The Philosophical Quarterly

Volume 59 • Number 236 • July 2009

CONTENTS

SYMPOSIUM ON THE ADMISSIBLE CONTENTS OF PERCEPTION

Perception and the Reach of Phenomenal Content	Tim Bayne	385
Seeing Causings and Hearing Gestures	S. Butterfill	405
Experience and Content	Alex Byrne	429
Is Perception a Propositional Attitude?	Tim Crane	452
Conscious Reference	Alva Noë	470
What are the Contents of Experiences?	Adam Pautz	483
Aspect-Switching and Visual Phenomenal Character	Richard Price	508
The Visual Experience of Causation	Susanna Siegel	519
The Admissible Contents of Visual Experience	Michael Tye	541
BOOK REVIEWS		563

EXPERIENCE AND CONTENT

By ALEX BYRNE

The 'content view', in slogan form, is 'Perceptual experiences have representational content'. I explain why the content view should be reformulated to remove any reference to 'experiences'. I then argue, against Bill Brewer, Charles Travis and others, that the content view is true. One corollary of the discussion is that the content of perception is relatively thin (confined, in the visual case, to roughly the output of 'mid-level' vision). Finally, I argue (briefly) that the opponents of the content view are partially vindicated, because perceptual error is due to false belief.

In the dark ages perceptual experiences were supposed to consist in direct awareness of sense-data, which are as they appear to be. Perceptual infallibility was the creed, with error blamed solely on the intellect. Eventually these doctrines were swept aside by the reformation. Perceptual experiences were conceived instead as fallible, testifying (sometimes wrongly) about the subject's familiar external environment. The thesis that experiences have representational content was firmly nailed to the seminar-room door. Early reformers took this thesis to consist in subjects' acquisition of dispositions to believe propositions about their environment, but later reformers rejected any such reduction.

Then came the recent (and inevitable) counter-reformation. While conceding that the reformers had a point against sense-data, the reactionary counter-reformers reaffirmed the doctrine of perceptual infallibility. Perceptual experience, they said, despite concerning ordinary physical objects, is not itself capable of error.¹

This paper is about the main thesis of the reformation, that experiences have representational content. What does that mean? (part A). Is it true? (part B).

¹ Counter-reformers may well claim that perceptual experience is not capable of correctness either: it is not in the business of either truth or falsity, and so 'infallible' is a tendentious label. Whether this position is plausible is briefly discussed in §III.

Part A: What is the view that 'experiences have representational content'?

I. THE CONTENT VIEW INTRODUCED

According to the reformation, 'experiences' (or 'perceptual experiences'), and in particular 'visual experiences', have representational content. Following Brewer, I shall call this the *content view*, hereafter (CV).² One of its first explicit statements (restricted to the visual case) is in Searle's *Intentionality*:

Visual experiences, like beliefs and desires, are characteristically identified and described in terms of their intentional content.³

Searle gives an example of looking at 'a yellow station wagon' (p. 37). At 'a first step', he says, his visual experience has the intentional content, or 'conditions of satisfaction', 'that there is a yellow station wagon there' (p. 41).⁴ Another well known statement of (CV), published in the same year, is in Peacocke's *Sense and Content*:

A visual perceptual experience enjoyed by someone sitting at a desk may represent various writing implements and items of furniture as having particular spatial relations to one another and to the experiencer, and as themselves having various qualities.... The representational content of a perceptual experience has to be given by a proposition, or set of propositions, which specifies the way the experience represents the world to be.⁵

These quotations suggest the following picture. There are certain familiar psychological items, namely 'perceptual experiences', for instance, 'visual experiences', and (CV) is simply the view that these items represent that the world is thus and so; they have 'conditions of satisfaction in exactly the same sense that beliefs and desires have conditions of satisfaction' (Searle, *Intentionality*, p. 39). Those who deny (CV), then, are claiming that these items do

³ J.R. Searle, *Intentionality* (Cambridge UP, 1983), p. 43.

² B. Brewer, 'Perception and Content', *European Journal of Philosophy*, 14 (2006), pp. 165–81, at p. 165.

⁴ Searle later argues (pp. 47–8) that the content of an experience is reflexive, concerning the experience itself.

⁵ C. Peacocke, Sense and Content (Oxford UP, 1983), p. 5. For some other statements of (CV), see C. McGinn, Mental Content (Oxford: Blackwell, 1989), p. 58; G. Harman, 'The Intrinsic Quality of Experience', Philosophical Perspectives, 4 (1990), pp. 31–52, at p. 34; M. Davies, 'Individualism and Perceptual Content', Mind, 100 (1991), pp. 461–84, at p. 462; M. Thau, Consciousness and Cognition (Oxford UP, 2002), p. 74; F. Jackson, 'Mind and Illusion', in P. Ludlow, Y. Nagasawa and D. Stoljar (cds), There's Something about Mary (MIT Press, 2004), pp. 421–32, at p. 428; S. Siegel, 'Do Visual Experiences Have Contents?', in B. Nanay (cd.), Perceiving the World (Oxford UP, forthcoming). See also W. Sellars, 'Empiricism and the Philosophy of Mind', Minnesota Studies in the Philosophy of Science, I (1956), pp. 253–329, at §§16–17, on 'experiences as containing propositional claims'.

not have representational content. The existence of the items, the 'experiences', is not in dispute; the contentious issue is whether they have content. As Searle (p. 44) remarks,

It is a bit difficult to know how one would argue for the existence of perceptual experiences to someone who denied their existence. It would be a bit like arguing for the existence of pains: if their existence is not obvious already, no philosophical argument could convince one.

Is the existence of perceptual experiences obvious? The next section argues that it is not.⁶

II. EXPERIENCES

Michael Hinton's book *Experiences* is not exactly a shining example of philosophical clarity. But buried beneath Hinton's eccentric prose style and unmemorable neologisms are some excellent points that have gone largely unnoticed. In particular, Hinton distinguished the ordinary notion (or notions) of an 'experience' from the 'special philosophical' one, about which he was highly sceptical. Although he did not explain the 'special philosophical' notion in quite the way it will be explained below, his separation of the two was an important insight.

II.1. 'A very special notion'

What is the 'very special notion' of an experience, which we find in much philosophical writing on perception? Suppose one sees a galah and hears the screech of a cockatoo. Then in the special philosophical sense one has a visual experience and an auditory experience. It is not mandatory to take these experiences to be different, but certainly this is a natural inference from the terminology. But whether or not the visual experience and the auditory experience are identical, experiences are supposed to be particulars: if you and I both see a galah, then there are two visual experiences, yours and mine. Granted that experiences are particulars, there is only one plausible basic category under which they fall: they are events. Experiences are like flashes, bangs, conferences, cricket matches, parties and races. They are particular things that occur or happen; they are (at least paradigmatically) extended in time, and have a beginning, a middle and an end. As Searle says (p. 45), 'visual and other sorts of perceptual experiences are conscious mental events'. Likewise Peacocke speaks in Sense and Content of 'particular'

⁶ §II elaborates on A. Byrne and H. Logue, 'Either/Or', in A. Haddock and F. Macpherson (eds), *Disjunctivism: Perception, Action, Knowledge* (Oxford UP, 2008), pp. 57–94, at pp. 82–3.
⁷ J.M. Hinton, *Experiences: an Inquiry into Some Ambiguities* (Oxford UP, 1973).

(p. 20) and 'token' (p. 37) experiences, and of their 'occurrence' (p. 47). Many subsequent writers, while disagreeing with Searle and Peacocke on a variety of fundamental issues in the philosophy of perception, agree with them on these points.⁸

Why think there are such events? The natural answer is that the existence of experiences is introspectively evident, just as the existence of flashes and bangs is extrospectively evident. This is clearly Searle's view, and it also appears to be Lycan's:

... introspection does represent our experiences as having properties. In particular, it classifies them; it assigns them to kinds. We are indeed 'made aware of them, as we are of beer bottles, as objects having properties that serve to identify them', though of course experiences are events, not physical objects like bottles.⁹

Sometimes experiences are said to be states, which suggests that they are *properties* or *conditions* of a certain sort, not events. But although in some contexts states are contrasted with events, in philosophy of mind 'state' not infrequently functions as a convenient umbrella word, with 'mental state' meaning 'mental condition, event, phenomenon, or whatever'. The common phrase 'token state' sometimes signals this inclusive way of talking: if the author is not assuming a controversial ontology of tropes or property instances, the charitable interpretation is to take 'token states' to be events.

II.2. 'A very general one'

Some everyday examples of the use of 'experience' (the noun) are these:

- I. I had the experience of swimming the Bosphorus¹²
- 2. Seeing the Taj Mahal was an unforgettable experience
- ⁸ See, e.g., Harman, 'The Intrinsic Quality of Experience', p. 42; A. Millar, Reasons and Experience (Oxford UP, 1991), p. 11; C. Siewert, The Significance of Consciousness (Princeton UP, 1998), p. 11; B. O'Shaughnessy, Consciousness and the World (Oxford UP, 2000), p. 39; A. Byrne, 'Intentionalism Defended', Philosophical Review, 110 (2001), pp. 119–240, at p. 203; M.G.F. Martin, 'On Being Alienated', in T. Gendler and J. Hawthorne (eds), Perceptual Experience (Oxford UP, 2006), pp. 354–410, at p. 354; Siegel, 'Which Properties Are Represented in Perception?', also in Perceptual Experience, pp. 481–503, at p. 484. Sometimes philosophers use 'event' extraordinarily broadly, so that if an object o is F at t it supposedly follows that there is an 'event' of 's being F occurring at t. Hence there is an 'event' of this pen's being straight, etc.; cf. J. Bennett, Events and their Names (Indianapolis: Hackett, 1988), p. 6. It is safe to say that almost none of the philosophers referred to above has such an elastic use in mind.
- ⁹ W.G. Lycan, 'Dretske's Ways of Introspecting', in B. Gertler (ed.), *Privileged Access: Philosophical Accounts of Self-Knowledge* (Aldershot: Ashgate, 2003), pp. 15–30, at p. 26; Lycan is quoting from, and disagreeing with, Dretske's paper 'How Do You Know You are Not a Zombie?' in the same volume.
 - ¹⁰ For an example, see Millar, Reasons and Experience, pp. 10–11.
- ¹¹ On some views (e.g., Bennett, *Events and their Names*) events *are* property instances. Be that as it may, the point is simply that the existence of events (elections, weddings, etc.) is less controversial than the existence of property instances.
 - ¹² From Hinton, Experiences, pp. 5–6.

- 3. I have not had the experience of tasting haggis
- 4. I had many strange experiences today¹³
- 5. No prior experience needed [in a job advertisement for house painters; this is a mass occurrence of 'experience'].
- (1)–(5) may be, respectively, paraphrased as follows:
- 1*. I swam the Bosphorus¹⁴
- 2*. I saw the Taj Mahal and I shall not forget seeing it
- 3*. I have not tasted haggis
- 4*. Many strange things happened to me today
- 5*. Applicants do not need to have worked previously as house painters.

These examples illustrate, in Hinton's phrase (p. 7), 'the ordinary biographical sense of the word'. Ordinary talk of one's 'experiences' is talk of what happened to one, what one did, what one encountered or witnessed. Although often this concerns events, it is not talk of experiences in the special philosophical sense. ¹⁵ If it were, then presumably an utterance of 'I had the experience of seeing a galah for two minutes' (equivalently, 'I saw a galah for two minutes') would report the occurrence of a certain 'visual experience' lasting for two minutes. However, as Vendler pointed out, 'I saw a galah for two minutes' bears no grammatical hint of an event or process unfolding in time – unlike, say, 'I chased a galah for two minutes'. ¹⁶

II.3. The 'no experience' hypothesis

Obviously there are experiences: watching the final inning was a thrilling experience, and eating the crackerjack was an unpleasant one, for example. However, to conclude from this that there are 'visual experiences' and 'gustatory experiences' in the special philosophical sense is just to ignore the fact that 'experience' in its philosophical use is not a harmless extension of ordinary usage. As Travis notes, it is 'a far from innocent count noun'.¹⁷ Unexceptional everyday remarks about experiences do not secure the

¹³ From M. Tye, Consciousness and Persons: Unity and Identity (MIT Press, 2003), p. 97.

¹⁴ As Hinton points out (*Experiences*, pt. I), this paraphrase is not perfect, since having the experience of doing such and such suggests some sort of awareness on the subject's part. If one somehow managed to swim the Bosphorus while fast asleep it would be at least odd to say one had the experience of swimming the Bosphorus.

¹⁵ See Thau, Consciousness and Cognition, p. 207; also B. Farrell, 'Experience', Mind, 59 (1950), pp. 170–98.

¹⁶ Contrast, for example, 'I deliberately chased ...'/'I was chasing ...' and *'I deliberately saw ...'/*'I was seeing ...'. See Z. Vendler, 'Verbs and Times', *Philosophical Review*, 66 (1957), pp. 143–60, esp. pp. 155–6.

¹⁷ C. Travis, 'The Silence of the Senses', Mind, 113 (2004), pp. 57–94, at p. 57.

existence of 'experiences' of the special philosophical sort. But so what? If there are 'visual experiences', they are revealed by introspection, whether or not we talk about them in daily life. Besides, as Searle says, is it not obvious that there are such things?

That it is not obvious is one moral which can be drawn from the much discussed claim, inspired by remarks in Moore's 'The Refutation of Idealism', that experiences are 'transparent'. Statements of the claim vary, but Tye's is representative: 'In turning one's mind inward to attend to the experience, one seems to end up concentrating on what is outside again, on external features or properties'. 'Attend' should not be read too expansively, as something like *consider*, since Tye holds that we can think about our experiences. Presumably his point is that we cannot attend to our experiences in anything like the way we can attend to perceptual stimuli. In attending to a perceived stimulus, one allocates more cognitive resources to processing information about it; according to Tye, in this sense there is no such thing as 'attending to one's experience'.

This claim is surely plausible. (Cognitive scientists have distinguished many different kinds of attention, but have not yet seen the need to suppose that we can attend to our experiences.) More or less equivalently, we do not know of our experiences by 'looking within' – by a *quasi*-perceptual faculty of introspection. How do we know of them, then? Tye's answer is that we know of them by looking without:

If we try to focus on our experiences, we 'see' right through them to the world outside. By being aware of the qualities apparently possessed by surfaces, volumes, etc., we become aware that we are undergoing visual experiences. But we are not aware of the experiences themselves.²⁰

I know that I see a pig, and the suggestion that I know this by looking outwards and spotting the pig seems right (somehow).²¹ Although spelling out the details is far from straightforward, suppose for the sake of argument that this model of self-knowledge is basically correct. If I am undergoing a visual experience of a pig, then I can know that by attending to the pig. Fine. But why think I am undergoing a visual experience of a pig? (In the special philosophical sense of 'experience', this is not a prolix way of saying 'I see a pig'.) There are, of course, numerous events in the causal chain starting from the pig and continuing into my brain. If I am undergoing an experience of a pig, the experience is presumably to be found in that causal

¹⁸ G.E. Moore, 'The Refutation of Idealism', Mind, 7 (1903), pp. 1–30.

¹⁹ M. Tye, Ten Problems of Consciousness (MIT Press, 1995), p. 30.

²⁰ Tye, Consciousness and Persons: Unity and Identity (MIT Press, 2003), p. 24.

²¹ See, in particular, G. Evans, *The Varieties of Reference* (Oxford UP, 1982), pp. 227–31; F. Dretske, *Naturalizing the Mind* (MIT Press, 1995), ch. 2.

chain. But since the issue is whether I am undergoing an experience in the first place, this is of no help at all.

Tye, in fact, comes as close as possible to the conclusion that there are no experiences, without actually affirming it. Although looking without tells us unequivocally that we are undergoing experiences, it leaves their number and duration somewhat conjectural (*Consciousness and Persons*, p. 97):

The simplest hypothesis compatible with what is revealed by introspection is that, for each period of consciousness, there is only a single experience – an experience that represents everything experienced within the period of consciousness as a whole (the period, that is, between one state of unconsciousness and the next).

One experience too many, perhaps: a simpler hypothesis is that there are *no* experiences. Of course, this simpler hypothesis will be obscured without Hinton's distinction between the 'very special' notion of an experience and the 'very general' one, and Tye's otherwise insightful discussion can be faulted on exactly this point. Immediately after the passage just quoted, Tye responds to an objection:

Admittedly, this hypothesis may seem to be at odds with such everyday statements as 'I had many strange experiences today'. But in reality there is no conflict. Talk of my undergoing many strange experiences no more requires for its truth that there exist multiple strange experiences than does talk of my having a drowning feeling require that there be a feeling that drowns. Just as in the latter case it suffices that I undergo an experience that *represents* that I am drowning, so too in the former it suffices that my experience today *represented* many strange things.

As pointed out in the previous section, 'I had many strange experiences today', as uttered in an ordinary context, may be paraphrased as 'Many strange things happened to me today'. Since this statement is not about experiences in the special philosophical sense, there is no conflict at all with Tye's 'one-experience' hypothesis, and so no paraphrase in terms of representation is needed.²² By the same token, there is no conflict with the 'no-experience' hypothesis either.

III. THE CONTENT VIEW EXPLICATED

The content view (CV) is not, or should not be, the view that experiences, in the special philosophical sense, have content. It is doubtful that there are such things. What should (CV) be instead?

 22 Tye only offers a paraphrase *sufficient* for the truth of 'I had n F-experiences today', not one which is necessary and sufficient. 'I had a single experience today that represented n F-things' would be false if I had a nap at lunchtime after fewer than n F-things had been represented, yet 'I had n F-experiences today' might well be true.

Sticking with vision for simplicity, one *veridically perceives* an object iff one sees it, and it is the way it appears or looks. One *non-veridically perceives*, or *is illuded by*, an object iff one sees it, and it is not the way it appears or looks. No great weight is being placed on the vocabulary of 'sees' and 'appears/looks'. This is merely intended to be an intuitive gloss on a distinction that we can recognize from a range of examples, situations like seeing a lemon on a table in daylight (veridical perception), seeing the Müller–Lyer figure (non-veridical perception or illusion), and so on. *Perception* comprises, by stipulation, veridical perception and illusion; it therefore excludes (what philosophers call) *hallucination*.²³ If one has a hallucination of a yellow lemon, one does not see anything, but one is not in a position to know this: one cannot tell merely by 'introspection' that one is not veridically perceiving a yellow lemon or having an illusion produced by a green lime.²⁴

(CV) is (at least) a claim about *perception*; whether or not it also covers the trickier case of hallucination is something that will (mostly) be set aside. Reversing history, it can be thought of as a descendant of, and an ostensible improvement on, the counter-reformation view as expressed by Brewer ('Perception and Content', p. 169):

... in perceptual experience, a person is simply presented with the actual constituents of the physical world themselves. Any errors in her world view which result are the product of the subject's responses to this experience, however automatic, natural, or understandable in retrospect these responses may be. *Error*, strictly speaking, given how the world actually is, is never an essential feature of experience itself.

According to Brewer, even in cases of illusion one is 'simply presented with the actual constituents of the physical world themselves': if there is any misrepresentation, it is to be found at the level of belief or judgement, not perception.

What is it to be 'simply presented' with the constituents of the physical world? In an ordinary situation in which one sees a yellow lemon and a red tomato, one is 'simply presented' with the lemon, the tomato, yellowness, and redness – perhaps that amounts to the fact that one sees the lemon and the tomato and sees yellow and red. But that is not all: the lemon is 'simply presented' as yellow, not as red. This is not captured by saying that one sees that the lemon is yellow – one may see that it is yellow even if only its distinctive lemon-like shape is 'simply presented'. For instance, in very dim light one might recognize that this is a (yellow) lemon by seeing its shape.²⁵

²³ In vision science, 'visual illusions' include 'philosophical' hallucinations. The Hermann Grid illusion, for instance, is arguably an example: one 'sees' non-existent grey spots.

²⁴ See Martin, 'On Being Alienated'.

²⁵ Further, one may see *that* the lemon is yellow even if one does not see *the lemon*.

How does the fact that the lemon is yellow get into the perceptual story? An attractive answer is to take perception constitutively to involve a propositional attitude, specifically an attitude rather like the factive attitude of knowing – *zeeing*, to coin a verb. Like knowing that p, zeeing that p entails that p. When one sees the yellow lemon, one *zees* that it is yellow – this is the sense in which the lemon is 'simply presented' as yellow.

Could zeeing just *be* knowing? It seems not. Suppose one is mistakenly convinced that the lighting conditions are peculiar and that the lemon is really green, despite looking yellow; one believes that the lemon is green and not yellow, and so presumably one does not know that it is yellow. Yet there is nothing perceptually amiss: one zees that the lemon is yellow.

What about illusions? According to the counter-reformation (elaborated with 'zeeing'), an illusion that q is a case where one zees that p and is (mistakenly) inclined to judge that q, or something along similar lines. Offhand, that seems forced, at best. Why strive and struggle when there is an easier route? Namely, take perception to be like *belief*, rather than like knowledge. This brings us to (CV): perception constitutively involves a propositional attitude rather like the *non*-factive attitude of believing, *exing* (meant to suggest 'experiencing'), not zeeing. Then illusions can be accommodated without strain: an illusion that q is simply a case where one exes that q. One may think of the content of the exing attitude as the output of (largely) informationally encapsulated perceptual modules. Sometimes one will be in possession of background information which undermines that q; this will not affect the output, resulting in the subject exing that q while disbelieving it.

(CV), as just explained, is intended as a theoretically fruitful description of the phenomenon of perception, not a piece of unarticulated folk psychology. Fortunately, it carries no commitment to 'experiences' in the special philosophical sense – introspectable events that occur when one sees a galah or hears a screech. (CV) is silent on whether to ex that p is to undergo an event, or whether it is to be in a state or condition. If to ex that p is to be in a state or condition, like believing and knowing, (CV) can be smoothly conjoined with the 'no experience' hypothesis.

Various optional extras can be added as desired: that the relevant contents are 'non-conceptual', that there is a different attitude for each of the different perceptual modalities, and so on. For present purposes, though, we can work with (CV) in skeletal form.

²⁶ Largely encapsulated: if one believes that the lemon before one is white but cleverly illuminated by a yellow spotlight, it will still look yellow. But only largely: for instance, knowledge of the colours of lemons seems to have a slight effect on colour appearance. See T. Hansen *et al.*, 'Memory Modulates Color Appearance', *Nature Neuroscience*, 9 (2006), pp. 1367–8.

Finally, it should be emphasized that the exposition of (CV) here is entirely unoriginal, and merely repeats with minor amendments a characterization that is often found in the literature. For instance, Millikan introduces 'visaging', 'a general term for what stands to perceiving as believing stands to knowing'; to suffer a perceptual illusion is to 'visage falsely'. And Johnston discusses the view that visual experience involves 'a *sui generis* propositional attitude – visually entertaining a content concerning the scene before the eyes'.²⁷

Part B: Is the content view true?

Perhaps surprisingly, explicit arguments for (CV) are rather thin on the ground.²⁸ It is hard not to sympathize with Travis' complaint in 'The Silence of the Senses' (p. 57): 'In no case I am aware of is this view argued for. Rather it is assumed from the outset.' Fortunately all is not lost, because an examination of Travis' argument *against* (CV) in that paper suggests a powerful argument *for* it.

IV. TRAVIS' ARGUMENT AGAINST THE CONTENT VIEW

In the first section of 'The Silence of the Senses', Travis spends some time unpacking the claim that 'a (given) perceptual experience has a (given) representational content' (p. 57). Although his characterization of (CV) differs in various respects from the one just given, his argument equally targets the latter.

How can (CV) be supported? The obvious suggestion was made in the previous section: appeal to perceptual illusions – the 'phenomena of misleading perceptual experiences' (p. 66). One *believes* that the lines in the Müller–Lyer figure are equal, yet they persist in *looking* unequal. Somehow the (mis-)information that the lines are unequal is perceptually available,

²⁷ M. Johnston, 'Postscript: Visual Experience', in A. Byrne and D. R. Hilbert (eds), *Readings on Color*, Vol. 1: *The Philosophy of Color* (MIT Press, 1997), pp. 172–6; R. Millikan, *On Clear and Confused Ideas* (Cambridge UP, 2000), p. 111. Johnston actually characterizes the view as *identifying* 'visual experience' and the '*sui generis* propositional attitude'. But that stronger claim is not needed.

²⁸ They are also sometimes unconvincing. For instance, Searle (pp. 4I-2) notes that 'sees that the F is G' is intensional, whereas 'sees the F' is extensional, and claims that the 'most obvious explanation of this distinction is that the "see that" form reports the intentional content of the perception'. But of course that cannot be *the* explanation, because 'sees that the stock market has crashed' is also intensional, and the explanation can hardly have anything to do with the content of perception. In any case, although 'sees o' has a distinctively visual sense, 'sees that p' arguably does not.

and (CV) apparently has a neat diagnosis of the situation: one exes that the lines are unequal. Another (connected) suggestion is to turn to the way we talk. Granted, there seems to be no appropriate propositional-attitude verb, but we do speak of the ways things look, smell, sound and so forth. This lemon, for instance, looks yellow and oval. Is such talk not best understood as implicitly reporting the content of the exing attitude, specifically, that this (the lemon) is yellow and oval?²⁹ In Travis' terminology (p. 63), this is the suggestion that perceptual content is 'looks-indexed'. That is, 'in some sense of "looks" (p. 63), 'the representational content of an experience can be read off the way, in it, things looked' (p. 69).

Travis' argument against (CV) consists in attacking both suggestions (focusing on the visual case), and may be set out as follows:

- I. Illusions do not show that (CV) is true
- 2. There are 'two different notions of looks' (p. 69):
 - (a) examples of the first notion: Pia looks like her sister, it looks as though it were a Vermeer (pp. 70, 75)
 - (b) examples of the second notion: it looks as if Pia's sister is approaching (p. 75)
- 3. 'Looks on this first notion ... are unfit to index content. For as to that they point in no one direction' (p. 72)
- 4. The second notion is a matter of 'factive meaning', and so 'collapse[s] representation into indicating ... [which is] to lose it altogether' (p. 79)
- 5. Hence if there is such a thing as 'the representational content of an experience', it is not looks-indexed that is, there is no 'looks'-construction that is exclusively used to report the content of the alleged exing propositional attitude
- 6. (CV) is not needed to account for illusion, and 'looks'-statements do not help, so (CV) is without support.

I shall postpone discussion of the first step of the argument, that perceptual illusions do not show that (CV) is true, and examine Travis' case against 'looks-indexing'.

IV.1. Against looks-indexing

It might be too obvious to mention (perhaps this is why Travis does not mention it), but his two 'notions of looks' correspond to Chisholm's 'comparative' and 'epistemic' uses of 'appear words' (of which 'look' is an example), introduced in ch. 4 of *Perceiving*. ³⁰ Chisholm's distinction is an

²⁹ Cf. R. Price, 'Content Ascriptions and the Reversibility Constraint', *Philosophical Perspectives*, 19 (2005), pp. 353–74, at pp. 357–8.

³⁰ R.M. Chisholm, *Perceiving: a Philosophical Study* (Cornell UP, 1957).

important component of Jackson's argument for the sense-datum theory in *Perception*.³¹ In that book (p. 30), Jackson explains the epistemic use as follows:

Suppose I say, in front of a house whose bell has not been answered and whose curtains are drawn, 'They appear to be away' or, in our standard form, 'It looks as if they are away'; then I am expressing the fact that a certain body of visually acquired evidence — in this case, drawn curtains and an unanswered bell — supports the proposition that they are away.

The comparative use, as in 'That looks like a cow', Jackson plausibly says, can be roughly paraphrased as 'That looks the way cows normally look' (p. 31). As Travis puts it (pp. 69–70), 'On [this] notion, something looks thus and so, or like such and such, where it looks the way such and such, or things which are (were) thus and so, does (would, might) look'. The comparative use is explained *using* 'looks' (the way cows normally *look*), a fact which will be important later.

Does either of these uses index the content of experience?

Travis' main complaint against comparative indexing (step 3 in the argument set out in the previous section), is that 'looks like' points 'in no one direction' (p. 72). Although his elaboration of this point is not easy to follow, one of his basic ideas is straightforward. The comparative construction reports that some things look the same way, without reporting what that way is. If I say that Pia looks to me like her sister, I am saying, roughly, that Pia looks to me the (salient) way her sister looks to me. If Pia looks tall and blonde to me and so does her sister, my remark is true. Similarly if Pia and her sister both look short and tired. How Pia looks to me (blonde, pink, angry) is not something that can be 'read off' what I have literally said, although my audience might well be able to infer it.

Travis' complaint against epistemic indexing (step 4) is this. Suppose, to take Jackson's example, it looks as if they are away. Then their drawn curtains and unanswered bell must be some sort of *sign* that they are away. As Travis puts it, 'What things look like on this use of "looks" is thus a matter of what things mean factively, or indicate'. This, he continues, 'is precisely not a matter of things being represented as so. Representation simply does not work that way' (p. 78).

But this complaint is not obviously right. On one popular account, representation (and perceptual representation in particular), precisely \dot{w} a matter of what things indicate (under certain conditions).³² But further

³¹ F. Jackson, *Perception: a Representative Theory* (Cambridge UP, 1977).

³² See, e.g., R. Stalnaker, *Inquiry* (MIT Press, 1984), ch. 1. In the course of explaining why the relevant sense of 'represent' has nothing to do with indication (pp. 58–9), Travis actually mentions one of the standard examples used to suggest the opposite, namely, tree rings.

discussion of Travis' argument is not necessary, because his conclusion can be secured much more swiftly.

First, clearly the epistemic use is not used *exclusively* to report the alleged content of perception, since almost *anything* can follow 'It looks as if': they are away, away in Uganda, trainspotters, Obama supporters, fond of dogs, etc. Proponents of (CV) do not typically think that perceptual experience can have the content *that they are away in Uganda*.³³

Secondly, even if the way something epistemically looks is specified in very restricted visual terms, this still need not be the alleged content of experience. Viewing one's car in an underground parking garage, it might both *look black*, and thereby *look as if it is blue* (epistemic) – that is how blue things look in this light. Evidently in such a situation the alleged content of experience is that the object is black (not blue).

Obvious next question: what about the 'phenomenal use' of 'looks' – 'looks black', and the like – which Travis does not discuss?

IV.2. 'Phenomenal' indexing?

In *Perceiving*, Chisholm distinguishes a 'non-comparative use' of appear words, in addition to the comparative and epistemic uses. In Jackson's *Perception* (p. 77) this becomes the familiar 'phenomenal use':

The phenomenal use is characterized by being explicitly tied to terms for colour, shape, and/or distance: 'It looks blue to me', 'It looks triangular', 'The tree looks closer than the house', 'The top line looks longer than the bottom line', 'There looks to be a red square in the middle of the white wall', and so on. That is, instead of terms like 'cow', 'house', 'happy', we have, in the phenomenal use, terms like 'red', 'square', and 'longer than'.

The phenomenal use does seem to be a genuine 'third use'. I observed in the previous section that the comparative use is explained using 'looks': if that sculpture looks like a cow, it looks the (salient) way cows look. So if cows look F, and that sculpture looks like a cow, then that sculpture looks F. Cows look to have a distinctive shape — cow-shaped, for want of a better term. Given contingent facts about the way cows look, to look like a cow (comparative) is to look, *inter alia*, cow-shaped. What is *that* use of 'looks'? Not comparative, on pain of a regress. Apparently not the epistemic one either. In a distorting mirror, something might look cow-shaped but not look *as if* it is cow-shaped.

One might hope that the phenomenal use can be analysed, as Jackson puts it, 'in terms of concepts pertaining to the epistemic or comparative uses'

³³ Cf. Siegel, 'Which Properties are Represented in Perception?', p. 481.

(p. 33). Jackson makes a convincing case that it cannot.³⁴ He goes on to argue that 'It is the analysis of [the phenomenal] use which leads to sensedata' (p. 33). With hindsight, he could have taken it to index the content of perception instead: if θ looks $_p$ (the subscript indicating the phenomenal use) F to S then S exes, of θ , that it is F.

However, Jackson has not characterized this third use of 'looks' properly. Talk of the 'phenomenal use' or, as Jackson sometimes says, the 'phenomenal sense', is naturally taken as a claim of ambiguity. If 'looks' has a special meaning when followed by 'terms for colour, shape, and/or distance' then, as Thau points out (p. 230), 'It looks red and very old' should seem anomalous, since this construction forces a univocal interpretation of 'looks' (cf. Searle, pp. 76–7). Yet that sentence is perfectly in order. Thau concludes that 'We do not mean two different things by "looks" when we say that something looks red and that something looks old'.

A fair point, as far as it goes. However, Thau's argument is incomplete, because it is targeted at the view that 'looks' when followed by 'red' only bears the phenomenal sense. Since 'It looks old' is unquestionably acceptable, and cannot be used phenomenally, its use must be either epistemic or comparative. In fact 'It looks old' can have both uses, as Jackson himself in effect observes.³⁵ Given that 'looks [adjective]' is sometimes used epistemically, there is no good reason for someone to insist that 'looks' can never be interpreted in this way with 'red' as its complement. A defender of the 'phenomenal use' should say that the whole phrase 'looks red' is capable of being used epistemically, comparatively, and phenomenally. If that is right, then 'It looks red and very old' has two straightforward interpretations, and should not (pace Thau, p. 230) 'seem ill formed or at best false'. Admittedly, this sentence will have an anomalous reading, which offhand it does not seem to, but that might be because it is obscured by the two straightforward interpretations.

Still, even though his argument does not secure the point, Thau is correct that there is no phenomenal use of 'looks', as least as Jackson explains it. Chisholm agrees. One illustration he gives of the 'non-comparative use' is 'The mountainside looks red to me' (*Perceiving*, p. 52), which sounds like Jackson's phenomenal use. But it is not, because Chisholm says later

³⁴ See *Perception*, pp. 37–48. There is a comparative construction that with only mild straining can be read as equivalent to the phenomenal/non-comparative use of 'looks red', namely, 'looks like a *stereotypically* red object'. But this is not the hoped-for analysis, since in order to get the equivalence the intended interpretation of 'stereotypically red object' has to be explained in terms of the phenomenal/non-comparative use: a stereotypically red object is one that would *look* red. (Merely *being* red is insufficient.) This point applies equally to the examples of 'looks centurian', 'looks old', and the like, discussed below.

³⁵ Jackson's example (*Perception*, p. 33) is 'The dog looks dangerous'.

(p. 116) that 'looks' in 'That animal looks centaurian' can be 'take[n] ... non-comparatively'. Jackson, not surprisingly, is unconvinced (*Perception*, p. 89):

It seems, in fact, that 'looks centaurian' normally amounts to 'looks like a centaur' or, as there are no centaurs, 'looks like a centaur would'; that is that it is to be understood comparatively.

How would a centaur look? (Let us ignore distractions about whether centaurs have an essentially mythical nature.) Centaurs, going by the usual artists' renditions, share distinctive visible characteristics, which is why they can (in mythology) easily be identified by sight. That is, there is a distinctive centaurian 'visual Gestalt': centaurs have a certain kind of body hair, torso, colouring, gait, and so forth. 'Centaur-shaped' does not do it justice. Likewise, 'cow-shaped' is a significantly oversimplified answer to the question 'How do cows look?' (cf. §IV.2 above). On a particular occasion, communicating that a certain animal has that distinctive centaurish look may well be crucial. It might not matter whether the animal looks the way centaurs would look (maybe they would not look much like the illustrations, and instead more like actual horses): what matters is that the animal looks to have those distinctive characteristics that are, as it happens, popularly associated with centaurs. There is an obvious verbal means of conveying the needed information: the animal looks centaurian.

Similar remarks go for 'looks old'. Plausibly, sometimes this phrase is used to convey a thing's distinctive visual appearance, not to make an epistemic or comparative claim. Naked mole rats are hairless, sparsely whiskered, pinkish-grey, and very wrinkled. They look old. A person who sees a naked mole rat and asserts that the animal looks old need not be saying that the rat looks as if it is old: he might think such an inference from its appearance would be nothing better than a wild guess. Neither need he be making a comparative claim: he might have no idea whether the rat looks like an old mole rat.³⁶ Thus 'It looks red and very old' has a natural reading that is neither comparative nor epistemic, an illustration of Chisholm's noncomparative use. There is no 'phenomenal use' to index perceptual content; could the non-comparative use step in to fill the breach? That is, is this claim true: if o looks_{nc} (the subscript indicating the non-comparative use) F to S then S exes, of o, that it is F? No, because perceptual content, if there is such a thing, goes with the ways things look when they look, F, which need not include Fness. If a naked mole rat looks_{nc} old to S, then S exes, of the rat, that it is wrinkled, pink, etc. – not that it is old. In other words, naked mole

³⁶ In fact, naked mole rats are exceptionally long-lived: see P.W. Sherman and J.U.M. Jarvis, 'Extraordinary Life Spans of Naked Mole-Rats (Heterocephalus Glaber)', *Journal of Zoology*, 258 (2002), pp. 307–11.

rats can be as they look_{nc} (wrinkled, pink, etc.) without being old (in principle, anyway).

Similarly, if someone looks_{nc} Scandinavian, and so looks to have the stereotypical Scandinavian bodily features (straight blond hair, small nose, pale skin, etc.), he can be as he looks_{nc} without being Scandinavian. Again, that animal, which looks_{nc} centaurian, can be as it looks_{nc} without being a centaur. 'Looks_{nc} F' is therefore idiomatic in the interesting way 'red hair' is. 'Red hair' *does* refer to hair of a distinctive colour similar to red (and so is an example of polysemy), but that orangeish shade is not the semantic value of 'red'. ('Looks_{nc} Scandinavian' and 'red hair' are thus quite different from paradigmatic idioms like 'blue blood' and 'green thumb'.) Although it might seem implausible, one could hold that 'looks_{nc} yellow' is in the same boat as 'looks_{nc} Scandinavian': something can be as it looks_{nc} when it looks_{nc} yellow without being yellow. In fact that is (near enough) Thau's view: he accepts (CV), and agrees that lemons look yellow (in every sense), but denies that perceptual content ever includes propositions predicating yellowness.³⁷

The upshot is that Travis is in one way right. Perceptual content, if there is such a thing, is not 'looks-indexed', at least as that notion has been explained here. But Travis is wrong to conclude that our ordinary talk provides no support for (CV). On occasion, we use 'looks' to convey information about the non-comparative looks of things. The phenomenon of noncomparative looking is something that (CV) appears well suited to explain.

V. TRAVIS' MODEL OF ILLUSION

A visual illusion is a situation of the following sort: o looks $_{nc}$ F to S and o is not the way it looks $_{nc}$. The phenomenon of illusion and the phenomenon of non-comparative looking are thus intimately connected: to explain one is to explain the other.

(CV) is not a claim about how we talk, and illusions and non-comparative looking are likewise non-linguistic phenomena. If there is direct support for (CV), it is to be found here, rather than in subtleties about our use of 'looks'. 'The Silence of the Senses', however, briskly dispatches illusions early on. Travis starts by observing that one may have one's 'surroundings in view', and yet be misled (p. 67): 'seeing Luc and Pia's flat strewn with broken crockery, one might reasonably suppose there to have been a tiff. For all that there might not have been one.' It appears as if there has been a tiff, but all that amounts to is that the evidence points that way, or that someone

³⁷ For a related view, see S. Shoemaker, 'On the Ways Things Appear', in Gendler and Hawthorne (eds), *Perceptual Experience*, pp. 461–80.

might reasonably take it to point that way. This sort of example does not provide any reason to wheel on the exing propositional attitude, with the content that there has been a tiff.

Travis then tries to extend this treatment to perceptual illusions. The Müller–Lyer lines, he suggests, *epistemically* look unequal to me: it looks to me as if they are unequal. That is, my evidence points that way, or someone (perhaps not myself) might reasonably take it to point that way. This does not imply that *I* have some tendency to believe that the lines are unequal: I can comment on what someone might reasonably conclude from the evidence without being inclined to conclude this myself. ('It looks as if there has been a tiff', I might say, even though I know that Luc and Pia would never throw their valuable crockery in anger.)

An immediate problem with this suggestion is the apparent lack of suitable evidence. I see the lines and, as Travis puts it (p. 65), 'simply confront what is there'. I must be aware of a feature of the lines that might reasonably lead someone to conclude that they are unequal. Suppose I am a naïve subject looking at the Müller–Lyer diagram for the first time and I believe that the lines are unequal. What feature of the lines led me to this conclusion? *Not* the arrow heads and tails – why would the fact that the lines have these features suggest that they are unequal? Equal lines could easily have those features.

A less forlorn candidate for the evidence can be extracted in this passage from *Sense and Sensibilia* (p. 43), a book to which Travis acknowledges a debt:³⁸

It is perhaps even clearer that the way things look is, in general, just as much a fact about the world, just as open to public confirmation or challenge, as the way things are. I am not disclosing a fact about *myself*, but about petrol, when I say that petrol looks like water.

Petrol looks like water whether or not these two liquids look similar to any specific individual, and in that sense petrol shares an 'objective look' with water. What is that 'objective look', exactly? Petrol looks clear, and so does water: that is (one of) the 'objective looks' they share. Austin chose the comparative 'looks like', but he could have picked the (non-comparative, non-epistemic) 'looks clear': I am not disclosing a fact about myself, but about petrol, when I say that petrol looks clear. Even if it does not look clear to me (I may be blind), petrol still 'objectively' looks clear.

Likewise, the Müller-Lyer lines objectively look unequal. That might seem a much better candidate for the needed evidence. I see the lines for the first time and note that they have that objective look. Mostly, things are as

³⁸ J.L. Austin, Sense and Sensibilia (Oxford UP, 1962). See also Travis, 'The Silence', p. 64, fn. 5.

they objectively look – petrol really is clear. So it would be reasonable for me to conclude that the lines are unequal. Similarly, when I am wise to the illusion, I conclude that they look as if they are unequal – someone might reasonably take their objective look to show that they are unequal.

Travis (p. 68) puts this as follows:

In the Müller–Lyer, two lines are contrived ... to have a certain look. They do not just seem to have that look; that is actually the way they look. (Witness the 'robustness' of the illusion.) Two lines may well have that look because one is longer than the other ... that look may thus indicate that it is two lines of unequal length that one confronts.... Thus may someone be misled by a Müller–Lyer. False expectations arise here in the wrong view of what something (a look) means, though perhaps a right view of what it ought to. What one gets wrong is the arrangement of the world: how the misleading seen thing relates to other things. That mistake neither requires, nor suggests, that in this illusion one line is represented to us as being longer than the other.

But what are 'objective looks'? In particular, what is it for petrol to objectively look clear? Surely there is no special mystery here: petrol objectively looks clear iff it $looks_{nc}$ clear to normal people, or something along similar lines. Grass objectively looks green; more specifically, it objectively looks yellowish green. Does light of wavelength 495nm objectively look a unique green, a shade of green that is neither yellowish nor blueish? No: it $looks_{nc}$ a unique green to some, but not to others.³⁹

If this is correct, then Travis' treatment of illusions, at least as I am reconstructing it, fails. In effect, he *denies* that the Müller–Lyer lines look_{ne} unequal to individual perceivers. Rather, the lines have a certain 'objective look', and 'that look may thus *indicate* that it is two lines of unequal length that one confronts': one knows that the lines have that look, and thus the lines look *as if* they are unequal. But this account *presupposes* that the lines may look_{ne} unequal to a particular individual; if they cannot, then they cannot objectively look unequal either. Once it is *conceded* that the lines may look_{ne} unequal to someone, it also should be conceded that they may look_{ne} unequal to someone who believes that the lines are equal. This now needs explaining without invoking (CV), and Travis' account does nothing at all to explain it.

Travis would doubtless resist the account of 'objective looks' in terms of non-comparative looking. But that would only bring temporary relief. If one stares at a bright red surface for a minute or so and then looks at a grey surface, it appears tinged with green. A Travis-style explanation of this illusion would involve taking a certain objective look of the grey surface to suggest that the surface is green (or greenish) – specifically, an objective

³⁹ See C.L. Hardin, Color for Philosophers (Indianapolis: Hackett, 1988), pp. 79–80.

green look. But *whatever* the account of 'objective looks', an ordinary grey surface does *not* objectively look green, or greenish: it objectively looks grey. Hence a Travis-style treatment does not get off the ground.⁴⁰

VI. THE CONTENT VIEW AS THE BEST EXPLANATION OF ILLUSIONS

According to Travis (p. 65), perception 'simply places our surroundings in view; affords us awareness of them'. As noted in §III above, Brewer agrees. Illusions pose a challenge to this position, as of course Travis and Brewer both recognize. The lines in the Müller–Lyer figure look_{nc} unequal, and this precisely suggests that sometimes perception does *not* 'simply place our surroundings in view'. I have just shown how difficult it is to resist this conclusion.

Still, I have not yet shown why we should embrace (CV). Why not rest with non-comparative looking, stopping short of the exing propositional attitude? (Visual) perception essentially involves the relation $o \ looks_{nc} \ F \ to \ S$, not, in addition, an attitude to a proposition. The possibility of strict perceptual error is provided for: that will happen exactly when $o \ looks_{nc} \ F \ to \ S$ but is not the way it looks_{nc}. In other words, why not stick with the good old 'theory of appearing', recently revived by Langsam and Alston?⁴¹

As Alston explains it (p. 182), the theory of appearing 'takes perceptual consciousness to consist, most basically, in the fact that one or more objects appear to the subject as so and so, as round, bulgy, blue, jagged, etc.'. The theory's fundamental primitive is the relation o appears as F to S (p. 191, changing Alston's schematic letters). This suggests that the terminology for the fundamental primitive is a piece of ordinary English, but appearances (pun intended) are deceptive. In Alston's 'appears' terminology, an illusion is supposed to be a situation in which o appears as F, but is not F. Therefore, because of the point about 'looks old/centaurian/Scandinavian' mentioned at the end of SV, o (visually) appears as F to S cannot be identified with the relation conveyed by 'o looks F to S', taken non-comparatively. 'o appears as

⁴⁰ This also poses a problem for the similar account of illusion in Brewer, 'Perception and Content'. Another quite different counter-reformation account of illusion is that developed in the work of M.G.F. Martin (e.g., 'On Being Alienated'). Martin's constitutive account of the illusion just mentioned in the text is roughly this: one sees the grey surface, but cannot tell by introspection alone that one is not veridically perceiving a surface tinged with green. For references to the main discussions of Martin's view, see Byrne and Logue, 'Either/Or', p. 74, fn. 31.

⁴¹ H. Langsam, 'The Theory of Appearing Defended', *Philosophical Studies*, 87 (1997), pp. 33–59; W.P. Alston, 'Back to the Theory of Appearing', *Philosophical Perspectives*, 13 (1999), pp. 181–203. See also Jackson, *Perception*, ch. 4.

F to S' is thus a bit of jargon, not a familiar English expression, and in that respect is on all fours with 'S exes that p'.

Moreover, (CV) has a clear edge over the theory of appearing. First, room must be made for perceptible relations, in addition to perceptible (monadic) properties. To take the simplest example, suppose one sees a red spot ('this') to the left of a brighter red spot ('that'). This appears red and that appears red, but of course that is not all: this appears to the left of that, and that appears brighter than this, facts which an account of 'perceptual consciousness' should not overlook. Without supplementation, they are overlooked: 'F' is supposed to be replaced by a term for a perceptible quality like colour and shape. But if 'brighter than this' is allowed to specify the way that appears, it is very hard to see why a singular term for a perceived object has to remain in subject position, in the theory's canonical locutions. If 'That appears as brighter than this to S' is acceptable (with 'this' in the complement of 'appears'), what is wrong with the more pleasingly symmetrical 'It appears to S that that is brighter than this'? In this formulation, the theory is just a notational variant of (CV).

Secondly, what about hallucinations? If *S* has a hallucination of a lemon, no physical object in *S*'s environment appears yellow to *S*. According to Alston (pp. 191–2), a 'mental image' appears yellow. According to Langsam (pp. 38–41), *nothing at all* appears yellow, and so some other account of hallucinations is required. Plainly the proper treatment of hallucinations is no simple matter, and at least the proponent of (CV) has more options.⁴² The matter is too complicated to discuss here, but there should be the suspicion that the theory of appearing founders at this point.

Thirdly, even if we set hallucinations aside, it is not at all obvious that *all* perception is directed on particular objects, as the theory of appearing would have it. Smelling and tasting are ways of perceiving, but when one smells, is there a particular thing that one smells, in the way that there is a particular thing that one sees? Grammar puts 'smells the cheese' and 'sees the cheese' on all fours, but the corresponding perceptual phenomena are quite different: seeing the cheese enables one to entertain singular thoughts about it, smelling the cheese does not. Arguably, smelling the cheese provides no object-dependent information, not even about, in Lycan's phrase, 'vaporous emanations'.⁴³ This is not a problem for (CV), since quantified propositions of various sorts are there for the taking.

⁴² See Byrne and Logue, 'Either/Or', pp. 89–90.

⁴³ W.G. Lycan, Consciousness and Experience (MIT Press, 1996), p. 146; see also C. Batty, Lessons in Smelling: Essays on Olfactory Perception (MIT: PhD thesis, 2007).

VII. TWO MATTERS ARISING

Suppose (CV) is true, and the preceding defence of it is on the right lines: to see is, *inter alia*, to ex that *p*. Two questions are particularly pressing. First, what are the allowable substituends for '*p*'? That is, what sorts of propositions comprise the content of perceptual experience? Secondly, can the exing attitude be characterized in more detail?

To take the first question first, if (CV) is supported by an inference to the best explanation of illusions, then one might expect perceptual content to be relatively thin. Visual illusions, as the object of study in the visual sciences, concern properties like shape, motion, colour, shading, orientation and the like, not properties like being tired, belonging to Smith or being a lemon.⁴⁴ There is thus no immediate reason to take (visual) perceptual content to include the proposition that o is a lemon, and the like. Suppose Alice, a lemon-fancier, is fooled by Austin's lemon-like bar of soap (Sense and Sensibilia, p. 50) - 'Lo, a lemon', she says. On discovering that the object is not in fact a lemon, will she insist that the visual impression as of a lemon still persists, in the way as the visual impression as of unequal lines persists in the Müller-Lyer? That seems doubtful: the natural response is either comparative or epistemic. 'Well, it looks exactly *like* a lemon', Alice might say, meaning that it shares its visible characteristics with lemons. (Hence since the soap is not a lemon, being a lemon is not a visible characteristic in the relevant sense.) Alternatively, she might say 'It looks exactly as if it is a lemon', meaning that it would be reasonable for someone to take the soap to be a lemon.

Siegel demurs, arguing that properties like *being a lemon* figure in the content of perception. Modifying her main example (which concerns pine trees), suppose one has never seen a lemon. On exposure to enough lemons, one develops the capacity to recognize them by sight. Plausibly, lemons now look (non-comparatively, non-epistemically) different from how they did when one saw lemons for the first time. As Siegel puts it (p. 500), 'gaining a disposition to recognize [lemons] can make a difference to visual phenomenology'. She then argues that the best explanation for this difference is that (in my terminology) one can now ex that this is a lemon.

But the following scenario shows that there must be something wrong with Siegel's argument. Suppose lemons grown on Island A look like normal lemons, and that lemons grown on Island B look like cucumbers (because of the strange soil and climate). One develops a recognitional disposition for

⁴⁴ Causation, though, is an especially tricky case – *locus classicus*: A. Michotte, *The Perception of Causality* (London: Methuen, 1963); see also S. Siegel, 'The Visual Experience of Causation', *The Philosophical Quarterly*, 59 (2009) (this issue), pp. 519–40.

the fruit on Island A, and similarly for the fruit on Island B (but does not know that the fruits are identical). If Siegel's argument works, then if one sees an A fruit and a B fruit side by side, they will both be visually represented as lemons. Presumably, then, (a) one will believe that the two fruits are of the same kind, and (b) they will appear *more* visually similar after one has learnt to recognize them by sight than they did before. Clearly neither of these predicted consequences will be borne out.

It might be replied that the property of being a lemon is represented under two different 'modes of presentation', corresponding to the distinctive Gestalten of shape, colour and texture that respectively characterize the A and B fruit, and it is the modes of presentation that account for one's beliefs about the fruits and for visual similarities. That the Gestalten are represented is plausible, but this point undercuts the case for the conclusion that the property of being a lemon is also visually represented. If learning to recognize A and B fruits involves acquiring perceptual contents concerning different Gestalten, the same diagnosis applies to Siegel's original example. On learning to recognize (normal) lemons by sight, one's perceptual contents change, but not by including propositions about lemons as such.

We may provisionally conclude that perceptual content is relatively thin. To that extent, its epistemological importance is lessened. No doubt perceptual content figures in an explanation of how one knows by sight that this is a lemon, but its role cannot be to serve up that proposition in the first place.

Finally, the second question, about the nature of exing. It is supposed to be a non-factive propositional attitude that is constitutively involved in perception, but this to say alarmingly little. If there really is such an attitude, it is puzzling that there is no corresponding propositional-attitude verb.

These vexing issues would vanish if it turns out that exing is believing. That happy prospect is usually dismissed, though, on the ground that it fails to account for cases of known illusion. Looking at the Müller–Lyer figure, one exes that the lines are unequal but believes that they are equal. Hence, it is typically concluded, exing is not believing (cf. §III above).

But there is a hole in this style of argument. Inconsistent beliefs are perfectly common. That one believes that the lines are equal need not prevent one from also believing that the lines are unequal. Admittedly, if one has the latter belief, it is not manifest in one's behaviour: one does not assert that the lines are unequal, for example. But it might be, as Armstrong once suggested, that this belief is 'held in check by a stronger belief'.⁴⁵ If

⁴⁵ D.M. Armstrong, A Materialist Theory of the Mind (Routledge & Kegan Paul, 1968), p. 221; see also A.D. Smith, 'Perception and Belief', *Philosophy and Phenomenological Research*, 62 (2001), pp. 283–399. It is important to note that the claim that perception constitutively involves belief (in particular, that exing is believing) does not imply that perception can be *reduced* to belief.

perception constitutively involves belief, then this neatly explains the commonly agreed fact that in the absence of any reason for thinking otherwise, one believes, in the usual unimpeded way, that the lines are unequal. If exing *is* believing, then the explanation of this otherwise mysterious connection between perception and belief is trivial.

If exing is believing, then the reformers and counter-reformers are not so far apart. The reformers are right in holding that illusion involves perceptual error; the counter-reformers are right in tracing the error to a false belief. The issue is complicated, but let us pray that this present-day schism in the philosophy of perception will have an ecumenical ending.⁴⁶

Massachusetts Institute of Technology

⁴⁶ For advice and assistance which greatly improved this paper, thanks to David Chalmers, James Genone, Jeff King, Heather Logue, Fiona Macpherson, Adam Pautz, Susanna Rinard, Susanna Siegel, Charles Travis, Michael Tye, an anonymous referee, and audiences at the Australian National University and the University of Glasgow.