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The Elusiveness of the Content of Perception Non-existential, Nonsingular, and Incomplete

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ABSTRACT

In this paper, I take for granted the view of a long tradition tracing back to Kant that the content of perception is nonconceptual, nonpropositional, and iconic. However, I challenge the idea that this content is either an existentially quantified proposition (the existential view), an object-involving proposition (the particularist view), both (the pluralist view), or still that there is no fact of the matter about the elusive content of perception (Block). Instead, I propose an alternative hybrid model as the most suitable for perception, namely a mix of the representation of properties (relativistic content) and acquaintance with whatever causes the relevant token experience. Although this format is iconic or map-like, the best semantic model for understanding this relativistic content of perception is an open sentence with predicates and free variables. Since this content is neither particular nor existential, it is incomplete (at least in the light of Fregean semantics). That is, it is neither accurate nor inaccurate per se. Perceptions do not represent particulars, let alone the causal relationship between particulars or environmental conditions and the token experience. In other words, neither particulars nor causal relations belong to the content of the experience. Instead, particulars and causal relations belong to the evaluative circumstances of the content (Lewis's context-index pairs). Perceptions represent "de re" properties as accurate or inaccurate attributions to what is causally responsible for the relevant token experience.

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Intruduction

In this paper, I assume the view of a long tradition, going back to Kant, that perception has a representational content that is nonconceptual, nonpropositional, and iconic. To say that the content of perception is nonconceptual is not only to say that the subject need not have the required concepts to canonically specify that content but also that even if the subject does have the necessary concepts, they do not determine the accuracy conditions that define the content. To say that perceptual content is nonpropositional is to say that properties or attributes are not predicated of anything. Finally, when one claims that the content of perception is iconic, one claims that this content is map-like.

Since the 1980s, there has been an intense debate about the nature of the content of perception. The debate involves two basic opposing sides: "existentialists," such as Collin McGinn (1982), Martin Davies (1992), and more recently Christoph Hill (2019, 2021), Mark Sainsbury (2023), and Ned Block (2023), and "particularists," such as Michael Tye (2009, 2019), Tyler Burge (2010, 2022), and more recently Susanna Schellenberg (2010, 2018, 2019). Additionally, there is a third viewpoint known as the "pluralists" (David Chalmers, 2004; Logue, 2021), who argue that perception has both singular and existential content to address the limitations of the other two sides.

Existentialists argue that the content of perception is existential, meaning that it represents something that exemplifies or does not exemplify properties that perception attributes to particulars. They base their claim on the insensitivity of visual experience to the replacement of particulars by qualitatively identical particulars. Particularists base their claim on the view that visual experience essentially involves perceptual constants and that existentialists fail on the known Grice-like cases.

Block's latest book (2023) defends the existentialist view over the particularist view. He rejects Schellenberg's strong particularity thesis, which claims that particulars are a part of the content itself, and Burge's weak particularity thesis, which claims that perceptual states are token-individuated by the particularities at issue. Block argues that visual experiences only refer to or represent particulars when they are explicit cases of perception of objects, events, instances of properties, etc. Given that, he believes this is not a metaphysically constitutive feature of perception but rather an incidental one. Essentially, block states that there is no factual evidence that compels us to regard the representation content of visual experience as singular, existential, or both.

This paper aims to demonstrate that Block's view is unconvincing. According to his data, perception represents properties rather than quantified propositions. To best understand this content, I propose a hybrid model that utilizes open sentences with predicates and free variables. Perceptions do not represent what is causally responsible for the relevant token experience and the environment. Instead, these causes belong to the evaluative circumstances of the content (Lewis's context-index pairs). Perceptions represent "*de re*" properties as accurate or inaccurate "attributions" of what is causally responsible for the

token experience. This content is neither particular nor existential but incomplete (at least in the light of Fregean semantics).

I justify this hybrid theoretical model in an abductive way. Firstly, it is the only model that avoids the drawbacks of particularist and existentialist views. Second, it is the model best suited to Block's empirical counterexamples to the particularist view. Third, it is the model that shows why the content of perception is inaccurate in Grice-like cases. Finally, it is the model that brings together the best pre-theoretical intuitions from opposing views in the field of perceptual philosophy, namely the content view and the relational view as Campbell names them (see Block, 2002, 114-131).

I have structured this paper as follows: In the section following this introduction, I will discuss the existential view. Despite Grice's problems, any attempt to improve the existential view by including the relevant causal relationship between particulars and experience in the content is misleading. It overly intellectualizes the content of perception by assuming that we perceive and, therefore, represent the very token-reflexive causal relations between particulars (or the environment) and our experience of those particulars (or the environment) (see Tye, 2009). Moreover, I shall argue that Sainsbury's nonaccidental condition cannot circumvent Gricean cases.

Perceptions are insensitive to particulars as such, and there are numerous counterexamples of experiencing properties without particulars as Block (2023) shows: the Ganzfeld case, the crowding case, the tunnel effect case, the ensemble case, etc. In the next section, I will present my hybrid model in detail. I argue that Lewis' framework is better suited to the nonpropositional character of the content of perception than Kaplan/Recanati's (suited to the propositional content of perceptual judgment). In the fourth and final section, I will present my abductive defense of the hybrid model. First, I will argue that all empirical cases from cognitive science better support my view than the competing views. Finally, I argue that relativistic content has an additional advantage: it can rescue the stubborn pre-theoretical intuitions of the content and relational views.

The Existential View

Susanna Siegel argues that if something looks red, the visual experience is veridical if and only if the object seen is red (Siegel, 2010), implying that visual experience has some condition for accuracy, i.e., its representational content. Following Campbell (2002, 114-131), we refer to this as "the content view." Although the "content view" is the hegemonic vision in neuroscience and cognitive science, it is still far from being a consensus in the philosophy of mind and perception. Naive realism and enactivism reject the view that experiences have content. Naïve realists claim that the primary function of experience is to bring us into direct contact with the world (see Campbell 2002; Travis, 2004; Johnston, 2004, 2006, Fish 2009, and Martin 2002, 2004, 2006) have brought it back into the

discussion.[1] In contrast, enactivism claims that experience is a type of activity rather than a representation (see Hurley, 1998; Hutto & Myin, 2014; Noë, 2004; O'Regan, 2011).

Visual illusions are the main reason in favor of the content view. Pre-theoretically, we consider some of our experiences veridical, while others are illusory (nonveridical and hallucinatory). If we see an object with properties, it does not have or without properties it does have, our experience is illusory. The content view explains the possibility of illusory experiences quite intuitively: experience represents a scene under certain conditions of accuracy: The illusion occurs when the world does not meet these conditions, and the content is inaccurate. Can opponents of the content view comply with this strong intuition? At first glance, naïve realists and enactivists might object that one can understand an illusory experience well without presupposing content: An illusion, they might argue, is an experience in which the visual system produces an unusual response to a feature in a situation where the feature is not present. The problem with this answer *is* that no one must assume that perception is always or even almost veridical (see Block, 2023, 30). Naïve realism and enactivism are non-starters. From now on, we will take the content view as given without further argument. The remaining question is: Which is the most appropriate model for the content of experience? [2]

If we take a Russellian proposition as the appropriate model for content, there are two options to consider. The first is that since perceptual experience is insensitive to the numerical identities of the particulars involved, the better theoretical approach is to consider the Russellian content of perceptual experience as an existential proposition that either contains no particulars or is not constituted by particulars. I will refer to this theoretical approach as the existentialist view.

McGinn's work in 1982 was the first to support the existentialist content view in recent literature. According to him, using singular terms like demonstratives to specify the content of perception is inappropriate. Instead, an accurate description should use only general terms, which McGinn calls the "generality thesis." Therefore, the content of perception should represent the world as containing a yellow lemon, but not a specific one. Particulars are not constituents of the representational content of perception. Davies was the first to state the existential view explicitly:

> If perceptual content is phenomenological content, then, it seems, it is not object-involving. But from this, it does not follow that perceptual content is

[1] However, since I am not interested in the phenomenology of perception, from now on, I will no longer speak of "naïve realism" but of the "relational view," according to Campbell 2002, 114-131

[2] When I say this, I am taking for granted the so-called content view of sensory experience. To say that experience has "content" means precisely that a sensory state of mind presents the world under certain conditions of accuracy (the content). If these conditions are met, the content is accurate or veridical; otherwise, the content is inaccurate. The content view is the mainstream view in the philosophy of perception, but it is far from being a consensus. Nevertheless, I must make it clear from the outset that I have no space here to defend the content view against its critics. That would require a whole new article. So, assuming that the content view is correct, this essay aims to explain the best version of the content of the experience.

> not truth conditional-not fully representational; for we can take perceptual content to be existentially quantified content. A visual experience may present the world as containing an object of a certain size and shape, in a certain direction, at a certain distance from the subject. It matters not at all to that existentially quantified content of a subject's experience whether, for example, it is Fido or Fifi that she is looking at (Davies, 1992, 26).

The representational content of my visual experience is not "object-involving." [1] My visual experience as of a yellow lemon represents a yellow lemon just in front of me, not this or that yellow lemon just in front of me. That said, the best model for the content of the visual experience is an existential, quantified proposition.

The existentialist view has two key motivations. First, suppose the content of visual experience is phenomenological, as Davies claims. In that case, the visual experience's content determines the experience's phenomenology. Since the object and any other particular do not contribute to that phenomenology, visual experiences with the same phenomenal character can represent the world as the same, even if they are experiences with numerically different particulars. Therefore, one cannot specify the content of experience by using singular terms "on the pain of denying that distinct objects can seem precisely the same" (McGinn, 1982, 51).

The existentialist view has a second reason in its favor: experiences can present the world as the same, even if one of them is a hallucination in which no object is perceived. This means that the existentialist view can easily accommodate the idea that hallucinatory experiences can have the same content as ordinary experiences, whether they are accurate or illusory. Both types of experiences project the same conditions of satisfaction onto the world as if there is a yellow lemon straight ahead. The accuracy of the content depends on whether there is a yellow lemon in front of the viewer. The content is inaccurate or illusory if the lemon is not yellow or the yellowish thing is not in front.

Grice's (1961) classic case, discussed in Soteriou (2000), Tye (2009), and Schellenberg (2018), challenges the widely accepted existentialist view. In the scenario, a person stands in front of several pillars, with an oblique mirror reflecting the image of an indistinguishable pillar that fully conceals one of the pillars in front of them. Although the scene is accurately represented in the light of the existentialist view—after all, there is a pillar standing in front of the subject—the visual experience is illusory because this pillar is not the pillar the person sees. The pillar the subject sees is the one outside his field of vision whose image covers up the one standing ahead of him.

In 2009, Tye presented a similar case. Suppose I am looking at what appears to be a yellow lemon lying directly in front of me. But unbeknownst to me, there is a mirror in front of me at a 45° angle, reflecting the image of another lemon that I happen not to see directly. The thought is that it is not the lemon that I seem to see straight ahead as yellow that is the

[1] Davies denies what Block has recently called the "strong singular content" (Block, 2023, 125).

reason for my experience of a yellow lemon, but the other lemon of green color that I cannot see directly, but only because its image is reflected in the mirror. However, due to the peculiar lighting conditions, the image of this lemon in the mirror appears to me to be green. Let us now assume there is a yellow lemon behind the mirror, in the same place as a lemon in my visual experience (see Tye, 2009, 79).

According to the existential view, the content of experience, in this case, must be accurate; after all, the world appears to me as my visual experience represents it because there is a yellow lemon right in front of me. In contrast, my visual experience is illusory, for I do not see the yellow lemon that is, in fact, directly in front of me. The yellow lemon is behind the mirror, outside my visual field. Instead, I see the image of another white lemon reflected at a 45° angle on the mirror, which appears yellow because of special lighting conditions. Thus, although my experience of a yellow lemon is illusory, its content must be accurate, according to the existentialist view. The main argument for the content view, however, is the assumption that the inaccuracy of the content is responsible for the illusory character of the experience: the experience is illusory only because it misrepresents the world or imposes conditions that are not satisfied. Let us call these Gricean counterexamples cases of "veridical misperceptions."

The scenarios of the so-called "veridical hallucinations" (Lewis, 1980b) also challenge the existential view. Let us suppose that there is a yellow lemon in front of me. Unbeknownst to me, the information reflected from the lemon and reaching my retina is not processed further. An evil neuroscientist (or Cartesian demon, if you will) has blocked the signals from my retina to my optic nerve while at the same time activating my visual cortex using electrical probes that function in the same way as neurological signals. Under these circumstances, I neither perceive nor misperceive the yellow lemon because I see nothing. My experience is hallucinatory. Nevertheless, the representational content of my visual experience is accurate according to the existential view; after all, the world appears as my experience represents it: A yellow lemon is right in front of me. Again, my experience is illusory, but its corresponding content is accurate.

Now, if particulars are relevant to the content of the experience, one might suppose that the existential view could avoid problems similar to those put forth by Grice. My visual experience of the yellow lemon is accurate if (i) there is a yellow lemon in my visual field, but also if (ii) the fact that there is a yellow lemon is causally responsible for my visual experience (see Searle 1983, 123). My visual experience represents not only a yellow lemon but also the fact that a yellow lemon is the cause of this token experience. This second condition makes the content of the experience "token-reflexive," as it refers back to the experience itself in order to specify its accuracy.

On this view, veridical misperception and veridical hallucinations are, in fact, pure cases of illusory experiences because there is no causal relation between the experience and what the experience represents. Suppose the yellow cube directly in front of me is not causally responsible for the corresponding token experience that represents it (either because the yellow lemon is behind the mirror and the lemon I see is green or because I have a

hallucinatory experience). In that case, that content cannot possibly be accurate, even if the world is as it appears to me. Grice-like cases are simply cases of illusory visual experiences. The conjunctive content is inaccurate since the individual does not represent the proper causal relationship between her mental state and the perceived particular.

Chris Hill (2019) suggests a similar account along the following lines:

> A subject S is perceptually aware of an object O just in case (i) S's experience E represents that there is a (single) object with such and such perceptible qualities in such and such a location, (ii) O is causally responsible for E, and (iii) O comes closer than any of the other causes of E to satisfying its representational content (Hill, 2019, 2).

Searle's conjunctive existential view is untenable for several reasons, however. First, as Tye notes, the suggestion is quite counterintuitive: "Intuitively, I misperceive *that* cube. My experience misrepresents *it*" (Tye, 2009, 80, emphasis in original). Second, the conjunctive view is phenomenologically odd. Tye claims that "the suggestion (...) is not easy to accept. Intuitively, when I look at a tomato, for example, my eyes are on the tomato, not on its [causal] relationship to itself as well as the tomato" (Tye 2009, 80). When we perceive a pillar in front of us, we do not feel we are experiencing the causal relationship between it and our experience, but only the pillar itself.

The third is the following: the main reason for the existential view is that visual experience is insensitive to substituting particulars for others that are qualitatively identical. Similarly, visual experience is insensitive to replacing the causal relation between the pillar in front of me and the qualitatively identical pillar to my side, provided that this second pillar appears to be in front of me. Thus, according to the existential view of norms, there is no reason to suppose that the perceiver represents the causal relations between the pillar and his token experience apart from the pillar itself.

Fourth, the self-referentiality required by Searle's conjunctive content is, according to Burge, "too complex or demanding" (Burge, 1991, 198). It overintellectualizes the content of visual experience by requiring that each subject have the cognitive faculties necessary to represent his or her experience and the causal relationship between what it represents and the subject's mental state. The token-reflexive representation of the causal relationship between the token experience and the particular the token is about is a cognition that goes far beyond "pure perception."[1] Indeed, by all accounts, that token-reflexive representation is at least a perceptual judgment.

Fifth, assuming that the normal causal relationship is part of the representational content of the experience and that the observer is aware of it, Searle's View of perceptual reference appears inherently descriptivist (Bach, 2007). Here, the reference is determined in a "satisfactionally" rather than a "relationally" way (Bach's original objection, as seen in 1987, 12 and reiterated in 2007). Searle's account of perceptual reference does not rely on the

[1] About "pure perception," see Block 2023, 17-19.

object being causally responsible for the perceiver's experience but on the subject's propositional knowledge of that fact. Consequently, not the particular cause of my visual experience but my knowledge that this causal condition has been satisfied determines the reference of my visual experience to the pillar.

Of course, as Sainsbury (2019) and Hill (2009) plausibly argue, we can only perceive something if it plays no causal role in generating our visual experience. Nevertheless, the issue is not whether token-reflexive causal relations play a crucial role in visual experience. Rather, the issue is whether or not these causal relations are part of the content of visual experience. Years later, Searle responded to these objections by claiming that "the agent need not be conscious or aware or even able to specify that these [causal relations] are the contents [...]. The specification may indeed be the result of a difficult philosophical analysis" (Burge, 1991, 232). In the final section of this paper, I will argue that the relevant token-reflexive causal relations do not belong to the content of experience but rather to the wide circumstances of evaluating the content.

Burge (1991) suggests that one can get around these objections to Searle's position by simply including a demonstrative in the content. Accordingly, the appropriate model for the content of the visual experience would be the noun phrase "that yellow lemon." This suggestion would capture the relevance of the causal relationship between the token experience and the related object without incorporating it into the content as an extra clause. Unfortunately, this is not very helpful in Grice-like scenarios. In all these cases, the perceiver would point to the wrong particular, namely the one whose image appears before him. Imagine I am standing before a yellow lemon again, and an angled mirror is covering up the yellow lemon straight ahead of me while reflecting the image of a green lemon on my side. In this instance, my visual experience is illusory, yet the demonstrative content of my experience is accurate.

Mark Sainsbury (2019) proposes a notion of existential content that could be applied to these cases when one considers them as instances of the perception of particulars. His notion of it is a general theory of perceptual content that lies between existential content and singular content. Be that as it may, to avoid Grice-like scenarios, Sainsbury adds another condition to the causal one: "The perceptual content of a perceptual experience is correct iff there are perceived objects of which it is nonaccidentally true" (Sainsbury, 2019, 1, emphasis added). In Tye's example, the perceiver does not perceive the covered lemon because it plays no causal role in his perception. To begin with: What causes his token experience is another lemon outside his visual field.

Moreover, the representations of the perceived properties apply to the occluded lemon, but only accidentally. To put it counterfactually, à la Nozick: Visual experience does not track its accuracy in proximal possible worlds. Even if there were no visible particulars behind the mirror, or if there were no yellow lemon but something else, the visual experience would still represent a yellow lemon. The happy result is that the experience of the hidden yellow lemon is illusory, but its content is only accidentally inaccurate.

Sainsbury's nonaccidental condition is very intuitive. However, let us consider it in light of another Grice-like example from Tye: Suppose I see two cubes, A and B. I am wearing both color inverting and spatially displacing lenses. A is red and on my right, but it looks green and on my left. B is green and, on my left, but it looks red and on my right. Take the case of A. My experience misrepresents it. A look green to me (and on my left). It isn't. (2018)

Given the causal condition, Tye sees both cubes A and B since those are the particulars causally responsible for his respective token experiences. The question, then, is: Does Tye's experience satisfy Sainsbury's nonaccidental condition? In the light of existentialism, we can consider the content to be nonaccidentally accurate even if there were not color inversion and spatial shift due to the lenses, there would still be two cubes one of them red while the other green. In the light of particularism, however, the content is inaccurate. Here we are back to the persistent intuition that "I misperceive *that* cube." (2009, 80, emphasis in original). Tye's experience misrepresents cube A. Cube A looks green, but it is red. Cube A appears to be to Tye's left, even though it is to his right. The same is true for the other cube B (Tye's experience misrepresents its color and location).

The moral is: Sainsbury's nonaccidental requirement seems correct, though it cannot avoid the Grice-like problems raised against the existential view. At least in light of the examples of particulars, it is hard to see how Tye's visual experience could represent some cubes, one of which is red and the other green. Intuitively, Tye's visual experience misrepresents cubes A and B.

The Particularistic View

Thus, it seems natural to assume that the representational content of experience can be specified by indexical expressions such as "over there," "to the left," "straight ahead," "in front of/behind me," "here," "now," "a minute ago," etc. (contrary to what McGinn explicitly says). I see the yellow lemon ahead of me. Content experiences represent the world from the subject's perspective in space and time. Thus, if one wants to characterize the perspective aspects of content, it would be natural to use indexical expressions for spatial properties and perhaps for subject and time.

Moreover, following Bach (2007), we must support the claim that experience refers directly to particulars in the relevant sense that identifying properties of those particulars do not mediate perceptual reference (in the sense that the reference determination is relational rather than satisfactional). The proposal is to model visual experience as a "mental demonstrative." Therefore, we should take the singular proposition as the appropriate model for the content of the visual experience. Let me call this the particularistic view (on the representational content of visual experience).

As Block (2023, 124–125) notes, the phrase "singular content" initially has an ambiguous meaning. Its weakest sense refers to content directed at a particular, where its accuracy is contingent on that particular. For example, if I think that a lemon comes from the region and you think that the same lemon comes from the area, the truth value of our thoughts may vary depending on the origin of the fruit. There are also stricter definitions of the term. E.g.,

singular content also means "object-involving content," that is, content in which the object itself is part of the content. Alternatively, singular content also means that the particular in question "constitutes" the content, meaning that the particular metaphysically grounds or determines the content.

Burge is an advocate of the weaker interpretation of the singular content theory. According to him, it is "not crucial" whether token perceptions involve particulars "since scientific types are not particular-involving" (Burge, 2010, 364). In contrast, Schellenberg claims that the singular content of visual experiences is essentially particular-involving (in the strong sense of "singular content"). Furthermore, Schellenberg (2018) distinguishes between phenomenological and relational particularities. The former applies to a perception when it appears to be of a particular, but the latter requires an actual particular that partially constitutes the perception.

The most compelling argument against the particularist view is the existence of "lookalities," which is also the strongest argument for the existential view. Regardless of whether one accepts representationalism (the view that phenomenal character is based on the representational content of visual experience), visual experiences are insensitive to particulars. For example, if a second yellow lemon, virtually identical to the first in every detail, were to replace the first without my knowledge, my visual experience would remain the same. Worse, I would not even notice the change. Therefore, the representational content of the visual experience cannot be singular.

In his recent book (2023), Block presents several empirical counterexamples of cases in which the singular content view (either in its weak or strong version) seems to fail, at least as a universal uniform view of the content of visual experience. In Block's counterexamples, visual experience is not about single-outing particulars, i.e., objects, events, places, times, particular instances of properties, and tropes. He claims that (i) particulars are not metaphysically constitutive of visual experience and that (ii) there is no fact of matter between the rival views, namely the existential and the singular content view of visual experience. In his words, "the existential content is plausible for some perceptions, notably those that don't involve figure-ground segregation, and singular content has at least some plausibility for object perception" (Block, 2023, 141).

Let us consider a few of Block's counterexamples. The first exciting case is seeing a motion without noticing anything in particular. Block gives us three reasons for assuming that we can perceive motion without moving particulars:

1. Motion discrimination in the periphery is nearly as strong as in the fovea, but acuity in the periphery is much weaker than in the fovea. McKee and Nakayama (1984, 25) note, "Velocity discrimination (ΔV/V) [NB: difference in velocity divided by velocity] is as precise in the periphery as in the fovea, amounting to about 6% for the optimum velocity range." Note, however, that this is velocity discrimination (that is, discrimination between different velocities), not velocity detection, and in the experiments reported, the moving objects were visible.

2. When acuity is weak, objects may not be distinguishable from their background. For example, a grid of black-on-white stripes that can be resolved with good acuity may not be distinguishable from a uniform gray field with low acuity. If acuity is too poor to distinguish the moving object from the background, the visual system would be unable to ascribe motion to it. Thus, seeing the motion of an object that cannot be resolved would be a case of perception in which the object that is moving cannot be distinguished from the background.
3. The peripheral retina is dominated by rods, not cones, and rods feed preferentially to the motion-sensitive area of visual cortex, area MT/V5 (Block, 2023, 132).

An example of this phenomenon is the "tunnel effect." When an object moves smoothly and quickly, people often perceive it as moving behind a hidden element no wider than the object itself. According to Jessie Munton (2021), people can see the entity behind the occluding element and thus perceive "invisible" things.[1]

According to Block, "crowding" is also a visual phenomenon that can occur when someone perceives a movement, a property, without being able to identify a moving object, a particular. The likelihood of crowding increases as one moves further into the periphery of vision. In one experiment on crowding, a participant commented, "It looks like one big mess... I seem to take features of one letter and mix them up with those of another." Another participant noted, "I know that there are three letters, but for some reason, I cannot identify the middle one, which looks like it's being stretched and distorted by the outer flankers" (Pelli, Palomares, & Majaj, 2004, 1139).[2]

Another example of seeing movement without seeing a moving object that Block quotes is blindsight syndrome type 2, also known as Riddoch syndrome. In type 1 blindsight syndrome, individuals cannot consciously perceive objects in any part of their visual field. Interestingly, people with type 2 blindsight syndrome can often consciously perceive an object's movement without seeing the moving object.

Ensemble perception is another possible instance of nonsingular seeing. In this type of perception, one can see the average tilt and size of lines, or the average expression of faces, without being able to see any particular face. However, can we not say that one visually singles out the group itself rather than seeing the average expression without singling out any particulars? According to Block, it is unclear whether one singles out any specific group when seeing the average expression of a sea of faces.

Block also gives another example of perceiving properties without perceiving particulars: the frequency at which flickering light merges so that the flickering is no longer visible. For many people, this frequency is higher in the periphery of the eye than in the center, so we are more sensitive to flicker in the periphery. Consequently, we may perceive flickering throughout the peripheral visual field without limiting it to a specific location.

[1] Quote extracted from Block 2023, 133.
[2] Quote extracted from Block 2023, 133.

But the "Ganzfeld" perception is one of the most intriguing cases he presents. In this perception, for example, when one sees fog-like light, flicker, and motion are perceived in different parts of the visual field, but there is no distinction between figure and ground. Consequently, this perception has no figure to pick out, rendering it challenging to explain with the particularistic view. As for Ganzfeld's perception, its accuracy depends on the presence of fog-like light. In other words, if there is fog-like light, the experience of fog-like light is accurate, but it need not be a particular type of fog-like light.

Similarly, an experience of light is usually understood as an experience of some light rather than a particular light. The same is true of the flicker perception described earlier, which can reasonably be considered a perception of some flicker. Perception of motion in the periphery without a clear perception of a moving object is also valid and may not fit into a model based solely on object perception. Thus, there is no need to force these perceptions into a model based solely on object perception.

We have enumerated several reasons that undermine the existentialist view and others that undermine the particularist view. Block concludes that "there is no fact of matter" that could settle the dispute between existentialists and particularists. Nevertheless, Block finds an objection to his position:

> I often hear the following objection: "You concede that singular content is plausible for object perception; but given that we should have a uniform account of all perception, we should favor singular content for ganzfeld and motion perception as well." One problem with this reasoning is that sensory modalities other than vision are less plausibly singular than vision. For example, I can experience roughness with tactile perception. An enveloping tone that permeates the local environment is an audio version of a ganzfeld. Of course, it is always open to the objector to claim that these perceptions are singular perceptions of tropes or instances, e.g., instances of roughness rather than some roughness. Still, the pressure to adopt a uniform account could lead to a uniform existential account once the full array of senses is considered. The point is even more plausible if one regards smell and taste as perceptual senses (Block ,2023, 142).

Block argues that the most natural assumption is that sensory states represent properties rather than particulars (the exception is the visual perception of particulars). Suppose we perceive a roughness with tactile perception or a bump or a barrel with auditory perception. In that case, no particulars are involved in the accuracy conditions for the content of my tactile and auditory experiences. For example, if I am blind and perceive roughness through tactile perception, a particular surface of a table or a specific stone is not part of the content of my tactile experience. If I hear a sound that pervades the environment, a particular location (in space and time) is also not involved in the accuracy conditions of my auditory experience. So, what do I represent in these tactile and auditory experiences? The answer is as simple as this: I merely represent a property (unlike Block, I do not care whether I

represent the property or a trope). What I am getting at is that the accuracy condition has nothing to do with a particular as such.

The only cases in which we perceive a particular thing are through the visual experience of objects or events. But this brings us back to the most robust case against the particularistic view of the content of visual experience: even the visual experience of particulars is insensitive to particulars as such: if a second yellow lemon replaces a qualitatively identical first down to minimal details, I notice nothing.

My view is not directed against the idea that we perceive particulars. Instead, I argue that the accuracy conditions of visual experience do not include the particulars themselves. This view is not incompatible with cognitive science, as Block claims (2023). My proposal is consistent with the idea that our visual experience only represents properties, as in the case of Ganzfeld or when we hear a sound that permeates the environment. In the case of crowding, we only represent roughness through tactile perception, and the accuracy conditions of the visual experience do not include the particulars themselves. This view is not incompatible with cognitive science, as Block claims (2023). My proposal is consistent with the idea that our visual experience only represents properties, as in the case of Ganzfeld or when we hear a sound that permeates the environment. In the case of crowding, we only represent roughness through tactile perception. Even when we visually perceive a yellow lemon, we only see the yellow coloration and the bulbous shape. This is because replacing the object seen with other qualitatively identical objects does not change the experience from the subject's point of view. However, if these experiences have accuracy conditions, the properties they represent must be accurate or not of something seen but not represented, namely, that which is causally responsible for the experience. The best model for perceptual content remains an open question since both particularism and existentialism have failed.

The Hybrid View

Block's empirical counterexamples and the simple case of "lookalities" undermine particularism. In contrast, Grice-like scenarios undermine existentialism. In this section, I will introduce what I call the relativist view. This relativistic content is not a complete proposition by Frege's standards, for it is not "absolutely" true or false. Nevertheless, it is complete because it can be understood without missing anything. Since I assume that the content of perception is nonconceptual and nonpropositional, I suggest that open sentences with free variables (or a demonstrative) and predicates provide the best model for the content of perception. For example, the content of my perception as of a yellow lemon (this yellow; this lemon-like shape) is accurate *iff* the corresponding attributes are accurate pictures of what causes the token experience.

The Stoic concept of "lekton" is widely regarded as the primary source of the notion of relativistic content, which has regained attention in recent thinking on temporal propositions. This has sparked a vast body of literature on the topic, to which many notable scholars have contributed, including Prior 1959; Kamp 1968; 1971; 1981; King 1995; 2003; Fitch 1998; 1999; Ludlow 1999; Keller 2004; MacFarlane 2003; 2005; Brogaard 2008;

2010, 2012). The concept of relative content has been extended to epistemic modals (see Egan, Hawthorne, and Weatherson 2004) and subsequently to the issue of error-free disagreement (see Kölbel 2003; Brogaard, 2012) and the domain of morality (see Brogaard 2008). Several authors have recently extended the idea of relative content to experience, suggesting that the content of experience should be viewed as a complex of properties, veridical or not, concerning a given object (Brogaard, 2010).

Recanati's account of the content of perceptual judgment is an excellent example. His case is based on Kaplan's "two-stage picture" of semantics. According to Kaplan's semantics, the first step is to determine the content of an utterance based on context, while the second step is to evaluate the utterance under the circumstances of evaluation. Modal and temporal operators determine these circumstances. Similarly, context determines the relativistic content of the perceptual judgment in perception. By analogy, the psychological mode of perception determines the circumstance of evaluation of the content of the perceptual judgment (analogous to Kaplan's circumstance of evaluation). In other words, Recanati suggested that sensory perception, imagination, and memory are the "psychological analogs" of traditional modal operators in that they also determine the wide circumstances of evaluating the content of a visual experience. For example, when I see the pillar in front of me, the relative content of my perceptual judgment (i.e., pillar-like) must be evaluated as accurate or inaccurate in the present tense and relative to the object that causes it. In contrast, when I recall the presence of a pillar in front of me, I must evaluate the same content (there is a pillar in front of me), but now relative to the past tense that triggers my memory. Thus, the context that delivers the content and the situation in which it is evaluated are separable.

The first question Recanati's proposal raises are whether Kaplan's "two-stage picture" is adequate to explain the supposed content of perception. Kaplan's approach seems counterintuitive in this context. For one thing, the content of perception is context-dependent in opposition to the propositional content of a perceptual judgment. For another, given this context-dependency, there is no common content to be assessed in different circumstances of evaluation. Here Recanati's analogy between Kaplan's modal operators and the putative psychological operators breaks down. Indeed, Recanati rejects the thesis that the content of perception is nonconceptual and nonpropositional. In the author's view, there is no clear distinction between perception and perceptual judgment, which we believe is a significant mistake. Therefore, his account, however insightful, is best understood as an account of the content of perceptual judgments rather than pure perception.[1]

Since the content of perception is essentially nonpropositional and context-independent, Lewis's one-stage picture is more appropriate than Recanati's. When I see a yellow-orange, the content can be understood as a "locational property" that the subject self-attributes to the

[1] For space reasons, we cannot argue that pure perceptual content is nonconceptual and nonpropositional (see Burge 2010).

perception. Lewis famously claims that the truth of this content depends on the features of the context in two complementary ways:

> Context-dependence and index-dependence. A context is a location—time, place, and possible world—where a sentence is said. It has countless features determined by the character of the location. An index is an n-tuple of features of context, but not necessarily features that go together in any possible context. Thus, an index might consist of a speaker, a time before his birth, a world where he never lived at all, and so on (Lewis, 1980b, 79).

The truth value of a sentence depends on the context in which it is uttered, which includes numerous features such as world, time, and place. This phenomenon is called indexicality in the strict sense since the semantic value of an expression is contingent upon the context of its utterance. Like Kaplan, however, Lewis recognizes that some features of the utterance context are "shiftable." For example, modal and temporal operators shift evaluation time by changing the default time of evaluation established by the utterance context. A sentence that falls within the scope of a temporal operator is evaluated at a different time than when it was uttered.

For example, "There are dogs" is true if and only if there are dogs at the time of utterance. In contrast, "There were dogs" is true only if there were dogs at the time of the utterance. When the evaluation point is shifted because of an operator that modifies a feature of the context, the sentence must be evaluated within the scope of the operator with respect to an "index" (an n-tuple of features) that is different from the original context, as Lewis calls it. According to Lewis, this means,

> Two different dependencies of truth on features of context: context dependence and index dependence. We need the relation: sentence s is true at context C at index I. We need both the case in which I is the index of the context c and the case in which I has been shifted away, in one or more coordinates, from the index of the context (Lewis, 1980b, 88).

According to Lewis, the truth or falsity of a proposition should be understood as relative content that is true or false with respect to context-index pairs, as complex functions from context-index pairs to truth values. For example, the sentence "There is a yellow lemon" is true with respect to a context c and an index I if and only if a yellow lemon 1 is in the time, place, and world of I. On the other hand, the sentence with the temporal operator "Yesterday there was a yellow lemon" is true with respect to a context of utterance C and an index I if and only if a yellow lemon2 is in the world of I at the location of C one day before the utterance. Similarly, the sentence "Actually there is a yellow lemon" is true to a context C and an index I if and only if there is a yellow lemon3 of tea at the time and place of I in the actual world (world of C).

The question is, how are the context indices pair determined? We cannot use Recanati's approach of finding a connection between speech acts and propositional content in

perception because perception is nonconceptual and nonpropositional (even if Lewis disagrees). However, Lewis offers a hint:

> Visual experience is a state characterized by its typical causal role, and its role is to participate in a double causal dependence. Visual experience depends on the scene before the eyes, and the subject's beliefs about that scene depend in turn, partly on his visual experience (Lewis, 1980a, 239).

Suppose that the content of the token experience of type "e" as of a yellow lemon is the property of being a yellow lemon. In principle, this could be accurate for any particular in any possible world: yellow lemon 1 in world 1, 2 in world 2, cup 3 in world 3, and so on. However, this consequence of the existentialist view is undesirable and must be ruled out. Let us assume that at 14:00, a yellow lemon is right in front of me, but at 14:00:10, when my experience takes place, the yellow lemon is no longer in my visual field. Intuitively, I do not perceive the lemon visually but imagine or hallucinate it.

Suppose a yellow lemon is standing in front of someone in Paris. Of course, I am not perceiving this yellow lemon. Thus, for a perceptual experience to be considered a genuine visual perception, it requires what Lewis calls "possible individuals situated in worlds." We need worlds in which a yellow lemon is located in my visual field. This yellow lemon is causally responsible for my token experience if we have a genuine perception. The crucial point is this: the crucial causal relation is not part of the representational content; it is not part of the accuracy conditions of perception. Instead, it is a condition for an experience to be evaluated as a genuine perception. If an existing yellow lemon is not causally responsible for my token experience under normal conditions, then neither the content turns out to be inaccurate nor is my visual experience illusory. Instead, my experience simply cannot be considered a genuine perception.

The key takeaway is that the context index pair is determined by "possible individuals situated in worlds" or "centered worlds." These centered worlds consist of the subject, the location of particular (if applicable), and the cause-and-effect relationships between events in the external world and the subject's relevant experiences. This distinction is essential in distinguishing between perception, imagination, and hallucination.

To summarize, perception's content is neither conceptual nor propositional. It is merely the attribution of a property, which does not make it a complete true or false proposition according to Frege's standards. So, when we perceive objects, their particulars belong to the context index pair, not the content. The question that remains is how we access these particulars. Lewis did not address this directly, but his writings imply that he refers to them in terms of Russellian knowledge by acquaintance:

> In each case, there are causal chains from him to me of a sort which would permit a flow of information. Perhaps I do not get accurate information; perhaps I get misinformation, but still the channel is there. I shall call such relations as these relations of acquaintance (Searle, 1983, 9-10).

At this point, I would like to introduce my hybrid model, which combines the relativistic content view with the relational view. I propose that the best way to model access to particulars related to the context-index pair is through an acquaintance relationship. This is where the "relational view" of experience comes into play. We do not include particulars as part of the content but refer to them by acquaintances. I use causal chains between particulars and myself to gather information. This results in a picture where neither the subject of the experience, particulars, the causal relations, nor even the time of the experience are part of the content of the visual perception. Instead, they are part of the context-index pair. Our perception of objects lets us become acquainted with particulars and represents their properties. The relativistic content is best modeled linguistically as an open sentence containing only predicates and free variables, which accurately or inaccurately attribute properties of what we are acquainted with.

Inference to the Best Explanation

My hybrid model supports Tye's persistent intuition that when we perceive or misperceive objects, what we represent or misrepresent is always relative to this or that particular (Tye, 2009, 80). Additionally, my model meets Sainsbury's criteria: causal and nonaccidental requirements. Firstly, the causal requirement means that we perceive whatever is causing the relevant experience, and thus the model predicts that we correctly or incorrectly represent the properties of the cause. Secondly, the nonaccidental requirement states that genuine perception's content must be nonaccidentally accurate. Since the content is only accurate of whatever causes the relevant token experience under normal conditions, i.e., accidentally accurate contents, they are ruled out.

Now we have to deal with Block's main objection that there is no fact of matter defining the form of the content of perceptual experience:

> I do not see a solid reason to favor either existentialism or singularism or the "pluralist" view that all perceptions have both singular and existential content (Logue, 2021).Further, the existence of perceptual states that are not on the face of it about particulars (to be described below) suggests that singular content in neither the solid nor weak senses is constitutive of perception, even if object perception is singular in the weak sense (Block, 2023, 128).

I don’t favor either side in this dispute. I think existential content is plausible for some perceptions, notably those that don’t involve figure-ground segregation, and singular content has at least some plausibility for object perception (Block, 2023, 141).

Indeed, Block's empirical counterexamples and the insensitivity of perception towards qualitatively identical particulars undermine the particularist view. However, it remains to be seen whether these counterexamples support the existentialist view, which specifies perceptual experience as a quantified existential proposition with a variable bound by a quantifier like "some" or "a" (see Davies, 1992, 26).

However, it is essential to note that while Block's empirical cases may challenge the particularist view, they do not necessarily support the existentialist view. Upon closer examination, we can see that some of Block's cases, like Ganzfeld, contradict the idea of a variable bound by a quantifier as "nothing" can instantiate light properties. Similarly, the cases of tunnel effect or crowd perception do not have any representation of "something" that instantiates the property of motion. In the case of touch, there is not a representation of "anything" that is rough. Block's version of the existential view differs from other proposed versions by Davies and McGinn.

Upon closer inspection, all the empirical counterexamples Block cites and the fact that perception is insensitive to particulars as such—i.e., the substitution of one particular for another qualitatively identical one—support my alternative view. I claim that what perception represents are properties, whether accurate or inaccurate, of particulars (in the case of the perception of objects, events, and particular instantiations of properties) or accurate or inaccurate of the Ganzfeld, crowd, ensemble, and so on. Moreover, the relativistic content can easily explain cases of visual perception of properties without particulars, such as the Ganzfeld (fog-like perception), the tunnel effect (perception of motion), ensemble perception, the case of "crowding," etc. Likewise, the relativistic content can also accommodate tactile and auditory perceptions of properties. Moreover, relativistic content can also easily explain why the content of perceptions is inaccurate in Grice-like cases. In short, Block's empirical counterexamples support our claim that the content of perception is relativistic. Although the format may be iconic, the best semantic model is an open sentence with predicates and free variables.

In this final section, I will present two more abductive defenses of my proposed hybrid theoretical model for sensory experience. Firstly, I will prove that my model is the most suitable for accommodating three primary pre-theoretical intuitions about the experience that seem incompatible.

Secondly, I will demonstrate that my model has the added advantage of reconciling the two leading theories of perception: the relational view and the content view of sensory experience.

In the previous section, I explained that my hybrid model merges two views: a relativistic content view and a relational view. I suggest that the best way to model the reference to the pertinent details in the context-index pair is by using an acquaintance relationship with the cause of the token in question (relational view). In contrast, our perceptual experience represents the de re properties of these same causes. It is time to evaluate our progress.

Two seemingly mutually exclusive intuitions characterize the field of the philosophy of perception. First, any reasonable explanation of perception must account for the intuition that perceptions are token-individuated by the causes of each token experience: particulars (objects, instances of properties, events, places, and times) in the case of perceiving objects and features of the environment in the case of perceiving properties such as motion, light, flickers, etc. For example, my perception of the yellow lemon in front of me differs from my perception of another lemon in front of me and from my perception of the same lemon

further away. Similarly, my perception of flickering in a Ganzfeld at time t1 differs from a qualitatively identical perception of flickering in a Ganzfeld at time t3 if there is no continuum between the perceptions.

The second crucial intuition is that perception is insensitive to what is causally responsible for a token experience. For instance, if I see a pillar blocked by the reflection of another identical pillar outside my field of view, I would not notice any difference. Similarly, if flickering lights in the Ganzfeld are covered by another set of identical flickering lights outside my field of view, I would not notice any difference if I am unaware. These two conflicting intuitions pose a dilemma for us:

1. The causal relation between a token experience and what is causally responsible for the token in question is metaphysically constitutive of perception since this causal relation token-individuates perception.
2. Our perception is insensitive to the relation between the token experience and what is causally responsible for the token in question.

My theoretical hybrid model of perception can quickly solve this dilemma. As we have already noted, the content of perception is not existential. But neither is it singular. Neither the particulars (the particularist view) nor the causal relationship (the existential view) belongs to the representational content of perception. Instead, the particulars and the relevant causal relationship belong to the context-index pair.

That said, for content to be considered perceptual content, it must be evaluated in relation to what is causally responsible for the relevant token experience. Moreover, for that content to be considered a perceptual content, it must be accurate in a nonaccidental way, i.e., meeting the beforementioned counterfactual condition.

Let us now consider the two opposing views in the philosophy of perception. The first rival theory is the relational view (Campbell, 2002), which holds that perception aims to bring humans into direct contact with the particulars and properties of the external world. This view has been influential since the time of prominent thinkers such as Aristotle and Thomas Aquinas and was prevalent in the classical and scholastic periods of the history of philosophy. In traditional, modern philosophy, however, the crucial relationship between the perceiver and the perceived was seen as indirect. It was believed that one never perceived things directly in themselves but only indirectly through knowledge of their mental proxies, such as ideas and sense impressions.

The second rival theory is the content view (Campbell, 2002). According to the content view, sense perception represents the world around us under certain conditions of accuracy. For example, when I observe a moth on a tree, I represent the world as if a moth were in my field of view. If the world is as it is, and if the way our experience represents it matches (i.e. if there is indeed a moth on the tree), then the representational content is accurate; otherwise, it is inaccurate.[1]

[1] Versions of the "content view" have become popular since the seminal works of Elisabeth Anscombe (1965), David Armstrong (1968), Fred Dretske (1969; 1981; 1995), and Pitcher (1970). Following Campbell (2002,

The two theories of perception seem to lead us in opposite and incompatible directions. The relational view conveys the intuition that perception involves a direct relationship to the world rather than a vicarious world of ideas. However, it struggles to explain how perception can be illusory and lead us astray in our judgments. On the other hand, the content view successfully conveys the intuition that our perception can be illusory. However, it faces the problem of explaining direct references without including the relevant causal relationship as part of the content.

Additionally, both theories face difficulties in accounting for the phenomenon of hallucinations. The relational view ultimately adopts classical disjunctivism, which claims that perceptions and hallucinations are not the same psychological type. This is because perceptions provide direct epistemic contact with the external world, whereas hallucinations do not. On the other hand, the content view takes a disjunctive perspective on the representational content of perceptions. Proponents of this theory assume that perceptions and hallucinations belong to the same psychological type because they share a common content schema. This schema is said to take the form of accurate and inaccurate perceptions of existing particulars, a singular proposition. In the case of hallucinations, there is a "gappy content" with a hole in the place of the missing particular.

None of these explanations, however, seems even remotely satisfactory. In the case of the relational view, it is difficult to accept that perceptual experiences and hallucinatory experiences do not belong to the same psychological type, especially when the same brain regions, such as the visual cortex, are involved in both cases. On the other hand, in the case of the content view, it is unlikely that a content schema is considered content with appropriate accuracy conditions.

My theoretical hybrid perception model can solve the above problems by reconciling the "relational view" and the "content view," thus doing justice to the intuition that motivates both. Indeed, the purpose of our perception is to bring us into direct contact with what causes our experience by becoming acquainted with the external world. This serves to anchor our perceptions of the world. Yet our perceptions do not represent what causes them. This is the truth of the relational view. However, when we are in direct epistemic contact with what causes our perceptions, we represent properties as accurate representations of those causes. Under this assumption, we can satisfy our intuition that we have illusory perceptions.

So, what happens in hallucinations, and why are they a sensory experience? The answer can be found in Dretske (1995): We do not come into direct epistemic contact with particulars, properties or relations (knowledge by acquaintance) because there is no proper causal connection between our senses and things outside us. Yet we represent non-instantiated properties as if they were instantiated.

pp. 114-131), we may call this the "content view" of perceptual experience. Of course, Campbell's "content view" is an umbrella term covering quite different views of content; as we saw, the content may be modeled as a singular or general proposition.

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