Abstract: This article accomplishes two closely connected things. First, it refutes an influential view about the relationship between perception and knowledge. In particular, it demonstrates that perceiving does not entail knowing. Second, it leverages that refutation to demonstrate that knowledge is not the most general factive propositional attitude.

Keywords: perception, knowledge, belief, perceptual entailment thesis, Roderick Chisholm, G.E. Moore, Bertrand Russell, Timothy Williamson

1. Introduction

“THE PASSAGE FROM SENSATION to perception,” wrote Bertrand Russell in his magisterial *Human Knowledge: Its Scope and Limits*, “involves connections between facts, not only facts. It involves these, however, only if perception is to be regarded as a form of knowledge.” Sensation is “a source of knowledge” but not “in any usual sense, knowledge.” By contrast perception “is of the nature of knowledge” (Russell, 1948, p. 440). Timothy Williamson defends a similar view in his landmark work *Knowledge and Its Limits*. On Williamson’s view, perceiving is to knowing as being crimson is to being coloured. Perceiving is “a specific way” of knowing, just as being crimson is essentially a way of being coloured (Williamson, 2000, p. 34). Roderick Chisholm likewise accepts a similar view in his *Theory of Knowledge* when he writes, “If she hears that the dog is at the door, then she knows that the dog is there,” and defines ‘[S] perceives that there is an F’ so that it entails ‘S knows that there is an F’ (Chisholm, 1989, pp. 40, 41). G. E. Moore also accepts a similar view in *Some Main Problems of Philosophy* when he writes that in the sense of ‘perceive’ that “we are said to perceive that so and so is the case,” “if I see that a man has a beard I do (for the moment) necessarily know that he has [a beard].” Perceiving “entails” knowing (Moore, 1953, p. 92 n. 1, and p. 61 n. 7).

If Moore, Russell, Chisholm and Williamson are right, then perceiving entails knowing. Call this the *perceptual entailment thesis* or ‘PET’ for short.¹ Does

¹ Thomas Reid (1785, p. 135) advances a different entailment thesis, namely, that perceiving entails full conviction. “We are never said to perceive things, of the existence of which we have not a full conviction.” My discussion below refutes Reid’s entailment thesis too.
perceiving entail knowing? I argue that it doesn’t. This points to an important further result, because if PET is false, then knowledge is not the most general factive propositional attitude.

This article proceeds as follows. Sections 2–4 present three arguments against PET. Section 5 leverages those results to demonstrate that knowledge is not the most general factive propositional attitude. Section 6 aims to reduce the choice facing us to its simplest possible terms and suggests one way to make further progress on the issue. Section 7 considers and rejects one way for my opponents to regain the upper hand. Section 8 briefly concludes.

2. First Argument

My first argument against PET:

1. Knowing that Q entails believing that Q. (Premise)
2. Perceiving that Q does not entail believing that Q. (Premise)
3. So perceiving that Q does not entail knowing that Q. (From 1 and 2)²

The argument is valid. 1 is very plausible and widely accepted. Williamson, Chisholm, Moore and Russell all accept it (Russell, 1948, p. 170; Moore, 1953, p. 103; Chisholm, 1989, pp. 97–8; Williamson, 2000, pp. 42, 254).³ (Later we will consider a different argument that does not depend on 1.) The only remaining question is whether 2 is true. I present two cases demonstrating that it is.

(LINES) One ordinary day not so long ago, before a departmental function, my friend Chris, an epistemologist keen on vision science, presented to me an image of two horizontal line segments, flanked by arrows, like so:

Chris asked me, “So, what do you think, is the bottom line longer?” It appeared to me that it was, but I was suspicious from the very start. “Wait!”

² The inference relies on the following logical principle: if P entails R, then S entails P only if S entails R. Let ‘P’ be ‘you know that Q’, let R be ‘you believe that Q’, and let ‘S’ be ‘you perceive that Q’. Since (1) P entails R, but (2) S does not entail R, it follows that (3) S does not entail P.

³ Radford (1966) dissents.
I thought to myself, “I’ve seen this trick before: they’re Müller-Lyer lines! The inward angles on the top line make it falsely appear shorter than the bottom line, flanked with outward arrows.” I even know the clever explanation of why this should be so.4 “No, it’s not longer,” I answered confidently and honestly, quite happy with myself.

But I’d been had. Those lines are not liars. Things really were as they appeared: the bottom line is longer. I – and possibly you as you read along – saw that the bottom line was longer all along. But I – and again possibly you – did not believe that it was. Indeed, I reasonably believed that it was not.

(RABBIT) I signed up to participate in a psychology experiment designed to study the cognitive effects of hallucinogens. I made my way to the lab, whereupon I was placed alone in a nondescript room. The lead psychologist explained that she would presently administer a serum – a powerful hallucinogen that causes vivid and disturbingly realistic audiovisual hallucinations for at least one hour, with no other noteworthy side-effects. She injected me with the serum and left the room. Although I did not know it at the time, months later I discovered that in fact the whole thing was a social psychology experiment, arranged to see whether and to what extent people would mistrust their own senses in light of an authority figure’s testimony. The lead psychologist actually administered a harmless saline solution; I would suffer no audiovisual hallucinations at all.

In any event, shortly after the lead scientist left, she sent into the room a giant mechanical rabbit carrying a huge drum, which it beat relentlessly. It caught my attention, of course. I looked right at it and saw that a giant mechanical rabbit stood before me. But given my understanding of the situation, I did not believe that a giant mechanical rabbit stood before me. Based on my background knowledge, I disbelieved it, and reasonably so.

In each case, I see that Q despite failing to believe that Q.5 In LINES I saw that the bottom line was longer, but I did not believe that it was. Moreover, as you carefully and attentively read along, the same may well have been true of you. In RABBIT I saw that a giant mechanical rabbit stood before me, but I did not believe it. So it is possible to see that Q without believing that Q. And since seeing that Q counts as perceiving that Q, it follows that perceiving that Q likewise does not entail believing that Q.

4 The top figure resembles a corner angling towards you, the bottom figure a recessed corner angling away. But the lines take up the same space in your visual field. The brain thus imposes a size-constancy rule – a more distant object, which takes up the same space in your visual field as a nearby object, must be larger – and the result is a visual illusion of incongruence.

5 This is actually an understatement. Not only do I fail to believe Q (i.e., ~Bq), I also disbelieve Q (i.e., B~q). The latter fact is relevant to the next section’s argument.
Williamson suggests several ways of deflecting examples like LINES and RABBIT. I will consider them each in turn, beginning with this passage:

It is sometimes alleged that one can perceive . . . that Q without knowing that Q, because one fails to believe or to be justified in believing that Q. Other evidence may give one reason to think that one is only hallucinating what one is in fact perceiving . . . One abandons the belief, or retains it without justification; either way, it is alleged, one fails to know. (Williamson, 2000, pp. 37–8)

Notice that this does not accurately characterize my examples. In the examples, I do not abandon the belief that Q, precisely because I never acquire it to begin with. For the same reason neither do I retain it without justification. To be fair we must note that Williamson was of course not contemplating my specific examples, so he is not guilty of misrepresentation. But the examples still must be dealt with.

Williamson suggests another way to handle the examples, invoking a distinction between two types of seeing.

There is a distinction between seeing that Q and seeing a situation in which Q. One difference is that only the former requires the perceiver to grasp the proposition that Q. A normal observer in normal conditions who has no concept of chess can see a situation in which Olga is playing chess, by looking in the right direction, but cannot see that Olga is playing chess . . . (Williamson, 2000, p. 38)

Just so we have convenient labels, let us call seeing a situation in which Q simple seeing, and seeing that Q propositional seeing. The distinction between simple seeing and propositional seeing is apt and important. Williamson’s example of Olga playing chess is good. Here is another. You can see a fossa hunt a lemur without seeing that a fossa hunts a lemur. This might happen, for instance, if you were in the forests of Madagascar but lacked the concept of a fossa. To simply see a fossa hunt a lemur, the relevant activities need only unfold before your eyes and register in your visual system; you need not also possess the concept of a fossa (or of a lemur, or of hunting). To propositionally see, by contrast, you must possess all concepts featured in the claim A fossa hunts a lemur.

The distinction does not discredit my examples. I do not lack any concept featured in the relevant claims, so we cannot properly conclude that lacking relevant concepts would prevent me from propositionally seeing that Q.

Williamson suggests yet another way to handle the examples. (In the following quote, I adjust the claim at issue so that it agrees with one of my examples.)

The present cases suggest another difference between the two notions of seeing. By looking in the right direction, you can see a situation in which the bottom line is longer. In the imagined case, moreover, you have enough concepts to grasp the proposition that the bottom line is longer.

6 I said Williamson’s example is good, so why introduce another? Mainly because I want an example featuring a concept you easily might not previously have had (namely, the concept of a fossa), whereas you surely already had the concept of chess.
Nevertheless, you cannot see that the bottom line is longer, precisely because you do not know what you see to be a situation in which the bottom line is longer (given the unfavorable evidence). On this account, the case is a counterexample to neither the claim that seeing implies knowing nor the claim that knowing implies believing. (Williamson, 2000, p. 38)

We are told that propositionally seeing that Q requires knowing what you see to be a situation in which Q. (Presumably this is all indexed to a particular time – propositionally seeing that Q at a particular time requires knowing, at that time, what you see to be a situation in which Q – and the following discussion assumes as much.) So Williamson’s suggestion here relies on this principle:

W1. You propositionally see that Q only if you know that you see a situation in which Q.  

(Williamson (2000, p. 39) makes an analogous claim regarding remembering.) We must ask whether W1 is plausible.

I reject W1 because it unduly limits the class of persons who propositionally see. A human child who lacks the concept of a situation or of seeing could nevertheless still see that various things are true. The child might see that there is a peach on the table, but not know that he sees a situation in which there is a peach on the table, because he lacks concepts featured in that claim, and so could not even entertain the claim. Similar points apply to other unsophisticated knowers. Moreover, W1 is not generally true even for subjects who have all the relevant concepts. Take the average adult human. Suppose she sees that there is a peach on the table. She might nevertheless not even entertain the claim that she is seeing a situation in which a peach is on the table. (I must admit, I very rarely entertain such claims, and I doubt that I am atypical in this respect.) If she does not entertain that claim, then she does not believe it. If she does not believe it, then she does not know it. W1 thus falsely implies that she does not see that there is a peach on the table.

3. Second Argument

I mentioned earlier that 1 is very plausible, widely accepted, and even endorsed by my opponents in the present debate. Moore, Russell and Chisholm endorse it

7 I leave open whether the ‘see’ in ‘only if you know that you see’ should be understood as ‘propositionally see’ or ‘simply see’. I detect nothing in the following discussion that requires us to settle on one reading or the other. Also let me forestall one potential worry about W1. A literal reading of Williamson’s text might lead us to instead phrase W1 as: (W1*) You propositionally see that Q only if you know what you see to be a situation in which Q. W1* features knowing what rather than knowing that. The ensuing critique does not depend essentially upon choosing W1 over W1*. I could make all the same points aimed directly at W1*, accomplishing little aside from lengthening and complicating our discussion.
wholeheartedly. Williamson endorses it, but only, in Frank Jackson’s words, in a “fence-sitting way” (Jackson, 2002, p. 517). Williamson also says that examples such as mine “put more pressure on the link between knowing and believing . . . than they do on the link between perceiving . . . and knowing” (Williamson, 2000, p. 38). So in this section I grant that 1 is false for argument’s sake.

Here is a different argument that does not rely on 1.

1*. Knowing that Q entails that you do not both (i) fail to believe that Q, and (ii) reasonably believe that not-Q. (Premise)

2*. Perceiving that Q does not entail that you do not both (i) fail to believe that Q, and (ii) reasonably believe that not-Q. (Premise)

3. So perceiving that Q does not entail knowing that Q. (From 1* and 2*)

The argument is valid. 1* is beyond doubt. LINES and RABBIT support 2* just as well as they support 2. Seeing that Q is consistent with both failing to believe that Q and reasonably believing that not-Q. In LINES I saw that the bottom line was longer, but I did not believe that it was. Indeed I reasonably believed that it was not. In RABBIT I saw that a giant mechanical rabbit stood before me, but I did not believe it. Indeed I reasonably believed that no such thing stood before me. So it is possible to see (and thus perceive) that Q despite both failing to believe that Q and believing that not-Q.

4. Third Argument

Consider this famous case.

(BARN) Henry and his son are driving through the country. Henry pulls over to stretch his legs and while doing so regales his son with a list of currently visible roadside items. “That’s a tractor. That’s a combine. That’s a horse. That’s a silo. And that’s a fine barn,” Henry added, pointing to the nearby roadside barn. And indeed Henry saw that a barn stood nearby. But unknownst to them the locals recently secretly replaced nearly every barn in the county with papier-mâché fake barns. Henry happens to see the one real barn in the whole county. But had he instead set eyes on any of the numerous nearby fakes, he would have falsely believed it was a barn. (adapted from Goldman, 1976, pp. 172–3, who credits Carl Ginet)

---

8 But see Williamson (2000, p. 254), where in the course of defending the knowledge account of assertion he says, “knowing entails believing”!

© 2010 Stiftelsen Theoria
Published by Blackwell Publishing Ltd
Epistemologists standardly classify BARN as a Gettier case and deny that Henry knows that a barn stands nearby. Suppose they are right. Certainly he can still see that a barn stands nearby, even if he lacks knowledge. This suggests the following argument.

4. Henry sees that a barn stands nearby. (Premise)
5. Henry does not know that a barn stands nearby. (Premise)
3. So perceiving that Q does not entail knowing that Q. (From 4 and 5)

Perception can flourish in environments where knowledge flounders.

5. Generality

A central tenet of Williamson’s immensely influential epistemology is that knowledge is the most general factive propositional attitude. Is it?

Call a propositional attitude that takes Q as its object an attitude that Q. An attitude is factive just in case it is impossible to have that attitude towards anything other than a true claim. Intuitive examples of factive attitudes include seeing, remembering, recognizing, being aware, and knowing. An attitude is non-factive just in case it is possible to have that attitude towards a non-true claim. Non-factive attitudes include believing, hoping and doubting.

Williamson accepts each of these claims.

6. Perceiving that Q is a factive attitude.
7. If you have any factive attitude that Q, then you know that Q.

6 is obvious. 7 is simply an expression of Williamson’s proposal that knowledge is the most general factive propositional attitude. Together 6 and 7 entail,

8. If you perceive that Q, then you know that Q,

which is just PET in other words. But we have already seen that perceiving does not entail knowing. So either 6 or 7 must be false. That perception is factive is just as

---

9 But see Sartwell (1992); Hetherington (1998, 1999); Weatherson (2003); Lycan (2006); and Sosa (2007).
10 More specifically, Williamson (2000, ch. 1.4) argues that knowledge is the most general factive stative attitude. Williamson agrees that perception is a factive stative attitude.
11 “A propositional attitude is factive if and only if, necessarily, one has it only to truths. Examples include the attitudes of seeing, knowing, and remembering” (Williamson, 2000, p. 34).
12 “The proposal is that knowing is the most general factive stative attitude, that which one has to a proposition if one has any factive stative attitude to it at all” (Williamson, 2000, p. 34).
13 “If you really do see that it is raining, which is not simply to see the rain, then you know that it is raining; seeing that A is a way of knowing that A” (Williamson, 2000, p. 38).
plausible as that knowledge is factive, and the latter claim is, as Williamson puts it, “trivially” true.\footnote{Hazlett (forthcoming) dissents.} So we should reject 7.\footnote{For different arguments against 7, see Reed (2005) and Sosa (2009).}

6. Choosing Sides

My overall argument relies on intuitions about general principles and particular cases, just as almost every philosophical argument does. But such intuitions can be disputed.

I have taken care to respond as fairly and directly as I can to the objections my esteemed opponents offered in anticipation of arguments like mine. Yet my esteemed opponents might not share the intuitions motivating my arguments, in which case they won’t be persuaded. They might, for instance, simply dispute the intuitive verdicts I have rendered on LINES, RABBIT and BARN – verdicts essential to my arguments. We would then be at an intuition stalemate. Others would be left to decide for themselves. One way to bring the entire debate into sharp focus, should we reach that point, would be to simply ask: what is more plausible, that (a) neither the subject in LINES, nor the subject in RABBIT, nor the subject in BARN sees that Q, or (b) PET is true?

While perhaps not ideal, this would still be a noteworthy development and point the way toward further progress on a popular and influential thesis.\footnote{I say “perhaps” because I do not share the view that we in philosophy must aim to present arguments that will convince our opponents. But this is no place to grind that methodological axe.} We would better understand where serious potential conflict occurs between PET (along with 2) and at least some people’s considered judgments about particular cases. Consequently we would better understand some of PET’s (and 2’s) potential vulnerabilities. My esteemed opponents could then look to solidify their position either by explaining away recalcitrant contrary intuitions, or by demonstrating further benefits of their view, which could then be used to offset the contrary intuitions (compare Jackson, 1998, ch. 2; and Weatherson, 2003). I devote the next section to considering one way of implementing the strategy of offsetting contrary intuitions.

7. Offsetting Value?

6 is obvious and accepted by both sides of the debate. And as we already saw, 6 and 7 combined entail PET. So if 7 provided significant theoretical benefits, we would then be able to leverage that result to offset any of PET’s allegedly counterintuitive
consequences. For example if accepting 7 enabled a compelling account of the value of knowledge, that might suffice to offset the alleged counterintuitive consequences in cases like LINES, RABBIT and BARN. PET would then stand fast in virtue of 6’s impeccability and 7’s fruitfulness, thus bypassing the intuition stalemate and earning my esteemed opponents a decisive advantage.

Williamson motivates 7 on the grounds that it would explain why we value knowledge: knowledge “matters to us because factive stative attitudes matter to us” (Williamson, 2000, p. 34). We value a match between mind and world, and knowing is the most general attitude in which mind matches world, which explains why we value knowing.

Explaining why we value something need not involve necessarily true generalizations. We value saving for retirement because we want to retire comfortably. This does not require that, necessarily, one retires comfortably only if one saves for retirement. Nevertheless, as a matter of fact, almost invariably one will retire comfortably only if one saves for retirement.

Factive attitudes do matter to us. They help us acquire goods and happiness, avoid dangers, and plan our lives well. In a word, they are very useful.17 Suppose that knowledge matters to us because factive attitudes matter to us. This does not require that knowledge be the most general factive mental state. It could be equally well explained on the grounds that almost invariably mind matches world only if the mind knows. Cases like LINES and RABBIT do not challenge this latter claim. If having a factive attitude and knowing come apart only in such cases, we could for all practical purposes treat knowledge as the most general factive attitude. But that still would not make it true.

8. Conclusion

I conclude that perceiving does not entail knowing and that, consequently, knowledge is not the most general factive propositional attitude.

9. Acknowledgements

For their help on this paper and related material, I thank Brit Brogaard, Baron Reed and Ernest Sosa.

17 It may be alleged that the bare matching of mind to world possesses some intrinsic or non-instrumental value, irrespective of its benefits. But it is factive attitudes’ usefulness that most plausibly primarily explains why we value them.
References


