

## ON WILLIAMSON’S ACCOUNT OF PROPOSITIONAL EVIDENCE\*

ARTURS LOGINS

### *Abstract*

In this paper I examine Williamson’s (2000) claim that all evidence is propositional. I propose two objections to key premises of Williamson’s argument. The first is a critique of Williamson’s claim that we choose between hypotheses on the basis of our evidence. The second objection is that Williamson’s claim that evidence is an *explanandum* of a hypothesis leads to counter-intuitive consequences.

### 1. *Introduction*

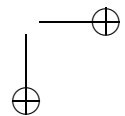
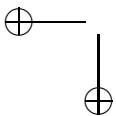
In his influential book *Knowledge and its limits* Timothy Williamson (2000) has claimed that all evidence one possesses is propositional. This, in turn, is a necessary premise for the argument to the conclusion that all and only evidence is knowledge ( $E=K$ ).<sup>1</sup>

The focus of this paper is to raise objections to Williamson’s propositional account of evidence. I claim that even if, on my account, the  $E=K$  equation can be maintained, it nevertheless grounds a more permissive account of what evidence is.

I propose to re-examine Williamson’s argument, offering some critical remarks and objections. In section 2, I present Williamson’s argument for the propositional nature of evidence. In section 3, I provide two arguments against two premises of Williamson’s argument, namely the claim that evidence enables us to choose between hypotheses and, secondly, the claim that it is central for evidence to be an *explanandum* of an explanation. I show that this claim has some serious problems because of ambiguity in what is meant by explanation. I show that Williamson’s account has some very counter-intuitive consequences.

\*The research leading to this paper was supported by the Swiss National Science Foundation (SNSF) grant number 100015\_131794. I would like to thank Brian Ball, Pascal Engel, Davide Fassio, Matthew Kennedy, Kevin Mulligan for their comments and discussions. Earlier materials from this paper were presented at VAF IV conference in Leuven January 2010 and in Phileas Talks in Geneva December 2009.

<sup>1</sup> Since for Williamson (2000) there is only propositional knowledge.



2. *Williamson on propositional evidence*

The point of departure for Williamson's (2000) argument for the propositionality of evidence is the claim that what evidence does is enabling us to choose between competing hypotheses. Williamson (2000) claims (premise 1) that "we often choose between hypotheses by asking which of them best explains our evidence" (p. 194). This choice that we are making between competing hypotheses is determined by Inferences to the Best Explanations (IBE) whereby which hypothesis we choose is the one that best explains the evidence. Williamson claims here that we are (often) using IBEs to provide an explanation for some evidence.<sup>2</sup> From this follows (premise 2), namely evidence is what a hypothesis explains<sup>3</sup> (p. 195).

The next step of the argument is the claim (premise 3) that if a hypothesis explains an item, then this item must be of a propositional kind, whilst next premise (premise 4) states that an item which is explained by a hypothesis is propositional (p. 195). From this follows (the conclusion) that evidence is propositional.

For the argument to work Williamson needs to show that the premises of the argument are true. Especially central premises — premises 2 and 3 — should be motivated. Premise 2 contains an assumption that evidence is an *explanandum* of a hypothesis (Evidence as Explanandum of an Hypothesis (EE)) and premise 3 contains an assumption that what a hypothesis explains is (necessarily) propositional (Propositionality of Explanandum (PE)).

According to Williamson's argumentation the assumption (EE), as the content of the premise 2, is grounded, because it is implied by premise 1. He argued for premise 1 by observing that it is in our usual, ordinary practice to choose between hypotheses on the basis of evidence (by the Inference to the Best Explanation). The fact that IBE is providing explanations shows that it is crucial for evidence to be an *explanandum* of a hypothesis.

With regards to premise 3 (or the (PE) assumption) Williamson argues for it by showing that it can't be the case that there is something which is a kind of thing which a hypothesis explains, but which at the same time is not propositional. This is shown, according to Williamson by considering "that-clauses". The main idea is that the kind of thing which a hypothesis

<sup>2</sup> Notice that Williamson's argument is itself an implicit IBE — the assumption that it is a central function of evidence to serve in the IBE is (an attempt to) the best explanation of our ordinary, regular use of evidence. But Williamson himself affirms that IBE is not always acceptable, as when he claims that "[e]ven if inference to the best explanation is not legitimate in all theoretical contexts. . ." (p. 194). One could doubt whether this highly theoretical case is a case where IBE is acceptable.

<sup>3</sup> This holds because it is an exemplification of this schema: (ii) is implied from (i) where — (i) *x* is explained by a hypothesis through an IBE and (ii) *x* is explained by a hypothesis.

explains must have a structure which respects "that-clause" structure, otherwise it will not be possible to explain it properly. Williamson argues that a single word does not give an explanation (is not a proper explanation) since explanation must be structured by "that-clauses" (p. 195). And it is never the case, according to Williamson that something that is the kind of thing which hypotheses explain doesn't have a structure expressed by 'that' clause.<sup>4</sup>

To sum up, this is the structure of Williamson's argument (PropE):

- (1) (EE) is grounded in our usual epistemic practice (evidence is what serves in our Inferences to the Best Explanation (IBE)).
- (2) Thus, by inference to the best explanation of (1), (EE):  $x$  constitutes evidence iff  $x$  is *explanandum* of a hypothesis (is what a hypothesis explains).
- (3) (PE):  $x$  is explained by a hypothesis only if  $x$  is propositional.
- (4) (PE) is grounded in our language use — viz. the use of "that clauses" plus the assumption that "that clauses" enable us to give sufficiently specified explanations (i.e. an unspecified  $x$  (= without a "that clause") is a source of infinity of propositions and cannot constitute an explanation)
- (5) By (EE) and (PE) follows the conclusion: if  $x$  is evidence, then  $x$  is propositional.

A more accurate restatement of Williamson's argument should mention a further aspect of Williamson's position:

(EVIDENCE)  $x$  is  $S$ 's evidence iff (i)  $x$  serves the central function of evidence AND (ii)  $x$  is grasped/accessed by  $S$ .

Where (i) is explained as follows:

(CEF)  $x$  serves the central function of evidence iff  $x$  is an *explanandum* of a hypothesis by IBE.

In my previous formulations I presented (EE) in terms of what necessary and sufficient conditions an item should satisfy to be counted as evidence. That is not completely exact. Instead I should have presented (EE) in terms

<sup>4</sup>There are two ways one could object to the (PE) claim. First, one could argue against the argument from the use of "that-clauses", one way to do so would be to affirm that explanations without the use of the "that-clause" are genuine, not ill-formed explanations (Pryor (2007) considers one such tactic. Turri (2009) objects to positions which assume that propositions can be epistemic reasons). A second objection might reject Williamson's presupposition that facts are propositions (among classical proponents of the view that facts are not propositions are Russell, Wittgenstein, Husserl). Thus  $x$  (a fact) can be explained without being a proposition itself.

of necessary and sufficient conditions<sup>5</sup> for an item playing the central evidential function. For reasons of simplicity, I assume the "short-cut".<sup>6</sup>

I propose now to turn to a critical examination of Williamson's argument.

### 3. *Against Evidence as Explanandum*

In this section I raise an argument against the (PropE) argument. I reject the (EE) claim. I argue for this by giving two arguments — first I argue that Premise 1 rests on a false presupposition, namely the idea that we are *choosing* between hypotheses (with regards to our evidence). Second, I claim that there is a more profound problem — the *central* function of evidence is not to be an *explanandum* of a hypothesis, but rather to explain (or cause) a hypothesis (belief).

Before I continue, I propose, to be clear, recalling what it actually is we are talking about when we are talking about hypotheses here — we are in fact talking about the content of our beliefs. Our ordinary epistemic practice concerns beliefs and their content. It is more natural to speak about the content of our doxastic attitudes and not hypotheses.

#### *Not choosing between hypotheses*

I propose that there is a serious problem with Williamson's use of «*choosing*» between hypotheses as a central aspect of what evidence makes possible (premise 1). In our usual practice most of the time we don't *choose* between hypotheses or propositions as potential contents of beliefs (or other doxastic states). To be able to choose between various entities implies that there are those various entities, and that I have a kind of access to them (when I am choosing between two kinds of apples in a supermarket I have a kind of access to them, I see them, I can touch them, they are just there in front of me, etc.). In case of potential contents of beliefs it is not clear what it would mean for there to be various accessed potential contents of beliefs between which I should choose: What is *my* access to them (if I don't have an access to them, how can I potentially choose between them)? Do I possess them (prior to acquisition of evidence)? Do I acquire them on the basis of evidence? If I don't acquire them on the basis of evidence, then on the basis of

<sup>5</sup> Williamson doesn't give his characterisation in terms of conditions, I use it in order to simplify argumentation, I think that this use doesn't change anything substantial for his argument.

<sup>6</sup> I assume that this "short-cut" is not problematic for our purposes, as I leave to one side the question of grasping/accessing of evidence.

what do I acquire them?<sup>7</sup> If I do not hold them how can I choose between them?<sup>8</sup> It seems natural to assume that I should at least grasp propositions between which I am supposed to choose one (and that prior to choosing, otherwise my arrival to it is not a result of choice but an accidental guess). And it seems also natural to assume that at least in some circumstances (most of ordinary situations where we discover things) we don’t possess contents of our potential beliefs (= hypotheses), we don’t even grasp them.

Therefore I claim that we don’t choose between hypotheses – potential contents of beliefs on the basis of evidence, because we don’t possess these contents before we come to know the evidence, and often even we could never possess or grasp those contents without the relevant evidence. And even if we come to believe all the relevant alternatives after acquiring knowledge of some piece of evidence, it doesn’t seem plausible that we would choose between them. To choose between hypotheses (contents of beliefs) would mean that we are evaluating them, comparing them and then picking out one which is the most appropriate (whatever it would mean). But that doesn’t seem to be the way in which we react to evidence. We acquire a piece of evidence, say a piece of strange information and posterior to it we formulate some surprising ideas which we are able to grasp only thanks to the new evidence.

Thus I conclude that it is not the case that we are undergoing IBE’s when we are faced with some evidence. Often we do not even consider other propositions but only the one which we form in the face of evidence. Instead, it seems that, given some background information in place, when we have evidence *e*, we simply *infer* by default some other proposition *p*. Usually, having evidence does not imply choosing between hypotheses. Thus I reject premise 1 of the argument. And if premise 1 doesn’t hold then it creates problems for the rest of the argument — premise 2 is no longer justified. However one could maintain that even if we should reject premise 1, one could hold that it is central for a piece of evidence to be an *explanandum* of a hypothesis. I now turn to this central claim.

<sup>7</sup>This causes a dilemma for Williamson: either these beliefs are already possessed, which seems extremely implausible — how can we possess (psychologically) beliefs which explain some evidence, before we come to know that evidence? Or on the other hand, we acquire these beliefs. But then on the basis of what do we acquire them? It is rather common to speak about epistemic reasons, on the basis of which our beliefs are acquired. But given the similarity between epistemic reasons and evidence, Williamson can’t motivate acquisition of beliefs on the basis of epistemic reasons because this would reverse his point of view.

<sup>8</sup>Another problem is that there are often cases where there are no competing hypotheses, but only one hypothesis.

*Not an explanandum*

My second objection to Williamson's argument concerns his key claim that evidence is what a hypothesis explains. There are cases, I claim, where we have evidence  $e$  in support of a proposition  $p$ , but  $p$  does not explain  $e$  for us.

Consider the following case.<sup>9</sup> Long time ago, Chevalier X had a love affair with a maid. That love affair made him mad. One day, in an excess of jealousy, he killed the maid when he saw her flirting with another man. Moved by grief, he had erected a tower of a specific height so that its shadow would cover the spot where he first proclaimed his love to the maid every afternoon. Now, many years after the murder, Chevalier X tries to find once again the place where he proclaimed his love to the maid for the first time. He arrives near the tower in an afternoon and sees the shadow of the tower covering the precise spot. It seems that there is a piece of evidence  $e$  that Chevalier possesses: "The shadow of the tower covers exactly this precise spot of the land", and it seems that this piece of evidence  $e$  is evidence in support of a proposition  $p$ , for him: "I've proclaimed my love to the maid for the first time exactly here". However, it doesn't seem right to say that  $p$  explains  $e$  for Chevalier X. The *mere* proposition  $p$  is not the explanation of  $e$ . There is no direct and simple explanatory link between  $e$  and  $p$ . Hence, there are cases (I believe that the Chevalier case is not an isolated phenomenon) where someone can possess evidence in favour of a proposition without that that proposition explains the piece of evidence.

Now, the obvious reply that one could make against this objection, is to claim that although  $p$  is not the explanation of  $e$ , it is nevertheless *a part* of the explanation of  $e$ . In order to possess the full explanation of  $e$  other propositions are also needed, such as "I had erected a tower of a specific height", "A  $n$ -meters high tower will produce a shadow of  $m$ -meters", "I had intention to mark the spot with a shadow from a tower", etc. Only a whole set of such propositions constitutes the explanation of  $e$ . However, importantly,  $e$  is what is (in part) explained by  $p$ .

This reply is unsatisfactory, however. There are two problems with it. First, there seem to be no non *ad-hoc* (or non pragmatic<sup>10</sup>) way of distinguishing  $p$  from other propositions among the full explanation of  $e$ . But this

<sup>9</sup> Adapted from van Fraassen 1980.

<sup>10</sup> One could follow van Fraassen 1980 and endorse the claim that explanations are pragmatically determined. And then, accept that what evidence is, after all, is also determined in part by pragmatic factors (in virtue of its being an *explanandum*). This move is not available to Williamson, however. Since he explicitly (Williamson 2005) denies that pragmatic factors determine knowledge possession. And according to Williamson, the set of known propositions by a subject  $S$  just is the set of evidence that  $S$  possesses. Hence, if Williamson allowed that evidence is pragmatically determined, then he also had to allow that knowledge is pragmatically determined.

is problematic, since  $p$  seems to enjoy a special status with regards to  $e$ . It seems that  $e$  is evidence for  $p$ , for Chevalier, it is not evidence for some other proposition for him, such as  $p'$ : "A  $n$ -meters high tower will produce a shadow of  $m$ -meters", or if it is, then only secondarily. One cannot, for instance, appeal to probabilities, in order to explain this special status of  $p$  with regards to  $e$ , since,  $p'$  conditional on  $e$  does not seem to be less probable with regards to unconditional  $p'$ , than is  $p$  conditional on  $e$  compared to unconditional  $p$ . Hence, it seems there is no way to account, within this framework, for the fact that  $e$  is evidence for  $p$ , rather than for  $p'$ , for Chevalier (or that, primarily,  $e$  is evidence for  $p$  and not for other propositions, for Chevalier). Second problem is even more radical one. On pain of having an *ad hoc* approach, everything within the full causal history of  $e$ , going back to the Big Bang, should be included as a part of the *full* explanation of  $e$ . But we surely don't want to define evidence  $e$  as what is explained by the full causal history of  $e$ , going back to the Big Bang. But then, if we don't have theoretically satisfactory way to identify a particular partial explanation and we don't want the whole set of the full explanation to be what explains a piece of evidence  $e$ , then we have to conclude that evidence is not what is explained by a hypothesis.

On the contrary, it is natural to think that evidence just is what enables us to *form* a belief, or to make inferences. There is a sense in which a belief or positioning a hypothesis is a *response* to evidence. Sherlock Holmes, for example, gathers evidence before forming a hypothesis. And when a sufficient amount of evidence is gathered he forms a hypothesis. Evidence is what *enables* him to state an explanatory hypothesis.

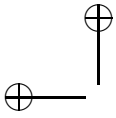
Thus I conclude that (EE) does not state the central function of evidence. Evidence is not essentially an *explanandum* for a hypothesis.

If (EE) doesn't hold then the (PropE) argument doesn't hold. (EE) is false. Thus the (PropE) argument doesn't hold. It doesn't show that all evidence is necessarily propositional.

### Conclusion

I have considered Williamson's argument for the claim that all evidence is propositional. I have claimed that his argument doesn't hold, because two of its premises are not true. I have not claimed, however, that there is non-propositional evidence. There might be other good arguments in favour of the propositionality of evidence. This larger question is left for another investigation.

University of Geneva, Episteme, Switzerland  
E-mail: Arturs.Logins@unige.ch



### REFERENCES

- Pryor, James (2007). ‘Reasons and That-clauses’, *Philosophical Issues*, vol. 17.
- Turri, John (2009). ‘The Ontology of Epistemic Reasons’, *Noûs*, 43.
- Van Fraassen, Bas C. (1980). *The Scientific Image*. Oxford University Press.
- Williamson, Timothy (2000). *Knowledge and its Limits*, New York, Oxford University Press.
- Williamson, Timothy (2005). Contextualism, subject-sensitive invariantism and knowledge of knowledge. *Philosophical Quarterly* 55 (219):213–235.

