

CONTENT ASCRIPTIONS AND THE REVERSIBILITY CONSTRAINT

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We often make content ascriptions to subjects that are assertable despite being literally false, in the sense that the subject does not literally have the content that we are ascribing to them. The ascriptions are close enough to the truth, and in the conversational context it is convenient to be a little loose in one's content ascriptions. In this paper, I shall give some examples of one kind of non-literal content ascription, and then propose a constraint, which I call the reversibility constraint, which distinguishes instances of this kind of non-literal content ascription from literal content ascriptions. I will then apply this constraint to looks-statements, and argue that the reversibility constraint can help us decide which looks-statements report the contents of visual experiences, and which do not. I will argue for the conclusion that 'that apple looks to the left of me' does not report the content of my visual experience when I do not see myself.

I.

In this section I discuss examples of non-literal content ascriptions.

I might know that Peter, who is not in the conversation, believes that the UK has a population of 60 million. It might be salient to you and me in the conversational context that France has a population of 60 million. If you ask me 'what does Peter believe the population of the UK is?', I might trade on the established link in the conversation between the figure of 60 million and the population of France and answer 'Peter believes that the UK has the same population as France', even though we both understand that I am not trying to communicate that Peter believes the proposition that the UK has the same population as France. Here I am using the phrase 'same population as France' as a way of picking out the population that Peter believes the UK to have. What you understand me as communicating is really that the population of France is what Peter believes the population of the UK to be.

I am assuming here that the only reading of the sentence ‘Peter believes that the UK has the same population as France’ is the one on which Peter believes the proposition expressed by its embedded sentence, i.e. the proposition that the UK has the same population as France. Call this the *de dicto* reading of the content ascription. One might wonder whether ‘Peter believes that the UK has the same population as France’ has as a literal reading ‘The population of France is the same as what Peter believes the population of the UK to be’. Call the latter reading the *de re* reading of the content ascription. I will be assuming in what follows that ‘Peter believes that the UK has the same population as France’ has *only* the *de dicto* reading, and therefore is literally false in the context described above. If you think that ‘Peter believes that the UK has the same population as France’ has a *de re* reading, then you should understand my claim as being that that sentence does not have, in the specified context, a true *de dicto* reading. The same goes for the examples I give below. And instead of understanding the constraint I will develop as I do, namely as a way of distinguishing instances of one kind of non-literal content ascription from literal content ascriptions, you should understand it as distinguishing instances of one kind of content ascription which do not have true *de dicto* readings from content ascriptions that do have true *de dicto* readings.

I will now give a series of other examples of content ascriptions that I take to be literally false. The first is very similar to the one above. If it is salient to us that Bill Clinton thinks that the population of France is 60 million, then when you ask ‘What population does Peter think that the UK has?’, in response to your question I might say ‘Peter believes that the UK has the same population as Bill Clinton thinks France has’. Again in saying that I may not think that Peter has any views about the population that Bill Clinton thinks France has. What you understand me as communicating is really that the population that Bill Clinton thinks France has is the population that Peter believes that the UK has.

Let’s say that we both know that Peter only lets short people into his car, say a Mini, and I know that Peter believes that Mary is 170 cm tall. We have been discussing Clive, whom we both know Peter has never heard of. It has come up in discussion between us that Clive is 160 cm tall. Since you know Peter, you tell me that Clive is too tall a person for Peter to allow in his car. You ask me whether Peter would let Mary into his car. I know that Peter thinks that Mary is 170 cm tall, and I respond to your question by saying ‘No, Peter wouldn’t let Mary into his car, because he believes that Mary is taller than Clive’. When I say this, we both understand that I do not intend to communicate that Peter believes the proposition that Mary is taller than Clive. Rather, given that you know that Peter has never heard of Clive, you understand me as communicating that Clive’s height is less than the height that Peter believes that Mary has. My belief report gives you enough information to answer your question, namely whether Peter would let Mary into his car, but not so much as to tell you the specific height property that Peter believes Mary to have.

I might know that Peter thinks that Mary is very generous. To be poetic and dramatic, I might report what Peter believes by saying 'Peter believes that Mary is more generous than Santa Claus', even though I do not mean to convey that Peter believes the proposition that Mary is more generous than Santa Claus. You understand me as communicating that Santa Claus is less generous than Peter believes Mary to be.

Let us say that we need to know where Peter thinks his son is, because we know that Peter will travel to where he thinks his son is, and we need to get in touch with Peter. The two options that we are considering for where Peter believes his son to be are: at the playground, and near The Cutty Sark. I know that Peter believes that his son is at the harbor. Since the harbor is, in fact, near The Cutty Sark, I choose not to report Peter's belief precisely, but to adopt the terminology of the conversation, and I say 'Peter believes his son is near The Cutty Sark'. I choose to report Peter's belief content quite roughly because there is no practical risk involved; a more literal belief report would produce the same course of action as my actual report, and my actual report fits with the established terminology of the conversation. If everyone understands that, when there is no practical risk involved, specific belief contents might get expressed loosely, then when they hear my belief report, they will understand me as communicating that a place near The Cutty Sark is where Peter believes that his son to be.

We can imagine a case just like the one in the paragraph above except where the options for where Peter thinks his son is are Oxford and London. I may know that Peter believes that his son is in Leicester Square, which is in London, and I might report that by saying 'Peter believes that his son is in London', even though, for all I know, Peter might not have a view on whether Leicester Square is in London.

We can use examples similar to those above to generate non-literal assertion reports, or desire reports, or intention reports. When Peter said that the population of the UK is 60 million, and it is salient in the conversational context to both of us that France has a population of 60 million, I might trade on this link and say 'Peter said that the population of the UK was the same as the population of France'. When Peter said that Mary was 170 cm tall, and it is salient between us that Clive is 160 cm tall, then I might say 'Peter won't let Mary into his car because he said that Mary was taller than Clive'. As long as it is understood by everyone that Peter has never heard of Clive, what I will be understood as communicating is that Clive's height is less than the height that Peter said Mary had. If Peter wants Mary to be very generous, I might say, in a dramatic way, 'Peter wanted Mary to be more generous than Santa Claus'.

II.

I have given examples of one kind of non-literal content ascription, and in this paper I shall focus only on this kind. I will now argue for a constraint that

distinguishes instances of this kind of non-literal content ascription from literal content ascriptions. Consider the situation above in which Peter believes that Mary is 170 cm tall, and given the salience of Clive's height in the conversational context, I report Peter's belief by saying 'Peter believes that Mary is taller than Clive'. What demonstrates that this is a non-literal belief report is that, although Mary is believed by Peter to be some way, it is not the case that Clive is believed by Peter to be some way. The thought here is that if Peter really believes that Mary is taller than Clive, then Mary is believed by Peter to be some way (i.e. taller than Clive), and Clive is believed by Peter to be some way (i.e. such that Mary is taller than him). The fact that this constraint is not met in the context when I utter 'Peter believes that Mary is taller than Clive' demonstrates that the content ascription is not literally true (I am assuming that the content ascription does not have a *de re* reading, though, if you thought that it did, you should understand the point of the constraint as demonstrating that the content ascription does not have a true *de dicto* reading).

In general, then, the constraint is this: if Peter believes that A bears relation R to B, then A is believed by Peter to be some way, and B is believed by Peter to be some way. We can use this constraint to show why the other belief reports discussed in section I are non-literal. Consider the example where Peter believes that the UK has a population of 60 million, and, trading on the established link in the conversation between the figure of 60 million and the population of France, I report what Peter believes by saying 'Peter believes that the UK has the same population as France'. In this case, although the UK is believed to be some way by Peter, it is not the case that France is believed to be some way by Peter. If 'Peter believes that the UK has the same population as France' was a literal belief report in this context, the UK would be believed by Peter to be some way, and France would be believed by Peter to be some way.

In another example, although I know that Peter believes that his son is at the harbor, trading on certain facts about the conversational context, I say 'Peter believes that his son is near The Cutty Sark'. What demonstrates that this is a non-literal belief report is that it is not the case that The Cutty Sark is believed by Peter to be such that his son is near it.

As we saw, for all the cases of non-literal belief reports, there are cases of non-literal assertion reports that work in just the same way. A similar explanation can be given of why these assertion reports are also non-literal. For instance, when Peter said that the population of the UK was 60 million, and trading on certain facts about the conversational context, I say 'Peter said that the UK had the same population as France', what demonstrates this to be a non-literal assertion report is that, although the UK was said by Peter to be some way, it is not the case that France was said by Peter to be some way.

The constraint that we have identified seems to hold for all representational content, and I formulate it below as such. This is a reason to think that the constraint holds for all representational content, and I formulate it below as such. The main aim of this paper is to apply the constraint to the contents of

perceptual experiences to explore what consequences it has for those contents. I express the constraint as follows:

Reversibility Constraint: Necessarily, if A is represented as bearing R to B, then B is represented as being such that A bears R to it.

The way I am understanding this constraint is as follows. 'A' and 'B' here are singular terms. In the phrase 'A is represented as bearing R to B', 'A' is outside of the scope of 'is represented', and in the phrase 'B is represented as being such that A bears R to it', 'B' is outside of the scope of 'is represented'. It is important that 'A' and 'B' in the constraint are singular terms, since the constraint would not hold if they were definite or indefinite descriptions. For instance, suppose that Katie is believed by David to have visited a foreign country; from this it does not follow that a foreign country is believed by David to be such that Katie has visited it, where 'a foreign country' is outside of the scope of 'is believed'; for a foreign country to be believed by David to be such that Katie has visited it, where 'foreign country' is outside the scope of 'is believed', it would follow that a foreign country exists, whereas it does not follow from Katie's believing that David has visited a foreign country that a foreign country exists.

III.

In this section I shall apply the reversibility constraint to looks-statements. I assume that there are at least some looks-statements that report the contents of visual experiences. In fact, the most natural way to introduce the phrase 'the contents of visual experiences' is by appealing to the notion of the ways objects look. An object can look a certain way to a subject, and if the object is the way it looks to the subject, then we say that the subject's experience is veridical, and if the object is not the way it looks to the subject, we say that the subject's experience is non-veridical.

There is a question concerning which looks-statements report the contents of visual experiences. It is plausible, for instance, that 'O looks square to S' can report the content of a particular experience of S. It is also very intuitive that some looks-statements do not report the content of experience. For instance, occasionally we use perceptual verbs even when we are having no experiences of the relevant sense-modality. Derek and Jody might be arguing in the dark, and Jody says to Derek 'it looks as though you are in agreement with Russell' and Derek replies 'I see what you mean'. Here the perceptual verbs are being used to report acts of understanding and not the contents of Derek's and Jody's visual experiences. Derek might be listening to the radio, and on the basis of the radio report say 'it looks as though there are going to be elections in Afghanistan';

again the looks-statement here seems to have nothing in particular to do with the contents of Derek's visual experience at the time.

Given that there are looks-statements that do seem to report the contents of visual experiences, and those that do not, the question arises as to how to decide which ones do and which ones do not. The presence of a perceptual verb in the report is clearly not the deciding factor. And although in some cases it might be intuitively clear whether the looks-statement reports the content of experience, in many cases it is highly contentious. Some philosophers, for instance Christopher Peacocke (1983), think that 'O looks to Adam to be a tomato' can report the content of Adam's visual experience (Siegel (2005) is sympathetic to this view as well), and other philosophers, for instance Colin McGinn (1982), Tyler Burge (2002), and Alan Millar (2000) disagree.

Philosophers in the latter camp take the view that the only looks-statements that report the contents of visual experience are those that concern a very sparse range of properties, for instance, color, shape, location and size properties. Philosophers in the former camp think that looks-statements concerning a much richer range of properties can report the contents of visual experiences (I should make it clear that, in this paper, I am using the word 'report' in the sense that, if a looks-statement reports the content of S's visual experience, then that looks-statement correctly reports the content of S's visual experience). For instance, a philosopher in this camp might hold that visual experiences could represent natural kind properties, such as the property of being water, artificial kind properties, such as the property of being a table, semantic properties, such as the property of meaning *bachelor*, moral properties, such as the property of being good, mental state properties, such as the property of being in pain, and aesthetic properties, such as the property of being beautiful.

There is also a question as to what restrictions there might be on experience representing relations. For instance, suppose that you are looking at two chairs, and you say 'this chair looks to me the same height as that chair'. In a second case, suppose that you are looking at a building in front of you, and do not see the Eiffel Tower, and you say 'this building looks to me the same height as the Eiffel Tower'. Both of these are relational looks-statements, but in one case you see both the relata, and in the other case you see only one of the relata; and the question is whether they both report the content of your visual experience in the above contexts. In the rest of this paper I will be arguing that the second looks-statement does not report the content of your experience in the above context, on the grounds that you do not see both the relata in question. I will then discuss the implications of this point for the debate over which looks-statements report the content of experience and which do not.

We saw above that the reversibility constraint applies to the contents of beliefs, desires, assertions and intentions, and we noted that, given its broad application, there is a reason to think that it applies to all cases of representational content, including the contents of perceptual experiences. One might try to argue that, since the content of experience is non-conceptual, and the content

of beliefs and desires is conceptual, terms which I will define below, one should not expect experiences and beliefs to obey the same constraints. This argument would be powerful if it could be shown that there was an explanatory connection between a content's being conceptual and the content's satisfying the reversibility constraint. This would challenge the presumption that the contents of perceptual experiences, which are arguably non-conceptual, satisfy the reversibility constraint. However, in the absence of such an explanatory connection between conceptualism and reversibility, the presumption that the reversibility constraint applies to the contents of perceptual experiences, given that it applies to all other kinds of content we have considered, should remain.

In fact, there is good reason to deny any link between a state's satisfying the reversibility constraint and its having conceptual content. On the standard definition, a state has conceptual content iff being in that state requires the subject of the state to possess the concepts that canonically characterize that content. For this way of thinking about conceptual content, see Gareth Evans (1982, p 159), Adrian Cussins (1990, p 382–383). According to this definition, there is at least one kind of state that satisfies the reversibility constraint and is, arguably, non-conceptual, namely the state of saying that *p*. On one view, you can say that *p* without having the concepts that characterize the content that *p*. For instance, consider someone who falsely thinks the word 'red' means *green*, and who does not have the concept *red*. When they point at a green tablecloth and say 'that tablecloth is red', of course what they *mean* to say is that the tablecloth is green, but according to this view, what they actually say is that the tablecloth is red. This is why we are inclined, according to this view, to say that what they said is false. If this view is correct, and it does seem plausible, then the subject does not have the concepts that characterize what they said, and hence the state of saying what they in fact said is a non-conceptual state. And if the state of saying that *p* is a non-conceptual state, then, given that assertions satisfy the reversibility constraint, there is no essential connection between a state satisfying the reversibility constraint and a state having conceptual content.

Let us now apply the reversibility constraint to the two relational looks-statements that you utter:

- 1) 'this chair looks to me the same height as that chair' (where you see both chairs)
- 2) 'this building looks to me the same height as the Eiffel Tower' (where you see what is referred to by 'this building', but do not see the Eiffel Tower).

I am assuming here that 'The Eiffel Tower' is a name, and so the reversibility constraint, which applies only to content-ascriptions involving singular terms, does indeed apply to 2.). The reversibility constraint entails that 2.) does not report the content of your visual experience. This is because for the looks-

statement to satisfy the reversibility constraint, it must be possible to reverse the order of the relata in the looks-statement and say how the second relatum looks to you to be. That is, if it is true that this building looks to you the same height as the Eiffel Tower, it must be true that the Eiffel Tower looks to you such that this building is the same height as it. However, when you do not see the Eiffel Tower, the Eiffel Tower does not look any way to you at all. Let us call this the 'seeing rule': if x looks F to S , and ' x ' is outside the scope of the 'looks', then S sees x . The seeing rule seems intuitively plausible, and in this paper I shall assume that it is correct. If there was an analogue of the seeing rule for beliefs it would be this: if x is believed by S to be F , and ' x ' is outside the scope of the 'is believed', then S is *acquainted* with x . But I will not be relying on this rule about belief being correct, because the notion of acquaintance is hard to spell out.

Since 2.) does not satisfy the reversibility constraint, it does not report the content of your visual experience. 1.), by contrast, is reversible. Since you see both chairs, you can reverse the order of the relata in the looks-statement and say how the second chair looks to you to be; you can say 'that chair looks to me to be such that this chair is the same height as it'. So it is an open possibility that 1.) reports the content of your visual experience.

One might respond at this stage and say that the correct way of reporting the contents of visual experiences is by using the operators 'it looks to me to be the case that', 'it is seen by me to be the case that', or 'I see that' (for this application the latter two operators would have to be understood, non-standardly, as non-factive, to allow for the possibility of non-veridical visual contents). So, for instance, 2.) would be re-phrased as 'I see that this building is the same height as the Eiffel Tower'. And one might argue that that this statement is reversible within the scope of the 'I see that' operator. For instance, one can reverse the order of the relata within the scope of the 'I see that' operator and say 'I see that the Eiffel Tower is the same height as this building'.

However, this is not an application of the reversibility constraint as formulated, but rather a weaker version of it. If Jane believes that A bears relation R to B , the requirements of the reversibility constraint are that one can say how each relatum is believed to be, not simply that one can reverse the order of the relata within the scope of the 'believes that' operator. That is, if Jane believes that A bears relation R to B , then A must be believed by Jane to be some way, and B must be believed by Jane to be some way. Recall the example above in which I say 'Peter believes that Mary is taller than Clive', when Peter has never heard of Clive. Nothing I have said rules out the possibility that, in the same conversational context, I could reverse the order of the relata within the scope of the 'believes that' operator and say 'Peter believes that Clive is shorter than Mary', where this second belief report would still be a non-literal one. I do not want to take a stand on whether this kind of reversal within the scope of the 'believes that' operator is possible for non-literal belief reports. What I am claiming is that if Jane believes that A bears relation R to B , then A is believed by Jane to be some way, and B is believed by Jane to be some way.

So, let us suppose that one's preferred way of reporting the contents of visual experiences was by using the operator 'I see that'. If you see that A bears a relation R to B, then the reversibility constraint entails that A is seen by you to be some way, and B is seen by you to be some way. So, the correct application of the reversibility constraint shows that, when you do not see the Eiffel Tower, the sentence 'I see that this building is the same height as the Eiffel Tower' does not report the content of your visual experience, since the Eiffel Tower is not seen by you to be any way at all.

IV.

In this section I shall discuss some further applications of the reversibility constraint. I shall argue that the reversibility constraint rules out, in most cases, one's experiences from representing objects as having observer-relative properties. An observer-relative property is a property of bearing a certain relation to the observer. For instance, if I am the observer, such properties include the property of being to the left of me, the property of being in front of me, the property of being far away from me, and the property of being circular and at a slant from me. Although it is very natural to think that visual experiences do represent these properties, I shall argue that in most circumstances they do not.

Consider the relational looks-statement 'this apple looks to me to the left of me'. According to the reversibility constraint, this looks-statement reports the content of a visual experience only if one can reverse the relata and say 'I look to me to be such that this apple is to the left of me'. However, if I do not see myself, then I do not look any way to myself at all. So, in those cases in which I do not see myself, 'this apple looks to the left of me' is ruled out from reporting the content of my visual experience. The reversibility constraint also entails that 'this apple looks to me far away from me' is ruled out from reporting the content of my experience when I do not see myself. The same points apply to the looks-statements 'this apple looks in front of me', 'this coin looks to me circular and at a slant from me' and 'this apple looks 120 degrees from me'; when I do not see myself, none of these looks-statements are reversible, and so do not report the contents of my visual experiences.

One might think that the reversibility constraint allows the sentence 'A looks further away than B' to report the content of experience, if A and B are both seen. But in fact this statement is elliptical for 'A looks further away *from me* than B', and this statement is not reversible if I do not see myself. Similarly, if one sees A and B, one might think that 'A looks to the left of B' can report the content of experience; however, this sentence is elliptical for 'A looks further to *my left* than B', and this statement is not reversible if I do not see myself.

The reversibility constraint rules out all observer-relative properties from featuring in the content of one's visual experience when one does not see oneself. This conclusion raises a question about what position properties visual

experience does represent, since it is very intuitive that visual experience does indeed represent position properties; for instance, sometimes a red square looks in a different position at t_1 and t_2 . I do not address this question in this paper, but leave it to further work.

V.

In this section I shall consider some objections to the argument in the above two sections. Different objections focus on different aspects of the argument. The first objection concerns the way in which I have applied the reversibility constraint to derive the conclusion that objects do not look to the left of me when I do not see myself. My argument was that, when I do not see myself, the statement 'this apple looks to me to the left of me' does not report the content of my visual experience because the looks-statement is not reversible: it is not the case that I look to myself to be such that this apple is to the left of me. The objector agrees that, when I do not see myself, I do not look to myself to be such that this apple is to the left of me. However, the objector claims that I am proprioceptively perceived by myself to be such that this apple is to the left of me. In other words, although I am not seen to be any way at all, when I do not see myself, I am proprioceptively perceived by myself to be such that this apple is to the left of me.

It may well be true that I am proprioceptively perceived by myself to be such that this apple is to the left of me. However, this will not enable the looks-statement 'this apple looks to the left of me' to report the content of my visual experience. The reversibility constraint requires that if, say, Peter believes that the US is larger than the UK, then the US is believed by Peter to be some way, and the UK is believed by Peter to be some way. It is not enough for the reversibility constraint to be met in this case that the UK be merely hoped to be some way, or seen to be some way, or otherwise represented to be some way; the UK has to be *believed* to be some way. Similarly, for 'this apple looks to me to the left of me' to satisfy the reversibility constraint, it is not sufficient that I be somehow represented to myself to be such that this apple is to the left of me; rather I have to look to myself to be such that this object is to the left of me. The reversed attitude-ascription has to involve the same attitude as the original, unreversed attitude-ascription.

A second objection agrees with my conclusion that objects do not look to the left of me when I do not see myself, but argues that there is a fall-back option, namely that objects look to me (monadically) to the left, or in front, or at a certain distance. The proponent of this objection does not hold that there exists a property of being to the left. Rather, the objection is that the state of affairs of something's being to the left of me has two modes of presentation in visual experience, a monadic mode of presentation and a relational mode of presentation. Under the monadic mode of presentation, the object is simply

presented as to the left. Under the relational mode of presentation, the object is presented as being to the left of me. The objector is suggesting that experience represents objects as being simply to the left, but this monadic mode of presentation determines a relational veridicality-condition, namely being to the left of me. The suggestion that objects look to the left *simpliciter* is made by John Campbell (1994, p119); the use of modes of presentation is my development of the suggestion.

One way of thinking of these modes of presentation is along Fregean lines. These modes of presentation are Fregean senses that appear elsewhere in the contents of thoughts. This would be an unattractive way of developing the idea, since there are powerful arguments for thinking that the content of perceptual experiences is non-conceptual (see Evans (1982), Peacocke (2001), Heck (2000), Campbell (2002)). To avoid a conflict with these arguments, the modes of presentation should be taken to be non-conceptual modes of presentation.

How should we decide whether a given relational state of affairs has two non-conceptual modes of presentation or not? Frege gave a sufficient condition for introducing modes of presentation, according to which, if you could rationally doubt that Hesperus was Phosphorus, it followed that 'Hesperus' and 'Phosphorus' had different modes of presentation. However, assuming that the content of experience is non-conceptual, then what you can rationally doubt will not be a constraint on the contents of your experiences. The proponent of this objection would need some equivalent criterion that we could use to decide when to introduce non-conceptual modes of presentation. One option is that they draw on the reversibility constraint. They could argue that, when we are apprised of all the relevant facts, if we are prepared to assert 'A looks to bear R to B', and we do not see B, then the state of affairs of A bearing R to B is being visually represented in a monadic way. In other words, a more accurate report of how things look would be to say 'A looks R-ish', where 'R-ish' is a non-conceptual mode of presentation that picks out the state of affairs of bearing R to B.

This proposal cannot be right, since, recalling an example we considered above, Derek and Jody might be arguing in the dark, and Jody might say to Derek 'it looks as though you are in agreement with Russell'; it is clear here that the combination of this sentence being uttered when the speaker is apprised of all the relevant facts, together with the fact that Russell is not seen, does not entail that Jody's visual experience represents via a monadic mode of presentation the state of affairs of being in agreement with Russell; quite apart from anything else, Jody may not be having any visual experiences at all at the time.

Another criterion for introducing non-conceptual modes of presentation that the proponent of non-conceptual modes of presentation could offer is this: if there can be phenomenally different ways in which a visual experience can represent a given property, then this is sufficient for there to be non-conceptual modes of presentation of this property in visual experience. Let us consider an example. Suppose that you can visually represent someone as being taller*,

where the non-conceptual mode of presentation taller* picks out the state of affairs of being taller than Tony Blair. Suppose now that you in fact see Bill Clinton and Tony Blair standing next to each other. The challenge to the proponent of non-conceptual modes of presentation is to say what the perceptual difference is between representing the scene before you via the relational mode of presentation, and representing the scene before you via the monadic mode of presentation. That is, as you look at the scene before you, containing Bill Clinton and Tony Blair, the challenge is to explain what sort of phenomenal difference in your experiences we might expect to occur as your experiences go from representing this state of affairs via the monadic mode of representation, taller*, to representing the state of affairs via the relational mode of presentation, taller than Tony Blair.

The proponent of non-conceptual modes of presentation could argue that no such change is possible, since whenever you represent the relational mode of presentation you represent the relevant monadic mode of presentation too. This would be a slightly odd consequence, since it would mean that one could never represent the particular state of affairs in question purely relationally. A stronger objection, however, is that, even if representing the relational mode of presentation entails representing the monadic mode of presentation, they are still distinct modes of presentation, and when they are both present, we should be able to distinguish them as different features of our experience. So the perceptual difference objection presented in the previous paragraph does not require something as strong as the possibility of representing the relational mode of presentation *without* representing the monadic mode of presentation. In fact all that the perceptual difference objection requires is that when the two modes of presentation are present together, one should be able to say what the perceptual difference is between them. Indeed, since we think we have fairly reliable introspective access to the contents of our experiences, it should be obvious to us what this perceptual difference is. The lack of any obvious perceptual difference between these modes of presentation in our experiences is therefore evidence against the hypothesis that they are there.

Similar points can be made for the case where 'taller*' is replaced by 'to the left'; the parallel challenge would then be to say, when an apple is to the left of S, and S sees both the apple *and* herself, what the perceptual difference is between S's representing the state of affairs of the apple being to the left of her via a relational mode of presentation, and representing that state of affairs via a monadic mode of presentation. I should make it clear that this is not a general argument against the existence of non-conceptual modes of presentation; it is just an argument that, in this particular case, there is a challenge facing the person who wants to introduce them.

A third objection to my argument concerns the applicability of the reversibility constraint to the content of experience at all. The objector argues as follows. There must be a time index in the content of experience. After all, if my experience represents that this apple is green, my experience is not made

veridical by this apple being green at some time in the past or future. My experience is veridical only if the apple is green now. Therefore my experience represents that this apple is green now. And 'now' picks out a relation to a time. Therefore the lengthened version of the content of my experience is: this apple is green at *t*. '*t*' here refers to the time of the experience. So we can say that 'this apple looks green at *t*' reports the content of my experience. But, the objection continues, this looks-statement is not reversible. We cannot reverse it and say that *t* looks to me to be such that this apple is green at it. Therefore, the objection continues, the reversibility constraint does not apply to visual experience.

One way to respond to this challenge would be to allow that my experience represents that this apple is green now, but deny that 'now' picks out a relation to a time. One could be a nominalist and continue to describe events as happening 'now', but deny that there are entities, times, that things stand in the 'at' relation to.

However, I will not pursue this nominalist line of response. My answer to this challenge is to deny that the content of experience involves reference to a time. By 'the content of experience', we mean the way things look. And it seems a very intuitive idea that we can ask of this apple 'was it yesterday the way it now looks?'. The intelligibility of this question requires that the way the apple now looks does not include a reference to a time. If it did include a reference to a time, such as green today, then asking, of the apple yesterday, whether it was green today, would get us the wrong results. Yesterday, the apple was green today just in case it is green today. How the apple is *today* is not the question that was being asked by 'was the apple yesterday the way it now looks?'. The meaning of the question left it open that the apple might have been yesterday the way it now looks even though it is not today the way it now looks. For the question to be intelligible in this way, the properties that the apple looks to have cannot include a time index.

The objector's motivation for introducing temporal properties into the content of experience was to prevent the content of experience being made accidentally veridical by the apple being green at some point in the past or future. However, this problem is removed if we use the notion of 'is the way it looks' instead of 'veridical'. For we can ask 'is the apple the way it looks?', where we are explicitly asking whether the apple has *now* the set of properties that it looks to have, and so there is no danger of how the apple was yesterday or two years ago affecting the answer to this question. In other words, one can avoid the problem of accidental veridicality by being careful about how we use the notion of something's being the way it looks. We can ask whether an apple is the way it looks, or whether it was the way it looks, or whether it will be the way it looks. Each question will receive an answer that is unaffected by the answers to the other questions, thereby avoiding the accidental veridicality problem.

A fourth way of responding to my argument is to accept the result of the reversibility constraint that my visual experiences do not represent the property of being to the left of me, when I do not see myself, but argue that there is

a fall-back option. Perhaps visual experience represents the property of being to the left of the observer at the center of *this* region of space, where 'this' picks out a region of space of which the observer is at the center, and which, according to the suggestion, the observer does indeed see. Of course, we need some answer to the question of exactly which region of space this is, and we need to be convinced that the observer does indeed see it. But the key point, as far as the reversibility constraint is concerned, is that the observer is picked out with a description, rather than with a singular term. And given that the reversibility constraint applies only to looks-statements that involve singular terms, if a particular cup looks to me to be to the left of the observer at the center of this region of space, it is not required by the reversibility constraint that the observer at the center of this region of space look to me to be such that the cup is to the left of it. All that is required by the reversibility constraint is that this region of space looks to me to be some way.

In responding to this suggestion I shall focus on the more general question that this suggestion raises. The more general question concerns what one should say about cases in which *x* looks to *S* to bear a relation *R* to the *F*, where 'the *F*' is a definite description and what it picks out is not seen by *S*. A related question concerns what one should say about cases in which *x* looks to *S* to bear a relation *R* to an *F*, where an *F* is not seen by *S*. Given that we are interested in which looks-statements report the contents of experiences, the general issue here is whether visual experience has quantificational content. I will present an argument that there are certain quantificational contents that experiences do not have as part of their *non-conceptual* contents, and so there are certain looks-statements of the form '*x* looks to *S* to bear a relation *R* to the *F*/an *F*', where the *F*/an *F* is not seen by *S*, that do not report the non-conceptual content of *S*'s experience. In particular, I will argue that the looks-statement that is being offered by the proponent of the fourth objection does not report the non-conceptual contents of visual experience.

I want to distinguish at the outset two ways in which one might be tempted to think that experience has quantificational content. If one thinks that hallucinatory experiences have contents, one might be tempted to think that they have quantificational, existential contents, since they cannot have singular contents, because nothing is seen by the subject. According to this view, for instance, a given hallucination might represent that a red square is next to a green circle. Call this kind of content 'qualitative quantificational content'; I will explain the terminology below. A second way in which one might be tempted to ascribe quantificational contents to visual experiences is due to looks-statements such as 'Claire looks to me to be near the red boat', where the red boat is not seen by me (perhaps Claire is wearing a distinctive uniform), or 'Claire looks to me to be near a red boat', where a red boat is not seen by me. Call this 'non-qualitative quantificational content'. The qualitative and the non-qualitative kinds of quantificational content are distinct. Hallucinations, which we are supposing might have qualitative quantificational content, are qualitatively similar to

experiences one has when objects one sees look to one to be certain ways. For instance, a case in which one hallucinates a red square next to a green circle is qualitatively similar to a case in which there are two objects, A and B, and A looks red and square to you and it looks to you to be next to B that looks green and circular to you. If any experiences have non-qualitative quantificational content, they are not like this. If Claire looks to me to be near the red boat, and the red boat is not seen by me, the experience that I am having at the time need be not at all qualitatively similar to the experience I have when I see Claire as being next to something that I see and that looks to me to be a red boat. When Claire looks to me to be near the red boat, and the red boat is not seen by me, there need be no reddish quality to my experiences at all, whereas when I hallucinate a red square next to a green circle, there is a reddish quality to my experience.

My main thesis, as far as the fourth objection goes, is that it is not possible for experience to have non-qualitative quantificational contents as part of its non-conceptual content. So it is not possible for looks-statements of the form 'Claire looks to me to be near the red boat', where the red boat is not seen by me, to report the non-conceptual contents of my visual experience, where the non-conceptual contents are those that your experiences can have without you, as the subject, having the concepts that canonically characterize them. I have four reasons for thinking this. Firstly, when there exists an object that looks red to me, I am having a suitable experience on the basis of which I could acquire the concept *red*. Similarly, a hallucination with qualitative quantificational content might well be a suitable experience on the basis of which I could acquire the concept *red*. But it seems that the sort of experience I am having when Claire looks to me to be near the red boat, and the red boat is not seen by me, is not the kind of experience on the basis of which I could acquire the concept *red*. The natural explanation of this is that for Claire to look to me to be near the red boat, where the red boat is not seen by me, I must have the concept *red* (and the concept *boat*) already. A second, related, reason is that it does not seem that 'Claire looks to me to be near the red boat', where the red boat is not seen by me, could be true unless previously some particular object had looked red to me, or I had had an experience with a qualitative quantificational content involving the property of being red. The natural explanation of this seems to be that the previous occasions of an object looking red to me, or me hallucinating something red, are necessary for me to acquire the concept *red*, which in turn I need to possess if some object is going to look to me to be near the red boat, when the red boat is not seen by me.

Thirdly, when it is appropriate to assert 'Claire looks to me to be near the red boat', when the red boat is not seen by me, there is always some story to be told about what I know or think that enables that looks-statement to be assertable. For instance, I might know that the uniform that Claire is wearing is the uniform that people from the red boat wear. Knowledge or thoughts of this kind about the red boat seem necessary for Claire to look to me to be near

the red boat in the case described. To the extent that such knowledge is necessary for 'Claire looks to me to be near the red boat' to be true in the case described, that looks-statement cannot report the non-conceptual content of experience in that case. Fourthly, when I see something as red, I always see it as being some particular shade of red. Similarly, if you hallucinate a red square, you always hallucinate the square as being some particular shade of red. However, the same is not true for non-qualitative quantificational contents. When Claire looks to me to be near the red boat, it does not follow that there is some shade of red, red*, such that Claire looks to me to be near the red* boat. One could argue that there is a general ban on non-qualitative quantificational contents containing determinate color properties such as particular shades of red. But this strategy seems implausible. If you are a color expert, you might well say that Claire looks to you to be near the yellow ochre boat, when you do not see the yellow ochre boat. A better explanation of the frequent lack of determinacy in non-qualitative quantificational contents is that the story about the subject's beliefs or states of knowledge, described in the third reason above, that one has to tell in order to make the looks-statement in question assertable, does not usually involve the subject having thoughts or knowledge about determinate color properties that the un-seen object has. To the extent that this is the explanation for the frequent lack of determinacy in looks-statements involving non-qualitative quantificational content, it follows that 'Claire looks to me to be near the red boat' does not report the non-conceptual content of my experience in the case described.

These four reasons make it plausible that Claire can only look to me to be near the red boat, in the context described above, if I have the concept *red boat*, and therefore the sentence 'Claire looks to be near the red boat', uttered in that context, cannot report the non-conceptual content of my visual experience. We are now in a position to answer the fourth objection. The sentence 'this apple looks to me to be to the left of the observer at the center of this region of space', uttered when I do not see myself, and where the content being ascribed to me is a non-qualitatively quantificational one, does not report the non-conceptual content of my visual experience.

A consequence of saying that the non-conceptual contents of visual experience do not contain non-qualitative quantificational contents is that looks-statements such as 'this tomato looks to Glenn to have a back', where a back is not seen by Glenn, do not report the non-conceptual content of Glenn's experience (because looks-statements such as these ascribe to Glenn non-qualitative quantificational contents), and hence Glenn's visual experience does not non-conceptually represent the tomato as having a back. If Glenn's visual experience does not non-conceptually represent the tomato as having a back, then there is a case for saying that Glenn's visual experience does not non-conceptually represent the object as a tomato. This is because an intuitive condition of representing something as a tomato is representing it as a three-dimensional object, and an intuitive condition of representing something as a

three-dimensional object is representing it as having a back. Thus, to the extent that Glenn's visual experience does not non-conceptually represent the tomato as having a back, it does not non-conceptually represent the tomato as being a tomato. Perhaps there is a position in logical space for the view on which one's visual experiences can non-conceptually represent something as being a tomato without representing it as having a back, but it seems that if the non-conceptual contents of visual experiences are so sparse as to include not even the property of having a back, it is not clear what motivation would remain for saying that the non-conceptual contents of visual experiences include the property of being a tomato.

A fifth objection to the conclusion that observer-relative properties do not feature in the content of experience when we do not see ourselves is that this is such a counter-intuitive conclusion that it constitutes a *reductio ad absurdum* of the applicability of the reversibility constraint to the content of experience. I do agree that the validity of a constraint should be assessed against the plausibility of its consequences, but in this particular case, I believe that the conclusion that observer-relative properties do not feature in the content of experience to be independently justified by at least two other arguments, which I give below.

The problem of defining 'the observer'

Let us call the informal idea that objects can look to the right of you, or to the left of you the 'observer-relative' view. There is a question about what the best construal of the observer-relative view is: whether the view should be that objects look to the left of *you*, your *head*, or your *eyes*. I will present some arguments for thinking that the best construal of the observer-relative view is that objects look to the left of the axis that extends from the center of your pupils. However, this construal leads to a problem. If it is indeed the case that the spatial contents of experience refer to specific physiological properties of the eye, then that implausibly rules out beings with slightly different physiologies from ours from having veridical experiences with the same spatial contents as ours.

First, I will argue that we should avoid saying that objects look to the left of *you*. Call S_1 the situation in which object O, against a plain white background, moves from your left to your right, and you keep your head still. Call S_2 the situation in which O stays still, and you move your head from right to left. From a purely visual point of view, S_1 and S_2 seem qualitatively identical. The change in look of O in S_1 is identical with the change in look of O in S_2 . Of course, you may be able know whether you are in S_1 or S_2 by proprioception, since proprioception may tell you whether you have moved your head. But if we focus on the purely visual aspects of S_1 and S_2 (to do this, we can imagine that your proprioceptive awareness has been numbed), it seems hard to deny that O's change in look in S_1 is identical with its change in look in S_2 . If we say that, in S_1 , the object comes to look to your right, then we have to say that in S_2 as well.

But if we say that in S_2 , we are committed to saying that your experience is illusory, since O remains to your left!

One could get round this implausible consequence by saying that, in S_1 and S_2 , O comes to look to the right of your *head*, rather than you. If we said this, then the experience in S_2 would be veridical, since when you swing your head round to the left, O does come to be to the right of your head.

However, this construal of the view is problematic as well. Imagine a situation, S_3 , in which O remains to your left, and, instead of swinging your head round from right to left, you keep your head still, and swing your eyes round from right to left. It seems that the change in look of O in S_3 will be qualitatively identical with the change in look of O in S_1 and S_2 (and the only way of distinguishing S_3 from S_1 and S_2 would be through proprioception, which we are imagining is numbed at present). If we say that, in S_3 , O comes to look to the right of your head as your eyes swing round from right to left, then we are committed to saying that your experience is illusory, since O remains to the left of your head.

We can avoid this implausible consequence by saying that O comes to look to the right of your eyes, rather than your head. But what is it to be to the right of one's eyes? The notion of one's eyes having a right and left depends on them having a front and back. The front of the eyes would presumably be where the pupil is, and the right of the eye would presumably be to the right of the axis that extends out from the center of the pupil. So, this, I contend, is the best construal of the observer-relative view: that objects look to the left of the axis extending from the center of my pupils (because I have two pupils, perhaps the axis should be taken to be in the middle of the two axes that extend from the center of my two pupils).

This view, on which the spatial contents of perception include certain physiological properties of the eye, has implausible consequences concerning whether other animals with very slightly different physiologies could have experiences with the same veridical spatial contents as ours. For instance, imagine a race of Martians that are physiologically identical to humans, except that they have photo-sensitive cells on one side of their pupils, so that if they wanted to see something straight ahead, they had to angle their eyes slightly to the right. Such a race of animals seems easy to imagine. It also seems intuitive that objects could, in principle, be visually represented to them in the same way as they are to us, including in all spatial aspects. However, if we say that the way we represent objects spatially is by representing them as having such properties as being to the left of the axis extending from the center of the pupils, then there will be cases in which we will be committed to saying that the Martians' similar experiences are non-veridical, whilst ours are veridical, and this seems deeply implausible.

An instance of this problem occurs when one considers the Martian seeing something that we would normally describe as straight ahead. On the observer-relative view, object O looking to one to lie straight ahead is a matter of O looking to lie directly on the axis that extends from the center of one's pupils. If

the Martian can have experiences with the same spatial contents as ours, then when he sees an object as straight ahead, the object will, on the observer-relative view, look to lie directly on the axis that extends from the center of his pupils. But of course, because he is a Martian, his eyes are angled slightly to the right, so the object doesn't lie directly on the axis that extends from the center of his pupils! Hence his experience is an illusion. This consequence seems extremely implausible, not least because the Martian has as much right to say that he is the one having veridical experiences, and we are the ones that are having illusory experiences.

One way for the observer-relative view to avoid this conclusion is to say that the Martian has different spatial contents from us, because of the different physiology of his eyes. But this seems implausible too. It seems that we could have had experiences with the same spatial contents if we had been born with photo-sensitive cells on the sides of our pupils.

This is the case against the observer-relative view: the view is forced to a position that has implausible consequences for the spatial contents of the experiences of animals with different physiologies from us. One could try to respond to the argument by appealing to locational non-conceptual modes of presentation. On this view, a subject's locational non-conceptual mode of presentation picks out whatever state of affairs normally causes the subject's experiences containing that type of non-conceptual mode of presentation. So in the example of the Martians and the humans, the same locational non-conceptual mode of presentation present in Martians' and humans' experiences would pick out different states of affairs, hence allowing qualitatively identical Martians' and humans' experiences to be made veridical by different kinds of states of affairs.

In this proposal non-conceptual modes of presentation are playing exactly the role that qualia play in *causal externalist* theories of perceptual representation of certain other properties, such as color properties. For instance, causal externalists about color properties hold that visual experiences have certain non-representational qualitative properties, and these experiences acquire their content by their standing in certain causal relations with properties in the world (see Chalmers (2005) for such a view). So, it would be legitimate to regard the locational non-conceptual modes of presentation introduced above as location qualia.

As opposed to answering the fundamental question that the argument that visual experience does not represent observer-relative properties raises, the causal externalist merely forces it to be asked in different terms. The question facing the person who denies that visual experience represents observer-relative properties is what location properties visual experiences do represent. The parallel question facing the causal externalist is how to characterize the locational qualitative properties that partly constitute the qualitative character of visual experience. The causal externalist might offer the suggestion that there are left-ish and right-ish qualia, but this suggestion is implausible (see the considerations in the argument below). So, even if one was attracted by the causal

externalist position, the fundamental question raised by the argument in this section, namely what a proper account is of locational qualitative properties, would need to be addressed. Indeed, the principal difference between the causal externalist and the opposing view is that the opposing view thinks that qualitative properties *are* representational properties, and the causal externalist denies this. So both positions need to give an account of locational qualitative properties. The difference between the positions emerges only after one has given such an account, namely over the issue of whether, in giving an account of these qualitative properties, one has thereby given an account of representational properties.

360 degree vision

I shall now present a second argument for the claim that objects do not look to the left of me. Imagine that, at t_1 , I am looking straight ahead and a cup is to my right. In this situation, the observer-relative view holds that the cup looks to my right (or “to the right of my eyes”; all the points made below will apply to this construal of the observer-relative view too). Now imagine that, between t_1 and t_2 , the physical angle that I see gradually increases, so that at t_2 I come to have 360 degree vision all around. Let us imagine further that I come to be able to walk in the direction that I used to call ‘backwards’. I am now a relatively symmetrical being along two axes: the axis I used to call front/back, and the axis I used to call right/left.

When I have become symmetrical in this way, there will be no way of distinguishing my front from my back, and, since the notions of right and left are essentially connected with the notions of front and back, no way of distinguishing my right from my left. Intuitively given that there is no such thing as my front, there would be no such thing as looking to be in front of me, as opposed to the back of me. It follows from this that there would be no such thing as looking to my right or to my left. It also seems that, in the process of my coming to have a wider and wider angle of vision, and therefore coming to see a wider range of objects, the apparent location of the cup that I see need not change. The simple fact that I can see more objects around the back of me does not seem to require that the apparent location of the cup change.

If the above reasoning is sound, then we can construct the following argument:

1. At t_2 , the cup does not look to my right.
2. There is no change in the apparent location of the cup between t_1 and t_2 .
3. At t_1 , the cup does not look to my right.

This is the second argument (not including the argument from the reversibility constraint) against the view that objects look to our left and right. Certain features of this argument connect with the causal externalist position above. I

claimed that the causal externalist position had to include an account of the location properties that are part of the qualitative character of visual experience. If the argument from 1. to 3. is sound, the proposal that there are right-ish and left-ish qualia seems implausible. 1. says that at t_2 , when I no longer have a front or back, objects would not look to the front of me, as opposed to the back of me. This suggests that my experiences of objects would not have a front-ish qualitative character, as opposed to a back-ish qualitative character, and therefore neither a right-ish as opposed to a left-ish qualitative character (intuitively this idea explains our acceptance of 1.). This claim is entirely consistent with saying that the locational qualitative character of my experience will vary as objects move around me; what is being denied is that any given locational qualitative property is essentially front-ish or back-ish. Similar claims can be made about auditory perception. If we were symmetrical, and had no front or back, it seems plausible that, although the locational qualitative character of our auditory experiences may vary as objects making noises move around us, we would not continue to describe objects as sounding in front of us, or behind us. This thought suggests that the locational qualitative properties in auditory experience are neither essentially front-ish nor back-ish. This concludes my discussion of the two further arguments for the conclusion that visual experience does not represent observer-relative properties, the aim of which was to rebut the objection that the counter-intuitiveness of this conclusion ought to count as a *reductio ad absurdum* of the reversibility constraint.

The central argument of this paper has been the development of the reversibility constraint and its consequences. I have argued that the reversibility constraint is a general constraint on representational content. On the assumption that some looks-statements report the contents of visual experiences, the reversibility constraint, when applied to looks-statements, has the consequence that visual experiences do not represent observer-relative properties, such as the property of being to the left of you, the property of being to the right of you, the property of being in front of you, the property of being far away from you, and the property of being circular and at a slant from you, when you do not see yourself. This consequence of the reversibility constraint, that visual experience does not represent observer-relative properties when you do not see yourself, raises a question about what sorts of position properties visual experience, in general, does represent. I intend to address this question in further work. A subsidiary argument in the paper, which formed the response to one of the objections, was that visual experience does not have non-qualitative quantificational content in its non-conceptual content, which has the consequence that visual experience does not non-conceptually represent objects as having backs.¹

Notes

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