

DOES SEEING RED REQUIRE THINKING ABOUT RED THINGS?

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We continuously form perceptual beliefs about the world based on how things appear to us in our perceptual experiences. I see that the ripe tomato in front of me is red and I form the belief that this tomato is red based on my seeing it, i.e. based on my veridical perceptual experience of this red tomato. Perceptual experiences and beliefs are representational mental states. Both are defined not by what they are, i.e. their physical properties, but by what they are about, what they represent, by their content. The content of both perceptual experiences and beliefs is specified by how the world must be for them to represent things correctly; it is specified by stating the conditions under which they would be true.

If you want to explain intentional behaviour, i.e. things creatures do on purpose, then only mental states with content will do. Other neural configurations, such as the state a subject's visual cortex is in when receiving some particular information from the retina, may carry information about the subject's proximal environment. But what they can't do is feature in explanations of *intentional* behaviour. They cannot be used as part of a rationalising explanation of what the subject does. The information coming to the retina of the Spanish monolingual person is the same as the information coming to the English speaker's retina. Yet that information can't explain why the English speaker pulls the door while the Spanish monolingual speaker hesitates and then, 50% of the time, pushes. Also, and importantly, mental states such as perceptual experiences and beliefs figure in true explanations of intentional behaviour in virtue of *the way* they represent what they represent. It is only because e.g. Lois Lane believes that the man she

represents as Superman is not the same as the man she represents as Clark Kent that her behaviour around who happens to be exactly the same man can be explained.

Given the similarities between perceiving and believing, it seems sensible to ask this question. Is the way we perceptually grasp the world in experience the same as the way we believe the world to be? Is the content of perception of the same kind as the content of (perceptual) belief? A consideration in favour of the view that they are distinct might be that our experiences of colours and shapes are far more discriminating than our colour and shape beliefs. We can find ourselves being able to perceptually discriminate between two shades of green for which we don't have the relevant concepts, e.g. the concepts LIME and EMERALD. Yet, the view that the content of perceptual experiences is of the same kind as the content of belief content also seems plausible, especially if we think that the content of such perceptual experiences can be captured by *demonstrative* concepts, concepts such as 'that colour' – as we point to or fix our attention on either shade of green.

Philosophers who think the content of perception is different in kind to the content of beliefs are called (perceptual) nonconceptualists. They believe that the content of perceptual experiences – unlike the content of perceptual beliefs – is nonconceptual. To claim that the content of perception is nonconceptual is to maintain that in order to undergo a perceptual experience with a particular content, the subject need not possess the concepts involved in a correct specification of such content. Without needing to possess, for example, the concepts SQUARE and FITTING, a creature may nonetheless correctly represent the square peg as fitting into the square hole and may indeed fit the peg through the hole for this reason.

Perceptual conceptualists, by contrast, believe that the content of perceptual experiences and perceptual beliefs is of the same kind. They argue that the way the world appears to a subject in experience can be fully specified by

using concepts she possesses – by using, perhaps, just demonstrative concepts. For the conceptualist, we couldn't experience the world the way we do if we didn't have the concepts we have. The conceptualist thus insists that you can't experience squareness unless you have the concept SQUARE. The nonconceptualist says there is no problem in experiencing squareness even if you don't have the concept SQUARE.

In what follows, I take a snap shot at the so-called perceptual (non)conceptualism debate as defended by its original proponents. As we shall see, the discussion turns out to be not just about the nature of the content of perceptual experiences, but also, and importantly, about the nature of perceptual justification, i.e. the way in which our perceptual experiences justify our perceptual beliefs. Let's listen to what John, the conceptualist, and Chris, the nonconceptualist, have to say about their veridical red tomato experience. Let's also listen to Fred, a psychologist, who is sometimes really puzzled by some of the things the two philosophers say.

JOHN (the conceptualist): I take it for granted that having this (veridical) red tomato experience justifies, i.e. gives me a reason for, my belief that there is a red tomato in front of me. That is, since I trust that I am neither hallucinating nor under any perceptual illusion in believing that the tomato is red, I am just *importing* the content of my veridical perceptual experience into my (true) belief, which is thereby justified. If I can import the content of perception into my belief, then the content of my experience must be of the same kind as the content of my belief, i.e. conceptual. Of course, it would be foolish to hold that the content of my perceptual experience is a particular English sentence, such as 'this tomato is red'. The content of my experience, as the content of my belief, is rather something abstract that is *expressed* by that sentence – a proposition. On my view, I can only genuinely experience this coloured object in front of me as a red tomato if I already have the concepts RED and TOMATO. Otherwise, my experience wouldn't count as

the kind of event that would give me a reason to believe that this tomato is red.

CHRIS (the nonconceptualist): I agree with John that the perceptual belief that I express with the English sentence 'this tomato is red' is indeed justified by my veridical experience of this coloured object in front of me as a red tomato. The notion of belief justification I have in mind is also the same as John's. My beliefs are justified just in case I have reasons for believing them. In this instance, the reason for my believing that this tomato is red is my truly experiencing it that way. However, I do not conclude from all this that the content of my perceptual experience is, like the content of my belief, conceptual. Unlike John, I take the content of perceptual experiences to be different in kind from the content of beliefs. The content of perceptual experiences is, I claim, nonconceptual because I need not possess the concepts involved in a correct characterization of such content. On my view, my red tomato experience would be the same even if I didn't possess the concepts RED and TOMATO.

FRED (the psychologist): Your disagreement seems to hinge on the idea of whether possessing concepts such as RED is required to experience redness in the world. Yet you haven't said much about what concepts are or what it is to possess them. In psychology, concepts are considered mental representations and are treated as the building blocks of our *mental* economy. But there are lots of different theories about what counts as possessing a concept. So, if you want to make your positions clearer, you'll need to say a little bit more about concepts.

CHRIS (the nonconceptualist): Sure, this is important, especially since there is a major difference in the way psychologists and philosophers tend to characterize concepts. In philosophy, people like John and I are neo-Fregeans. Gottlob Frege was a nineteenth century German logician, mathematician and philosopher considered the father of modern analytic philosophy of language. We follow him in thinking that concepts are objective, non-psychological,

abstract entities. They are the constituents of those other abstract and structured entities John mentioned earlier: propositions. Unlike Frege, though, neo-Fregeans think that to possess a concept is to deploy a set of abilities – the abilities we exercise whenever entertaining thoughts containing that concept. Take the concept of conjunction, i.e. the concept AND. To possess this concept is to have the ability to draw inferences containing ‘and’, e.g. to conclude that ‘snow is white’ from ‘snow is white and grass is green’ or to draw the inference that ‘snow is white and grass is green’ from the truth of ‘snow is white’ and the truth of ‘grass is green’. This set of abilities is something that everyone who possesses the concept AND deploys and hence it’s something abstract, but to possess the concept is just to have those abilities. In fact, nobody counts as possessing the concept of conjunction if she cannot do these things!

FRED (the psychologist): Oh well, maybe Neo-Fregeans aren’t as far from psychologists as I thought. It seems to me that the view that to possess a concept is just to possess a complex set of abilities is not really that different to a really popular view in psychology according to which concepts are pattern recognition devices. It sounds like possessing the concept TOMATO only requires the subject’s ability to discriminate tomatoes from non-tomatoes, e.g. oranges.

JOHN (the conceptualist): We have to be careful here. If concepts were just pattern recognition devices, then almost all mental representations would be conceptual, but in a rather trivial way. When I said earlier that the content of perceptual experiences is conceptual, my claim was *not* a trivial one – as it would be if Fred were right. To avoid such misunderstandings, conceptual content should be characterized as meeting the following constraint: that the ability of a subject to think that e.g. this tomato is red, is not only composed of, but is also explained by, two distinct abilities, the ability to think of this tomato as an object that can have some other properties and the ability to think of

red as a property that some other objects can have. According to this so-called Generality Constraint – proposed by Gareth Evans, another neo-Fregean – a subject can be credited with the thought that this tomato is red, only if she can both think about this tomato – as being another colour, for instance – and think about other objects – an apple, say – as having the same colour as the tomato. Both Chris and I characterize conceptual content as content that is subject to the Generality Constraint. Possessing the concept TOMATO thus requires, at a minimum, that the subject be able to redeploy that particular concept in inference, and not just that the subject be able to discriminate between tomatoes and oranges. In fact, I am inclined to say that concept possession requires that the subject be able to justify the sorting of things between tomatoes and non-tomatoes. I don't understand concept possession without some kind of linguistic articulation.

FRED (the psychologist): I see. Your view of concepts is definitely different from the psychological notion of pattern-recognition device. You both agree we couldn't possess a concept without being able to exercise a complex set of cognitive – and not just discriminative – abilities. John, in fact, seems committed to tying concept possession to language. He, of course, also holds that we need to have the concepts TOMATO and RED to see this as the red tomato that it is. So John, as a conceptualist, will surely have to deny that pre-linguistic children or non-linguistic animals perceive the world in the same way as we do. Such a result doesn't strike me as totally unattractive. In fact, it seems to me that even those of us with a language do not perceive things or properties for which we don't yet have concepts in the same way as those who already have them. Let's say I look at a polygon with ten sides and ten angles while lacking the concept DECAGON. Would I really experience the shape of the polygon in the same way as someone who already has the concept DECAGON? At the same time, and interestingly, if I couldn't see the polygon as a decagon without already possessing the concept

DECAGON, how would the conceptualist explain how I learn such concept in the first place?

CHRIS (the nonconceptualist): That's a very good point, Fred. On John's conceptualist view, it is not clear at all how I learn certain perceptual concepts, such as DECAGON. If I couldn't see a geometric figure as a decagon for the first time unless I had the concept DECAGON, does it mean that I had the concept all along, that I never learnt it but just, somehow, discovered I had it? That view doesn't seem plausible at all. It is indeed difficult to see how conceptualists like John manage to explain how I learn new perceptual concepts, since they claim that what I see is already determined by the concepts I have. That seems to be totally circular. One of the main motivations for perceptual nonconceptualists like myself is precisely to provide a more convincing story about how we learn perceptual concepts – a story that avoids this kind of circularity. And we do. Since we claim that the content of perceptual experiences is nonconceptual, we need not assume that I already possess the concept DECAGON to perceive a geometric figure as a decagon for the first time. Learning such a new observational concept is explained as a process of subsuming content of one kind – nonconceptual – under content of a different kind – conceptual.

JOHN (the conceptualist): Look, an explanation of how we learn new observational concepts that required having those very same concepts to begin with would, of course, be circular and a very implausible explanation indeed. But I need not assume that the geometry student who encounters the shape of a decagon for the first time needs to possess the concept DECAGON to see it in the way she does. All I need to assume is that the student has some concept that captures the properties of having ten sides and ten angles, perhaps a demonstrative concept such as 'that shape' or 'that figure'. Ultimately, my view is that you can't learn a perceptual concept such as DECAGON unless you are the kind of creature who can at least form a demonstrative belief about decagons in the first place.

In fact, the conceptualist thesis that the content of perception and the content of belief are of the same kind is best presented as the thesis that the cognitive abilities that a subject has to deploy in order to perceive the world in the way she does are the same as the cognitive abilities the subject deploys in forming beliefs about the world. That's precisely why I believe that it would be impossible for me to perceive this red tomato as I do, were I not to possess the concepts TOMATO and RED – or, as I should have made clearer earlier, were I not to possess at least the demonstrative concepts that capture the properties of being a tomato and being red.

CHRIS (the nonconceptualist): You may finesse your view with all that talk about demonstratives and conceptual abilities, but it still entails that things appear as being a particular way in experience only to creatures with a language, because only creatures with a language will be able to form beliefs and hence only creatures with a language will be able to exercise conceptual abilities. And that is, I claim, an absurd conclusion. I'm sure it is possible for my 8-month old daughter to perceive this red tomato as I do, even though she hasn't got the concepts TOMATO and RED or any other demonstrative concepts.

JOHN (the conceptualist): I doubt very much your daughter can perceive the tomato in the same way as you do. Her retina and visual mechanisms may be causally affected in the same way, they may carry the same visual information about the colour and the shape of the tomato, but the carrying of visual information by *her brain* is irrelevant for what matters here, namely, the content of *her conscious* experience. Think for instance of the bodily adjustments of a skilled cyclist when taking a steep curve. You could explain *why* the cyclist moves in the way she does from a rational point of view, namely, in order to stay balanced while dealing with the topography of the road. But in providing such an explanation, you wouldn't give the cyclist's *reasons for* making such bodily adjustments. There doesn't seem to be any reason *for which* the cyclist moves in the

way she does because she doesn't know what it is that justifies her bodily adjustments in the first place. In the same vein, I claim that nothing can justify a perceptual belief, i.e. be a reason for which a subject believes something, without the subject being in a position to know what it is that justifies her – even if her knowledge can only be expressed via a demonstrative concept.

CHRIS (the nonconceptualist): I agree with you that in order for a perceptual experience to justify a corresponding perceptual belief, the content of the experience ought to be, as it were, *available* to the subject. But I don't think that this kind of availability requires the exercise of conceptual capacities. Moreover, I don't think it even requires that the subject be in any representational state. Take a feeling of pain, for instance. A feeling of pain may justify, i.e. it may be a reason for which I believe that I am in pain. The fact that certain creatures, like my daughter, cannot form beliefs about pain, because they don't have the concept PAIN, or cannot form beliefs about red tomatoes, because they don't possess the relevant concepts, doesn't rule out their experiencing pain or experiencing this red tomato in the way I do.

Let me also add a word or two about demonstrative concepts. John, you seem to heavily rely on them as your ultimate weapon. But, regardless of any other considerations, I think demonstrative-perceptual concepts such as 'that colour' or 'that shape' are just *too* fine-grained to appropriately capture the content of perceptual experiences, since there are many kinds of properties and objects which can be the referents of a demonstrative, yet cannot themselves be perceptually discriminated.

From Sean Kelly, I have heard the following two arguments. Take first what he calls the 're-identification condition', according to which a subject's possession of a demonstrative concept for an object or property *x* is warranted only if the subject is able consistently to correctly re-identify an object or property as falling under the demonstrative concept *X*. Our perceptual experiences of colour do not seem to satisfy this necessary condition for the

possession of demonstrative colour concepts because our ability to discriminate colours exceeds our ability to re-identify the colours discriminated. Hence the content of our colour perceptions cannot involve demonstrative concepts.

Second, the way I experience the colour of an object, the way the colour of the object *looks* to me, depends on the lighting conditions, e.g. whether the object is in the sun or in the shade. However, I experience the object to be the same colour whether it is in the light or the shade. This phenomenon is called perceptual constancy. If this is the case, then no colour demonstrative concept could describe the content of my colour experience because the demonstrative would always pick up the colour itself, not the colour-as-it-depends-on-my-experiencing-it-under-certain-lighting-conditions. Furthermore, when I perceive, say, the brown of the carpet in my office, I don't perceive it just as some abstract colour of brown, but as a *woolly* brown. The same shade of brown on a different object – say, a piece of fudge – may look different. I certainly may wonder whether they are in fact the same colour. Therefore, the relevant differences in the corresponding perceptual experiences are not differences regarding the colour itself and hence no colour demonstrative concept could be used to distinguish them.

FRED (the psychologist): This has all been extremely interesting. I believe I now have a better grasp of the perceptual (non)conceptualism debate. If I had to sum up the main disagreement between you two, between the perceptual conceptualist and the nonconceptualist, I'd be inclined to say that the conceptualist advocates, while the nonconceptualist denies, the existence of a very tight connection between what we can think and what we can experience. Having our conceptual abilities 'switched-on', as it were, seems to be the only way the conceptualist lets our experiences justify what we believe. The perceptual nonconceptualist, by contrast, allows experience to justify what we believe even when our conceptual abilities are not operational. It's almost as though the perceptual

nonconceptualist were championing the idea of nonconceptual reasons, i.e. something that justified our perceptual beliefs, but not in way that is apt for reasoning. Pain, the nonconceptualist argues, seems to work like this. It's available to us through the raw character of the experience, through its what-it-is-like-ness. So why couldn't there be other examples of nonconceptual reasons? Thinking about it like this helps me see the difference between John and Chris. John (the conceptualist) denies that there are – or even could be – nonconceptual reasons, whereas Chris (the nonconceptualist) thinks that there must be.

The issue, of course, has been not been settled here, but listening to you both has certainly helped me realise the relevance of this debate for understanding the complex relationships between perception and thought. I can see now that before the psychologists can provide answers to empirical questions such as whether non-linguistic animals or very young children have perceptual experiences that are the same as the experiences of language-using human beings, we may have to decide first between Chris and John's philosophical arguments. Who would have thought so!

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