

In his paper “How Deep is the Distinction between A Priori and A Posteriori Knowledge?”, Timothy Williamson argues for the claim that the distinction between the a priori and the a posteriori is merely a superficial one – one that “does not cut at the epistemological joints” (forthcoming, p. 8). The central part of his argumentative strategy consists in “comparing what would usually be regarded as a clear case of a priori knowledge with what would usually be regarded as a clear case of a posteriori knowledge” (ibid.), and attempting to show that there is no deep epistemological difference between the two cases. My aim in the present paper is, first, to argue that Williamson fails to establish this latter claim, second, to present an argumentative strategy that defenders of the claim might put forward in order to vindicate it, and third, to outline the prospects of one possible way of blocking this argumentative strategy.

In section 1.1, I will reiterate Williamson’s argument for the claim that there is no deep epistemological difference between the two cases in question. In section 1.2, I will show that his argument for this claim is unsound. In section 1.3, I will present a possible argument that might, taken together with my considerations in section 1.2, be regarded as demonstrating that the claim that there is no deep epistemological difference between the two cases in question is false. I will then highlight the main shortcoming of this argument. In section 1.4, I will present a possible argumentative strategy for vindicating the claim that there is no deep epistemological difference between the two cases in question.

1.1. Williamson’s argument from skills of imagination

Williamson applies his argumentative strategy to the following two supposedly clear examples of an a priori and an a posteriori truth, respectively:

- (1) All crimson things are red.
- (2) All recent volumes of *Who’s Who* are red.

He construes the following scenario of someone coming to know (1) (cf. Williamson, forthcoming, pp. 9f.). This person, Norman, has never been explicitly taught about any

co-occurrence relation between the two colors. Instead, he has acquired the two color concepts independently of one another, through ostension. He then gets confronted with the question whether (1) is true, and he comes to know the answer to this question not by looking at or remembering any particular object, but merely by using “his skill in making visual judgments with ‘crimson’ to visually imagine a sample of crimson” and by using “his skill in making visual judgments with ‘red’ to judge, within the imaginative supposition, ‘It is red’” (ibid., p. 9).

Williamson admits that this description of a cognitive process would have to be enriched in order to guarantee that the process in question yields knowledge of (1). That is, Norman’s skill in making visual judgments with ‘crimson’ should not only reliably enable him to imagine some arbitrary sample of crimson, but it should, in the case described, reliably enable him to imagine a *central prototype* of crimson (cf. Williamson, forthcoming, p. 10); and the same should hold regarding his skill in making visual judgments with ‘red’. Moreover, his skills making visual judgments with ‘crimson’ and ‘red’, respectively, should reliably enable him to assess how much a color shade may differ from the imagined central prototypes of crimson and red so as to still count as a shade of crimson or red, respectively. Such an assessment is necessary in order to differentiate between the true claim that all crimson things are red and the false claim that all red things are crimson (cf. ibid.). But even though these cognitive processes could in principle be spelled out in detail, such an endeavor is, as Williamson remarks, not necessary for the purposes of the comparison. (cf. ibid.)

Regarding the acquisition of knowledge of (2), the person to be imagined is again Norman. In addition to what has been stipulated about him in the first story, it is further to be imagined (cf. Williamson, forthcoming, pp. 10f.) that Norman has never previously been confronted with the question whether (2) is true. He is a competent user of all the single expressions contained in (2), and he is reliable in judging (by looking at the title) whether something is a recent volume of *Who’s Who*, and whether something is red. According to Williamson, these competences and faculties enable Norman to come to know (2),

“without looking at any recent volumes of *Who’s Who* to check whether they are red, or even remembering any recent volumes of *Who’s Who* to check whether they were red, or any other new exercise of perception or memory.” (Ibid.)

Instead, so Williamson claims, Norman can come to know (2) analogously to the way in which he comes to know (1), that is, by using his skill in making visual judgments with

‘recent volume of *Who’s Who*’ to imagine a (central prototype of a) recent volume of *Who’s Who*, and by using “his skill in making visual judgments with ‘red’ to judge, within the imaginative supposition, ‘It is red’.” (Ibid., p. 11) And in order to make the crucial point unmistakably clear, Williamson repeats: “No episodic memories of prior experiences, for example of recent volumes of *Who’s Who*, play any role.” (Ibid.)

He then draws the following conclusion from the comparison. Norman’s knowledge of (1) and (2) are clear cases of what would generally be regarded as instances of a priori and a posteriori knowledge, respectively. But the cognitive skills underlying the two processes of knowledge acquisition are “almost exactly similar.” (Williamson, forthcoming, p. 11) This, Williamson suggests, shows that there is no deep epistemological difference between (1) and (2), which, in turn, suggests that “the a priori – a posteriori distinction is epistemologically shallow.” (Ibid.) Of course, (1) and (2) differ in modal status, since the truth of (1) is necessary, while the truth of (2) is contingent. But this is of no *epistemological* significance, since “the distribution of errors in modal space may be much the same in the two cases.” (Ibid., p. 17) That is, even though (1) is true in all possible worlds, while (2) is true in some and false in others, one may well be as error-prone regarding the truth or falsity of (1) as regarding the truth or falsity of (2). Therefore, Williamson claims that “[t]he main effect of the modal difference between (1) and (2) may be to distract us from the epistemological similarity.” (Ibid.)

A very common way to conceptually distinguish between a priori and a posteriori knowledge is to make a certain distinction between the roles played by experience in the two kinds of case. That is, while in cases of a priori knowledge, experience is commonly regarded as playing a merely enabling role, in cases of a posteriori knowledge it is commonly regarded as playing an *evidential*, and thereby more than purely enabling, role.

The terms ‘enabling’ and ‘evidential’ are obviously in need of clarification. A usual way of providing this clarification is by stating that experience is enabling in so far as it contributes to the understanding of the relevant expressions. For example, knowledge of the fact that all bachelors are unmarried certainly requires some kind of experience. But, according to what is commonly assumed, this kind of experience is only necessary for the kind of knowledge in question in so far as it provides for the subject’s understanding of the sentence ‘All bachelors are unmarried’. In this specific example, this kind of experience includes all kinds of perceptions that contribute to the subject’s understanding of the sentence, as well as the sensory input that was necessary for the

subject to develop the general faculty of thinking. In contrast, the role of experience is evidential in so far as it is not purely enabling. For example, the role that experience plays in the knowledge of the fact that it rained yesterday is, according to what is commonly assumed, not purely enabling, since the mere understanding of the sentence in question has to be combined with some further experience in order to put the subject in a position to know that it rained yesterday.

Regarding the two cases of knowledge that Williamson considers, he claims that the distinction between an enabling and an evidential role of experience is of no use for demonstrating a deep epistemological difference, because “the role of experience in both cases is more than purely enabling but less than strictly evidential.” (Williamson, forthcoming, p. 15) That is, he neither regards the role of experience played in Norman’s knowledge of (1) as purely enabling, nor does he regard the role of experience played in Norman’s knowledge of (2) as strictly evidential.

In order to show that the role played by experience in Norman’s knowledge of (1) is more than purely enabling, Williamson construes the case of Norbert (cf. Williamson, forthcoming, p. 13), who, like Norman, has learned to use the terms ‘crimson’ and ‘red’ so as to be able to reliably apply these terms to objects in his surroundings. However, Norbert has had less experience than Norman in using the term ‘crimson’, which “makes him less skilful than Norman in imagining a crimson sample.” (Ibid.) Despite this incompetence concerning the faculty of offline processing, Williamson claims that “[b]y normal standards [Norbert] is linguistically competent with both words [and] grasps proposition (1).” (Ibid.) However, due to Norbert’s lack of skill in imagining a sample of crimson, he does not come to know (1). It follows that the role played by experience in Norman’s knowledge of (1) is more than purely enabling, since, as the case of Norbert is supposed to illustrate, knowledge of (1) requires more from experience than merely enabling one to entertain the respective thought.

Regarding Norman’s knowledge of (2), Williamson claims that “[t]he only residue of his experience of recent volumes of *Who’s Who* active in his knowledge of (2) is his skill in recognizing and imagining such volumes” (Williamson, forthcoming, p. 14), and he regards this role of experience as “less than strictly evidential.” (Ibid.) He therefore concludes that no deep epistemological distinction between Norman’s knowledge of (1) and of (2) can be drawn by appealing to the conceptual difference between an enabling and an evidential role of experience.

1.2. *Why the argument fails*

Williamson devotes some significant space (cf. Williamson, forthcoming, pp. 19ff.) to arguing that Norman's way of coming to know (1) is not relevantly different from people's supposedly a priori knowledge of mathematical and logical truths. For the moment, I will not contest this claim. In the present section, I will merely focus on Williamson's claim that the role of experience played in Norman's knowledge of (1) is not significantly different from the role of experience played in Norman's knowledge of (2). As described in the previous section, this claim is based on the premise that the role played by experience in both of these cases of knowledge is neither purely enabling nor strictly¹ evidential. I will argue that the reasons that Williamson offers for accepting this premise are not convincing. More precisely, I will argue that his considerations regarding skills of imagination fail to provide a good reason for accepting the claim that the role played by experience in Norman's knowledge of (2) is not an evidential one. Note that this does not by itself show that the role played by experience in Norman's knowledge of (2) is significantly different from the claim that the role played by experience in Norman's knowledge of (1). However, by demonstrating that the role played by experience in Norman's knowledge of (2) is evidential, one thereby demonstrates that Williamson's argument for the claim that there is no significant epistemological difference between Norman's knowledge of (1) and Norman's knowledge of (2) is unsound.

In order to see that the role played by experience in Norman's knowledge of (2) should be regarded as evidential, it is necessary to have a closer look at Williamson's claim that "[t]he only residue of [Norman's] experience of recent volumes of *Who's Who* active in his knowledge of (2) is his skill in recognizing and imagining such volumes." (Williamson, forthcoming, p. 14) I grant that this claim is true. However, I claim that the skill of imagining involved in Norman's knowledge of (2) is epistemically more demanding than it might superficially appear. That is, I will argue that the kind of imagining that figures in Norman's knowledge of (2) requires experience to play a role that should most plausibly be regarded as an evidential one.

¹ I take Williamson's use of the expression 'strictly evidential' as allowing for an interpretation according to which sentences of the form 'x is strictly evidential' are true iff corresponding sentences of the form 'it is strictly true that x is evidential' are true. From now on, I will only use the shorter expression 'evidential', intending it to be interpreted in the same way in which Williamson wishes the longer version to be interpreted.

The kind of imagining that figures in Norman's knowledge of (2) involves the skill of imagining recent volumes of *Who's Who*. This formulation of the skill is in need of clarification, for it can be used to refer to quite different skills. There are mainly two possible readings. According to one of these two readings, the skill of imagining recent volumes of *Who's Who* consists in the following:

- a) the skill of visually representing to oneself some possible thing that *could* be a recent volume of *Who's Who* (while judging that it could be such a volume).

Put into less inelegant terms, the skill described under a) might be redescribed as the skill of imagining how a recent volume of *Who's Who* might look like. Exercising this skill could, for example, consist in visually representing to oneself some possible green book with the expression "Who's Who" written on the cover, while judging that a recent volume of *Who's Who* might look exactly like that.

According to the second of the two readings, the skill of imagining recent volumes of *Who's Who* consists in the following:

- b) the skill of visually representing to oneself a stereotype (regarding color) of those things that in fact *are* recent volumes of *Who's Who*.

Obviously, what is needed for Norman's knowledge of (2) is not merely the skill described under a), but also the one described under b); for the skill described under a) might at best enable him to know that all recent volumes of *Who's Who* *could* be red.

Now, in order to see that the role of experience played in Norman's knowledge of (2) should be regarded as evidential, one merely has to consider the kind of experience that Norman had to make in order to reliably exercise the skill described under b). In order for Norman to exercise the skill described under b) as reliably as his knowledge of (2) requires, he had to take a (somewhat) recent look at volumes of *Who's Who*. Of course, Norman might in principle also gather the relevant information via testimony, but the example, as stipulated by Williamson, is one in which the relevant information is obtained through direct observation. The reason why Norman's reliable exercise of the skill described under b) requires him to have taken a somewhat recent look at volumes of *Who's Who* is simply that what is a stereotype (regarding color) of recent volumes of *Who's Who*, relative to time t_1 , might not be a stereotype (regarding color)

of recent volumes of *Who's Who*, relative to t_2 . In other words: if the stereotypical color of recent volumes of *Who's Who* is also the stereotypical color of past volumes, then it is contingently so. Of course, it might in principle be the case that Norman has not taken a look at volumes of *Who's Who* for a long time, but that he has good reasons to believe that new volumes of *Who's Who* have the same color as older ones. In such a case, Norman's reliable exercise of the skill described under b) would *not* require him to have taken a somewhat recent look at some of the volumes. But again, the example, as stipulated by Williamson, is not supposed to be read in this way. Therefore, putting it into lax terms, Norman's knowledge of (2) requires him to be visually up-to-date.

However, the claim that Norman's knowledge of (2) requires him to be visually up-to-date might still not be regarded as a good reason for accepting the claim that the role played by experience in Norman's knowledge of (2) is an evidential one. In order to overcome these reservations, it might be helpful to distinguish between two different readings of the claim that Norman's knowledge of (2) requires him to be visually up-to-date. Once it is clarified which of the two readings is the intended one, the conclusion that the role played by experience in Norman's knowledge of (2) is evidential should no longer be denied.

The distinction between two different readings of the claim that Norman's knowledge of (2) requires him to be visually up-to-date amounts to a distinction of two different kinds of requirement. The first kind of requirement is one that is merely due to people's limited memory capacities. It might, for example, be that Norman loses his skill of offline representation regarding certain concepts if he does not from time to time refuel his visual memory by direct observation. If the claim that Norman's knowledge of (2) requires him to be visually up-to-date is read in this way, then it does indeed not provide a good reason for accepting the claim that the role played by experience in Norman's knowledge of (2) is an evidential one. However, the intended reading is a different one. The kind of requirement corresponding to the intended reading is one that holds *in principle*, regardless of the limitations of people's memory capacities.

In order to illustrate that this latter kind of requirement can only be fulfilled if some of the experience involved is evidential, consider a modified version of Williamson's case which differs from the original version only insofar that Norman has been space-travelling for many years, having had no contact whatsoever with his fellow Earthians. Since the case is construed in such a way that he never had any good reason to suppose that future volumes of *Who's Who* would have the same color as previous ones, coming

to know (2) would require him to travel back to Earth (or to make some other kind of contact) and *check* the color of recent volumes of *Who's Who*. And this requirement is a principled one: it holds even though – as Williamson would admit – Norman understands any of the expressions involved, and it holds independently from whether his visual memory has to be refueled from time to time.

This case illustrates that a reliable exercise of the skill of imagining involved in Norman's knowledge of (2) is epistemically more demanding than it might superficially appear. In the modified version of the case, a reliable exercise of this skill requires Norman to make some contact with his home planet in order to check the color of recent volumes of *Who is Who* – even though he grasps (2) perfectly well, and independently from the quality of his visual memory. It would be extremely implausible to claim that the role played by this kind of experience is not an evidential one. In the original version of the case, checking the color of recent volumes of *Who is Who* does not require as much effort for Norman as it does in the modified version, since in the original version he has never left Earth. But this makes no difference regarding the general evidential character of the experience required for reliably exercising the skill of imagining described under b). It can be concluded that experience plays an evidential role in Norman's knowledge of (2), and that Williamson's argument for the claim that there is no deep epistemological difference between Norman's knowledge of (1) and his knowledge of (2) is therefore unsound.

1.3. The role of experience in Norman's knowledge of (1)

I have argued that the role played by experience in Norman's knowledge of (2) is an evidential one. Hence, in order to vindicate Williamson's claim that there is no significant epistemological difference between Norman's knowledge of (2) and his knowledge of (1), one would have to show that in Norman's knowledge of (1) experience also plays an evidential role. As stated above, Williamson claims that the role played by experience in Norman's knowledge of (1) is *not* an evidential one. But given that he is wrong about the role played by experience in Norman's knowledge of (2), one might suspect that considerations similar to those that have revealed Williamson's mistake regarding (2) might as well reveal an analogous mistake on Williamson's side regarding (1). That is, it might turn out that the kind of imagining

involved in Norman's knowledge of (1) – just like the kind of imagining involved in his knowledge of (2) – requires, contrary to how it might superficially appear, experience to play an evidential role. In section 1.4, I will present a possible strategy for demonstrating that experience plays indeed an evidential role in Norman's knowledge of (1). This strategy mainly consists in contrasting Williamson's original version of the scenario with a certain modified version of it, and in drawing a certain analogy between the two scenarios. In the present section, however, I will first briefly show that Williamson's arguments for *denying* that experience plays an evidential role in Norman's knowledge of (1) are unsatisfactory, and I will present an argumentative strategy which might make this denial at least *prima facie* plausible.

In the original version of the scenario, Norman acquires the words 'crimson' and 'red' by means of learning about the superficial phenomenal properties of crimson things and red things, respectively. As Williamson puts it,

“[h]e learns 'crimson' by being shown samples to which it applies and samples to which it does not apply, and told which are which. He learns 'red' in a parallel but causally independent way. [...] Through practice and feedback, he becomes very skilful in judging by eye whether something is crimson, and whether something is red.” (Williamson, forthcoming, p. 9)

Norman is then asked to make an offline judgment regarding whether all crimson things are red. His judgment that all crimson things are red is based on an exercise of the skill of imagining prototype samples of crimson and of red. According to Williamson, the role played by experience in Norman's knowledge that all crimson things are red is not purely enabling because Norman's reliable skill of imagining prototype samples of crimson and red goes beyond his understanding of the sentence 'all crimson things are red', and the acquisition of this additional skill involves experience:

“Norman's past experience did more than enable him to grasp proposition (1). It honed and calibrated his skills in applying the terms 'crimson' and 'red' to the point where he could carry out the imaginative exercise successfully.” (Williamson, forthcoming, p. 13)

In considering whether experience plays an evidential role in Norman's knowledge of (1), Williamson even goes so far as to concede that according to one possible interpretation of the example, experience plays indeed an evidential role. He writes:

“One interpretation of the example is that, although Norman's knowledge of (1) does not depend on episodic memory, and he may even lack all episodic memory of any relevant particular colour experiences, he nevertheless retains from such experiences generic factual memories of what crimson things look like and of what red things look like, on which his knowledge of (1) depends.

[...] On this interpretation, Norman's colour experience plays an evidential role in his knowledge of (1), thereby making that knowledge a posteriori." (Williamson, forthcoming, pp. 13f.)

But surprisingly, Williamson gives no reason for why this interpretation of the example is not the most plausible one.² Instead, he merely claims that "we need not develop the example that way" (Williamson, forthcoming, p. 14), and that the case might also be interpreted as one in which the only residue of Norman's experience active in his knowledge of (1) is a certain skill of recognizing and imagining (cf. *ibid.*). Williamson remarks that his choice of not interpreting the example as one of a posteriori knowledge is provisional, and that in section 5 of his paper, he will "reconsider, but reject, the idea that even supposed paradigms of a priori knowledge are really a posteriori." (Cf. *ibid.*) However, in section 5 he merely argues that Quinean considerations regarding the interconnectedness of the epistemic statuses of individual beliefs do not provide good reasons for accepting the claim that all knowledge is a posteriori. These kinds of argument do not provide good reasons for not interpreting the particular case of Norman's knowledge of (1) as a case in which experience plays an evidential role. Moreover, as the above discussion of the role played by experience in Norman's knowledge of (2) demonstrates, the two possible interpretations that Williamson considers are not mutually exclusive. That is, as seen above, the supposed fact that the only residue of Norman's color experience in his knowledge of (1) is a certain skill of recognizing and imagining does not guarantee that the role played by experience in his knowledge of (1) is less than evidential. It might turn out that, analogously to Norman's skill of imagining recent volumes of *Who is Who*, his reliable exercise of the skill of imagining crimson things requires experience to play an evidential role.

However, the fact that Williamson does not sufficiently argue for the claim that experience plays no evidential role in Norman's knowledge of (1) should not by itself be taken as a reason to reject it. In what follows, I will present an argumentative strategy that might make the claim that experience plays no evidential role in Norman's knowledge of (1) at least *prima facie* plausible. Later on, I will highlight the main shortcoming of this strategy.

Consider again the experience requirement in virtue of which, according to Williamson, the role played by experience in Norman's knowledge of (1) is more than purely enabling. The lack of the fulfillment of this requirement is exactly what

² A very similar point is made by Carrie Jenkins in a short (and generally sympathetic) discussion of an earlier version of Williamson's argument in *The Philosophy of Philosophy* (cf. Jenkins 2008, p. 700).

distinguishes the case of Norman from that of Norbert, and it results in Norbert's being "less skilful than Norman in imagining a crimson sample." (Williamson, forthcoming, p. 13) More exactly, the experience requirement in question concerns Norman's reliable skill of imagining not just some arbitrary sample of crimson, but a central prototype, regarding color, of such a sample, as well as some cognitive mechanism that enables Norman to reliably assess how much a color shade may differ from the imagined one in order to still count as a shade of crimson. Analogously, in the case of Norman's knowledge of (2), the experience requirement in question concerns Norman's reliable skill of imagining a central prototype, regarding color, of recent volumes of *Who is Who*, as well as some cognitive mechanism enabling Norman to reliably assess how much a color shade may differ from the imagined one in order to still count as a shade of the color of recent volumes of *Who is Who*. But despite this superficial analogy, the two experience requirements differ in the following way. In order for Norman to reliably imagine a central prototype, regarding color, of a sample of crimson, memories of past experiences of crimson things have to be integrated into some cognitive device whose output is the reliable imagining of the central prototype in question.³ In order for Norman to reliably imagine the kind of central prototype in question, it suffices – so one might assume – that the integrated memories be only memories of those past experiences that already played the role of providing for Norman's understanding of the word 'crimson'. Admittedly, those of Norman's experiences of crimson that merely play the role of providing for the skill of imagining in question, without playing the role of providing for his understanding of the word 'crimson' – that is, the extra amount of experience of crimson that Norbert lacks – will probably also be integrated into the cognitive device whose output is the reliable imagining of a central prototype of a sample of crimson (given, of course, that Williamson is right in claiming that some extra amount of experience is required at all). But – so one might claim – it is not required for Norman's way of coming to know (1) that these experiences be integrated into the cognitive device in question (even though this will probably happen), but these experiences are required for integrating the *understanding-providing* experiences into the cognitive device in question. (Imagine, in analogy, someone who motivates a group of others to collectively do a certain work. Her necessary role in bringing it about that the work gets done merely consists in motivating the others, who are – once motivated –

³ For an elaborated theory of the mechanisms of memory integration and offline representation, see Barsalou 1999 and Barsalou et al. 2003.

able to do it without her, even though she might end up helping them.) If one, instead, wishes to claim that it *is* required for Norman's way of coming to know (1) that these experiences be integrated into the cognitive device in question, then – so one might argue – it remains obscure how Norbert, who lacks this extra amount of experience, can possess the reliable online skill of judging whether a given object is crimson. If Norbert's experiences of crimson things have provided for this kind of skill, then it might seem plausible to assume that no additional experiences of crimson things do in principle have to be integrated into a cognitive device whose output is the reliable imagining of a central prototype of a sample of crimson.

Regarding Norman's knowledge of (2), matters are significantly different. That is, in order for Norman to reliably imagine a central prototype of a recent volume of *Who is Who*, it does clearly *not* suffice that the integrated memories be only memories of those past experiences that have played the role of providing for Norman's understanding of the expression 'recent volumes of *Who is Who*'. Instead, given how the scenario is construed, some of the integrated memories have to be memories of experiences of *recent* volumes of *Who is Who*, and it might well be that these experiences have played no role of providing for Norman's understanding of the expression 'recent volumes of *Who is Who*', since it might well be that Norman already understood the expression 'recent volumes of *Who is Who*' before any recent volume of *Who is Who* existed. Putting it into more general terms, the connection between the experience requirement in virtue of which, according to Williamson, the role played by experience in Norman's knowledge of (1) is more than purely enabling and Norman's understanding of the word 'crimson' is significantly closer than the connection between the experience requirement in virtue of which, according to Williamson, the role played by experience in Norman's knowledge of (2) is more than purely enabling and Norman's understanding of any of the expressions involved.

This difference might seem to allow for a characterization of the role played by experience in Norman's knowledge of (1) as non-evidential which does not commit one to an analogous characterization of the role played by experience in Norman's knowledge of (2). In particular, the above considerations might suggest the following argument:

- (P1) Any experience required for Norman's way of coming to know (1) is either required in order to provide for Norman's understanding of (1), or is required

in order to integrate those past experiences that are already required in order to provide for Norman's understanding of (1) into cognitive devices whose output is the reliable imagining of certain central prototypes.

- (P2) Neither of the two requirements mentioned in (P1) is an evidential requirement.
- (C) The experience required for Norman's way of coming to know (1) plays no evidential role (that is: it does not fulfill any evidential requirement)⁴.

If this argument were sound, it would, together with my above considerations regarding the role played by experience in Norman's knowledge of (2), provide a promising basis for defending the a priori/a posteriori distinction against Williamson's considerations. For given that the role played by experience in Norman's knowledge of (2) is evidential, while the role played by experience in Norman's knowledge of (1) is not, this difference might appear epistemically significant enough in order to call Norman's knowledge of (2) a posteriori without risking that there will be no place left for the a priori. If Williamson is right in claiming that the role played by experience in Norman's knowledge of (1) is more than purely enabling, and if he is also right in claiming that the same holds for any knowledge whatsoever, then one might decide to use the term 'a priori' for all instances of knowledge in which experience does not play an evidential role – thereby using the terms 'a priori' and 'a posteriori' in order to mark a fundamental epistemological distinction. If, on the other hand, Williamson is right in claiming that the role played by experience in Norman's knowledge of (1) is more than purely enabling, but wrong in claiming that the same holds for all other supposed instances of a priori knowledge, then the theoretically most useful way of applying the terms 'a priori' and 'a posteriori' might be to reserve the former for those instances of knowledge in which experience plays a purely enabling role, while classifying Norman's knowledge of (1) as neither a priori nor a posteriori.

But before seriously engaging in this kind of pragmatic considerations, one should have another look at the above argument. First, I am not claiming that the premises of the argument are true. Establishing the truth of (P1), in particular, would require a lot more than the sketchy considerations presented above. Second, a closer look at the

⁴ Henceforth, I will treat the expression 'play an evidential role' as synonymous with the expression 'fulfill an evidential requirement', assuming that this interpretation of the former expression does not relevantly diverge from Williamson's intended use of it.

argument reveals that it is not even valid. That is, even if (P1) and (P2) are true, (C) is still not established. In order to make the argument valid, the following additional premise is needed:

(P3) If some experience required for Norman's way of coming to know (1) is required in at least one of the two ways mentioned in (P1), then this experience does not also fulfill an *evidential* requirement for Norman's knowledge of (1).

Adding (P3) makes the argument valid. However, it is far from obvious that (P3) is true. In particular, (P3) is, for example, incompatible with the following claim regarding a certain double role of experience in Norman's understanding of (1):

(DR) Some of the experience that plays at least one of the two roles mentioned in (P1) also plays an evidential role in Norman's knowledge of (1).

Establishing (DR) would not only refute (P3), it would also, taken together with my above considerations regarding Norman's knowledge of (2), provide a strong case for Williamson's claim that there is no significant epistemological difference between Norman's knowledge of (1) and his knowledge of (2). In the following section, I will present a strategy of arguing for (DR).

1.4. The argument from analogy

As already announced at the beginning of the previous section, the argumentative strategy that I will now present consists in drawing an analogy between Williamson's version of the scenario of Norman's coming to know (1) and a modified version of it. The modified version has apparently not been considered by Williamson, but drawing the relevant analogy rests, at least to some extent, on Williamson's relatively minimal conception of understanding.

The modified version that I have in mind is one in which Norman does not, as in the original version, learn the term 'crimson' by learning to distinguish crimson from non-crimson things on the basis of superficial color perceptions. He has seen many

crimson things under normal perceptual circumstances, and he has thereby made the relevant superficial color perceptions. But he has never been taught that these things are crimson. Instead, he learned the word ‘crimson’ from a scientist friend, Mary⁵, who told him all there is to know about the microscopic surface properties that all and only crimson things possess.⁶ Norman thereby learned to distinguish crimson from non-crimson things, not on the basis of superficial color perception, but on the basis of observing the surfaces of the objects in question through a microscope. He has thereby also acquired good offline reasoning skills regarding the microscopic surface properties of crimson things. However, Mary has not told him about the microscopic surface properties that all and only red things possess. What Mary has told him has therefore not put him in a position to know, without making further experiences, that all crimson things are red. But even though Norman has not learned the word ‘crimson’ on the basis of superficial color perceptions, he *has* learned the word ‘red’ in this way, and he has thereby also acquired good offline reasoning skills regarding the superficial looks of red things. Obviously, though, his offline reasoning skills regarding the microscopic surface properties of crimson things and his offline reasoning skills regarding the superficial looks of red things do still not put him in a position to know, without making further experiences, that all crimson things are red. In order to acquire this knowledge, he would (if he does not want to rely on testimonial evidence) have to make further experiences either regarding the microscopic surface properties of red things, or regarding the superficial looks of crimson things. He then finally comes to know (1), not through making further experiences regarding the microscopic surface properties of red things, but through making further experiences regarding the superficial looks of crimson things.

⁵ This is of course an allusion to Frank Jackson’s famous thought experiment, presented in his 1982, p. 130, and in his 1986, p. 291. Williamson mentions Jackson’s thought experiment in a very short footnote (cf. Williamson, forthcoming, p. 37, n. 6). But, analogously to his dismissal of the claim that experience plays an evidential role in Norman’s knowledge of (1), he does not offer any argument for why experience does not play an evidential role in Mary’s knowledge of what red things look like, apart from suggesting that examples like these might also be interpreted as ones in which the only residue of color experience is the relevant skill of recognizing and imagining colors (cf. *ibid.*, p. 14).

⁶ Actually, mapping colors onto surface properties is not a straightforward matter, since similarity of color appearance for relevantly similar subjects under relevantly similar visual circumstances does not guarantee similarity of surface properties (cf. Hardin 1988, pp. 5f.). However, this fact is of course still compatible with the uncontested claim that color supervenes on surface structure. When I speak of surface properties that *all* and only things of a certain color possess, these properties are supposed to be understood disjunctively. An attempt of mapping colors onto electromagnetic reflectance profiles, which, in turn, supervene on molecular surface structure, is offered in Churchland 2007.

Which role could this example play in an argument for (DR)? The first main step in such an argument could be the following claim:

(P1) In virtue of possessing the reliable skill of correctly applying the word ‘crimson’ on the basis of observing the surfaces of the objects in question through a microscope, Norman *understands* the word ‘crimson’.

That is, he understands the word before he comes to know what crimson things superficially look like. Williamson’s own remarks about the conditions for understanding can be taken as speaking in favor of this claim. In his 2006 paper “Conceptual Truth”, Williamson suggests that understanding a word requires no more than “causal interaction with the social practice of using that word [permitting] sufficiently fluent engagement in the practice.” (Williamson 2006, p. 38) Regarding what a sufficiently fluent engagement might consist in, he merely claims that it “can take many forms, which have no single core of agreement.” (Ibid.)⁷ In the present example, a causal connection to the social practice of using the word ‘crimson’ is given, since Mary came to use this word through interaction with people who learned the word in a perfectly normal way. But is Norman’s engagement in the practice of using the word sufficiently fluent in order to constitute an understanding of it? Note that, at the point of time in question, even though Norman only knows about the microscopic surface properties of crimson things, he already knows that crimson is a *color*, and not, for example, a degree of smoothness. This kind of knowledge might already be taken as enabling a fluent engagement in the practice of using the word. Moreover, note that Norman is aware of the fact that he is not able to distinguish crimson from non-crimson things on the basis of superficially looks. A person who knows that ‘crimson’ is a color term, but who applies the term, on the basis of superficial looks, to those things that superficially look green, might plausibly be said to not understand the word ‘crimson’.

⁷ Williamson reuses the same formulations quoted here in *The Philosophy of Philosophy*, p. 126, in a chapter that is, like the paper “Conceptual Truth”, primarily concerned with epistemological conceptions of analyticity. Williamson’s view on this topic is that there are no analytic truths in this sense, since he does not believe in any kind of direct understanding-assent link. His denial of the existence of these links relies on the claim that one might understand a sentence (or grasp a thought), and yet, due to deviant logical views or dispositions, not be disposed to assent to it. See Boghossian (2011) for objections against this latter claim, and see Williamson (2011) for a detailed response. These issues, however, are not relevant for present purposes, for even if Williamson is right in denying the existence of direct links between understanding and dispositions to assent, the requirement of possessing the right logical views or dispositions is not one that could tip the scales regarding whether Norman’s knowledge of (1) is a priori or a posteriori.

Norman, however, is clearly better off in this regard. If he uses the term ‘crimson’, then he does not usually apply it to the wrong things. Instead, he is even able to explicitly teach normal speakers something about the essential characteristics of crimson things. In the light of these considerations, the claim that Norman understands the word ‘crimson’, even before getting to know what crimson things superficially look like, does not seem very far-fetched. It would of course take a lot more to conclusively establish it.

The next main step in an argument for (DR) could be the following claim:

(P2) If some experiences necessary for a certain way of coming to know a proposition neither play the role of providing for the subject’s understanding of the respective sentence nor the role of providing for the subject’s offline reasoning skills corresponding to the subject’s way of understanding the respective sentence, then these experiences play an evidential role in the subject’s knowledge of that proposition.

If one accepts (P1), then one would also have to accept that the description in the antecedent of (P2) is true of at least some of Norman’s experiences regarding the superficial looks of crimson things. For making these experiences is necessary for his way of coming to know (1), and before he makes these experiences, he already understands, according to (P1), the word ‘crimson’, as well as (so one might simply stipulate) the rest of the sentence, and he, according to the description of the scenario, already possesses good offline reasoning skills regarding the microscopic surface properties of crimson things and the superficial looks of red things. That is, if one accepts (P1), one would also have to accept that at least some of Norman’s experiences regarding the superficial looks of crimson things neither play the role of providing for the subject’s grasp of (1) nor the role of providing for the subject’s offline reasoning skills corresponding to the subject’s way of grasping (1). Therefore, the following can be concluded on the basis of (P1) and (P2):

(C1) In the modified version of the scenario, some of Norman’s experiences regarding the superficial looks of crimson things play an evidential role in his knowledge of (1).

In the spirit of Williamson's original argument, one might object to (C1) by claiming that the only residue of Norman's experiences of the superficial looks of crimson things active in his knowledge of (1) is his skill of recognizing and imagining crimson things. However, this supposed fact would, by itself, not be a good reason for rejecting (C1), because, as argued in section 1.2 above, reliably exercising the skill of imagining certain things may require experience to play an evidential role. Moreover, in the modified version of the scenario, Norman *already possesses* the skill of recognizing and imagining crimson things by the time he starts to make experiences regarding the superficial looks of crimson things. That is, he is already able to recognize and imagine crimson things in a way that corresponds to his understanding of the word 'crimson' – namely, on the basis of observing through a microscope, and representing to himself, the surface structure of crimson things.

If one still wishes to insist on the claim that in the modified version of the scenario, Norman's experience regarding the superficial looks of crimson things plays no evidential role in his knowledge of (1), and if one also accepts (P1), then one could be pressed to accept certain claims which defenders of the a priori will probably be quite unwilling to accept. Think, for example, of someone who comes to understand the word 'transparent' in a perfectly normal way, that is, by learning to distinguish transparent from non-transparent things on the basis of their superficial visual properties. Suppose further that this person comes to understand the term 'H₂O' in chemistry class, by learning to distinguish H₂O from other substances on the basis of looking through a microscope. She has, at this point, not been told that H₂O is water, and she has not explicitly been presented with H₂O except when looking through a microscope. She does therefore not know that H₂O is transparent. In order to acquire this knowledge, she would have to make experiences regarding the superficial visual properties of H₂O (or regarding the microscopic properties of transparent things). Now, the following problem arises for a defender of the a priori who wishes to deny (C1) while accepting (P1). Given that Norman understands the word 'crimson', and given that both Norman and the person in the example just described possess good offline reasoning skills corresponding to their ways of understanding the terms 'crimson' and 'H₂O', respectively, someone who denies (C1), would, by analogy, also commit herself to the claim that, in the example just described, the person's experiences regarding the superficial visual properties of H₂O does not play an evidential role in her knowledge that H₂O is transparent. Defenders of the a priori who deny (C1), while accepting (P1),

would therefore apparently be committed to accept the undesirable consequence that in the example just described, experience plays no evidential role.

This defense of (C1) against someone who accepts (P1) is also a defense of (P2), since the kind of defender of the a priori just described is in effect denying (P2). I am, of course, not claiming that the above considerations conclusively establish the truth of (P2). As with (P1), a lot more would be required for that. However, accepting (P1) and (P2) clearly commits one to accept (C1).

So far, the argument is merely concerned with the *modified* version of the scenario. As mentioned above, the purpose of presenting the argument is to present a strategy for establishing the truth of (DR). But (DR) is concerned with the *original* version of the scenario. Accordingly, the final part of the argument consists in drawing an analogy between the two versions of the scenario. Before doing so, one should emphasize some of the similarities between the two versions. In both of them, Norman comes to know (1). And he comes to know it via the same method, namely, by representing to himself the superficial color properties of crimson things and red things. Moreover, in both versions of the scenario, the reliable exercise of this offline skill is partly based on Norman's experiences regarding the superficial looks of crimson things. If the argument from (P1) and (P2) to (C1) is sound, then these experiences play an evidential role in the modified version of the scenario. But given the similarities just mentioned, it might seem odd to accept (C1) while denying that Norman's experiences regarding the superficial looks of crimson things also play an evidential role in the *original* version of the scenario. Drawing this analogy could be based on the following general claim, which constitutes the final premise of the argument:

- (P3) If some kind of experience plays an evidential role in someone's knowledge of some proposition p, then this kind of experience also plays an evidential role in any other instance of knowledge of p in which the acquisition of this knowledge is at least partly based on this kind of experience.

The expression 'based on' is supposed to be understood in a wide sense, so that if someone's knowledge of p is at least partly based on her understanding of a certain word, and if a certain kind of experience plays the role of providing for the subject's understanding of this word, then the subject's knowledge of p is at least partly based on the kind of experience in question, in virtue of the circumstances just described. Given

this understanding of the expression ‘based on’, Norman’s knowledge of (1) in the original version of the scenario is partly based on experiences regarding the superficial looks of crimson things. Therefore, the following conclusion regarding the original version of the scenario follows from (C1) and (P3):

(C2) In the original version of the scenario, Norman’s experiences regarding the superficial looks of crimson things play an evidential role in his knowledge of (1).

This completes my presentation of a possible strategy for establishing the claim that in the original version of the scenario, experience plays the kind of double-role described in (DR). In the parlance of someone who endorses the above argument, the argumentative strategy might broadly be described as red-flagging the evidential role of some of Norman’s experiences by means of *isolating* this role in a scenario in which this role and the other role that the same experiences originally play are played by different experiences.

As with (P1) and (P2), I do not claim to have established the truth of (P3). A lot more would be required for that. However, my short considerations regarding these three premises already indicate that they are not far-fetched, and that the argument from analogy therefore deserves some closer examination.

1.5. Summary and outlook

In the foregoing sections, I have argued that Williamson’s argument for the claim that there is no significant epistemological difference between Norman’s knowledge of (1) and Norman’s knowledge of (2) is unsound; but I have presented an argumentative strategy for vindicating this claim.

In particular, I have argued, in section 1.2, that Williamson’s argument for this claim is unsound by showing that experience plays an evidential role in Norman’s knowledge of (2). In section 1.3, I have considered a possible argument for the claim that experience does not play an evidential role in Norman’s knowledge of (1). It has occurred that this argument relies on the hidden premise that if some experience plays a role in Norman’s knowledge of (1) which is not evidential, then this experience does not

also play a second, evidential, role in Norman's knowledge of (1). In section 1.4, I have presented a possible argument, which I will simply call the argument from analogy, for establishing the claim that some experience *does* play a second, evidential, role in Norman's knowledge of (1). If this argument is sound, then it vindicates Williamson's claim that there is no significant epistemological difference between Norman's knowledge of (1) and Norman's knowledge of (2), for it would then have been established that experience does not only play an evidential role in Norman's knowledge of (2), but also in Norman's knowledge of (1). Since Norman's knowledge of (1) might be regarded – at least by defenders of the a priori – as a clear case of a priori knowledge⁸, this unexpected epistemological similarity between Norman's knowledge of (1) and his knowledge of (2) might be regarded as challenging the existence of a priori knowledge.

There are, of course, several possible strategies for blocking the argument from analogy. One might, for instance, challenge P2 on the basis of the claim that experience which *improves* or *enriches* someone's understanding of a word – even though the person in question already possesses understanding *simpliciter* of this word – and which is necessary for the person's way of coming to know a certain proposition, should not be characterized as playing an evidential role in the person's knowledge of that proposition. This strategy, however, will face the danger of over-generalization, since it might commit one to characterize experiences regarding hidden essences of natural kinds as playing no evidential role in a person's knowledge that a certain natural kind has certain hidden properties. A further possible strategy for blocking the argument from analogy might consist in challenging P3, on the basis of a highly individualized conception of evidentiality and apriority. It will be necessary to examine the prospects of these and other strategies in some detail, but I will leave this for a later occasion.

⁸ The argument from analogy applies equally well to truths like the one expressed by the sentence 'Nothing is red (all over) and green (all over) at the same time', which might be taken by defenders of the a priori as an even clearer example of an a priori truth than (1) (even though this is probably only due to the fact that (1) is less obviously *true* than the sentence just mentioned). The corresponding scenario would be one in which Norman is able to identify red objects on the basis of their superficial looks, but not on the basis of their microscopic surface properties, and in which he is able to identify green objects on the basis of their microscopic surface properties, but not on the basis of their superficial looks. Hilary Putnam's 1956 paper "Reds, Greens, and Logical Analysis" triggered a debate about whether the apriority of the truth expressed by 'Nothing is red (all over) and green (all over) at the same time' can be explained on the basis of its analyticity – a debate in which only the analyticity, but not the apriority, of this truth is questioned. And relatively recently, Laurence Bonjour – one of the most prominent contemporary defenders of the a priori – listed the proposition that no surface can be uniformly red and uniformly blue at the same time as one of five supposedly clear examples of propositions that can be known a priori (cf. Bonjour 2005, p. 100; see also pp. 100-102 of Bonjour's 1998 book *In Defense of Pure Reason*).

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