accurate or inaccurate. If accounting for accuracy conditions is the reason for introducing content, then denying that perception has accuracy conditions undermines at least this reason for accepting the content thesis (e.g. Brewer 2006).

The Indeterminacy Objection: If perceptual states have representational content,

then the way an object looks on a given occasion must fix the representational content of the perceptual state. The way an object looks on a given occasion does not, however, fix the representational content of the perceptual state. Therefore, perceptual states do not have representational content (e.g. Travis 2004). 16

In light of these five objections, austere relationalism rejects the content thesis. The central positive idea of austere relationalism is that perception is constitutively a matter of a subject standing in an awareness or an acquaintance relation to a particular: a mind-independent object, a property that this object instantiates, an event, or a combination thereof (Campbell 2002, Brewer 2006). Alternatively, perception is analyzed as an event in which such relations obtain (Martin 2002). Austere relationalist views differ further on whether perceivers are perceptually related only to objects in their environment (Brewer 2006, 2011) or whether they are also related to the properties that these objects instantiate (Campbell 2002). Views differ moreover on how the perceptual relation is understood: it can be understood as a sensory awareness relation or as an epistemic

acquaintance relation.¹⁷ Finally, views differ on how they oppose representationalism: while all austere relationalists agree that appeals to content are unnecessary to give a satisfying account of perception, some go a step further and argue that relationalism explains certain phenomena better than representationalism can. Some even argue that representationalism is flat-out incapable of accounting for certain phenomena that the relationalist can readily explain (e.g. Brewer 2006, 2011).

What austere relationalist views have in common is that they endorse the negative thesis that no appeal to representational content is necessary in a philosophical account of perception, in conjunction with the positive thesis that any perception constitutively involves at least three components: a subject, the environment of the subject, and a perceptual relation between the subject and particulars in that environment.

For the sake of specificity, I will focus on the simple case of a subject being acquainted with a mind-independent object that instantiates only one perceivable property. Everything I will say about this case needs to be modified only slightly to fit other versions of austere relationalism. I will specify these modifications where required to establish my argument. The case of a subject being acquainted with a mind-independent object that instantiates only one perceivable property is a model that requires making the simplifying assumption that there can be a perception of an object as instantiating only one perceivable property. Typical cases of perception are more complex: any visual perception of an object arguably involves perceiving at least a color and a spatial property that this object instantiates along with situation-dependent properties correlating with these color and spatial properties. Further, it is arguably possible to perceive a property-instance without perceiving an object that instantiates the relevant property. Finally, many perceptions are crossmodal in that they involve interactions between two or more different sensory modalities.

Given this simplifying assumption, the austere relationalist thesis can be articulated in the following way: a subject perceives a particular white cup only if she is acquainted with that particular white cup. Being acquainted with a white cup may in turn be analyzed in terms of being acquainted with a cup instantiating whiteness, where the relevant object and property-instance are (roughly) co-located. More generally, subject S perceives object o and any property-instance F only if S is acquainted with o and F, where o and F are (roughly) co-located.

Three clarifications are in order. First, austere relationalists do not deny that beliefs and judgments are formed on the basis of perception. So what is contentious is not whether perception brings about mental states with content. What is contentious is rather whether this content is constitutive of perceptual states.

Second, austere relationalists do not contest that perception involves informational processing. As Campbell argues (using the term cognitive rather than informational processing), "[o]n a Relational View of perception, we have to think of cognitive processing as 'revealing' the environment to the subject"

(2002: 118). Austere relationalist do not deny that perception involves informational processing, but rather insist that no appeal to representational content is necessary to explain the nature of the awareness of our surroundings that we have as a consequence of this processing. So while, for example, Campbell allows that representations play a role on a subpersonal level, he denies that any appeal to representational content is necessary to explain perception on a personal level.²⁰

Finally, austere relationalists need not deny that we can articulate propositions to express what we perceive. Acknowledging that a subject can articulate such propositions entails no commitment to her perceptual state being constituted by the content thereby articulated. It might be that the propositions articulated are merely associated with the perceptual state. In other words, austere relationalists can accept the association thesis.²¹

4. The Perceptual Content Argument

As austere relationalists point out, the content thesis is typically taken for granted and rarely argued for. To be sure, many views have been defended that rely on the content thesis. But more often than not such views simply assume that perception is representational and proceed to argue for one particular way of understanding its content. There are many ways one might argue that perception is constitutively representational. I will develop an argument in support of the content thesis drawing on the view that perception is constitutively a matter of employing perceptual capacities—that is, discriminatory, selective capacities.

The Perceptual Content Argument

- I. If a subject S perceives a particular α , then S discriminates and singles out α .
- II. If S discriminates and singles out α , then S is employing perceptual capacity C_{α} by means of which S discriminates and singles out α .
- III. If S is employing C_{α} by means of which S discriminates and singles out α , then S's perceptual state M brought about by being perceptually related to α and employing C_{α} is repeatable and has accuracy conditions.
- IV. If S's perceptual state M brought about by being perceptually related to α and constituted by employing C_{α} is repeatable and has accuracy conditions, then S's perceptual state M is constitutively a matter of representing α in virtue of employing C_{α} .
- V. If S's perceptual state M is constitutively a matter of representing α in virtue of employing C_{α} , then S's perceptual state M brought about by being perceptually related to α is constituted by content c in virtue of S representing α .

From I–V: If S perceives α , then S's perceptual state M brought about by being perceptually related to α is constituted by content c in virtue of S representing α .

In support of Premise I we can say that discriminating and singling out a particular from its surround is a minimal condition on perceiving the particular. For example, when Kim sees a white cup, she employs her capacity to discriminate white from other colors and to single out white in her environment. Similarly, she employs her capacity to differentiate and single out cup-shapes from other shapes in her environment. Such discriminatory activity allows for scene segmentation, border and edge detection, and region extraction.²² It is not clear how one could perceive a particular without at the very least discriminating and singling it out from its surround. For this reason, we can say that discriminating and singling out a particular from its surround is a minimal condition on perceiving the particular. If this is right, then perception is constitutively a matter of discriminating and singling out particulars.

Now, discriminating and singling out particulars requires employing perceptual capacities—namely, discriminatory, selective capacities (Premise II). A perceptual capacity is repeatable and, in employing a perceptual capacity, one either singles out the particular one purports to single out or one fails to do so. I will give support to each part of this claim in turn.

First, perceptual capacities are repeatable in that the very same perceptual capacity can be employed to single out particular α or to single out particular β , where α and β are both particulars of the type that the perceptual capacity functions to single out. For example, the perceptual capacity RED functions to single out any perceivable instance of red. So the same perceptual capacity can be employed in distinct environments. Moreover, the same perceptual capacity can be employed to single out α at time t_1 and at time t_2 and thus yield the same perceptual state at t_1 and t_2 . If this is right, then there is a repeatable element that is constitutive of perceptual states, namely, the perceptual capacities employed. And, with repeatability comes generality—for what it is for a capacity to be general simply is for it to be applicable across a variety of temporal and situational contexts. As a consequence, perceptual states have a general element. This general element is due to the nature of the perceptual capacities the employment of which constitute the perceptual state.

Being a repeatable capacity is, of course, not a sufficient condition for yielding a mental state characterized by representational content. After all, many things in the world have repeatable capacities without those capacities yielding mental states characterized by content. Being repeatable is, however, a necessary condition on yielding a mental state that is characterized by representational content. And the necessary condition is what we need.

When one is perceptually related to a scene, one employs perceptual capacities which may or may not function to single out the particulars present. If I employ my capacity to discriminate and single out red from other colors in an environment in which there is no instance of red, the content of my experiential state will be inaccurate in that respect.

Insofar as a perceptual capacity is repeatable and insofar as one either singles out the particular one purports to single out or one fails to do so, employing

perceptual capacities generates a perceptual state that is repeatable and has accuracy conditions (Premise III). Now, being repeatable and having accuracy conditions are jointly key features of representational content. So employing perceptual capacities yields perceptual states that exhibit key features of representational content: it yields a perceptual state that is repeatable and that can be accurate or inaccurate with regard to the particulars in the environment of the perceiver. If this is right, then the perceiver's perceptual state represents particulars in her environment in virtue of employing perceptual capacities (Premise IV).

So far, we have established that the perceiver's perceptual state is constitutively a matter of representing the particulars perceived in virtue of employing perceptual capacities. If that is right, then that perceptual state is constituted by content in virtue of employing those perceptual capacities (Premise V). Thus, our perceiver bears the representation relation to the content rather than the mere association relation. As a consequence, the notion of content established by Premises I–V goes beyond that established by the argument for associative content. Since S is arbitrarily chosen, the conclusion holds for any perceiver and so characterizes perception generally. Therefore, the argument establishes the content thesis.

5. The Relational Content Argument

How does the content thesis fare with regard to the five austere relationalist objections? Austere relationalists present us with a dilemma: either reject the thesis that perception has content or fail to adequately account for its epistemological, phenomenological, and representational role. In the rest of this paper, I will argue that we need not accept this dilemma since there is a view of perceptual content that circumvents the austere relationalist's objections. In doing so, I will argue that the content of perception should be understood as relational content.

More specifically, I will argue that if the phenomenological, epistemological, and semantic grounding objections carry any weight, then any austere representationalist is vulnerable to these objections. However, as I will argue, if content is understood to be relational content (and not general content as the austere representationalist holds), then the content thesis emerges unscathed. I will then argue that the indeterminacy objection and the accuracy condition objection are not objections to the content thesis, regardless of how perceptual content is understood.

So I will contend that the defender of the content thesis should embrace that content is relational content—be it the content of perception, hallucination, or illusion. Not only does such a view avoid objections to which the austere representationalist falls prey, such a view moreover accommodates the phenomenological, epistemological, and semantic grounding insights of austere relationalism. As I will show, such a view can explain phenomenal character in terms of perceptual relations to particulars and can explain how perception provides us with

knowledge of particular objects, grounds demonstrative reference, yields singular thoughts, fixes the reference of singular thoughts, and more generally grounds language in the world.

The relational content argument goes as follows:

The Relational Content Argument

From I: If a subject S perceives particular α , then S discriminates and singles out α .

- VI. If S discriminates and singles out α , then S is perceptually conscious of α in virtue of discriminating and singling out α .
- VII. If S is perceptually conscious of α in virtue of discriminating and singling out α , then S is perceptually conscious of α in virtue of employing perceptual capacity C_{α} by means of which she discriminates and singles out α .
- VIII. Perceptual capacities are by their nature linked to what they single out in the case of an accurate perception.

From I–IV: If S perceives a particular α , then S's perceptual state M is constitutively a matter of representing α in virtue of employing C_{α} .

IX. If S's perceptual state M is constitutively a matter of representing α in virtue of employing C_{α} and if perceptual capacities are by their nature linked to what they single out in the case of an accurate perception, then S's perceptual state M is constituted by relational content rc in virtue of S being perceptually related to α and of S representing α .

From I–IX: If S perceives α (while not suffering from blindsight or any other form of unconscious perception), then S's perceptual state M is constituted by relational content rc in virtue of S being perceptually related to α and of S representing α .

I will give support to the premises of this argument by discussing the austere relationalist objections to the content thesis.

5.1. The phenomenological objection

Austere relationalists argue that phenomenal character is constituted by the very mind-independent objects and properties of which one is aware when perceiving. As Campbell succinctly puts it:

On a Relational View, the phenomenal character of your experience, as you look around the room, is constituted by the actual layout of the room itself: which particular objects are there, their intrinsic properties, such as colour and shape, and how they are arranged in relation to one another and to you. (2002: 116; similarly, Martin 2002: 393 and Brewer 2007: 92f.)

Austere relationalists diverge regarding whether phenomenal character is constituted by mind-independent particulars *tout court* or by awareness or acquaintance relations to these particulars. They agree, however, that phenomenal character is externally determined.

The phenomenological objection has it that a view on which phenomenal character is grounded in content (rather than in the actual layout of the perceiver's surroundings) faces the problem that what constitutes the phenomenal character of the perceptual state is distinct from that of which the perceiver is aware—at least on representationalist views that deny that perceivers are aware of the content of their perceptual states. Moreover, any view that accounts for phenomenal character in terms of intentional objects, qualia, sense-data, or propositions faces the problem of why and how such peculiar entities bring about phenomenal states. In short, the objection is that explaining phenomenal character in terms of relations to anything other than the particulars perceived severs phenomenal character from that of which we are aware.

One could question how serious a problem the phenomenological objection is for austere representationalism. I will not pursue that matter here. Rather, I will, for the sake of argument, grant that phenomenal character should be analyzed in terms of perceptual relations to mind-independent particulars. I will argue that the phenomenological objection only threatens views on which phenomenal character is determined by its content, where that content is general. It does not threaten views on which phenomenal character is grounded in relational content. As I will show, if content is relational content, then the phenomenological objection can be circumvented and we can recognize the austere relationalist insight that phenomenal character is grounded in perceptual relations to the mind-independent particulars.

By arguing that the phenomenal character of perception, hallucination, and illusion is grounded in relational content, I go beyond austere relationalists: the view I defend does not only analyze the phenomenal character of perception in terms of relations to perceived particulars, it defends the more radical thesis that the phenomenal character of hallucination and illusion should be understood in this way as well.

Doing justice to the austere relationalist insight will require constraining the content thesis in two respects. First, the content of a perception is constituted at least in part by (perceptual relations to) the particulars perceived. Second, the content of an illusion or a hallucination is derivative of the content of perception insofar as it can be specified only with reference to the structure of the content of a perception with the same phenomenal character.

While austere relationalists argue that perceptual relations to the environment should be taken as explanatorily primary in an account of perceptual consciousness, austere representationalists instead take the content of the perceptual state to be explanatorily primary. Against both views, I argue that perceptual content and perceptual relations to the environment should be recognized to be mutually dependent in any explanation of what brings about perceptual

consciousness. In other words, I argue that perceptual experience is constitutively both relational and representational: when we perceive, we employ perceptual capacities by means of which we discriminate and single out particulars in our environment, where the relevant particulars are external and mind-independent objects, events, and property-instances. When we suffer an illusion or a hallucination, we employ the same perceptual capacities baselessly that we would employ in a perception with the same phenomenal character in virtue of being perceptually related to the relevant particulars. Given that in cases of illusion, we fail to single out one or more mind-independent property-instances that we purport to single out, illusions are treated on a par with hallucinations. After all, in both cases, the subject fails to single out a particular in her environment. The difference between illusion and hallucination is simply this: in an illusion, the particular we fail to single out is a property-instance; in a hallucination, the particular we fail to single out is an object.

Taking into account that perception is constitutively a matter of employing perceptual capacities, we can specify the second constraint as follows: the content of an illusion or a hallucination is derivative of the content of perception insofar as the perceptual capacities employed in illusion or hallucination can only be specified with reference to their role in a perception with the same phenomenal character. There are explanatory and metaphysical aspects to this primacy of the employment of perceptual capacities in perception. We cannot explain the employment of perceptual capacities in illusion and hallucination without appealing to what would be the case if the subject were perceiving. Licensing this explanatory primacy, there is a metaphysical primacy: while perceptual capacities can be employed in illusions and hallucinations, they function to do what they do in perception.

The key idea is that employing perceptual capacities in a sensory mode, for example, a mode such as seeing, hearing, touching, smelling, or tasting, constitutes the phenomenal character of the perceptual state.²³ If a subject's environment sensorily seems to contain the particular α , then she is in a phenomenal state that is constituted by employing a perceptual capacity that functions to single out particulars such as α . An example will help illustrate the idea. Let's say I am perceptually related to a red flower growing in a thicket of green foliage. Parts of the flower are a gorgeous shade of crimson. So among other things, I am perceptually related to an instance of crimson. Let's call the particular patch of crimson to which I am perceptually related α . To be perceptually conscious of α , I need to discriminate and single out α from its surround: for example, I need to discriminate it from the green foliage in the background. Engaging in this kind of discriminatory activity is what it means to be perceptually conscious of α . I can employ a variety of perceptual capacities to discriminate and single out α . I can employ my capacity to discriminate red from other colors. Alternatively, I can employ more fine-grained capacities, such as my perceptual capacity to discriminate crimson from other colors, including other shades of red. If I employ this capacity to discriminate and single out α , then my phenomenal character will be more fine-grained than if I employ only my capacity to discriminate red from other colors. After all, I am now not only discriminating α from the green background, but moreover discriminating α from the darker shade of red on the tip of the petal and from the more orange shade of red of the adjacent petal. Either approach allows me to be perceptually conscious of the patch of crimson amidst the green foliage. The fact that I can discriminate in more or less detail, thereby changing the phenomenal character of my perceptual state, is evidence in support of the thesis that employing discriminatory, selective capacities constitutes phenomenal character.

On the suggested view, experiences in which the same perceptual capacities are employed in the same sensory mode have the same phenomenal character. More specifically, phenomenal character corresponds one to one with the employment of perceptual capacities in a sensory mode. If phenomenal character is constituted by employing perceptual capacities, whether the subject succeeds or fails to single out a particular has no effect on phenomenal character (Premise VI). Insofar as discriminating and singling out a particular is a matter of employing perceptual capacities, the subject is perceptually conscious of α in virtue of employing such capacities (Premise VII).

To show why the thesis that perception is a matter of employing perceptual capacities supports the view that perception is constitutively not just representational but moreover relational, it is crucial to take a closer look at perceptual capacities. A perceptual capacity is systematically linked to particulars of a specific kind in that it functions to differentiate and single out such particulars. For example, my perceptual capacity to discriminate and single out instances of red in my environment is systematically linked to red particulars, in that the function of the capacity is to discriminate and single out red particulars. It is unclear what it would mean to possess a perceptual capacity—the very function of which is to single out particulars of a specific kind—without being in a position to single out such a particular when one is perceptually related to one and nothing else is amiss. Consider again the capacity to discriminate and single out red from other colors. Were we not in a position to use our capacity to single out red in our environment when we are perceptually related to an instance of red and nothing else is amiss, then it is unclear how we could possibly count as possessing the capacity to discriminate red. Thus, being in a position to single out a particular of the kind that the capacity functions to single out when perceptually related to such a particular and nothing else is amiss is a minimal condition for possessing a perceptual capacity.

If we possess a perceptual capacity, then we can employ it not only in perception, but also in hallucination and illusion. When we suffer an illusion or a hallucination, we employ the very same perceptual capacities that we would be employing were we enjoying a perception with the same phenomenal character—albeit while failing to single out the relevant particulars. The perceptual capacities are, even when employed in hallucination or illusion, systematically linked to what they function to single out in perception. After all, they still function to

do what they do in perception, namely, to discriminate and single out particulars in the environment. The problem is simply that the environment is not playing along. Now it might be that we are always unlucky and, like Jackson's Mary prior to leaving her black and white room, are never perceptually related to red things and so never in a position to single out anything red in our environment (Jackson 1986). Even so, the minimal condition would still hold. While perceptual capacities can be employed in illusion or hallucination, they are determined by relations between perceivers and their environment insofar as the function of the capacity is to discriminate and single out mind-independent particulars. This is to say that there is a metaphysical priority of perception over hallucination and illusion.²⁴

Regardless of whether one is perceiving, hallucinating, or suffering an illusion, the perceptual capacities employed are systematically linked to what they function to single out in perception. After all, perceptual capacities function to single out particulars; they do not function to fail to single out particulars. It is not only parsimony that dictates that the capacities employed in hallucination or illusion are the same as the ones employed in perception. A second reason is that it would be odd to say that hallucinations or illusions are brought about by capacities that function to bring about hallucinations or illusions. As the argument above shows, perceptual capacities are by their nature linked to what they single out in the case of an accurate perception (Premise VIII).

Insofar as perceptual capacities are systematically linked to particulars, the phenomenal character constituted by employing perceptual capacities is systematically linked to particulars. This is to say that phenomenal character is systematically linked to what the relevant perceptual capacities single out in perception. If the fact that perceptual capacities single out particulars in some situations but not others has any semantic significance, then the token content ensuing from employing perceptual capacities in perception will be constituted by the perceptual capacities employed and the particulars thereby singled out.²⁵ Employing perceptual capacities yields a content type that perceptions, illusions, and hallucinations with the same phenomenal character have in common. So individuating perceptual states by their content type amounts to individuating them with regard to the experiencing subject's phenomenal character. The token content of a perceptual state ensues from employing perceptual capacities in a particular environment, thereby either singling out particulars or failing to do so. In the case of a perception, the token relational content will be a singular content. Insofar as at least some of the perceptual capacities that constitute the content of an illusion or a hallucination are employed baselessly, the token content of such mental states is gappy. The ensuing content of an illusion or a hallucination has the form of a singular content, but fails to be a token singular content.

By analyzing phenomenal character as constituted by employing perceptual capacities that function to discriminate and single out particulars (and in perception do just that), we can recognize the austere relationalist insight that phenomenal character can and should be explained in terms of (perceptual relations to)

the very particulars of which we are aware in perception. This insight demystifies phenomenal character insofar as it analyzes it in terms of (relations to) concrete, mind-independent particulars, rather than say qualia, sense-data, phenomenal properties, intentional objects, or any other peculiar entities. However, by arguing for the radical thesis that all there is to being in a perceptual state with a certain phenomenal character is being perceptually related to the environment, austere relationalists leave mysterious how one could be in a mental state with phenomenal character if one is not perceiving, but rather suffering an illusion or hallucination. By introducing perceptual capacities that ground our ability to single out particulars, we can reject this radical thesis. And, by rejecting that thesis, we can not only hold on to the content thesis, but we can moreover give a straightforward explanation of what accounts for the phenomenal character of illusions and hallucinations.²⁶

The view suggested is constitutively representational insofar as perceptual content is constituted by employing perceptual capacities. It is constitutively relational insofar as perceptual capacities function to single out particulars—and in perception fulfill this function. Since the content of an experiential state is constituted by employing perceptual capacities that function to single out particulars, relations to particulars are implicated in the very nature of experiential content. As a consequence, the content yielded by employing perceptual capacities is relational content (Premise IX). In virtue of recognizing that perception is constitutively both relational and representational, the suggested view rejects all ways of factorizing perceptual content into an internal and an external component.²⁷

I have presented a way of accounting for phenomenal character that both recognizes the content thesis and respects the austere relationalist insight that phenomenal character is grounded in perceptual relations to the particulars perceived. While I have argued that phenomenal character is constituted by employing perceptual capacities in a sensory mode, these perceptual capacities have in turn been analyzed in terms of the particulars they function to single out (and in fact single out in perception). So on the account presented, phenomenal character is analyzed in terms of mind-independent particulars.

5.2. The epistemological objection

Austere relationalists argue that perception can provide us with knowledge of particulars only if those particulars make a constitutive difference to the relevant perceptual states. I will argue that this epistemological objection does not undermine the content thesis. If perceptual content is constituted by the particulars perceived, we can endorse the content thesis while acknowledging the epistemological insights of austere relationalists. Thus, I will argue that a view on which perception is constitutively both relational and representational is at least as well suited as austere relationalism to account for perception providing us with knowledge of particulars.

Before I show why the epistemological objection is not a threat to the content thesis, we should explain what motivates the objection. It is widely accepted that by perceiving a particular, a subject can gain perceptual knowledge of that particular. After all, if we cannot gain knowledge of particulars via perception, it is unclear how we could ever gain such knowledge. Consider again Kim, who sees a coffee cup at time t_1 . Let's call the cup she sees cup₁. In virtue of seeing cup₁, Kim gains perceptual knowledge of that particular cup. If her perceptual state were the same whether or not she were perceiving cup₁, then it is not clear how her perceptual state could ground knowledge of cup₁.

Switching cases bring out the point particularly clearly. Let's suppose Kim closes her eyes briefly and, unbeknownst to her, cup_1 is replaced with the qualitatively identical cup_2 . So, when Kim reopens her eyes at time t_2 , she is causally related to a numerically distinct cup . Even though she cannot tell, she is perceiving different cups at t_1 and at t_2 . Before the switch, she gains perceptual knowledge of cup_1 . After the switch, she gains perceptual knowledge of cup_2 . Moreover, her belief that the cup she sees at t_2 is the same as the cup she saw at t_1 is false. So despite it seeming to her as if they are the same cup , she does not know that the cup she sees at t_2 is the same as the cup she saw at t_1 . If the cup had not been replaced, then her belief would have been true.

Another way of motivating the idea that perception grounds knowledge of particulars is with regard to the role of perception in grounding knowledge of the referent of demonstratives. Perception grounds our ability to know to which particular a demonstrative term refers (Campbell 2002: 22). If perceptual states were not constituted by the particulars perceived, it is not clear how perception could play this epistemological role. Campbell argues that only a view "on which experience of an object is a simple relation holding between perceiver and object, can characterize the kind of acquaintance with objects that provides knowledge of reference" (2002: 115). To motivate this, consider Kim who says "that cup of coffee is the one with sugar in it". If Kim's perceptual state were exactly the same regardless of whether she were seeing cup₁ or cup₂, then what would ground Kim's knowledge that "that" refers to the cup she is perceiving, rather than some other cup? The idea is that when Kim says, "that cup of coffee is the one with sugar in it," my ability to know to which cup she is referring requires knowing to which particular cup "that" refers. This knowledge is grounded in being perceptually related to the particular cup to which "that" refers in the specific situation.

Austere relationalism is ideally structured to give an account of perceptual knowledge insofar as it posits that one can perceive o's Fness if and only if one is perceptually related to o and o is F. By contrast, if the content and phenomenal character of a perceptual state are in no way constituted by the particulars perceived—as the austere representationalist holds—then one's perceptual state can have the same phenomenal character and the same existentially quantified content $(\exists x)Fx$ regardless of what particular (if any) one perceives. The austere representationalist posits that two experiences with the same phenomenal

character do not differ in content. So according to the austere representationalist, Kim who sees \sup_1 at t_1 and \sup_2 at t_2 will ceteris paribus have the same perceptual content at t_1 and at t_2 . Another way of bringing out the contrast between austere relationalism and austere representationalism is to say that an environment-independent representation that o is F does not entail that o is F. By contrast, austere relationalism has it that perceiving o's Fness entails that o is F.

The austere representationalist could argue that it is the causal relation between the perceiver and the particulars perceived that grounds knowledge of those particulars: if the subject is related to cup₁, the content of her perceptual state is caused by cup₁. If she is related to cup₂, the content of her perceptual state is the very same, but it is caused by cup₂. The brute difference in causal relations accounts for any difference in knowledge. The problems with this causal strategy are the same as the ones that face any causal view of perception in general and any causal view of knowledge in particular. I will not rehearse these here, but will just mention that the most salient problem is that—although causal relations may play an important role in transmitting information—the possibility of deviant causal chains prevents knowledge and perception from being straightforwardly analyzed in terms of causal relations to mind-independent particulars.²⁸

If causal relations cannot do the job, what accounts for the constitutive difference between Kim's perception of \sup_1 at t_1 and her perception of \sup_2 at t_2 ? Assuming that perceptual knowledge is a perceptual state, the critical question is: what is the constitutive difference between Kim's perceptual state at t_1 and her perceptual state at t_2 , such that her perceptual state at t_1 grounds knowledge of \sup_1 and her perceptual state at t_2 grounds knowledge of \sup_2 ? There are at least two ways of understanding the relevant difference: in terms of phenomenal character or in terms of perceptual content.

Austere relationalists pursue the first option. As Campbell argues, the object of perception is a constituent of the perceptual state insofar as attending to it brings about an unrepeatable phenomenal aspect of the perceptual state. If phenomenal character is constituted by perceived objects and not multiply realizable, then the phenomenal character of perceiving numerically distinct objects necessarily differs, even if those objects are qualitatively identical. Campbell commits himself to this radical consequence in his discussion of the following inference:

P1: That woman is running. **P2:** That woman is jumping.

Conclusion: That woman is running and jumping.³¹

As he argues, "[r]ecognizing the validity of the inference requires that your experience should make the sameness of the object phenomenally accessible to you" (2002: 129f.). If the woman running were in fact the qualitatively identical twin of the woman jumping, then Campbell would have to say that one's

experience should make the difference of the objects phenomenally accessible, such that one could recognize the inference as invalid. It is, however, counterintuitive that the distinctness of the objects would be phenomenally accessible via perception—assuming that the two women are indistinguishable to the perceiver and she does not notice that there are two different women present.³²

The obvious solution to the problem is to argue that it is not phenomenal character, but rather perceptual content that tracks the difference between perceptions of numerically distinct but qualitatively identical objects.³³ Since austere relationalists deny that perceptual states have content, this solution is not open to them. If we accept that perceptions of distinct objects differ in content, then we can accept that Kim's perception of \sup_1 at t_1 and her perception of \sup_2 at t_2 are phenomenally the same, while acknowledging a difference in the perceptual state that grounds knowledge of the distinct objects.

Austere relationalism has it that for perception to ground knowledge of particulars, there must be a phenomenal difference between perceptions of qualitatively identical but numerically distinct objects. If we accept that perceptual content is relational, we can avoid this unfortunate consequence, while recognizing the austere relationalist insight that relations to particulars bring about a constitutive difference in perceptual states that grounds knowledge of the particulars perceived. Any epistemological reason there is to hold that perceptual states are constituted by the particulars perceived can be accommodated if perceptual content is constituted by those particulars. To be sure, I have not argued that this is the only or the best way to account for perceptual knowledge.³⁴ My aim in this paper was more modest. It was to show that a view that endorses the content thesis while analyzing perceptual content as relational content can account for the epistemological role of perception in much the same way as austere relationalism.

5.3. The semantic grounding objection

Perception grounds demonstrative reference, fixes the reference of singular terms, and yields *de re* mental states such as singular thoughts. One could argue that, in virtue of playing these roles at the intersection of mind and language, perception grounds language in the world. Indeed, austere relationalists have it that only if perceptual states are understood as not having content can we explain how perception grounds concepts and, more generally, language in the world. As Campbell puts it, "[t]he fundamental objection to the common factor approach is that on the common factor approach, experience cannot play its explanatory role; we cannot understand how experience, so conceived, could be what provides us with our concepts of the objects around us" (2002: 123). The austere relationalist idea is that while we have singular thoughts and so beliefs that put us in contact with mind-independent particulars, perception puts us in contact

with such particulars more directly. This contact with particulars is, according to austere relationalists, why perception grounds concepts and, more generally, language in the world.

Again, austere relationalists present us with a dilemma: either perception grounds language or perceptual states have content. Again, this is a false dilemma. I will argue that we need not choose between perception grounding language and perceptual states having content, as long as perceptual content is relational content.

There are at least two ways to think of language as grounded in perception. A radical perceptual grounding view has it that all concepts need perceptual grounding (e.g. Barsalou 1999, Prinz 2002, for criticism see Machery 2007). A modest perceptual grounding view has it that at least some of our concepts need perceptual grounding (e.g. Dove 2009). I will here assume a modest perceptual grounding view, but everything I say about that view generalizes to the radical view.

If employing perceptual capacities constitutes perceptual content and if those capacities are analyzed in terms of the particulars they function to single out, then we can accept that perception has content while recognizing the empiricist insight that "[e]xperience is what explains our grasp of the concepts of objects" (Campbell 2002: 122). So we can recognize the semantic grounding insight without rejecting the content thesis.

Brewer suggests that any representational account of perception would amount to a descriptive view of perception: all we get in perception of an object is a qualitative specification of the way things stand with that object, a specification that could hold equally well of any other numerically distinct yet qualitatively identical object (2011: 32–41). So according to Brewer, if the content thesis were correct, perception could only offer descriptions of objects that may equally well be satisfied by any number of distinct particulars.

In response, while many views of perceptual content are no doubt committed to a form of descriptivism, this is not true if perceptual content is relational. Singular modes of presentation do not constitute descriptions of environmental particulars that may equally well be satisfied by any number of distinct particulars; they are rather the semantic counterpart of singling out particulars in virtue of employing perceptual capacities.

Brewer's central argument against perception being representational hinges on a version of the semantic grounding objection:

If S sees a mind-independent physical object o, then there are certainly (perhaps indefinitely) many true sentences of the form 'o looks F', but I would ... deny that S's seeing o itself consists in the truth of those sentences or can be fruitfully illuminated by listing the facts that o looks F_1 , o looks F_2 , ..., o looks F_i , etc., or the fact that it visually seems to S that o is F_1 , o is F_2 , ..., o is F_i , etc. S's seeing o, her perceptual experiential relation with that particular mind-independent physical object is more basic than any such facts and is what grounds the truth of all those sentences ... (2011: 62f.)

Brewer argues here that perceptual relations between a perceiver and an object are more basic than the sentences that express how the object looks to the perceiver. We can agree with Brewer that truthmakers are more basic than the sentences they make true. So we can agree with him that "S's seeing o, her perceptual experiential relation with that particular mind-independent physical object is more basic than any such facts and is what grounds the truth of all those sentences," where these sentences express how the environment looks to a person. However, what is at issue in the debate about whether perception has content is not the relation between sentences and their truthmakers. The thesis that perception is a matter of representing the environment is neither a thesis about sentences nor a thesis about sentential truth. It is a thesis about mental content. No one thinks that perception is constitutively a matter of expressing true sentences that report how the object looks to perceivers. 35

While everyone can accept that perception is not constitutively a matter of expressing sentences, there is an argument in close vicinity of Brewer's argument that strengthens his case against representationalism. This argument has the same form as Brewer's and preserves the intuitions guiding his argument, but it is about mental content rather than sentences:

If S sees a mind-independent physical object o, then there are certainly (perhaps indefinitely) many accurate mental contents of the form 'o looks F', but S's seeing o itself does not consist in the accuracy of those mental contents, nor can it be fruitfully illuminated by listing the facts that o looks F_1 , o looks F_2 , ..., o looks F_i , etc., or the fact that it visually seems to S that o is F_1 , o is F_2 , ..., o is F_i , etc. S's seeing o, her perceptual experiential relation with that particular mind-independent physical object is more basic than any such facts and is what grounds the accuracy of all those mental contents.

In response to this rephrased version of Brewer's argument, we can say that we can accept that S seeing o is more basic than the accuracy of the content of her perceptual state. However, accepting this does not commit us to accepting that S seeing o is more basic than S representing o. So we can accept that S seeing o is more basic than the accuracy of the mental content, while acknowledging that S seeing o is not more basic than S representing o. As argued above, S seeing o entails that S represents o: S cannot see o without employing perceptual capacities by means of which she discriminates and singles out o and employing such perceptual capacities constitutes representational content.

5.4. The accuracy condition objection

Austere relationalists argue that perceptual experience is not the kind of thing that can be accurate or inaccurate. Brewer articulates the idea in the following way:

[I]n perceptual experience, a person is simply presented with constituents of the physical environment itself. Any errors which result, in belief, or indeed in anything else, are products of the subject's responses to this experience, however natural, on the one hand ... or else reflectively reasoned, on the other, these responses may be. Error, strictly speaking, given how the environment actually is, is never an essential feature of experience itself. (2006: 169)

No doubt neither events nor relations are assessable for accuracy. So if perceptual experience is simply a perceptual relation to the environment or an event in which such a relation obtains, then perceptual experience cannot be assessable for accuracy. On the austere relationalist approach, it is trivially true that perceptual experience itself is not assessable for accuracy. When representationalists say that perceptual experience is accurate or inaccurate, they must be understanding perceptual experience either as something other than a perceptual relation or an event, or they must be using the phrases "this perceptual experience is accurate" or "this perceptual experience is inaccurate" as elliptical for "the content of this perceptual state is accurate" or "the content of this perceptual state is inaccurate."

In the interest of generality, I will talk of accuracy conditions rather than truth conditions. After all, only if perceptual content is understood as having a propositional structure, will it have truth conditions. While I hold that perceptual content has a propositional structure, my argument in this section is neutral on the matter. Moreover, speaking of accuracy conditions allows one to acknowledge that the accuracy of perceptual content comes in degrees: perceptual content can be more or less accurate with regard to the environment of the perceiving subject.

It will be necessary to make some clarifications about the notion of accuracy conditions. Accuracy conditions are often equated with content (see e.g. Tye 2009, Dretske 1995, Burge 2010). But this cannot be right. Accuracy conditions need to be distinguished both from content and from the truthmaker of that content. The accuracy conditions of perceptual content specify the way the environment of a perceiver would have to be for the content of her perceptual state to be accurate. More schematically, the idea is that:

(AC) The content c of a perceptual state brought about by being perceptually related to environment E is accurate if and only if E is the way c represents E to be.

There are many other ways to articulate accuracy conditions, but I take this to be the most neutral one. To get clearer about what is at stake, let's consider an example. Say I see a white cup to my right. I can articulate the content of my perceptual state as follows:

(C_1) That white cup is to my right.

This content determines accuracy conditions, which can be articulated in the following way:

(AC₁) The content c_I of a perceptual state brought about by being perceptually related to that white cup to my right is accurate if and only if that white cup is to my right.

In light of these clarifications, we can proceed to defend the claim that perceptual content is assessable for accuracy. In virtue of a subject perceiving her environment, she is perceptually conscious of the environment. The phenomenal character of her perceptual state specifies the way the environment would have to be for the content of her perceptual state to be accurate. The environment is either the way it seems to her or it is different from the way it seems to her. If the environment is the way it seems to her, then the content of her perceptual state is accurate. In all other cases, the content is inaccurate. So if a subject is in a perceptual state with a particular content, then this content is either accurate or inaccurate.

Now, the accuracy condition objection could be understood as implying that the way the environment sensorily seems to one is necessarily the way the environment is. The idea is that if the environment is necessarily the way it seems to one in perceiving that environment, then perceptual experience does not have accuracy conditions.

There are at least two ways to understand the idea that the environment is necessarily the way it seems. On one understanding, the idea relies on the alleged factivity of seeming: if α seems a certain way to you, then α must exist. One might argue that a particular in the environment cannot seem a certain way to one, without that particular existing such that it can seem to you to be a certain way. While it is widely accepted that awareness is factive in that one being aware of α implies that α exists, it is more controversial to accept that seemings are factive. In response to this argument: even if " α seeming a certain way" were factive in this way, it does not follow that perception is not representational. It follows only that the perceptual content is necessarily accurate.

On a second understanding, the idea is that perception is infallible. This idea may be argued to follow from a certain understanding of what it means for perception to be a matter of being perceptually related to the environment. Let's assume for the sake of argument that perception is indeed infallible. Even if we make this controversial assumption, there is no reason to think that perceptual content does not have accuracy conditions. Like factivity, infallibilism about perception implies that perceptual content is necessarily accurate. It does not imply lack of accuracy conditions.

It is worth pausing to make two clarifications about the thesis that the way the environment seems to one determines accuracy conditions. First, there can be phenomenal differences between perceptual states that are not a matter of how the environment seems to one, but rather a matter of the way in which one perceives one's environment. If I am nearsighted, my experience may be blurry, but I need not perceive the environment as being blurry.³⁶ For the purposes of this paper, we can remain neutral on how to account for those aspects of

phenomenal character that do not pertain to the way the environment seems to the perceiver.

Second, the environment is arguably rarely and perhaps never the way it perceptually seems to us to be.³⁷ We perceive plates to be round, although their shapes are much more complicated. We see surfaces to be colored, but it has been argued that surfaces do not have color properties (e.g. Hardin 1988, 2008, Boghossian and Velleman 1989, Averill 2005, and Maund 2006). We see our environment to be populated by objects, but it has been argued that there really are no objects or at least not the kind of objects that we seem to see (e.g. Unger 1979, van Inwagen 1990). To accommodate these various respects in which the environment differs from how we perceive it to be, we must either relax our notion of an accuracy condition or resign ourselves to widespread (albeit explicable) perceptual error.³⁸

We can all agree that if it perceptually seems to us that there is a red dragon playing the piano where in fact there is simply a white coffee cup, then we are not accurately perceiving the environment. Moreover, we can all agree that although we do not perceive the microphysical structure of the objects to which we are causally related, we can nonetheless accurately perceive our environment. As soon as we move beyond these parameters, the situation quickly gets complicated.

On many views of perceptual content, it seems to be assumed that the more detail is represented, the more accurate one's perception.³⁹ But more detail is not necessarily better. We can perceive our environment accurately even if we do not represent every detail in view. After all, if we see a white cup on a desk and represent the white cup on the desk, but fail to represent the speck of dust next to the white cup, we would hardly count as not accurately representing our environment. Moreover, were we to represent all details perceptually available to us, we would suffer from information overload. Indeed, it may be that perception does not aim at truth or accuracy, but rather aims at guiding action. If this is right, then rather than speaking of "accuracy conditions," we should perhaps be speaking of "action-guiding conditions" or "knowledge-guiding conditions." Even if we take this stance, we could say that the accuracy conditions of perception are indexed to the action-guiding role of perception or the knowledge-guiding role of perception. We do not need to settle these questions here.⁴⁰ If my argument for the thesis that perceptual states have accuracy conditions holds, then it holds regardless of what stance one takes on this set of issues.

5.5. The indeterminacy objection

Austere relationalists argue that when we see an object, there are many ways that the object can look. Let's assume for a moment that it is clear what it means for an object to look a certain way. Given this assumption, the indeterminacy objection can be formulated in terms of the following argument:

The Indeterminacy Argument

- (1) If perception has representational content, then the way an object looks on a given occasion must fix what representational content the perception has.⁴¹
- (2) The way an object looks on a given occasion does not fix what representational content the perception has.

From 1 & 2: Perception does not have representational content.

The second premise needs explaining. As Travis points out, there are different and incompatible ways an object can look to be: "A peccary . . . may look exactly like a pig . . . It may also look like a tapir, a clever dummy pig, a wax imitation peccary, and so on. Experience cannot coherently represent it to us as both a peccary and wax (and a pig, and so on)" (2004: 73). He argues, moreover, that no one way an object can look to be should be given primacy. So one and the same peccary—with one and the same look—may bring about perceptions with different representational contents.

I will argue against the indeterminacy objection, by showing that on at least one understanding of "looks" the second premise must be rejected. As I will show, the force of the indeterminacy objection relies on a particular understanding of "looks," namely, on what Chisholm calls the comparative use of appearance words. Austere relationalists do not deny that a subject is sensorily aware or perceptually conscious of a particular in her environment when she is perceptually related to that particular (while not suffering from blindsight or any other form of unconscious perception). On the face of it, a subject's being sensorily aware of a particular entails that the particular sensorily seems a certain way to her. Now, austere relationalists argue that perception is simply openness to the environment, and by doing so may be read as questioning this connection between being sensorily aware of a particular and the particular seeming a certain way to her. As Travis formulates the idea:

[P]erception, as such, simply places our surroundings in view; affords us awareness of them. There is no commitment to their being one way or another. It confronts us with what is there, so that, by attending, noting, recognizing, and otherwise exercising what capacities we have, we may ... make out what is there for what it is—or, again, fail to ... [I]n perception things are not presented, or represented, to us as being thus and so. They are just presented to us, full stop. (2004: 65; see also Brewer 2006: 174)

One can accept both that perception simply affords us awareness of our surroundings and that if one is sensorily aware of a particular in one's environment, then that particular seems a certain way. The thesis that a particular seems a certain way implies only that it seems this way, rather than that way. To give an example: I am perceptually related to a desk. In virtue of being perceptually related to that desk, I am sensorily aware of the desk. I am not perceptually

related to a chair and I am not sensorily aware of a chair. Were I sensorily aware of a chair, the phenomenal character of my perceptual state would be different. If one can accept that perception affords us awareness of our surroundings, while also accepting that awareness of the environment implies that the environment seems a certain way, then there is no obvious reason why austere relationalists should deny the connection between being sensorily aware of a particular and the particular seeming a certain way to her.

Let's assume that the austere relationalist accepts that if one is perceptually related to a particular and so sensorily aware of that particular, then the particular will seem a certain way to one. Even so, they would reject that a particular seeming a certain way to a perceiver implies that she is in a perceptual state with content, where that content corresponds to the way the particular seems to her. Travis argues against the thesis that perceptual content corresponds to how the environment sensorily seems to a perceiver by arguing against the idea that experience is looks-indexed, that is, the idea that "the representational content of an experience can be read off of the way, in it, things looked" (2004: 69). He considers the comparative and epistemic senses of looks, although he does not use these labels to distinguish them. Following Chisholm (1957: 43–52), we can understand the comparative sense of appearance words as pertaining to cases in which appearance words are used to compare the ways things look, as when an object is said to look like a typical member of some category. Examples of this use are "That looks as if it is a coffee cup" and "That sounds as if it is a cello." The epistemic sense of appearance words pertains to cases in which appearance words are used to express evidence in support of a proposition. One might say, for example, when confronted with a puddle of coffee and a broken cup, "It looks like someone dropped their coffee cup"; or, when hearing a beautiful rendition of Brahms's cello trio, "It sounds like someone has been practicing."

For the sake of argument, let's accept Travis's reasons for rejecting the thesis that perceptual content is looks-indexed on the epistemic and comparative use of appearance words. This leaves the option that perceptual content corresponds to how the environment looks (or more generally seems) on a noncomparative use of appearance words. Following Chisholm (1957: 50–3), we can understand the noncomparative use as pertaining to cases in which appearance words are used to single out or refer to particulars, such as objects or property-instances, without thereby making comparisons to other particulars. Cases include uses of demonstratives, such as, "that shade of blue," "that shape," and "this high pitch." Arguably, the epistemic and comparative uses are parasitic on such demonstrative, noncomparative uses of appearance words. After all, how the environment seems in such cases provides the basis on which comparisons are drawn and thus provides the basis for the environment to seem a certain way comparatively. Moreover, how the environment seems noncomparatively provides the evidence that allows for the environment to seem a certain way in the epistemic sense of "seems." The force of the indeterminacy objection relies on understanding "looks" comparatively. If "looks" is understood noncomparatively, then the second premise of the indeterminacy objection is false.

By denying that representational content plays any fundamental role in perception, austere relationalism amounts to a view on which the way the environment seems to a perceiving subject is matched by a contentful mental state only at a second stage when judgments or beliefs are formed on the basis of perception. Austere relationalism thus relies on a distinction between a state of awareness that lacks content and a (causally downstream) state of awareness that possesses content, namely, the state one is in when one judges and believes certain things about one's environment on the basis of perception.

The critical question is what it can be for the environment to seem a certain way to a subject without her being in a mental state with content. As I have argued, one cannot be sensorily aware of a particular without employing perceptual capacities by means of which one discriminates and singles out the particular. But employing perceptual capacities by means of which one discriminates and singles out the particular just is to be in a mental state with representational content.⁴³

Accepting this is compatible with accepting that any given scene can be perceived in many different ways and any given perception can be articulated in many different ways. Even if there are many ways that the world can be perceived as being, there is only one way the world is. To motivate this, consider Norway's jagged coastline: it has exactly one objective length, but we attribute very different numeric lengths to it depending on how detailed our measurements are. Although the results of these measurements are different, they are not incompatible as long as one factors in the differences in the methods of measurement deployed. The important point is that the fact that we can arrive at different measurements is not to deny that there is only one way the coast of Norway is. Travis ties his indeterminacy objection to issues about accuracy conditions. So I will here connect the two issues as well: even though the results of our measurements are different, any given measurement either succeeds in accurately representing the coastline or fails to do so. Although the measurements are different, that does not imply that only one of them is accurate. It implies only that the accuracy of the measurement must be assessed relative to the chosen method of measurement. Indeed, the measurements can all be accurate relative to the method of measurement chosen.

Now, one could argue that if one scene can be represented in many different ways, then it must be the case that some of these representations are more accurate than others. In response, suppose that we make ten distinct measurements of the coast of Norway. Each number can be an accurate representation of the length of Norway's coast relative to the method of measurement chosen.

To take an example closer to home: a scene can be photographed once with a standard lens and once with a wide-angle lens. Although the representations of the scene will differ, this does not imply that at least one of the representations must be inaccurate. Again, just because there is only one way the scene in fact is, it does not follow that there can be only one accurate representation of the scene.

Our perception is accurate only if we represent the way our environment is, but any given environment can be represented in many different ways. So even if we recognize the noncomparative use of appearance words and thus reject the second premise of the indeterminacy argument, we can nonetheless accept that there are many different ways to accurately represent the same scene. So the representationalist can accept one of the motivations driving the indeterminacy objection.

Not only are there many different ways to accurately represent the same scene, we can accept that there is indeterminacy in the way we represent our environment in perception. Consider the case in which we perceive two lines and notice that they are different in length. One line being longer than the other implies that it is some specific length longer. This, however, does not imply that any representation of a difference in length is a representation of some specific difference in length. We can simply represent the two lines as being different in length. In the same way, we can perceive the rim of a cup as round despite the fact that it is not perfectly round. Perception is often a rough guide to the world.⁴⁴

The way the environment seems to a perceiver may change from moment to moment, even as her gaze remains steady. Say she is looking at a pig. She can direct her attention at its shape, its color, the texture of its skin, or any combination of these features. As her attention shifts, the phenomenal character of her perceptual state will change. One or more propositions can be associated with every one of these phenomenal states and, thus, with every one of these ways that the environment may seem to her. All these propositions are equally legitimate. Nevertheless, at any given moment, the environment will noncomparatively seem to her to be one specific way.

Travis considers, but immediately dismisses the idea that perceptual content is looks-indexed on a noncomparative use of "looks." He does so on grounds that a noncomparative use presupposes a comparative use of "looks"—though, again, he does not use Chisholm's labels to distinguish between the different uses (2004: 81). In response, we can say that, no doubt, perceptual reports involve concepts the meaning of which abstract from the richness of what is perceived. Typically, we abstract from the particular shape of a perceived object by using concepts such as "round" or "square" to express what shape the object seems to us to have. But although the content of perceptual reports may be coarse-grained in this way, there is no reason to think that the content of the relevant perception is similarly coarse-grained. If perceptual content is understood as corresponding to how the environment seems to us, then the content can be understood to be as fine-grained as our phenomenal character.

I argued that if "looks" is understood noncomparatively, then the way things look fixes the content of a perceptual state. The indeterminacy objection depends on a comparative or an epistemic understanding of appearance words. If appearance words are understood noncomparatively, then the second premise of the indeterminacy argument is false and the indeterminacy objection can be rejected. So I showed that even if we accept Travis's argument that neither epistemic nor comparative looks fix perceptual content, we can still reject the indeterminacy

objection. Moreover, if we reject Travis's argument that looks—in the comparative or epistemic sense—fixes the content of a perceptual state, then the scope of my argument for the content thesis can be understood as pertaining not only to the way the environment seems noncomparatively, but also to the way it seems comparatively and epistemically.

6. Coda

I have defended the view that perceptual states have content by critically discussing what I identified as the five main austere relationalist objections against the content thesis. While austere relationalists have good reasons to criticize many views that rely on the content thesis, I aim to have shown that any reason there is to argue that perception is constitutively relational can be accommodated by understanding perceptual content to be relational content. Thus, I argued that perception is constitutively both relational and representational. More specifically, I argued that if perceptual content is understood to be relational, then we can take on board the phenomenological, epistemological, and semantic grounding insights of austere relationalists without rejecting the content thesis.

I conclude that we can accept the austere relationalist thesis that perception puts us in direct contact with particulars in our environment, while acknowledging that perception is representational. Indeed, if we recognize the role that perceptual capacities play in bringing about our perceptual states, we must accept that perception is representational. Moreover, contrary to what austere relationalists would have us believe, we are always constrained by our perceptual tools: there is always a way in which we perceive the world to be. Austere relationalism wants us to have a kind of immediate contact with the world that simply is not available to us. Denying that we are always in some respect constrained by our perceptual tools is not only epistemically arrogant: it undermines the role that perception plays in our cognitive lives.

The mind is constitutively a matter of employing mental capacities in virtue of which we represent our environment. These mental capacities can take the form of concepts or low-level discriminatory capacities. Understanding the mind in this way allows for a clear way of understanding the content of mental states, and moreover allows for a clear way of understanding how mental states are grounded in the physical.

Notes

1. In his famous Stufenleiter passage of the *Critique of Pure Reason*, Kant categorizes different kinds of representations: "The genus is representation in general (representatio). Subordinate to it stands representation with consciousness (perceptio). A perception which relates solely to the subject as the modification of its state is sensation (sensatio), an objective perception is knowledge (cognitio)" (A320/B377).

- 2. For a recent discussion of Reid's direct realism, see Wilson 2013. Martin (2002, 2004) argues against any view on which perception can be analyzed in terms of a propositional attitude towards a content, leaving open the possibility that perceptual states could have content without the subject standing in a propositional attitude to that content. Since he does not outright deny that perceptual states have content, I will discuss his view only to the extent that his positive view of perception is structurally similar to that of austere relationalists.
- 3. For an argument against a representationalist account of the Mach diamond, see Macpherson 2006.
- 4. See Siegel 2006 and Macpherson 2012 for different arguments for this thesis.
- 5. The debate about whether perceptual content is conceptually or nonconceptually structured is sometimes understood as a debate about whether perceptual content is structured by Fregean concepts and not just by properties and objects. On this understanding, the first and second questions about the nature of perceptual content distinguished above are conflated. However, as I argued elsewhere (Schellenberg 2011) one can understand perceptual content as constituted by modes of presentation and as nonconceptually structured. Therefore, the two questions should be treated separately.
- 6. Nanay (2013) argues that the debate between representationalists and relationalists is best understood as a debate not about what is constitutive of perceptual states, but rather as a debate about the individuation of perceptual states.
- 7. McGinn (1982), Davies (1992), Tye (1995), Lycan (1996), and Byrne (2001) among others have defended views that are committed to perceptual content being, in this way, independent of the perceiver's environment.
- 8. For a more detailed discussion of constitution, see Schellenberg 2016.
- 9. This strong representationalist view is sometimes formulated as the view that content and phenomenal character are identical (see e.g. Tye 2009). Any such identity claim commits a category mistake. After all, phenomenal character is a property that captures what it is like to perceive one's environment, while representational content has semantic and perhaps linguistic properties.
- 10. Papineau (2014) defends a view on which conscious sensory qualities are not intrinsically representational.
- 11. For a discussion of the relation between the content of pictures and the content of perceptual states and mental states more generally, see Hopkins 1998 and Crane 2009
- 12. For similar arguments highlighting the relation between sensory awareness, accuracy conditions, and perceptual content, see also Byrne 2001, Pautz 2010, and Siegel 2010. As I will show such arguments do not establish more than the association thesis.
- 13. One can argue that on Russell's view, acquaintance with particulars and universals is more basic than any mental content insofar as such acquaintance explains how it is possible to entertain the relevant content.
- 14. It should be noted that the bar for being a proposition could be set so low that on any notion of content, perceptual content will be a proposition (see e.g. King 2007). Moreover, there are ways of understanding propositional attitudes such that any mental state characterized by content will also include a propositional attitude towards that content. If that is all that is meant by a propositional attitude and if perceptual content is always a proposition, then any

view that endorses the content thesis will also endorse the propositional attitude thesis.

- 15. It should be noted that there are many further issues beyond these three choice points that bear on the notion of perceptual content. One concerns how much of our environment we represent. Consider the case in which you are perceiving the scene in front of you. As it happens, there is a little bug in your line of sight that you do not notice. Are you perceptually related to the bug? If so, do you represent the bug such that it plays a role only at the level of unconscious perception? Or is it the case that you represent the bug such that it plays a role at the level of conscious perception, but you lack access to that aspect of your conscious perception? My argument is neutral on what stance one takes on these questions. For a discussion of conscious and unconscious perception, see Phillips and Block 2016.
- 16. One could formulate a sixth objection, namely, a particularity objection: representationalist views cannot adequately account for perceptual particularity, that is, they cannot account for the constitutive difference that particulars perceived make to the relevant perceptual states. I will not treat this as an independent objection, since it is folded into the epistemological objection and the semantic grounding objection.

Naturally, different austere relationalists emphasize different objections. For example, Travis emphasizes the indeterminacy objection, while Martin emphasizes the phenomenological objection. The accounts that Travis targets are committed to "first, that a perceptual experience has a particular representational content . . . second, that the perceiver can recognize this feature of it . . . third, that this is a content the perceiver may accept or reject" (2004: 82f.). Brewer specifies the views he targets as committed to two principles: "The first is that contents admit the possibility of falsity, and that genuine perception is therefore to be construed as a success, in which the way things experientially seem to the subject to be is determined as true by the way things actually are in the environment around him . . . The second is that contents involve a certain kind of generality, representing some object or objects as being determinate ways that such things in general may be" (2006: 166).

- 17. Arguably, understanding the perceptual relation as a mere causal relation will not do for austere relationalist purposes.
- 18. For a defense of situation-dependent properties, see Schellenberg 2008. For a discussion of how austere relationalism can exploit situation-dependent properties, see Genone 2014.
- 19. Byrne (2009: 436f.) argues that austere relationalists face the problem of what binds the relevant objects with the relevant properties: "Take an ordinary situation in which one sees a yellow lemon and a red tomato. One is 'simply presented' with the lemon, the tomato, yellowness, and redness—perhaps that amounts to the fact that one sees the lemon and the tomato and sees yellow and red. But that is not all: the lemon is 'simply presented' as yellow, not as red . . . How does the fact that the lemon is yellow get into the perceptual story?" This problem of what unifies the relevant objects and properties can be dealt with in an austere relationalist account by arguing that the properties that an object instantiates are necessarily (roughly) co-located with the object. The qualification "roughly" leaves room for the color of the object being only a surface property of the

object, rather than a property that encompasses the three-dimensional shape of the object. This strategy of co-location deals with another criticism of austere relationalism. Siegel (2010) argues that the thesis that subjects are related to objects and the properties these objects instantiate implies that subjects are related to facts such as that o is F, which in turn implies that subjects are related to propositions. So she argues that austere relationalists are committed to treating perception as factive and thus as propositionally structured. If the thesis that subjects are related to objects and the properties these objects instantiate is analyzed in terms of co-location of the relevant particulars, then no appeal to facts is necessary to make sense of the austere relationalist thesis.

- 20. For a recent discussion of the personal/subpersonal distinction, see Drayson 2014.
- 21. For an argument that disposing of perceptual representations is inconsistent with empirical findings about dorsal perception and about the multimodality of perception, see Nanay 2014. For a discussion of how the ventral and the dorsal stream work together in visual experience, see also Wu 2014 and Schwenkler and Briscoe 2015. For a critical discussion of recent representationalist views on empirical grounds, see Ganson et al. 2014.
- 22. For a more detailed defense of the thesis that perception is constitutively a matter of discriminating and singling out particulars, see Schellenberg 2016. Singling out a particular is a proto-conceptual analogue of referring to a particular. While referring may require conceptual capacities, singling out particulars does not.
- 23. For a defense of this thesis, see Schellenberg 2018.
- 24. For a more detailed discussion of the metaphysical primacy of perception over hallucination and illusion, see Schellenberg 2013 and 2014.
- 25. For a development of this idea and the view of perceptual content presented in this paragraph, see Schellenberg 2010.
- 26. For a discussion of how to account for aspects of phenomenal character that are not a matter of the environment seeming a certain way (e.g. blurriness) within the framework provided, see Schellenberg 2018.
- 27. For a helpful discussion of the problems of factorizing mental content into internal and external components, see Williamson 2000, 2006. See also Burge 2010.
- 28. For a detailed criticism of causal theories of perception, see Hyman 1992.
- 29. For a defense of the thesis that knowledge is a mental state, see Williamson 2000. For a discussion of how understanding perception in terms of employing perceptual capacities allows for a way to analyze what it means for perceptual knowledge to be a mental state, see Schellenberg 2017.
- 30. For a discussion of more options, see Schellenberg 2016.
- 31. It should be noted that the inference is in fact only valid if "that" refers to the same woman in all three instances.
- 32. Campbell acknowledges that "it may be impossible to tell, simply by having the experience, which sort of experience it is—whether it is one that involves a single object, or if it is, rather, an experience that involves a multiplicity of objects" (2002: 130). The question is how acknowledging this is compatible with positing that "[r]ecognizing the validity of the inference [cited above] requires that your experience should make the sameness of the object phenomenally accessible to you."

- 33. By arguing that phenomenal character is constituted only by the perceptual capacities employed (rather than being constituted also by the particulars thereby singled out), the view I am suggesting allows that perceptions of numerically distinct yet qualitatively identical objects differ in content while having the same phenomenal character.
- 34. For a detailed discussion of perceptual knowledge, see Schellenberg 2017.
- 35. For a discussion of the relation between mental content and linguistic meaning, see Speaks 2006. On perceptual reports, see Brogaard 2015.
- 36. See Allen 2013 for a representational account of blurred visual phenomenology.
- 37. See Pasnau 2016 for an argument that we should not suppose that the phenomenal character of perceptual experience reveals anything about mind or world.
- 38. See Mendelovici 2013 for a discussion of reliable misrepresentation.
- 39. This is suggested, for instance, by the analogy Burge (2010: 489) draws between the relative accuracy of perceptions and the relative accuracy of three drawings, where the drawing that is most inclusive of detail is the most accurate. In his example, the most accurate drawing is the one that does not merely get the color-shade right, but that also accounts for the lighting conditions.
- 40. See Watzl 2014 for a discussion of such issues.
- 41. As Travis puts it: "If perception is representational, then for any perceptual experience, there must be a way things are according to it . . . things looking as they do on a given occasion must fix what representational content experience then has" (2004: 71).
- 42. See Chisholm 1957 and also Jackson 1977. Travis focuses on the case of visual perception and therefore focuses on looks-locutions, but his point arguably generalizes to other sensory modes. In the interest of generality, I will talk of the environment seeming a certain way in one or more sensory modes, rather than the environment looking a certain way. This section draws on Byrne 2009, which provides a detailed discussion of Travis's argument against the thesis that experience is looks-indexed.
- 43. One might object that this notion of content simply amounts to what Travis calls autorepresentation, which he understands in the following way: "To take things to be thus and so just is to represent them to oneself as that way. Such representing is all in the attitude . . . one might find such [auto]representation in embedded propositions, 'mock speech'." He contrasts auto- with allorepresentation, which "represents such-and-such as so." Travis argues that, in contrast to autorepresentation, allorepresentation is "committed representation" (2004: 60f.). Allorepresentation is the notion of representation that Travis targets with his criticism. The notion of content in play amounts to allorepresentation given that how one's environment seems to one does not simply amount to taking it to be some way, but, moreover, to being committed to it being that way. While autorepresentation may be the kind of representation at play in "mock speech," I do not take it to be a kind of representation that plays any role in perception. Travis admits as much (p. 65). So for the purposes of this paper, we can safely assume that what is at stake is whether experience involves what Travis calls allorepresentation, not what he calls autorepresentation.
- 44. See Stazicker 2016 for an argument against the traditional assumption that we represent maximally determinate properties, rather than just determinable properties.

References

Allen, K. 2013. "Blur." Philosophical Studies 162: 257-73.

Averill, E. W. 2005. "Toward a Projectivist Account of Color." *The Journal of Philosophy* 102: 217–34.

Barsalou, L.W. 1999. "Perceptual Symbol Systems." Behavioral and Brain Sciences 22: 577-660.

Boghossian, P., and Velleman, J. D. 1989. "Colour as a Secondary Quality." Mind 98: 81-103.

Brewer, B. 2006. "Perception and Content." The European Journal of Philosophy 14: 165-81.

Brewer, B. 2007. "Perception and its Object." Philosophical Studies 132: 87-97.

Brewer, B. 2011. Perception and its Objects. Oxford: Oxford University Press.

Brogaard, B. 2015. "Perceptual Reports." *Oxford Handbook of the Philosophy of Perception*, ed. M. Matthen. Oxford: Oxford University Press.

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

Byrne, A. 2001. "Intentionalism Defended." The Philosophical Review 110: 199-240.

Byrne, A. 2009. "Experience and Content." Philosophical Quarterly 59: 429-51.

Campbell, J. 2002. Reference and Consciousness. Oxford: Oxford University Press.

Chalmers, D. 1996. The Conscious Mind. Oxford: Oxford University Press.

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

Crane, T. 1998. "Intentionality as the Mark of the Mental." *Contemporary Issues in the Philosophy of Mind*, ed. A. O'Hear. Cambridge: Cambridge University Press.

Crane, T. 2009. "Is Perception a Propositional Attitude?" Philosophical Quarterly 59: 452-69.

Davies, M. 1992. "Perceptual Content and Local Supervenience." *Proceedings of the Aristotelian Society* 92: 21–45.

Dove, G. O. 2009. "Beyond Perceptual Symbols: A Call for Representational Pluralism." *Cognition* 110: 412–31.

Drayson, Z. 2014. "The Personal/Subpersonal Distinction." Philosophy Compass 9: 338-46.

Dretske, F. 1995. Naturalizing the Mind. Cambridge, MA: MIT Press

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

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

Ganson, T., Bronner, B., and Kerr, A. 2014. "Burge's Defense of Perceptual Content." *Philosophy and Phenomenological Research* 88: 556–73.

Genone, J. 2014. "Appearance and Illusion." Mind 123: 339–76.

Hardin, C. L. 1988/1993. Color for Philosophers. Indianapolis: Hackett.

Hardin, C. L. 2008. "Color Qualities and the Physical World." *The Case for Qualia*, ed. E. Wright. Cambridge, MA: MIT Press.

Hopkins, R. 1998. *Picture, Image and Experience: A Philosophical Inquiry*. Cambridge: Cambridge University Press.

Hyman, J. 1992. "The Causal Theory of Perception." Philosophical Quarterly 42: 277-96.

Jackson, F. 1986. "What Mary Didn't Know." Journal of Philosophy 83: 291-95.

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

Kant, I. 1781. Kritik der reinen Vernunft. Critique of Pure Reason, trans. N. K. Smith. New York: St Martin's Press (1965).

King, J. C. 2007. The Nature and Structure of Content. Oxford: Oxford University Press.

Logue, H. 2012. "Why Naive Realism?" Proceedings of the Aristotelian Society 112: 211–37.

Lycan, W. G. 1996. Consciousness and Experience. Cambridge, MA: MIT Press.

Machery, E. 2007. "Concept Empiricism: A Methodological Critique." Cognition 104: 19-46.

Macpherson, F. 2006. "Ambiguous Figures and the Content of Experience." Noûs 40: 82-117.

Macpherson, F. 2012. "Cognitive Penetration of Colour Experience: Rethinking the Issue in Light of an Indirect Mechanism." *Philosophy and Phenomenological Research* 84: 24–62.

Martin, M. G. F. 2002. "The Transparency of Experience." Mind and Language 17: 376-425.

Martin, M. G. F. 2004. "The Limits of Self-Awareness." Philosophical Studies 103: 37-89.

- Maund, J. B. 2006. "The Illusion Theory of Colour: An Anti-Realist Theory." *Dialectica* 60: 245–68.
- Mendelovici, A. 2013. "Reliable Misrepresentation and Tracking Theories of Mental Representation." *Philosophical Studies* 165: 421–43.
- McDowell, J. 1994. Mind and World. Cambridge, MA: Harvard University Press.
- McGinn, C. 1982. The Character of Mind. Oxford: Oxford University Press.
- Nanay, B. 2013. "The Representationalism versus Relationalism Debate: Explanatory Contextualism about Perception." *European Journal of Philosophy* 23: 321–36.
- Nanay, B. 2014. "Empirical Problems with Anti-Representationalism." *Does Perception have Content*?, ed. B. Brogaard. Oxford: Oxford University Press.
- Papineau, D. 2014. "Sensory Experience and Representational Properties." *Proceedings of the Aristotelian Society* 114: 1–33.
- Pasnau, R. 2016. "Therapeutic Reflections on our Bipolar History of Perception." *Analytic Philosophy* 57: 253–84.
- Pautz, A. 2010. "Why Explain Visual Experience in Terms of Content?" *Perceiving the World*, ed. B. Nanay. Oxford: Oxford University Press.
- Peacocke, C. 1983. Sense and Content: Experience, Thought, and their Relations. Oxford: Oxford University Press.
- Phillips, I., and Block, N. 2016. "Debate on Unconscious Perception." *Current Controversies in Philosophy of Perception*, ed. B. Nanay. London: Routledge.
- Prinz, J. 2002. Furnishing the Mind: Concepts and their Perceptual Basis. Cambridge, MA: MIT Press.
- Russell, B. 1913. Theory of Knowledge: London: Routledge.
- Schellenberg, S. 2008. "The Situation-Dependency of Perception." *The Journal of Philosophy* 105: 55–84.
- Schellenberg, S. 2010. "The Particularity and Phenomenology of Perceptual Experience." *Philosophical Studies* 149: 19–48.
- Schellenberg, S. 2011. "Perceptual Content Defended." Noûs 45: 714–50.
- Schellenberg, S. 2013. "Experience and Evidence." Mind 122: 699–747.
- Schellenberg, S. 2014. "The Epistemic Force of Perceptual Experience." With a response by Alex Byrne, *Philosophical Studies* 170: 87–100.
- Schellenberg, S. 2016. "Perceptual Particularity." *Philosophy and Phenomenological Research* 93: 25–54.
- Schellenberg, S. 2017. "Perceptual Capacities, Knowledge, and Gettier Cases." *Explaining Knowledge: New Essays on the Gettier Problem*, ed. R. Borges, C. de Almeida, and P. Klein. Oxford: Oxford University Press.
- Schellenberg, S. 2018. "Perceptual Consciousness as a Mental Activity." *Noûs*.
- Schwenkler, J., and Briscoe, R. 2015. "Conscious Vision in Action." *Cognitive Science* 39: 1435–67.
- Searle, J. 1983. *Intentionality: An Essay in the Philosophy of Mind*. Cambridge: Cambridge University Press.
- Siegel, S. 2006. "Subject and Object in the Contents of Visual Experience." *Philosophical Review* 115: 355–88.
- Siegel, S. 2010. "Do Visual Experiences have Content?" *Perceiving the World*, ed. B. Nanay. Oxford: Oxford University Press.
- Soteriou, M. 2005. "The Subjective View of Experience and its Objective Commitments." *Proceedings of the Aristotelian Society* 105: 177–90.
- Speaks, J. 2006. "Is Mental Content Prior to Linguistic Meaning?" Noûs 40: 428-67.
- Stazicker, J. 2016. "The Visual Presence of Determinable Properties." *Phenomenal Presence*, ed. F. E. Macpherson, F. Dorsch, and M. Nida-Rümelin. Oxford: Oxford University Press.
- Travis, C. 2004. "Silence of the Senses." Mind 113: 57–94.

Tye, M. 1995. Ten Problems of Consciousness: A Representational Theory of the Phenomenal Mind. Cambridge, MA: MIT Press.

Tye, M. 2009. Consciousness Revisited: Materialism Without Phenomenal Concepts. Cambridge, MA: MIT Press.

Unger, P. 1979. "There are no Ordinary Things." Synthese 41: 117-54.

van Inwagen, P. 1990. Material Beings. Ithaca, NY: Cornell University Press.

Watzl, S. 2014. "Perceptual Guidance." Ratio 27: 369-505.

Williamson, T. 2000. Knowledge and Its Limits. Oxford: Oxford University Press.

Williamson, T. 2006. "Can Cognition be Factorized into Internal and External Components?" Contemporary Debates in Cognitive Science, ed. R. Stainton. Oxford: Blackwell.

Wilson, K. 2013. "Reid's Direct Realism and Visible Figure." *The Philosophical Quarterly* 63: 783–803

Wu, W. 2014. "Against Division: Consciousness, Information, and Visual Stream." *Mind and Language* 29: 383–406.