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ACCIDENTALLY TRUE BELIEFS AND THE WILLIAMSONIAN
MENTAL STATE OF KNOWING

ABSTRACT

I will explore some philosophical implications generated from Williamson's thesis that knowing is a state of mind (KSM). By using the fake barn case, I introduce a way to evaluate Williamson's KSM thesis— whether Williamsonian mental state of knowing can be plausibly distinguished from some other similar but epistemologically distinctive states of mind (i.e., accidentally true beliefs). Then, some tentative externalist accounts for the supposed differences between Williamsonian mental state of knowing, and accidentally true beliefs are critically assessed, which in turn implies that the evaluated traditional versions of externalism in semantics and epistemology do not fit well with Williamson's thesis KMS. In the end, I suggest that the extended-mind or extended-knower approach may be more promising, which indicates that the active externalism would be called for by Williamson's KMS thesis.

KEYWORDS: knowing, the Gettier problem, mental states, externalism

I. WILLIAMSON ON KNOWING AS A STATE OF MIND

In his seminal book *Knowledge and Its Limit*, Timothy Williamson proposes a new approach to the study of proposition knowledge, which suggests that “[k]nowing (propositional knowledge) is a state of mind”¹ that “does not factorize as standard analyses require.”² Bearing this kind of understanding of knowing in mind, Williamson proposes that “[w]e can see epistemology as a branch of the philosophy of mind.”³ Williamson's epistemological proposal here is to argue against traditional way of the conceptual analysis of (propositional) knowledge⁴, of which the justified-true-belief (JTB) account of knowledge is regarded as a paradigm, although Williamson does concede that certain kind

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of “modest positive the concept” of knowledge may be available⁵. To fully appreciate his innovative approach to the study of knowing, a few detailed clarifications of Williamson’s account of the thesis that “knowing is a state of mind” would be plausibly called for.

When he suggests that knowing is a mental state, first and foremost, Williamson does not imply that knowing inherits the property of being a mental state from any of its mental components that are constitutive and fundamental to knowledge. In this sense, Williamson no longer commits to the traditional thesis that knowledge is a kind of belief. For Williamson, “knowing is *merely* a state of mind,” which amounts to “the claim that there is a mental state being in which is necessary *and sufficient* for knowing *p*.”⁶ To put this idea more formally,

[F]or some mental state S, being in S is necessary and sufficient for knowing *p*.⁷

Thus, we can see that Williamson’s claim that knowing is a mental state is actually an abbreviative statement with much philosophical significance, which in turn results in (at least) two important consequences in Williamsonian epistemology. (i) Being so construed, knowing can be regarded as a paradigmatic mental state, which no longer need be reduced to any other kinds of mental states (say, beliefs, for example).⁸ This would favor Williamson’s knowledge-first epistemology. (ii) Williamson is able to defend an externalist view of knowing, since “a difference in knowledge would *constitute* a difference in mental state.”⁹ A desirable consequence from this view is that the difference in knowing under the discussion “need not be detectable by the subject who lacks knowledge.”¹⁰ Williamson’s view of knowing then saves a theoretical space for the possibility for an epistemic subject to be in different mental states even when she/he is positioned in

indiscriminable situations.¹¹

Since he rejects the reductionist view of knowing, Williamson would only present some qualitative descriptions of the properties of the mental state of knowing. According to Williamson, knowing is the most general factive mental state, and correspondingly, 'know' is a paradigmatic factive mental state operator (FMSO). When Williamson claims that knowing is factive, knowing does not take the truth of the target proposition as its subpart or component, even though one may *validly infer* the truth of p from the mental state of knowing that p . In this sense, knowing is not reducible to any kinds of true beliefs, for the latter is *not* the factive *mental* state. In the above sense, Williamson's view of knowing significantly departs from the traditional analysis of knowledge (say, any analysis of knowledge with the form of 'JTB+X'), although both views may ostensibly appear to agree on the factivity of knowing.

Williamson suggests that his thesis of knowing as a genuine state of mind implies that "[w]e can see epistemology as a branch of the philosophy of mind"¹²; this, in turn, would enable epistemologists to borrow theoretical resources from the philosophy of mind and then to apply them in epistemological studies. I think Williamsonian approach to epistemology should still provide us with sufficient space to engage some crucial problems that are intrinsic epistemology. I would suggest that one of legitimate epistemological research projects would be how to tell knowing from other non-knowing states of mind. Some non-knowing states of mind (say, accidentally true beliefs) may appear to be similar to knowing, epistemologists (since the period of Ancient Greek times) remain enthusiastic to develop various theories that are intended to help people to tell

knowing from lucky guessing or purely true beliefs generated by known accidents. In the next section, I would like to introduce one of the famous Gettier cases, i.e., the fake barn case, to evaluate Williamsonian thesis of knowing. One caveat needs to be announced in advance: by using the relevant Gettier cases here, I am not committed, implicitly or explicitly, to any metaphysical or conceptual reductionism of knowing. In this paper, I suggest that we should understand the Gettier cases in the following way: the state of mind of the gettiered subject is just accidentally (or luckily) true belief, which has to be distinguished from knowing, which by no means implies the reductionist thesis that knowing is (conceptually or metaphysically) constituted by some beliefs with specific epistemologically desirable properties.

Bearing the above view in minds, we will continue to assess Williamson's view of knowing as a state of mind concerning the classic Gettier case of fake barn.

II. THE GETTIER CASE OF FAKE BARN AND KNOWING AS A WILLIAMSONIAN MENTAL STATE

Consider a pair of cases as follows

THE NORMAL CASE OF KNOWING :

Henry_n is driving in the countryside with his son. For the boy's edification Henry identifies various objects on the landscape as they come into view. "That's a cow," says Henry, "That's a tractor," "That's a silo," "That's a barn," etc. Henry_n has no doubt about the identity of these objects; in particular, he has no doubt that the last-mentioned object is a barn, which indeed it is. Each of the identified objects has features characteristic of its type. Moreover, each object is fully in view, Henry_n has excellent eyesight, and he has enough time to look at them reasonably carefully, since there is little traffic to distract him. And the countryside is normal.¹³

THE GETTIERED FAKE BARN CASE:

The case-setting is almost the same with the first case, except for the following two variations: (i) it is now Henry_g who is driving in the countryside; and (ii) unknown to Henry_g, the district he has just entered is full of papier-mâché facsimiles of barns. These facsimiles look from the road exactly like barns, but are really just façades, without back walls or interiors, quite incapable of being used as barns. They are so cleverly constructed that travelers invariably mistake them for barns. Having just entered the district, Henry_g has not encountered any facsimiles; the object he sees is a genuine barn. But if the object on that site were a facsimile, Henry_g would mistake it for a barn.¹⁴

According to classical interpretation, we are inclined to agree on the following two knowledge-ascription statements:

- (k_n) Henry_n knows that it a barn in from of him.
- (k_g) Henry_g does not know that it a barn in from of him.

Although some contemporary epistemologist may disagree on (k_g) and insist that Henry_g also has the relevant knowledge,¹⁵ Williamson himself does regard the second case as a genuine Gettier case. Namely, Williamson thinks that Henry_g in the fake-barn case is not in a mental state of knowing, because “‘fake barn’ Gettier cases” presents certain kind of cases “in which the agent may lack relevant false beliefs but still the circumstances are not favorable enough for knowledge of the given truth.”¹⁶ It is also worth emphasizing that the above claim presented by Williamson is not seriously challenged by increasing data accumulated in the studies of experimental philosophy,¹⁷ for, as Williamson suggests, the relevant Gettier cases can be formally motivated in epistemic logic. If Williamson is correct, we can conclude from the above pair of cases that Henry_n and Henry_g are in different states of minds. Intuitively speaking, Henry_n is in a mental state of knowing, while Henry_g is not in a mental state of knowing¹⁸. But, can such intuitive judgments be backed up or justified (beyond the intuition)? If the answer to the question is ‘yes,’ we may wonder what

difference can be identified¹⁹ so that we are able to tell Henry_n's mental state from Henry_g's.

It is worth noting that there is an ambiguity²⁰ involved in the above question, which might lead to a rather easy, trivial, uninformative answer. For instance, if we think the above question aims at the *token* difference between the states of minds of Henry_n and Henry_g, the question can be easily answered, for Henry_n and Henry_g are different agents who are located in different spatiotemporal positions respectively. But such a reply does not address the real puzzle in the first place, and therefore becomes philosophically much less interesting. On the other hand, if we aim at some philosophically significant, informative solution to the problem, it seems that we have to find out a property that is presented in all mental states of knowing (including Henry_n's mental state, of course) but absent in the *type* of non-knowing mental states (which is instantiated by Henry_g). In a word, when we ask what makes the mental states of Henry_n and Henry_g different, we are indeed asking: "what difference tells the *type* of Henry_n's mental state from *type* of Henry_g's."²¹ Thus, unless further provisos provided, we would uniformly treat our question as the significant and informative one, which requires us to find the difference between the *types* of the states of Henry_n's and Henry_g's minds.

As it will be seen in the next section of the paper, the consideration of philosophically significant, informative answer to the above question would reveal a challenging difficulty for Williamsonian view of knowing.

III. THE DIFFERENCE BETWEEN TWO TYPES OF MENTAL STATES

By observation of the history of analytic philosophy, we may now easily pass some

theoretical strategies as unviable for the account of the difference between the types of the mental states of Henry_n and Henry_g.

For instance, the classical version of semantic externalism²² cannot help much, for semantic externalism normally holds that the semantic content fails to supervene upon the agent's or the speaker's internal features.²³ The comparison between the cases of Henry_n and Henry_g does not accurately parallel the comparison of the water on the Earth and the water on the twin Earth, for instance. Because the water on the Earth is H₂O and the water-like liquid on the twin-Earth is XYZ, the Earthian's belief that water is colorless and the twin Earthian's belief that water is colorless are actually different, no matter how qualitatively similar the relevant beliefs are, even granted that both the Earthian and the twin-Earthian can sincerely report their beliefs respectively by uttering the same sentence.²⁴ In this sense, the Earthian's and the twin Earthian's relevant beliefs are different, for their beliefs are about different watery stuff (i.e., H₂O and XYZ, respectively). Semantic externalism can also readily explain why an Earthian's mental state fails to be knowing when she/he mistakes XYZ for H₂O and falsely forms the relevant mental state in question. But the above strategy cannot directly extended to generate a desirable solution to the cases of Henry_n and Henry_g, for they both forms a causally appropriate mental attitudes towards genuine barns in question respectively. In sum, the comparison between Table 1 and Table 2 nicely illustrate the significant dissimilarity among the Gettier-related cases and the twin-Earth-related cases:

Table 1

	The watery stuff	The sentences uttered	The content of the mental states/thought
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The Earth	H ₂ O	Water is colorless.	H ₂ O is <u>colorless</u> .
The Twin Earth	XYZ		XYZ is <u>colorless</u> .

Table 2

	The observed object	The sentences uttered	The content of the mental states/thought
Henry _n	The genuine barn	It is a barn.	The genuine barn observed is a barn. ²⁵
Henry _g	The genuine barn		

Conceptually speaking, it would rather unsurprising that semantic externalism does not help much here, because semantic externalism mainly provides theoretic insights about the content of a proposition that may be embedded in a mental attitude. But, our central concern, on the other hand, focuses on the difference in the *states* of the minds in question (rather than the *mere* content of the mental states in question). This may also remind us of Williamson's discussion of the broadness of the mental state of knowing. Williamson explicitly criticize Burge's account of the factive mental states (which, of course include knowing),²⁶ for Williamson thinks Burge fails to fully appreciate the broadness of knowing. Williamson suggests that knowing is a broad mental state and its property of being factive does not imply that knowing a hybrid state of mind that is composed by a purely mental part and a non-mental part (say, truth-part). In other words, even if one, in a certain case, rationally and truly believes that *p*, there is no case for this subject to be positioned in the same state of mind and she/he knows that *p*. Thus, Williamson concludes that knowing, as a distinctive type of state of mind, is sharply distinguished from some other type of mental states with some epistemic merits (say, rationally and truly believing).

The above consideration would naturally broaden the scope of our investigation from the *mere* content of the mental states to epistemological studies that center upon the states

of minds in question. And the relevant topics then may appropriately concern the very mental or psychological states, the formation processes, the causal mechanism and interaction between the cognitive subjects and their epistemic environments, etc. We would, in turn, shift our attention from the semantic externalism to epistemic externalism.

Evidently, not every externalist theory of knowledge would work for us. For instance, the causal theory of knowing²⁷ cannot handle the fake barn case properly, since Carl Ginet and Alvin Goldman design the fake barn case to reveal the insufficiency of the very theory deliberately. We have to appeal to some other versions of externalist theories of knowledge to explain the differences of Henry_n's and Henry_g's mental states. Here comes one seemingly promising approach.

According to the mainstream diagnosis of the cases, Henry_n's and Henry_g's mental states have different statuses of anti-epistemic-luck; in other words, Henry_n's mental state of knowing is epistemically robust, but Henry_g's mental state is only accidentally true, which can be easily defeated. In this sense, Henry_n's mental state of knowing is epistemically reliable and safe, the properties of which are entirely absent in Henry_g's mental state. Let me briefly summarize the above idea as follows:

It is the property of being epistemically safe²⁸ that distinguishes Henry_n's mental state of knowing from Henry_g's one. Namely, Henry_n's mental state is epistemically safe while Henry_g's is not. Thus, according to Leibniz's law (or, indiscernibility of identicals), it is the epistemic safety helps us in telling the difference of Henry_n's mental state in question from Henry_g's one.²⁹

At first glance, the above "solution" seems to be promising, which appears to satisfy our criterion for a plausible account for the difference between the types of Henry_n's and Henry_g's mental states. As it will be shown, however, I propose that the above so-called

“solution” is not tenable under a scrutiny. The crux of the above “solution” is, I think, whether the property of being epistemically safe a proper discriminative one that is applicable within the schema of Leibniz’s law so that we can reasonably tell the difference in the *types* of mental states. For instance, currently (say, it is t_1) when I composing this paper, I am mentally conscious and let us call this mental state C_1 . Namely, I am in C_1 at t_1 . After a good sleep through the night, when I wake up in the next day and continue to compose the paper, I am also conscious. Let us mark this situation by the statement that I am in C_2 at t_2 . Intuitively, my mental states of C_1 and C_2 do not seem to be different in type, although C_1 has the property of being marked by the temporal instance t_1 , which is absent in C_2 . In this case, we cannot validly apply Leibniz’s law to derive a conclusion about the difference in types of C_1 and C_2 . Now the remaining task for us is to find a reasonable way to evaluate whether we can validly apply Leibniz’s law, together with epistemic safety, to derive the “favorable” conclusion.

To avoid the accusation of begging the question or being *ad hoc*, I would like to present the following bacteria case with the Gettier-style adaption of Dretske’s³⁰:

There are some marine bacteria with internal magnets, and they originally resides in the northern hemisphere. Since the oxygen is toxic to them, the bacteria’s internal magnets would align themselves towards geomagnetic north, and the bacteria can swim downwards from the surface of the ocean and reach the oxygen-free zone. In this sense, when their internal magnets function well in the northern hemisphere, we may name the relevant physiological state of the bacteria \mathbf{P}_n . Thus, evidently, \mathbf{P}_n is a *safe* state for guiding the bacteria in the northern hemisphere to the oxygen-free zone.³¹ Now suppose a bacteriologist migrates some of the bacteria from the northern hemisphere to the southern hemisphere. Because their internal magnets remain in the state of \mathbf{P}_n , the transplanted bacteria, without any further change of the environmental setting, would be guided towards the surface of the ocean and highly probably be killed in the oxygen-rich zone the southern hemisphere. Accidentally, from the pocket

of the bacteriologist, a piece of magnet bar is unintentionally dropped into the water area where the bacteria have just been migrated, which happens to change the local magnetic field. Together with the sinking magnetic bar, all of the transplanted bacteria are guided towards the oxygen-free zone in the deep ocean. In this latter situation, \mathbf{P}_n is no longer a safe (but rather a lucky) state for guiding the bacteria to the oxygen-free zone in the southern hemisphere.

The above Gettiered bacteria case structurally parallels to the fake barn case. Intuitively, the transplanted bacteria are only lucky to be guided by the magnet bar towards the bottom of the ocean and therefore avoid the fatal disaster of being killed by oxygen. To elaborate it modally: although the transplanted bacteria in the actual world are guided towards the oxygen-free zone due to the accident of dropped magnet bar, in a nearby possible world where no magnet bar is dropped, the transplanted bacteria, by their internal magnets, are led into the oxygen-rich zone and be all killed there. In this sense, the transplanted bacteria with \mathbf{P}_n state only *accidentally* get the right information about the new environment where they are migrated. On the other hand, the bacteria in their original living area always get the information of the oxygen-free zone correctly—but their internal magnets are exactly in the same state \mathbf{P}_n . In sum, the state of bacteria's internal magnets, \mathbf{P}_n , provides safe guidance in their original living area, while becomes unsafe in the migrated zone. I think, the bacteria case vividly illustrate that the same physiological (or metaphysical) state can be safe in one situation and unsafe in others. Thus, the contrast of being safe and being unsafe is not a plausible way for us to distinguish the states in question.

If the same type of \mathbf{P}_n can be safe in one situation and unsafe in another one, we cannot reasonably distinguish the type of Henry_n's mental state from the one of Henry_g's by suggesting the former is (epistemically) safe, and the latter is unsafe. Someone may object: there is a significant dissimilarity between the Gettiered bacteria case and the fake

barn case— it is Henry_n's and Henry_g's *mental* states that are under discussion, while \mathbf{P}_n is rather a *physiological* state of internal magnets in the bacteria. Actually, it is not so difficult to meet this challenge by adapting the original Gettiered bacteria case and introducing the relevant mental state \mathbf{M}_n that supervenes upon \mathbf{P}_n . Suppose the bacteria in the case now evolve and develop certain mental state \mathbf{M}_n that supervenes upon \mathbf{P}_n . According to the classic supervenience thesis in philosophy of mind, the bacteria remain in the same mental state \mathbf{M}_n as long as its supervenient physiological basis is still \mathbf{P}_n . By a similar pattern, we can see that the mental state \mathbf{M}_n of the bacteria before the transplantation is (epistemically) safe, but becomes unsafe after the transplantation.

If the above analysis is plausible, I think, it is fair to suggest that standard externalism in epistemology cannot help Williamson with his thesis of knowing as a state of mind.

IV. THE CONCLUSION: KNOWING AS THE EXTENDED STATE OF MIND IN PROSPECT

In previous discussion, I show that some traditional externalist strategies cannot help us to distinguish knowing as Williamsonian state of mind from some accidentally or luckily true beliefs. I confess, however, that this paper on its own does not suggest a conclusive rejection of Williamson's thesis of knowing, for the theoretical alternatives have not been exhaustively surveyed yet. We may still hold certain hope that some to-be-developed version(s) of externalism, when introduced into Williamson's account, could lead to a desirable outcome. Some hints can probably be revealed from the reflection of our previous discussion.

Some philosophers who endorse Williamson's Knowledge-First approach may, for instance, suggest that Williamson is able to account for the difference of Henry_n's and Henry_g's mental states by appealing to his primeness externalism. Namely, according to Williamson, knowing, as a prime state of mind, is used primitively to explain some other epistemological terms as well as epistemic phenomena rather than the other way around.³² I think some clarification of my approach in this paper is in order here. Williamson's argument for the primeness of knowing is based upon the *reductio-ad-absurdum* strategy.³³ Suppose knowing is a composite mental state constituted by the mental, internal component and the non-mental, external component. Then, there would be a case where a recombination of one's mental state is constructible out of the mental component from one case, and the non-mental component from another case and one is still in the state of knowing. But, Williamson strongly argues that the subject in the newly constructed case is not in the state of knowing. Here, again, I would like to re-emphasize my use of Henry_n-Henry_g case (as well as the bacteria case) does not imply that Henry_g is in the same type with the one of Henry_n's (let alone the so-called reductionism of knowing). I granted in the cases that Henry_g is in a different type mental state from Henry_n's. What is called for in this paper is the account for the intended difference (or different properties) that tells Henry_g's mental state from Henry_n's. In this sense, to embrace Williamson's primeness externalism does not further the understanding of the genuine difference between Henry_g's and Henry_n's mental states, since primeness externalism used in this situation amounts to a restatement of the granted supposition I have already accept and therefore fails to solve the relevant puzzle.

Some philosophers may suggest that, even though the primeness by itself cannot account for the relevant difference between Henry_g's and Henry_n's mental states, it is quite evident that Henry_n is positioned in a normal epistemic situation and therefore has knowledge but Henry_g is in an epistemically unfriendly situation and thus fails to know. In other words, it is the situational difference that distinguishes Henry_n's knowing from Henry_g's believing. Again, I do not disagree with this strategy in general way— but this strategy is too coarse-grained to enhance our understanding of the difference between Williamsonian mental state of knowing and merely true belief. We all realize that the fake barns in Henry_g's case prevent him from knowing. The genuine problem interests us is how to explain this prevention by appealing to some property of knowing that is missing in Henry_g's case. The relevant worry presented in this paper also sheds some lights on how to accurately interpret the bacteria case: the bacteria case should be regarded as an illustration of a situation where a traditional epistemic safety account cannot successfully distinguish Williamsonian mental state of knowing from the just truly believing by the externalist spirits.

Someone may suggest that the worry presented in this paper is committed to a strawman fallacy, for the term “a state of mind” is a technic term in knowledge-first epistemology, which should not be understood in an ordinary sense.³⁴ According to this line of thought, Williamson could bite the bullet by saying that Henry_n's mental state is different from Henry_g's only in the Williamsonian sense of “a state of mind.” But, in the ordinary sense of mental states, both Henry_n and Henry_g are in the same mental state. In this case, the comparison of the cases of Henry_n and Henry_g lose its initial power to

generate the relevant puzzle for us.³⁵ I sincerely doubt Williamson would embrace such a rescuing strategy, which amounts to “Winning a Battle, Losing the War.” This strategy severely undercuts the significance of the relevant disputes concerning Williamson’s knowledge-first epistemology, for the disagreements between Williamson and his opponents may become just terminological. I think the strategy is not charitable enough for Williamson’s project if we cannot prove that there is no further viable account for his thesis of knowing as a mental state.

I would lastly consider a criticism of the bacteria case, which may, in turn, sheds some lights on the prospect of Williamson’s thesis of knowing as a mental state. One may correctly indicate that there are two necessary presuppositions in the analysis of the bacteria case here. One *explicit* presupposition is the commitment of the supervenience thesis that remains contentious in the contemporary philosophy of mind; the other presupposition is *implicitly* committed, for the physical, physiological, or mental states of the bacteria in question are all located strictly within the spatial boundary of the biological organisms (i.e., the bacteria). To translate this implicit presupposition back to the analysis cases of Henry_n and Henry_g, we may discover that it amounts to presuppose that the mental states of Henry_n and Henry_g are spatially restricted in their bodies respectively. Both presuppositions may be abandoned when we evaluate the mental states of Henry_n and Henry_g. Without these two presuppositions, the similarities between the Gettiered bacteria case and the fake barn case would no longer established evidently.

I am quite sympathetic to the above fair criticism. The setting-up and the information of the cases of Henry_n and Henry_g are not explicitly committed to either presupposition

listed in the above. The mental states of Henry_n and Henry_g in question may be functionally multi-realizable and epistemically extended beyond the skulls or the bodies of the agents. In other words, what has been shown so far is that the “passive externalism”³⁶ is unable to provide sufficient support to Williamson’s thesis of knowing as a genuine state of mind. The “active externalism”³⁷ has not entered the scene yet.

I also think the extended-mind or extended-knower approach may be promising, but this theoretical account still call for substantial development. In somewhere else, I argue that Clark and Chalmers’ original functionalist version of active externalism are not applicable straightforwardly here, because the case of Henry_g and Henry_n are substantively different from Clark and Chalmers’ case of Inga and Otto. Since the extended cognition, the extended knower and the extended mind are hotly debated issues and the literature in the relevant research area multiplies fast, I cannot address the active externalism in my current paper due to the space, which may, in turn, sets the agenda for the further independent research. I would be satisfied with the limited conclusion so far that the traditional, passive externalism is not sufficient to supply Williamson’s thesis of knowing as a genuine state of mind to solve the problem in question.

ENDNOTES

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¹ Timothy Williamson, *Knowledge and Its Limits* (Oxford, UK: Oxford University Press, 2000), 21.

² Ibid., 33.

³ Ibid., 41.

⁴ Hereafter, without a further specification or explain, knowing (or knowledge) throughout this paper is restricted to propositional one. Some other non-propositional knowledge, such as knowing-how or knowing-by-acquaintance, would be set aside.

⁵ See Williamson’s *Knowledge and Its Limits*, 33.

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- ⁶ Ibid., 21, with original emphasis.
- ⁷ Ibid., 21.
- ⁸ See Williamson's *Knowledge and Its Limits*, 27-33 for more details.
- ⁹ Ibid., 26.
- ¹⁰ Ibid., 26. Williamson himself appeals to this view significantly to argue against epistemic skepticism (see Chapter 8 of his *Knowledge and Its Limits*). Due to the limited length of the paper, I, however, would leave the issue of skepticism aside.
- ¹¹ As it will be shown in the next section of the paper, the view would play a crucial role in the discussion in the fake-barn Gettier case.
- ¹² Timothy Williamson, *Knowledge and Its Limits*, 41.
- ¹³ Alvin I. Goldman, "Discrimination and Perceptual Knowledge," *The Journal of Philosophy*, Vol. **73**, No. **20** (November, 1976), 772, with minor adaptations.
- ¹⁴ Ibid., 773, , with minor adaptations.
- ¹⁵ For instance, some epistemologists who commit to truth-maker account of knowledge deny that the fake-barn case is a genuine Gettier case; and they further claim that the subject in the the fake-barn case knows that it is a barn. For truth-maker account of knowledge, see, for example, Adrian Heathcote, "Gettier and the Stopped Clock," *Analysis*, Vol. **72**, No. **2** (April, 2012), 309-314; Dale Jacquette, "Is Nondefectively Justified True Belief Knowledge?" *Ratio*, Vol. **9**, No. **3** (September, 1996), 115-127. For the argument against truth-maker theory of knowledge, see John Biro "Showing the 'Time,'" *Analysis*, Vol. **73**, No. **1** (January, 2013), 57-62; "Clocks, Evidence, and the 'Truth-Maker Solution,'" *Acta Analytica*, Vol. **29**, No. **3** (September, 2014), pp. 377-381; Chad Vance, "Truthmaker Theory Does Not Solve the Gettier Problem," *Ratio*, Vol. **27**, No. **3** (September, 2014), pp. 291-305. For a non-traditional but inspiring diagnosis of the fake-barn case without appealing to the truth-maker theory, see Stephen Hetherington (2012). "The Gettier-Illusion: Gettier-Partialism and Infallibilism," *Synthese*, Vol. **188**, No. **2** (September, 2012), pp. 217-230; *Knowledge and the Gettier Problem* (Cambridge, UK: Cambridge University Press, 2016; especially, 5-9, 89-106, 183-189).
- ¹⁶ Timothy Williamson, "Gettier Cases in Epistemic Logic," *Inquiry*, Vol. **56**, No. **1** (2013), 12.
- ¹⁷ For experimental philosophers' studies of the Gettier cases and relevant intuition, see, for instance, Joshua Alexander and Jonathan M. Weinberg, "The 'Unreliability' of Epistemic Intuitions," in *Current Controversies in Experimental Philosophy*, eds. Edouard Machery and Elizabeth O'Neill (New York, NY: Routledge Publishing Ltd., 2014), 128-145; Kenneth Boyd and Jennifer Nagel, "The Reliability of Epistemic Intuitions," in *Current Controversies in Experimental Philosophy*, 109-127; John Turri, "Knowledge Judgments in 'Gettier' Cases," in *A Companion to Experimental Philosophy*, eds. Justin Sytsma and Wesley Buckwalter (Malden, MA: Blackwell Publishing Ltd, 2016), 337-348.
- ¹⁸ One may suggest, for example, that Henry_g is only believing (with its content proposition being accidentally true, of course).
- ¹⁹ Note that the term "(being) identified" here is to ascribe a performance of ascribers (such as, we who read and evaluate the cases in question), which does not at all imply either Henry_n or Henry_g is able to tell whether he is positioned in a *normal* countryside or not.
- ²⁰ See the entry of "Type-token ambiguity" in Simon Blackburn, *The Oxford Dictionary of Philosophy*, 3rd edition (Oxford, UK: Oxford University Press, 2016), 486.
- ²¹ According to Williamson, even granted that, in the given cases, there are no clues for them to tell whether abundant fake barns presenting in the neighborhood, Henry_n and Henry_g are nevertheless in different (types of) states of minds. (Cf. Williamson's *Knowledge and Its Limits*, 24-26, 51-64.)
- ²² See Tyler Burge, "Individualism and the Mental," reprinted in his *Foundations of Mind: Philosophical Essays*, Vol. **2** (Oxford, UK: Oxford University Press, 2007), 100-150; Donald Davidson, "Knowing One's Own Mind," reprinted in his *Subjective, Intersubjective, Objective* (Oxford, UK: Oxford University Press, 2001), 15-38; Hilary Putnam, "The Meaning of 'Meaning,'" reprinted in his *Mind, Language and Reality: Philosophical Papers*, Vol. **2** (Cambridge, UK: Cambridge University Press, 1975), 215-271.
- ²³ See Jesper Kallestrup, *Semantic Externalism* (New York, NY: Routledge Publishing Ltd., 2012), 61-63.
- ²⁴ For a detailed discussion of Putnam's twin Earth argument, see Kallestrup's *Semantic Externalism*, 58-74
- ²⁵ It is confessed that, strictly speaking, the content of Henry_n's and Henry_g's mental states are

different in a *token* way, since different genuine barns are observed respectively by Henry_n and Henry_g. But, again, this approach remains insufficient to indicate a desirable answer to the given question, because it only provides us with a philosophically trivial description that fails to informatively tell us what distinguishes the type of Henry_n's mental state of knowing from the type of Henry_g's mental state.

²⁶ See Williamson's *Knowledge and Its Limits*, 50-51.

²⁷ For instance, Alvin I. Goldman, "A Causal Theory of Knowing," *The Journal of Philosophy*, Vol. **64**, No. **12** (June, 1967), 357-372.

²⁸ It should be acknowledged that my way of using the concept of epistemic safety is somehow different from the paradigmatic one, since it is normally used to describe the epistemic favorable property of *beliefs*, which is in turn normally regarded as a component of knowing. In this sense, the mainstream talk of epistemic safety is in tension with Williamson's anti-reductionist view of knowing. Since Williamson (*Knowledge and Its Limits*, 41, for example) suggests that his account of knowing is (at least) conceptually neutral to the concepts of being justified, being caused, being reliable, etc., I deliberately adapt the use of the term "epistemic safety" to make the relevant discussion compatible with Williamson's general view of knowledge.

²⁹ Thank Edouard Machery for composing this remedy.

³⁰ Dretske's original bacteria case is present in Fred Dretske, "Misrepresentation," reprinted in *Mental Representation: A Reader*, eds. Stephen P. Stich and Ted A. Warfield (Oxford, UK: Basil Blackwell Ltd., 1994), 164, 166. Hereafter, I would call my adaption of the case "the Gettiered bacteria case."

³¹ There is a hot debate concerning what the bacteria's internal magnets functionally represent in the northern hemisphere. For instance, Dretske and Millikan significantly disagree with each other on that issue (See Fred Dretske, "Misrepresentation," and Ruth Millikan, "Biosemantics," reprinted in *Mental Representation: A Reader*, eds. Stephen P. Stich and Ted A. Warfield (Oxford, UK: Basil Blackwell Ltd., 1994), 243-258). I would set aside the relevant discussion about (mis-)representation throughout my paper, for nothing crucial in my Gettiered bacteria case hinges on the verdicts with respect to the content of the (mis-)representation.

³² I am grateful to one of the anonymous referee for this point.

³³ See Chapter 3 of Williamson's *Knowledge and Its Limits*.

³⁴ For instance, Brueckner suggests that the primeness of knowing makes Williamsonian account of "a state of mind" distinct from the ordinary concept of "mental state." See Anthony Brueckner, "Williamson on the Primeness of Knowing," *Analysis*, Vol. **62**, No. **3** (July, 2002), 197-202. Recently, Smith also argues that Williamsonian thesis of knowing as a state of mind cannot be plausibly appreciated by the standard understanding of the mental states in philosophy of mind. See Martin Smith, "The Cost of Treating Knowledge as a Mental State," in *Knowledge First: Approaches in Epistemology and Mind*, eds. J. Adam Carter, Emma C. Gordon and Benjamin W. Jarvis (Oxford, UK: Oxford University Press, 2017), 95-112.

³⁵ I owe this idea to the other anonymous referee.

³⁶ I borrow the term from Clark and Chalmers (See Andy Clark and David J. Chalmers, "The Extended Mind," reprinted in *Philosophy of Mind: Classical and Contemporary Readings*, ed. David J. Chalmers (Oxford, UK: Oxford University Press, 2002), 643-651).

³⁷ Again, the term is used in Clark and Chalmers' sense.