



|                                     |  |
|-------------------------------------|--|
| <b>Title</b>                        | What you know when you know an answer to a question  |
| <b>Authors(s)</b>                   | Stout, Rowland   |
| <b>Publication date</b>             | 2010-06  |
| <b>Publication information</b>      | Stout, Rowland. "What You Know When You Know an Answer to a Question." Wiley, June 2010.<br><a href="https://doi.org/10.1111/j.1468-0068.2010.00745.x">https://doi.org/10.1111/j.1468-0068.2010.00745.x</a> .  |
| <b>Publisher</b>                    | Wiley  |
| <b>Item record/more information</b> | <a href="http://hdl.handle.net/10197/4969">http://hdl.handle.net/10197/4969</a>  |
| <b>Publisher's statement</b>        | This is the author's version of the following article: TStout, R. (2010), What You Know When You Know an Answer to a Question. <i>Noûs</i> , 44: 392–402 which has been published in final form at <a href="http://dx.doi.org/10.1111/j.1468-0068.2010.00745.x">http://dx.doi.org/10.1111/j.1468-0068.2010.00745.x</a> |
| <b>Publisher's version (DOI)</b>    | <a href="https://doi.org/10.1111/j.1468-0068.2010.00745.x">10.1111/j.1468-0068.2010.00745.x</a>  |

Downloaded 2026-05-01 23:50:04

The UCD community has made this article openly available. Please share how this access benefits you. Your story matters! (@ucd\_oa)



© Some rights reserved. For more information

## What you know when you know an answer to a question

Abstract:

A significant argument for the claim that knowing-*wh* is knowing-*that*, which is implicit in much of the literature on this, is spelt out and its significance explored. The argument includes an assumption that knowing-*wh* involves a subject being in a relation with an answer to a question and an assumption that answers to questions are propositions or facts. The paper considers a series of counterexamples to the conjunction of these two assumptions, developing refinements until the best one is achieved. The neatest response to the existence of this counterexample is to deny that answers must be facts.

## What you know when you know an answer to a question

Knowing-*who*, *why*, *what*, *where*, *whether*, *whither*, *whence*, *which*, *when* and possibly *how* are all cases of knowing an answer to a question. Many philosophers treat all these kinds of knowing-*wh* as kinds of knowing-*that*.<sup>1</sup> Their argument (either implicit or explicit) is that in knowing an answer to a question a person is in a certain relation with an answer, and since answers are facts, this is a relation between a person and a fact. Knowing a fact is knowing-*that*. So, knowing-*wh* is knowing-*that*.

Let me make the argument more precise.

(A) Whenever it is claimed that a subject, *s*, knows-*wh*, there is a direct question, *q*, corresponding to the *wh* clause; and the claim just is the claim that *s* knows an answer to *q*.

(B) The logical form of the claim that *s* knows an answer to *q*, is:

$$\exists x(A(x,q) \ \& \ K(s,x)).$$

(C) For each question, *q*, an answer to *q* (if there is one) is a fact – something that is fully specified using a clause beginning with “that”.

(D) Therefore, in attributing knowing-*wh* one is attributing knowing-*that*.

(E) Therefore, knowing-*wh* is a kind of knowing-*that*.

---

<sup>1</sup> See for example Hintikka (1981, 1992), Karttunen (1977), Stanley and Williamson (2001) and Vendler (1979). Hintikka more than anyone has argued for the importance of considering knowing-*wh*, partly because of his interest in the role of interrogation in knowledge acquisition. And he has also argued that knowing-*wh* can be understood in terms of knowing-*that*. So, he claims, although questions figure essentially in the process of knowledge acquisition, the end product of empirical enquiry can be described as knowledge-*that* without any lingering reference to these questions.

Implicit in premise (B) about the logical form of the claim that  $s$  knows an answer to  $q$  is that the terms that figure in this logical form figure *extensionally*. So whatever way we have of referring to the answer, if that way is substituted into the claim the truth value is unaffected. If the answer to the question of who is the first person to climb Mount Everest is the first fact I ever learnt at primary school and I know who is the first person to climb Mount Everest, then I know the first fact I ever learnt at primary school. What do not figure extensionally are the terms that figure in the specification of the known fact. For example, if Edmund Hillary was also the first New Zealand mountaineer to be knighted, I might know that Edmund Hillary was the first person to climb Mount Everest, without knowing that the first New Zealand mountaineer to be knighted was the first person to climb Mount Everest. This does not threaten premise (B) as long as what I know when I know that Edmund Hillary was the first person to climb Mount Everest is not the same as what I know when I know that the first New Zealand mountaineer to be knighted was the first person to climb Mount Everest.

I am working here with a *Fregean* conception of an answer – a conception in which the senses, not just the references, of the terms that figure in an expression of the answer contribute to its identity. If a *Russellian* conception is preferred, then answers will be individuated in a less fine-grained way, and the argument will need to be formulated slightly differently. For example, one might favour a direct reference approach to proper names, perhaps inspired by Kripke (1980). Then the fact expressed by Edmund Hillary's

nephew that Uncle Edmund was the first person to climb Mount Everest might be taken to be the same fact as that expressed by his saying that Edmund Hillary was the first person to climb Mount Everest, even though on the face of it he might know one without knowing the other. On this view a subject's state of knowledge with respect to that fact does not consist in their being in a two-place relation with that fact, but might consist instead in their being in a three-place relation with that fact and some mode of presentation or guise. They know the fact under the guise.<sup>2</sup>

This can be accommodated by including an extra argument place for the guise or mode of presentation in the knowledge relation throughout this argument. This is what Stanley and Williamson (1981) do. So the formula in (B) becomes:

$$\exists x \exists g (A(x, q) \ \& \ g \text{ is a guise} \ \& \ K(s, x, g)).$$

If what goes in place of  $x$  is "that ...", then knowing-*wh* is knowing-*that* under a guise, which is what knowing-*that* always is on this view. So the argument goes through in the same way that it does using the Fregean conception of a fact. To keep things simple I will work with the Fregean conception from now on.

It is important to be clear – as Stanley and Williamson (2001, 33-4) for example are – that the claim that knowing-*wh* is knowing-*that* does not amount to the claim that our talk of knowing-*wh* can be reduced to talk of knowing-*that*. There is a central difference

---

<sup>2</sup> See for example Salmon (1986).

between these two ways of talking that rules out such a reduction. For we can make a claim that someone knows-*wh* when we are not committing ourselves to any particular answer to the question, but we cannot make the corresponding claim that they know-*that* unless we are stating what the fact is that is known. If I say that Tenzing knows who was the first person to climb Mount Everest I am not saying who that was, but I cannot attribute the corresponding knowledge-*that* to Tenzing without doing so. This does not rule out the possibility that Tenzing's state of mind when he knows who was the first person to climb Mount Everest is precisely the state of mind of knowing that Hillary was that person.

The argument that knowing-*wh* is knowing-*that* is at the heart of a recent debate about *know how*. Knowing-*how* to do things is very often taken to be quite separate from knowing-*that*. Knowing-*how* seems to involve a capacity in a way that knowing-*that* does not, and it does not seem to require knowledge of any specification of that capacity. Someone may know how to ride a bicycle without knowing the facts that constitute a specification of that knowledge. But both Paul Snowdon (2004) and Jason Stanley and Tim Williamson (2001) have argued that this is a mistake. They argue that knowing-*how* does not always involve a capacity and it does always involve more than the mere capacity. Just being able to ride a bicycle is not sufficient for knowing how to ride a bicycle, for a circus flea might have that capacity without having any corresponding knowledge. Also it is not necessary. Having just lost my legs in a car accident I might still know how to ride a bicycle.

Snowdon claims that the relevance of having the capacity is that it often enables the knower to grasp the demonstrative component of the thing they know.<sup>3</sup> So I might know that *this* is how to speak French (as I speak French) or that *this* is how to ride a bicycle (as I ride a bicycle). On this view knowing how to ride a bicycle just is knowing of a way to ride a bicycle (a way that might be referred to by me as “this way” as I successfully ride a bicycle, but might also be described non-demonstratively) that *that* is how to ride a bicycle. It is knowledge-*that*.

Both Snowdon and Stanley and Williamson are responding in part to Gilbert Ryle’s (1949, chapter 2) influential attempt to make use of the distinction between knowledge-*that* and knowledge-*how*. Ryle held that our mental life is not constituted by our relationships with facts or propositions; instead it involves a variety of practical skills and dispositions. In particular, knowing-*how* is a crucial aspect of our mental life, and since, as he thought, it is not a kind of knowing-*that*, it does not consist in being in a relationship with propositions or facts.<sup>4</sup>

The general issue here is whether our cognitive engagement with the world is constituted at bottom by our entitlements and abilities with respect to *facts* (or perhaps propositions): our ability to pick out facts, assent to them, or bring them to bear in further thinking. If Ryle is right then the insight represented by his insistence on the distinction between

---

<sup>3</sup> Or to use the idiom preferred by Stanley and Williamson (1981), it provides the knower with a special mode of presentation of the thing they know.

<sup>4</sup> The so-called ‘intellectualist legend’ was a particularly implausible version of the sort of view Ryle was rejecting here, according to which every intelligent performance must be *preceded* by the consideration of some proposition. Ryle’s argument against this implausible view does not constitute a defence of the distinction between knowing-*how* and knowing-*that*, and nor (*pace* Stanley and Williamson) was it meant to.

knowing-*how* and knowing-*that* is that our cognitive sensitivity to the world involves the capacity to make other sorts of rational use of the world than these. For example we can make progress in our rational engagement with the world by locating things, identifying things, explaining things, developing methods for achieving goals, establishing what thing satisfies some description, choosing the right alternative, and so on. Assuming that these different cognitive achievements can be captured in claims about knowing-*wh*, whereas our cognitive connection with facts is captured in claims about knowing-*that*, then the issue really is whether knowing-*wh* is a kind of knowing-*that*, and the argument outlined at the start is an appropriate attempt to resolve the issue.

Stanley and Williamson argue that knowing how to ride a bicycle is knowing an answer to the question, “How can you ride a bicycle?”<sup>5</sup> This claim, a special case of premise (A) in the argument above is the interesting one as far as they are concerned. The rest of the argument goes through very quickly and they get the conclusion that knowing-*how* is a kind of knowing-*that*. But it is the rest of the argument that concerns me here. I am concerned with whether knowing an answer to a question is always a kind of knowing-*that*.

Stanley and Williamson appeal to a semantic rule described by Karttunen (1977, 10) that an embedded question denotes the set of propositions expressed by its true answers. If for simplicity we assume that a particular *wh* phrase embedded in a knowledge claim corresponds to a question that has a single true answer then we get the conclusion that the

---

<sup>5</sup> Stanley and Williamson (2001, 425). The precise reading of the relevant question is clearly quite a tricky issue, but not what concerns me here.

logical form of “*s* knows-*wh*” is “ $K(s, \{p\})$ ”, where  $p$  is a term for a proposition. This they take to be close enough to “ $K(s, p)$ ”.<sup>6</sup> Thus the logical form of “*s* knows-*wh*” is “ $K(s, p)$ ”, where  $p$  is a term for a proposition which is the answer to the *wh* question. If for the moment we do not worry about any possible difference between a fact and a proposition, this is equivalent to the conjunction of premises (B) and (C) in the argument above.

But we should worry about the distinction between a proposition and a fact. Zeno Vendler (1979) takes knowing-*wh* to be a kind of knowing-*that*, but he does not take this to be knowing a proposition; rather it is knowing a fact. There are apparently very deep grammatical differences between claims about belief and claims about knowledge. In particular you cannot be said to believe-*wh*.<sup>7</sup> It is quite ungrammatical to say that someone believes who was the first person to climb Mount Everest for example. The best we can do instead is the clumsy claim that they have a belief *concerning* who was the first person to climb Mount Everest. Likewise one cannot be said to assume or think who was the first person to climb Mount Everest.

We know facts; we don't believe facts. We believe propositions; we don't know propositions. Facts and propositions are both specified using the same sort of clause beginning with the word “that”; so I may know that Edmund Hillary was the first person to climb Mount Everest and also believe that Edmund Hillary was the first person to climb Mount Everest. But, according to Vendler, what I know is not the same thing as

---

<sup>6</sup> Stanley and Williamson (2001, 420 and 426 footnote 27).

<sup>7</sup> This was also observed by Ryle (1949, 28).

what I believe. The former is part of the world; the latter is a mere assumption, supposition or proposition. Vendler argues that answers to questions are facts not propositions – they are part of the world. So that is why we cannot be said to believe answers to questions. Because I think this is right I will talk throughout of facts rather than propositions as the objects of knowledge, even though most of the other protagonists in this debate, with the exception of Vendler, talk about propositions.

Jonathan Schaffer (2007) has recently argued that in knowing an answer to a question a person is not just in a relation with the answer; they are also in a relation with the question. So there are three things relating to one another when someone knows-*wh*, according to Schaffer: a person, a question and an answer. In this way Schaffer rejects premise (B) of the argument outlined above. Schaffer accepts (C), that answers are propositional in form, but claims that what you know when you know an answer to a question is an answer in relation to a question. So if you know who was the first person to climb Mount Everest you know as the answer to the question who was the first person to climb Mount Everest that Edmund Hillary was the first person to climb Mount Everest. For Schaffer, knowing-*wh* is not simply knowing-*that*; but it is knowing-*that as an answer to a question*.

Schaffer also thinks that knowing-*that* is not simply knowing-*that*, but is knowing-*that as an answer to a question*. So, for Schaffer, it is as misleading to talk of the object of knowledge as it would be to talk of the object of someone's preference. You prefer X in relation to Y, and in the same way, according to Schaffer, you know X in relation to Y.

So his position is structurally similar to the position considered earlier, according to which a subject knows an answer through a guise or mode of presentation. As proponents of that position can also do, he still thinks that knowing-*wh* is knowing-*that* (despite some protestations to the contrary); his claim is that both knowing-*wh* and knowing-*that* involve the subject being in a relation with a pair of things – an answer and a question.

Schaffer describes his central argument as the problem of convergent knowledge, and it involves a counterexample to the conjunction of (B) and (C). The counterexample is a situation in which the subject knows the answer to one question and not to another, but where the answer to the two questions is the same. It is an argument that has also been employed in different ways by Lawrence Powers (1978), Christopher Hookway (1996) and XXXX (2006). I will argue that while Schaffer's counterexample is not completely convincing some of the counterexamples presented by earlier authors can, with a bit of work, be made to stick. I will also suggest that what is refuted is the conjunction of (B) and (C) and not (B) itself. So we do not need to make knowing-*wh* into a cumbersome three-place relation between a person, a question and an answer, as Schaffer does, in order to reject the argument above. We can accept that knowing-*wh* is a two-place relation between a person and an answer to a question, but deny that an answer to a question need be a fact of the sort assumed by both Schaffer and the view he rejects

This is how the argument from convergent knowledge works. Recall (B) was the following claim:

(B) The logical form of the claim that  $s$  knows an answer to  $q$ , is:  $\exists x(A(x,q) \ \& \ K(s,x))$ .

Suppose  $s$  does know an answer to  $q$ . Then there is something, call it  $p$ , that is both an answer to  $q$  and is known by  $s$ . According to (C),  $p$  is a fact, and as such is the sort of thing that might answer different questions. Now suppose that  $p$  is also an answer to a different question,  $q^*$ . Then, according to (B),  $s$  knows an answer to  $q^*$ . So if we can think of a situation in which all this is the case except that  $s$  does not know an answer to  $q^*$  we have a counterexample to the conjunction of (B) and (C).

Formally we would have  $A(p,q)$ ,  $K(s,p)$  and  $A(p,q^*)$ , but it not be the case that  $s$  knows an answer to  $q^*$ . Since  $A(p,q^*)$  and  $K(s,p)$  jointly entail that  $\exists x(A(x,q^*) \ \& \ K(s,x))$ , which, according to (B), is the analysis of “ $s$  knows an answer to  $q^*$ ”, we would have derived a contradiction.

Schaffer’s example involves the following two questions (2007, 387):

$q$ : Is Bush or Janet Jackson on television?

$q^*$ : Is Bush or Will Ferrell (who does a good George Bush impersonation) on television?

The answer to them both is:

$p$ : The fact that Bush is on television.

But you might know the answer to  $q$  without knowing the answer to  $q^*$ . This means that you might know whether Bush or Janet Jackson is on television without knowing whether Bush or Will Ferrell is on television. You know that Bush is on television relative to  $q$ , which presupposes that either Bush is on television or Janet Jackson is on television. But you do not know that Bush is on television relative to  $q^*$ , which makes a different presupposition. And, given this, it cannot be the case that knowing an answer to  $q$  and knowing an answer to  $q^*$  are the same state – that of knowing  $p$ .

The trouble with this for my purposes is that an opponent who does not buy into Schaffer's conception of contrastive knowledge will find it too easy to reject the example. Seeing a white man on television and having a pretty good idea of what Janet Jackson looks like but no idea at all of what George Bush looks like beyond knowing that he is a white man, is it so clear that I know an answer to the question  $q$ ? An opponent to Schaffer's contrastive approach to knowledge might just deny that in this situation you know whether it is Bush or Janet Jackson on television. They might claim that to know this you need to know more than that it is not Janet Jackson.

Alternatively they might allow that you know an answer to  $q$  but deny that  $q$  and  $q^*$  have the same answer. The thing you know is that it is not Janet Jackson on television. This entails that if it is either Bush or Janet Jackson it is Bush. You might know this without knowing that it is Bush on television since you do not know that it is either Bush or Janet

Jackson on television. So this opponent might say that the proper answer to  $q$  is that if it is either Bush or Janet Jackson on television it is Bush. Answering simply that it is Bush on television is shorthand for this. This might also be the shorthand answer to  $q^*$ , where the full answer is that if it is either Bush or Will Ferrell on television then it is Bush.

That if it is either Bush or Farrell on television then it is Bush is a different fact from the fact that if it is either Bush or Janet Jackson on television then it is Bush, even though the shorthand version for each is the same.

So whether or not Schaffer's example is a genuine counterexample to the claim that knowing-*wh* is knowing-*that*, it is not an effective one, since too much hangs on how to treat this sort of contrastive question. In XXXX (2006, 169 ff.) I came up with the following example. The scene is a party where you meet someone you know – Mary - but cannot think what her name is when required to introduce her. If you had not been required to introduce her and someone had asked instead whether her name was Mary, you would have been able to answer that question without hesitation. And your mastery over answering that question is just as good as your mastery over anything you claim to know. But if instead you are faced just with the question of what is her name, you are embarrassed; you do not know the answer off hand.

So we have the following:

$q$ : Is her name Mary?

$q^*$ : What is her name?

Assuming, for the sake of argument, that (C) is correct, then what you know when you know an answer to  $q$  is a fact,  $p$ . The best candidate for the fact is the following:

$p$ : The fact that her name is Mary.

But by the same token,  $p$  must be an answer to  $q^*$ . This means, given (B), that you know an answer to  $q^*$ . But you do not know an answer to  $q^*$ ; so we have a contradiction, and either (B) or (C) is false.

There are two ways to attack this example. I do not think that either is satisfactory, but perhaps they do leave it in some doubt. One sort of opponent might deny that your failing in this case with respect to  $q^*$  is a lack of knowledge. They might be impressed by the fact that you are inclined to say: "I really know what her name is; it's on the tip of my tongue; I just can't get at the knowledge." If eventually you do recall the name you might say that this shows that you did remember it all along; you just could not access that knowledge.

Certainly you can know things which in some respect you cannot access at the time. You do not forget everything you knew when you fall asleep. And it is also true in the case at issue that the knowledge was still there potentially even when you had forgotten what her name was. But unlike falling asleep, in this case some forgetting (and then, if you recall the name, some subsequent remembering) has certainly gone on. If you have a trick for

recalling names which involves working through every letter of the alphabet until one clicks and then you have the name, this involves simultaneously using your cognitive potential and *developing* it.

When you insist that you know what her name is despite not being able to recall it, one of two things might be going on. You might be making an ‘aspirational’ claim – indulging in positive thinking in an attempt to reach for the knowledge. Or you might be describing your *usual* state, like someone in court for drunk and disorderly conduct describing themselves as a sober and respectable member of society. You have not permanently forgotten what her name is; but certainly for the time being you have forgotten what it is and no longer know what it is.

The example can also be attacked, though perhaps with even less plausibility from the other end. Someone might claim that you did not really know the answer to *q* until you were reminded of it by being asked the question itself.<sup>8</sup> Certainly you were reminded of the answer to *q\** by being asked *q*. As soon as you were asked *whether* her name was Mary you knew *what* her name was, even though you did not know it a moment before. This opponent extends this by saying that you were also reminded of *whether* her name way Mary by being asked whether her name was Mary, and you did not know whether her name was Mary just before being asked it.

But this flies in the face of the powerful intuition that in this situation you did not forget whether or not her name was Mary; you knew *that* before you were asked the question

---

<sup>8</sup> This is similar to the point made by John Hawthorne (2004, 78) in respect of Schaffer’s argument.

and did not need to be reminded of it by the question. Your knowledge of that is not impugned by your inability to say what her name is.

But, rather than battle it out over this example, the better strategy might be to construct a more clear-cut example. Powers (1978) presented several good examples of convergent knowledge, some of which were picked up by Hookway (1996). The best I think is the example of someone knowing what  $(x+1)^2$  is equal to when expanded but not knowing what  $x^2 + 2x + 1$  is equal to when factorised. A simpler version of this is as follows.

My five year old daughter Rebecca knows the answer to the question: What does  $3 + 5$  make? But she does not know the answer to the question: What added to 5 makes 8? She can get knowledge of the latter in the same sort of way that the boy in Plato's *Meno* 'uncovers' knowledge that the square of the diagonal of a square shape is twice that of the square of its side. We ask her: "Does  $1 + 5$  equal 8?" "Does  $2 + 5$  equal 8?" "Does  $3 + 5$  equal 8?" She answers these correctly and as she answers the third, her eyes light up; she has worked out the answer to the earlier question: "What added to 5 makes 8?" She did not know the answer to that question before going through this process. She did however know what  $3 + 5$  makes. She was not reminded of the answer to that question by being asked it. She knows those sorts of sums; but she is still learning the other sort.

So we have the following initial proposal for a counterexample to the conjunction of (B) and (C).

$q$ : What does  $3 + 5$  make?

$q^*$ : What added to 5 makes 8?

$p$ : The fact that  $3+5$  makes 8.

Assuming (C), that answers are facts, then it looks as though  $q$  and  $q^*$  have the same answer –  $p$ . But Rebecca knows the answer to  $q$  and she knew it before she was asked any of these questions. She has learnt it and not forgotten it. The answer to this question is firmly established in her mind. And her knowledge of it is not impugned by the fact that she is not as good at subtractions as she is at additions.<sup>9</sup> However she does not know the answer to  $q^*$ . When she goes through the guided reasoning process she *discovers* the answer. Now Socrates in Plato's *Meno* might say that she reveals knowledge (or what passes for knowledge) that she already had. This is parallel to the first opponent's move in the previous example of denying that you have forgotten what her name is but merely cannot access the knowledge that you still have. But this would clearly fail to do justice to the phenomenon. "Now I know the answer," she cries. Reasoning is a way of gaining new knowledge.

But there is a possible response to this counterexample. It is to claim that  $q$  and  $q^*$  have different factual answers. I assumed that if there was a fact that answered both it would be the fact that  $3+5=8$ . But one might claim instead that the answer to  $q$  is the following:

$a$ : The fact that 8 is what  $3 + 5$  makes.

---

<sup>9</sup> Even if someone persuaded themselves that Rebecca's lack of knowledge of the answer to  $q^*$  impugned her claim to know the answer to  $q$  they would be unable to apply this move to Powers' example of knowing what  $(x+1)^2$  is without knowing how to factorise  $x^2 + 2x + 1$ .

And one might at the same time claim that the answer to  $q^*$  is the following:

$a^*$ : The fact that 3 is what added to 5 makes 8.

If we can accept this and also accept that  $a$  and  $a^*$  are distinct answers, then we can hold on to the conjunction of (B) and (C).

In the same way one might claim that in my Mary example you do know that whether her name is Mary is that it is, but that you do not know that what her name is is Mary. And in Schaffer's example one might claim that you know that which of Bush or Jackson is on television is Bush, but that you do not know that which of Bush or Ferrell is on television is Bush.

The point is that given any *wh* clause we can construct a *that* clause which embeds the *wh* clause. If Tenzing knows who was the first person to climb Mount Everest, and that person was Hillary then Tenzing knows that Hillary was who was the first person to climb Mount Everest. If I know why she left the room, and that was because she needed to make a phone call, then I know that why she left the room was that she needed to make a phone call. If Sarah knows where her passport is and it is the top drawer of her desk then Sarah know that where her passport is is in the top drawer of her desk. If Hannah knows how to ride a bicycle, and *this* is how to ride a bicycle, then Hannah knows that

this is how to ride a bicycle. In each of these cases the question still figures indirectly in the specification of the answer known.

In general, if  $s$  knows- $wh$ , and  $wh$  is  $c$ , then  $s$  knows that  $wh$  is  $c$ .

The fact that the  $wh$  word – i.e. “what”, “whether”, etc – figures in the specification of the answer in each case may be incidental. Stanley and Williamson (2001) move seamlessly from saying that Hannah knows that this is *how* to ride a bicycle to saying that she knows that this is *a way* to ride a bicycle. The word “how” can be eliminated in favour of this existential description. And, in the same way, if Rebecca knows that 8 is what  $3 + 5$  makes she thereby knows that a number that  $3 + 5$  makes is 8. The word “what” can be eliminated from the specification of the fact that she knows. The difference in the structure of the two possible objects of Rebecca’s knowledge can be revealed using the following formalisation:

$a$ : The fact that  $\exists x((3+5= x) \ \& \ x=8)$ ;

$a^*$ : The fact that  $\exists x((x+5=8) \ \& \ x=3)$ .

The sentences expressing  $a$  and  $a^*$  are logically equivalent, but perhaps it is still a moot point whether or not they express distinct facts. The components of these sentences do have different semantic values. The sentence expressing  $a$  has the predicate  $x=3+5$  as a component and that expressing  $a^*$  has the predicate  $x+5=8$  as a component, and these have quite different semantic values. However this by itself does not force us to think of

$a$  and  $a^*$  as distinct. Frege presented the example of switching from an active verb to the corresponding passive verb as a change that did not change the identity of the thought.<sup>10</sup> So the fact that at Plataea the Greeks defeated the Persians is the same fact as the fact that at Plataea the Persians were defeated by the Greeks. Yet the relation  $x$  *defeated*  $y$  has a different semantic value from the relation  $x$  *was defeated by*  $y$ .

We could also apply Frege's test for the distinctness of two thoughts – whether it is possible to grasp both but have different attitudes to each.<sup>11</sup> Is it possible for Rebecca to know that what  $3+5$  makes is 8 without knowing that what added to 5 makes 8 is 3, while grasping both thoughts? If it were then it would be reasonable to say that these were different objects of knowledge.

I think it is not possible. Suppose that she knows that what  $3 + 5$  makes is 8. As we have seen, she may not yet know what added to 5 makes 8. But, despite not knowing what added to 5 makes 8, she nevertheless knows that what added to 5 makes 8 is 3. In order to know what added to 5 makes 8 she needs to know a subtraction. In order to know that what added to 5 makes 8 is 3 she only needs to know an addition. Looking at the formalisations makes it even clearer. If you know that  $\exists x((3+5= x) \ \& \ x=8)$  then you know that  $\exists x((x+5=8) \ \& \ x=3)$ .

---

<sup>10</sup> See for example Frege (1879, §3). It is also worth observing that Frege (1979 edition, 16-17) considered an example very similar to the Rebecca one in an unpublished 1880-81 article about Boole's logical calculus where he says that we can express the same thought by saying that 2 is the fourth root of 16 and by saying that 4 is a logarithm of 16 to the base 2 even though they employ different predicates –  $x^4=16$  and  $2^x=16$ . Thanks to Jim Levine for pointing out this example to me.

<sup>11</sup> See for example Frege, (1979 edition, 213).

In any case the counterexample can be adapted to put the matter pretty well beyond doubt. Consider now the new question,  $q^{**}$ :

$q^{**}$ : Is it the case that 3 is what when added to 5 makes 8?

Rebecca does know an answer to  $q^{**}$ . Faced with the assertion that 3 is what when added to 5 makes 8, she knows instantly to assent to it (albeit she may get confused by the convoluted expression of the proposition). She knows this despite not knowing an answer to  $q^*$ ; she does not know what added to 5 makes 8. But in this case, if answers to these questions are facts, they are unquestionably the same fact. There is no scope for the sort of response that made the previous counterexample look murky. The best candidate for a factual answer to  $q^{**}$  is  $a^{**}$  as follows:

$a^{**}$ : That whether it is the case that 3 is what added to 5 makes 8 is that it is.

$a^{**}$  must be identical to  $a^*$  - that 3 is what added to 5 makes 8. So here we must have a case where the difference in Rebecca's state of knowledge cannot be accounted for in terms of a difference in the facts that she knows or does not know.

Either (B) or (C) must be false. If we hold on to (B) we can continue to talk of the *objects* of knowledge. When you know something there is something that you know, and when you know the answer to a question the thing you know is an answer. Rejecting (C) works just as well as a response to the counterexamples, and gives the neater solution.

Assuming that an answer to a question must be a fact leads one inexorably to the conclusion that it is identical to an answer to another question. And then the counterexamples can be devised. But if we deny that an answer to a question is always a fact, then we deny that an answer to a question is always the sort of thing that can answer another question; and these counterexamples are blocked.

What Rebecca knows when she knows what added to 5 makes 8 is an answer to a question. The question can be answered by asserting the fact that what added to 5 makes 8 is 3. But in asserting this fact one has not fully specified the answer. A list of facts is not in itself a list of answers. This suggests that answers are *essentially* responses to questions; the identity of an answer depends on the question it is an answer to.

I will end with a couple of less cautious claims about what may follow from rejecting (C). First of all it may lead to some degree of pragmatism in one's approach to knowledge – just the kind of pragmatism that Stanley and Williamson (2001) attributed to Ryle and were so keen to reject. For if knowing-*wh* is not knowing-*that*, then your state of knowledge may depend on the sort of question that the object of that state answers. One kind of knowledge is knowledge of *whether*, another is knowledge of *what*, and another is knowledge of *how*, etc. Corresponding to each of these different kinds of questions and thus of knowledge is a different kind of practical step that constitutes an answer. To a *whether*-question the knower can correctly pick out an option.<sup>12</sup> If they know whether some proposition is true then they can correctly pick out

---

<sup>12</sup> It is important not to identify knowing-*whether* with knowing-*how* to pick out the right option. The claim here is just that knowing-*whether* involves the *capacity* to pick out the right option. Knowing how to

the truth or falsity of that proposition. This seems to be pretty close to what knowing-*that* involves, and suggests a line of thought in which facts are answers to *whether-it-is-true* questions. To a *what*-question the knower can identify a thing that satisfies some description. To a *how*-question the knower can demonstrate a method. To a *why*-question the knower can explain something. To a *where*-question the knower can demonstrate a place that satisfies some description. And so on. These all constitute varieties of rational sensitivity to the world – a range of sensitivities that is not reducible to the capacity manifested by knowing-*that*.

My second incautious claim concerns the metaphysical payoff. If we accept the Fregean approach to facts, then facts – the objects of knowledge-*that* – belong to the realm of sense not just to the realm of reference. If the knowable world is the sum of all possible objects of knowledge-*that*, then it is the world of facts – a world constituted by senses not just references - and so essentially *our* world. When we reject (C) but hold on to (B), we have to think of the objects of knowledge as going beyond just facts. If the knowable world includes all the possible objects of knowledge-*wh* as well as knowledge-*that*, then it is partly, but essentially, constituted by questions. It is not just the world of facts but also the world of answers to questions. This specifies a stronger sense in which it is essentially *our* world.

---

do something involves the capacity to answer the question how to do it, but it need not involve knowing how to answer the question how to do it. Otherwise regress follows.

## References

- Frege, G. (1879), *Begriffsschrift*, Halle: L. Nebert.
- Frege, G. (1979 edition), *Posthumous Writings* (ed. Hermes, H. *et al* and tr. Long, P. *et al*), Oxford: Blackwell.
- Hawthorne, J. (2004), *Knowledge and Lotteries*, Oxford: Oxford University Press.
- Hintikka, J. (1981), “On the logic of an interrogative model of scientific enquiry”, *Synthese* 47, 69-84.
- Hintikka, J. (1992), “Different constructions in terms of ‘know’”, in Dancy, J. and Sosa, E. (eds.) *A Companion to Epistemology*, Oxford: Blackwell, 99-104.
- Hookway, C. (1996), “Questions of context”, *Proceedings of the Aristotelian Society* 96:1, 1-16.
- Karttunen, L. (1977), “Syntax and semantics of questions”, *Linguistics and Philosophy* 1, 3-44.
- Kripke, S. (1980), *Naming and Necessity*, Cambridge MA: Harvard University Press.
- Powers, L. (1978), “Knowledge by deduction”, *Philosophical Review* 87:3, 337-71.
- Ryle, G. (1949), *The Concept of Mind*, London: Hutchinson.
- Salmon, N. (1986), *Frege’s Puzzle*, Cambridge MA: MIT Press.
- Schaffer, J. (2007), “Knowing the answer”, *Philosophy and Phenomenological Research* 75:2, 383-403.
- Snowdon, P. (2004), “Knowing how and knowing that: a distinction reconsidered”, *Proceedings of the Aristotelian Society* 104:1, 1-29.

Stanley, J. and Williamson, T. (2001), “Knowing how”, *The Journal of Philosophy* 98:8, 411-44.

Vendler, Z. (1979), “Telling the facts”, in Kiefer, F., Searle, J. and Bierwisch, M. (eds.), *Speech Act Theory and Pragmatism*, Dordrecht: D. Reidel.

Williamson, T. (2000), *Knowledge and its Limits*, Oxford: Oxford University Press.

XXXX, (2006). Reference to author’s work.