In Defense of No False Lemmas

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Abstract: Originally proposed as a solution to the Gettier Problem, the No False Lemmas account of knowledge states that a subject cannot come to know via a falsehood. In this paper, I defend no false lemmas as a necessary condition for knowledge by arguing that it can account for supposedly irreconcilable objections posed by perceptual Gettier cases and benign falsehoods. I also argue that counterexamples to the sufficiency of No False Lemmas are unconvincing depending upon one’s interpretation of such cases, and that we should consider the possibility that the theory also establishes a set of sufficient conditions for knowledge.

I. Introduction

Edmund Gettier (1963) showed that the traditional definition of knowledge as justified true belief is insufficient. Since then, the Gettier Problem has been one of the central issues in epistemology. The No False Lemmas account of knowledge was motivated as a solution to this problem. Proponents of this view\(^1\) argue that adding ‘no false lemmas’ as a fourth condition would yield a set of necessary and sufficient conditions for knowledge. The theory faces a number of objections that, in my view, do not hold up under scrutiny. Thus, my aim in this paper is twofold: to defend no false lemmas as a necessary condition, and discuss the possibility that it establishes a set of sufficient conditions. I will argue that the theory effectively deals with the original Gettier cases and is resilient to objections that it cannot account for perceptual Gettier

cases and so-called ‘benign falsehoods’. In defending against these two objections, I will interpret the theory to include both explicit and implicit inferential relations in the formation of belief. I will then discuss how scenarios such as The Lottery Case suggest that No False Lemmas does not establish a set of sufficient conditions for knowledge. However, I will argue that these scenarios may not be genuine counterexamples, which leaves open the possibility that No False Lemmas does establish a set of sufficient conditions.

My view regarding the No False Lemmas theory of knowledge represents a new perspective in the literature in that no one (that I am aware of) has attempted to use the theory to solve benign falsehood cases. And while Lycan (2006) has tried to account for perceptual Gettier cases within No False Lemmas, my analysis of these cases is distinct from his. I attempt to explain our intuitions regarding perceptual Gettier cases and benign falsehoods by making a distinction between explicit inference and implicit inferential relations, the latter of which I refer to as ‘grounds’, or ‘grounding’. In doing this, I argue that grounding is related to explicit inference in a way that should lead us to include both concepts in our understanding of No False Lemmas. I also introduce Timothy Williamson’s (1994) concept of margin for error in knowledge as a different way to conceptualize certain benign falsehood cases, and argue that his theory is consistent with the No False Lemmas theory of knowledge. Overall, I challenge a wide range of counterexamples to No False Lemmas and hope to demonstrate that the theory is more tenable than it is often considered to be.
II. What the Theory Says

After Gettier’s paper illustrated the inadequacy of the traditional definition of knowledge, the No False Lemmas theory arrived with a proposed fourth condition for knowledge, which requires that $S$’s belief that $p$ is not inferred from any falsehood (or false lemma, lemma being defined as an intermediate premise). Thus, under this theory, we have the following definition of knowledge:

$S$ knows that $p$ if and only if (i) $p$ is true, (ii) $S$ believes that $p$, (iii) $S$’s belief that $p$ is justified, and (iv) $S$’s belief that $p$ is not inferred from any falsehood.

Under this definition, a subject cannot know a certain claim if she reached it through a false lemma, even if her belief in this claim is justified and true. This additional condition appeals to our intuition that falsehoods cannot lead one to knowledge, because a false premise cannot provide evidential support for a true conclusion. In other words, a conclusion must be supported by proper evidence, and this relationship cannot hold if the evidence is false. According to this theory, a true and justified conclusion should be considered knowledge in virtue of the truth and justification of its premises. Thus, No False Lemmas prescribe us to the idea that there must be some continuity of truth between one’s premises and conclusion, which, if disrupted by a false premise, bars one from having knowledge.

While No False Lemmas is not a theory regarding epistemic luck, it essentially works to avoid an absurd result of the traditional Justified True Belief (JTB) theory of knowledge that allows one to arrive at knowledge through mere chance. Under traditional JTB, any justified true belief fits the definition of knowledge, even if one’s belief ‘just so happens’ to be true and justified despite conflicting (false) evidence that one is unaware
of. This element of luck is the basis of Gettier problems, which elucidated the issues with the JTB theory of knowledge and served as a catalyst for theories with additional conditions on knowledge such as No False Lemmas. Under No False Lemmas, knowledge is restricted to justified true beliefs that are based upon other truths, or facts of the matter – one cannot just so happen to know something in the way that the JTB definition of knowledge allows. I take it this theory is congruent with our concept of knowledge as an achievement that aims at capturing reality; we don’t simply want our conclusions to be true and justified, but we want these conclusions to be based upon truth.

III. No False Lemmas and Gettier Cases

No false lemmas as a fourth condition for knowledge is *prima facie* quite attractive, as it offers a straightforward and seemingly uncontroversial solution to Gettier’s original counterexamples to the JTB definition of knowledge. In Gettier cases, the subject meets all three conditions required by the JTB definition of knowledge, i.e., she has a justified true belief, yet she fails to know. In the two original examples presented by Gettier, this justified true belief has a clear inferential relationship with its premises, which is easily accommodated by the proposed fourth condition for knowledge. One of these original cases is set up as follows:

“Suppose that Smith and Jones have applied for a certain job. And suppose that Smith has strong evidence for the following conjunctive proposition:

(d) Jones is the man who will get the job, and Jones has ten coins in his pocket.
Smith's evidence for (d) might be that the president of the company assured him that Jones would in the end be selected, and that he, Smith, had counted the coins in Jones's pocket ten minutes ago. Proposition (d) entails: (e) The man who will get the job has ten coins in his pocket.” (Gettier, 1963, p. 122).

Suppose that Smith, rather than Jones, unexpectedly gets the job. Further, suppose that Smith happens to have ten coins in his pocket that he is unaware of. Together, these facts make (e) true. Gettier asks us to accept the claims of fallibility and justification closure, i.e., that one may be justified in believing a falsehood, and that competent deduction transmits justification from premises to conclusion, respectively. If we accept these claims, it follows that Smith has a justified true belief that the man who will get the job has ten coins in his pocket, and therefore satisfies the traditional JTB definition of knowledge.

However, we are inclined to say that Smith does not know (e). He came to his conclusion via the premise that Jones will get the job and that Jones has ten coins in his pocket; the former conjunct is false (Jones does not get the job), and the latter conjunct is then rendered irrelevant to the truth of the conclusion. Because Smith has inferred from a false premise, his conclusion is fundamentally disconnected from, or unrelated to, the facts that make his conclusion true. We can see that Smith’s conclusion is evidentially supported by premises that he is not even aware of, i.e., that he will get the job and that he has ten coins in his pocket. Under the No False Lemmas theory, Smith is precluded from having knowledge because he fails to satisfy the fourth condition (S’s belief that p is not inferred from any falsehood). Overall, No False Lemmas provides an unambiguous solution to the original two cases posed by Gettier because these cases are clearly
inferential, wherein the subject reaches a true conclusion despite reasoning via a false lemma.

While No False Lemmas can easily account for inferential Gettier cases like the one discussed above, a frequent objection\(^2\) to the theory is that it cannot deal with perceptual Gettier cases, which seem to have no inferential steps involved. Perceptual beliefs are considered to be immediate; under normal circumstances, we don’t reason through anything to identify a certain object as having a certain property. Thus, it is argued that No False Lemmas is not applicable in such cases, as there are no premises that could be true or false. Yet, further analysis of perceptual Gettier cases shows that they may not pose a genuine problem to No False Lemmas. I will argue that the target belief in perceptual Gettier cases is not immediately justified, but mediately justified by a false belief.

To begin, many perceptual Gettier cases fall into a class that I refer to as ‘mistaken identity’ cases. In these scenarios, the subject claims to have perceived something that is (unbeknownst to her) only an illusion, but the claim turns out to be true in virtue of something real outside of the subject’s field of vision. The Sheep in the Meadow Case\(^3\) is an example of such a scenario:

S sees a rock in the meadow that looks exactly like the outline of a sheep. So, S believes there is a sheep in the meadow. In fact, there is one, out of S’s line of sight.

In this case, S has a justified true belief (‘There is a sheep in the meadow.’). However, many would say that S does not know this claim, as S is wholly unaware of the

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\(^2\) See Lycan (2006) and Borges (2017) for a discussion of this objection to No False Lemmas.

\(^3\) See Chisholm (1966).
actual sheep in the meadow. In such cases, it is said that the claim is immediately justified via perception. That is, we think S is justified in her belief that she is looking at a sheep without her having to provide (perhaps to herself) any kind of argument for this. If justification is immediate, there can be no lemma involved, hence the charge that No False Lemmas cannot account for such cases.

However, cases such as this have been presented in a way that makes the justification for the subject’s claim seem immediate when it is not. We can see that justification is not immediate when we consider the fact that the subject is referring to a particular entity, while the subject’s conclusion makes an existentially generalized claim. In the example above, the subject is referring to *that* sheep (which is actually a rock), not just any sheep. The immediately formed belief picks out that particular entity, and is thus something like ‘That is a sheep’, not ‘There is a sheep in the meadow’. The immediate belief mirrors the subject’s direct perceptual experience, in the sense that only what is *directly available* to the subject in her experience (in this case, the rock) is able to bring about her perceptual belief. On the other hand, the claim ‘There is a sheep in the meadow’ is a general assertion – it could be referring to any sheep in the meadow, and is not a direct result of the subject’s immediate perceptual experience. The move from an immediately formed belief to a more general claim requires an inferential step, something like (a) ‘I am looking at a sheep’ to (b) ‘Therefore, there is a sheep in the meadow’. Thus, the immediately formed belief in this case and other mistaken identity cases constitutes a false lemma.
To further illustrate this point, consider another popular mistaken identity case - the ‘hologram person’ case. There are a number of iterations of this case\(^4\), but it is generally set up as follows:

S walks into the room and sees a perfect hologram of his friend Sarah sitting at a desk. So, S forms the belief ‘Sarah is in the room. She can help me with my math homework.’ In fact, Sarah is in the room, but she is crouched under a desk where S cannot see her.

Again, S has a true belief that *seems* to be immediately justified via perception, but it is our intuition that he lacks knowledge. As with the previous case, I argue that the subject’s immediately formed belief is not ‘Sarah is in the room’ but something like ‘That is Sarah sitting at her desk’. The immediately formed belief is a direct result of the hologram, and thus picks out this particular entity. Thus, the subject believes that he is seeing Sarah and that she is sitting at her desk, not that she is simply somewhere in the room. Again, the immediately formed belief ‘*That is Sarah*’ is a false lemma, as the subject is actually seeing a hologram. Given this analysis of mistaken identity cases, the No False Lemmas account is successful in that it precludes these subjects from having knowledge; the subject cannot know the target proposition because it depends on an immediate perceptual belief is false.

In contrast, there are perceptual Gettier cases that do not fit the structure of those discussed above, in which the immediately formed belief turns out to be true. While these cases seem to pose a more legitimate problem to No False Lemmas, they may still be successfully dealt with given a more careful account of what is involved in the formation

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\(^4\) E.g. Goldman’s ‘laser vase’ case (1967, p. 359).
of the subject’s belief. A famous example of such a case is Alvin Goldman’s (1976, p.772) ‘Fake Barn Country’ case, which is set up as follows:

Henry is driving through the countryside with his son, pointing out various objects and identifying them; he points to a barn and says, ‘That is a barn’. In fact, it is one. However, unbeknownst to Henry, he has been driving through Fake Barn Country, in which the rest of the barns are only fake barn facades that look exactly like real barns; thus, Henry has identified the only real barn in the vicinity. Many claim that, although Henry has a justified true belief that he is looking at a barn, he does not know it is a barn\(^5\). In this case, we say that Henry lacks knowledge because he has no way of determining (from his vantage point) if the barn he is looking at is in fact real – he just so happened to pick out a real barn in Fake Barn Country. Contrary to the sheep in the meadow case, Henry’s immediate perceptual belief ‘That is a barn’ \textit{is} a particular claim that mirrors his perceptual experience. Thus, there is no \textit{explicit} inferential step involved in Henry’s belief, which makes it unclear how No False Lemmas can account for this case.

However, Fake Barn Country serves as a counterexample to No False Lemmas only if we interpret this condition in a literal sense, i.e., if we take it to apply solely to explicit inference done by a subject in reasoning to a conclusion. If we accept a more loose interpretation of inferential relations, I argue that No False Lemmas can effectively deal with this case and related ones. What I mean by this more loose interpretation of inferential relations is what I refer to as ‘grounding’. Briefly, grounding refers to an

\(^5\) A few philosophers disagree with this claim and argue that Henry \textit{does} know it is a barn, which would exclude this as a genuine counterexample. E.g., Sosa (2011), Gendler and Hawthorne ((2005) 124: 331–352).
implicit evidential relationship between beliefs. A belief can ‘ground’ or ‘provide grounds for’ another belief through this evidential relationship. When I say that a certain belief (or set of beliefs) grounds another belief, I mean that this belief (or set of beliefs) makes this other belief likely to be true. This concept of grounding can be used to analyze cases like Fake Barn Country, in which an implicit evidential relationship (rather than an explicit one) appears to bar the subject from having knowledge.

(I will say more about grounding and why I think we should include it in our understanding of No False Lemmas, but I will first discuss how it applies to Henry.)

In Fake Barn Country, it is clear that Henry is operating under some false assumption, i.e., that all of the barns are real, or that there are no fake barns around. This belief may be implicit in that Henry is probably not consciously thinking this while he is driving through the country, but it is there – Henry does not only believe that the barn he picked out is real, but he believes that all of them are real. This implicit belief essentially ‘grounds’ (or attempts to ground) his immediate perceptual belief. That is, the fact that Henry takes this belief to be true contributes to his being justified in his perceptual belief. If Henry’s belief that all of the barns are real were true, it would have appropriately grounded his perceptual belief by making it likely to be true that he is looking at a real barn. However, Henry’s implicit belief turns out to be false in this situation, and false grounds cannot evidentially support a true belief. In other words, because Henry’s perceptual belief is based upon false grounds, the evidential relationship this grounding implies fails to hold – it is in fact unlikely for Henry’s claim that he is looking at a real barn to be true. Essentially, Henry’s perceptual belief is predicated upon an implicit (false) belief. For, if he had suspected that he might be in Fake Barn Country, he would
not be able to appropriately or confidently claim that he was looking at a real barn. While Henry has not consciously reasoned via a false premise, it can be reasonably said that he has come to his belief (to a significant degree) in virtue of a falsehood. Under this interpretation, it seems that the No False Lemmas theory can account for this case.

In response to this analysis, one might say that I have been too lenient with my interpretation of inference within the No False Lemmas definition of knowledge. It may be that the theory was constructed with only explicit inference in mind, and that proponents of the view meant for it to apply to inferential knowledge (in the explicit sense of ‘inference’). After all, a lemma is defined as an intermediary step in an argument, and arguments consist of explicit premises that support a conclusion. If one wants to interpret No False Lemmas literally, my argument regarding Fake Barn Country will be unconvincing, or at least seem irrelevant to the theory. Yet, I argue that we should understand No False Lemmas to apply to inferential relations in a wider sense, i.e., both explicit and implicit relations, as this yields a more robust account of knowledge⁶; this is why I have introduced the concept of grounding. In saying this, it is important to unpack the concept of grounding and explain how it fits within (and contributes to) the No False Lemmas theory.

The first thing to note is that grounding is fundamentally related to explicit inference in the formation of beliefs. The act of inference can be understood as a causal phenomenon; it consists in using certain beliefs to bring about other beliefs through a conscious psychological process. Beyond this, the act of inference aims at uncovering, or elucidating, the evidential (i.e. grounding) relationship between a set of premises and a

⁶ If one is upset by my use of the term ‘inference’ to refer to implicit relations, take my concept of grounding to refer to these implicit relations and as distinct from inference.
conclusion – it is a way of trying to make grounding explicit. If things are going well, the act of inference does just this. However, we can get things wrong despite our explicit inference appearing sound; this is what occurs in inferential Gettier cases. In the original Gettier case I discussed earlier, Smith’s inference appears perfectly reasonable, yet he lacks knowledge because his inference has ‘picked out’ false grounds for his conclusion. Essentially, the grounding relationship is one that can be exploited (successfully or unsuccessfully) in the act of inference.

However, notice that the grounding relationship between a subject’s body of evidence and a certain belief holds independent of the subject actually using it in explicit inference. That is, no one needs to infer that belief $a$ makes belief $b$ likely to be true for this to in fact be the case - this is why it is an implicit relation. For example, I might believe that I am currently on the third floor of Griffin-Floyd hall. I have a number of other beliefs that make this likely to be true, e.g., I believe that I walked into a building that says Griffin-Floyd Hall and proceeded up the stairs to the third floor. I also recognize Griffin-Floyd hall and this particular floor from the many times I’ve been here before. These beliefs (if true) make my belief that I am on the third floor of Griffin-Floyd hall likely to be true regardless of whether I consciously recognize this evidential relationship. Thus, my belief is grounded by a set of implicit beliefs. In essence, a belief can be grounded without the use of explicit inference, but explicit inference is always an attempt to make explicit one’s implicit grounds for thinking that a particular proposition is true.

Although I have discussed how grounding is related to inference, it may still be unclear why we should include both concepts in our understanding of No False Lemmas as a theory of knowledge. I have said that the theory appeals to our intuition that
falsehoods cannot produce knowledge, as falsehoods are unable to evidentially support a true conclusion. It would be a mistake to say that this applies only to false beliefs that we are consciously aware of, as implicit beliefs play a role in our knowledge as well. The notion of grounding allows for implicit (non-occurent) beliefs to play a role in our knowledge just as explicit beliefs do, in that it allows for these implicit beliefs to provide support for explicit beliefs without the use of explicit inference. Implicit beliefs create a context in which our explicit beliefs are formed by establishing a set of assumptions about our environment or a current state of affairs. These assumptions are rough and ready in the sense that they are the result of our prior body of knowledge regarding how the world works, and are not normally brought into conscious awareness to be explicitly confirmed or denied. Because of this, our implicit beliefs are especially fallible if we are in a situation that does not fit the epistemological status quo, e.g., Fake Barn Country. In these situations, our implicit beliefs may turn out to be false, and can pose a threat to our knowledge in the sense that they provide the foundation upon which our explicit beliefs are formed. Thus, both implicit and explicit false beliefs can disrupt the chain of truth that the No False Lemmas theory requires. Including the concept of grounding in addition to explicit inference within No False Lemmas allows us to accommodate this.

IV. ‘Benign’ Falsehoods

Up to this point, I have attempted to show that the No False Lemmas account of knowledge can adequately handle inferential Gettier cases and can be successfully defended against objections that it cannot account for perceptual Gettier cases. In this section, I will defend the theory against a class of supposed counterexamples involving
‘benign falsehoods’\textsuperscript{7}. In benign falsehood cases, a subject reaches a justified true belief via a false lemma, and it is our intuition that the subject knows the conclusion despite this falsehood. Thus, examples of benign falsehoods are meant to demonstrate that not all falsehoods preclude one from having knowledge, posing an obvious objection to No False Lemmas. Yet, I will argue that in such cases, the subject’s belief is fundamentally dependent upon a truth (or set of truths) rather than a falsehood, which should convince us that they are not genuine counterexamples to the theory.

To begin, an example of a benign falsehood case from Klein (2008, p. 36) is as follows:

‘…I believe that my secretary told me on Friday that I have an appointment on Monday … From that belief, I infer that I do an appointment on Monday. Suppose, further, that I do have an appointment on Monday, and that my secretary told me so. But she told me that on Thursday, not on Friday.’

In this case, the subject has reached her true conclusion via the false lemma that her secretary told her on Friday that she has an appointment on Monday. Thus, she fails to satisfy the fourth condition for knowledge under the No False Lemmas definition. Yet it seems clear to us that she knows the conclusion; she can be confident that she has such an appointment despite misremembering a certain detail. Thus, this example is meant to show that a subject can have knowledge despite reasoning via a falsehood, therefore demonstrating that no false lemmas is not a necessary condition on knowledge. However,

\textsuperscript{7} Claudio de Almeida (2017) uses this term. It is important to note that de Almeida uses the term ‘benign’ in the positive sense of ‘helpful’ or ‘kind’, and characterizes benign falsehoods as having some contribution to knowledge. Under my interpretation of benign falsehoods, ‘benign’ is meant as something that is not harmful, or innocuous.
I will argue that in this case and similar ones, the subject has not actually used the falsehood in question to reach her conclusion.

Firstly, it is important to examine why we think the subject knows in this case, as this will illuminate the role of the falsehood in her inference. Essentially, the subject’s premise is a conjunction, with one conjunct being true (‘I have an appointment on Monday’) and the other being false (‘My secretary told me on Friday’). This false conjunct could have just as well been left out of the subject’s premise and she would have come to the same conclusion – it provides irrelevant information. In other words, the subject’s conclusion is not dependent upon what day her secretary told her that she has an appointment on Monday. Because of this, the false conjunct is not doing any real epistemic work for the subject. We can see that the subject’s conclusion is fundamentally dependent on the true belief that her secretary told her that she has an appointment on Monday, and this true belief is sufficient for her to infer the conclusion. If we accept these claims, it can be said that the subject has not actually reasoned via a falsehood. I take it that this interpretation is congruent with what No False Lemmas is actually promoting as a theory, i.e., that falsehoods cannot produce, or lead to, knowledge. That is, a subject cannot know something in virtue of a false belief, but may know despite having some false belief that is peripheral to their conclusion.

A more problematic example of a benign falsehood is The Handout Case (Warfield, 2005, p.407-408), which differs from the case discussed above in that the false belief is importantly relevant to the subject’s conclusion. The case is set up as follows:
S is giving a talk before a group of people and counts 51 people in the crowd. So, S concludes that the 100 copies of the handout she has brought are enough for everyone. But, S miscounted – there are actually 52 people in the crowd.

In this example, S has reached a justified true belief that 100 copies are enough, but has reasoned via a false lemma, i.e., that there are 51 people in the crowd. Again, it is clear to us that S knows the conclusion; she can be confident in her belief despite the minor miscount. Further, the falsehood in this case provides relevant information to the subject that allows her to infer the conclusion. Thus, it seems that we cannot say that the subject has not used the falsehood, as I argued in The Appointment Case. In what follows, I will provide two ways of examining this case, utilizing the concept of grounding once again and then via ‘margin for error’ principles.

To start, we must again ask why we have the intuition that the subject knows in this case. Although the subject’s explicit inference is based upon a false premise, the conclusion is adequately grounded by a set of true beliefs. The false premise ‘There are 51 people in the crowd’ entails the more general, true belief the subject has that there are clearly less than 100 people in the crowd. This is significant, as it is this true belief that is appropriately grounding her conclusion. What I mean by this is that the subject’s conclusion is not dependent upon an exact number of people in the crowd, as long as it is clear that this number is less than 100. If the subject had instead counted 99 people in the crowd, she would probably have either done a recount or have been unsure that she had enough handouts, as this conclusion would be dependent upon there being exactly this many people and not more. I bring up this point to illuminate the fact that the subject presumably accepts the risk that she might have miscounted, and does not worry about
this risk when she counts 51 people because she can still be certain of her more general, true belief that there are less than 100 people. Additionally, it can be said that the subject holds a number of other beliefs like ‘It is unlikely that many more people will come’ and ‘I printed 100 handouts total and they are all right here’. Together, this set of true beliefs provides sufficient grounds for the subject’s conclusion, allowing her to know that there are enough handouts for everyone. Thus, while her explicit inference involves a false belief, this false belief is superseded by a number of true beliefs that ground her conclusion and the inferential relation. In essence, the subject knows in virtue of these true beliefs, rather than the false belief regarding an exact number of people she counted in the crowd.

A particular point I made about the above case – i.e., that the subject presumably accepts the risk of a miscount when inferring her conclusion – illuminates Timothy Williamson’s (1994) concept of margin for error in knowledge. Williamson argues that much of our knowledge is ‘inexact’ in the sense that we can leave a margin for error and still know. He states, “…inexact knowledge is a widespread and easily recognizable cognitive phenomenon, whose underlying nature turns out to be characterized by the holding of margin for error principles” (p. 227). In other words, we can intuitively recognize cases of inexact knowledge, and our intuition that the subject knows is the result of their belief falling within an appropriate margin for error. The margin of error principle he describes has the form: “A' is true in all cases similar to cases in which “it is known that A” is true’ (p. 227). In The Handout Case, if it is known that there are enough copies for 51 people (and this is our intuition), it is true that there are enough copies in all similar cases, e.g., if there are 52 people. The actual number of people in the crowd (52)
is very close to the counted number of people in the crowd (51); because of this similarity, the margin for error principle holds and the subject can know in both cases. The question of which cases fall within the margin of error for a certain belief (i.e., which cases are sufficiently similar to the actual case) is of course dependent upon the specific situation.

Now, I have yet to explain what Williamson’s theory has to do with No False Lemmas. I maintain that in cases like the one above, we think that the subject knows not because she has reasoned via a falsehood, but because she has left an appropriate margin for error. One might doubt that these are distinct statements, and argue that leaving a margin for error implies that one will get things wrong at least some of the time, and therefore end up inferring via a falsehood. Indeed, I think this is why it seems that one can have knowledge from a falsehood. Yet, I argue that in these cases the subject reasons in a deductive way that does not make use of a falsehood.

When a subject leaves an appropriate margin for error, she realizes that her perceptive capabilities (or measurement capabilities) are fallible, and can choose to accept the risk that her evidence may be slightly inaccurate because of this. The subject also knows what range of evidence would allow her to have confidence in her target proposition. Thus, it seems that in cases such as this, the subject reasons as follows:

(1) If variable $x$ is between the values of $y$ and $z$, then I can conclude that $p$.
(2) Variable $x$ falls between the values of $y$ and $z$.
(3) Therefore, I can conclude that $p$.

Constructed in this way, the subject in The Handout Case has not inferred via a falsehood. Rather, she has accommodated for the fact that there is a range of values that
could make her conclusion true. Overall, this discussion provides another way to understand benign falsehood cases like The Handout Case without invoking the concept of grounding.

V. Is ‘No False Lemmas’ Sufficient for Knowledge?

While I have defended no false lemmas as a necessary condition for knowledge, I will not attempt to show that it establishes a set of sufficient conditions. Rather, I hope to present this as a possibility that warrants further consideration. The degree to which one finds this a genuine possibility will largely depend on one’s interpretation of counterexamples to the sufficiency of No False Lemmas. The upshot of no false lemmas as a fourth condition for knowledge is that if all of one’s premises are true and justified, then one is in a position to know one’s conclusion. Scenarios such as The Lottery Case (Borges, 2017, p. 284) seem to demonstrate that this does not always hold. The case is set up as follows:

Assume S has a ticket for a large and fair lottery and has no other sources of money to buy a yacht. In this case, S reasons as follows:

(1) My ticket lost.

(2) If my ticket lost, I will not be able to buy a yacht.

(3) So, I will not be able to buy a yacht.

Assume that S’s ticket did lose, making (1) true. S is also justified in believing the truth of (1) due to his knowledge of the odds of winning the lottery. Further, S knows (2) because he knows how expensive a yacht is and that he cannot afford one without winning the lottery. Thus, S has a justified true conclusion that he will not be able to buy
a yacht, and all of his premises are justified and true as well. Therefore, he satisfies all conditions for knowledge under the No False Lemmas definition. However, most say that S does not know the conclusion. If we accept both of these claims, this case demonstrates that No False Lemmas does not create a set of sufficient conditions for knowledge.

A similar case, let’s call it The Parking Lot Case, comes from Sorensen (2018), which is set up as follows:

‘Suppose I ask you whether you will walk home after work and that this prompts you to reason thus:

(1) My car is in the parking lot.
(2) If my car is in the parking lot, then I will drive home.
(3) Thus, I will drive home.

Now, suppose that, on the basis of this argument, you tell me that you will not be walking home.’

Assume that the subject knows his car is in the parking lot because he remembers parking it there this morning and has no reason to believe that it would not be there. As the case is presented above, it seems clear that the subject knows he will not be walking home. Sorensen then asks us to consider a different version of the case in which the subject is informed that cars have recently been getting stolen from the parking lot in which he parks his car. Assume that the subject’s car has not been stolen and is in the parking lot, making (1) true. The subject knows (2) and is justified in believing the truth of (1) because it is unlikely that his particular car has been stolen out of a large lot full of cars, and his car has anti-theft features. In this version of the case, although all of the subject’s premises are true and justified, most would say that he does not know his
conclusion. Again, if we accept that the subject in either of these cases both (a) satisfies all conditions required by no false lemmas and (b) lacks knowledge, we must conclude that No False Lemmas is not a sufficient definition of knowledge. While I do not doubt that the subjects in these cases lack knowledge, I think we should question whether they actually satisfy all conditions laid out under no false lemmas.

In regard to this question, I am inclined to say that the subject in both of these cases does not actually believe his first premise as it is presented. If this is the case, it becomes clear that the subject lacks knowledge because he fails to satisfy the belief condition for one of his premises, and he cannot believe his conclusion if he does not believe a central premise to this conclusion. However, this would also mean that these are not genuine counterexamples to No False Lemmas (or the traditional definition of knowledge, for that matter), as not all conditions for knowledge are satisfied under either definition. This objection hinges on the idea that behavior is an indication of belief. In The Lottery Case, it can be said that if S had truly believed that his ticket lost, he would have just thrown it away. The fact that he kept the lottery ticket until he knew for sure that his ticket lost indicates that he did not commit to his claim in a way that is congruent with our concept of belief. It seems that he made an ‘educated guess’ that his ticket lost, and guesses are not beliefs. Similarly, in The Parking Lot Case, the subject is most likely concerned about the fact that cars have been getting stolen from the parking lot in which he parks his car. It seems more correct to say that he hopes his car is in the parking lot, rather than genuinely believes this.

Alternatively, one could maintain that the subjects actually believe something along the lines of ‘It is most likely that x’, and more importantly, can justifiably believe
this, rather than the belief that x is in fact the case. It seems that probabilistic evidence (e.g., there is a 0.5% chance my car was stolen from the parking lot) can justify an associated probabilistic claim (therefore, there is a very high chance that my car is in the parking lot), but not a categorical claim. Thus, the subject’s belief as it is presented in the original example is either unjustified, or a misrepresentation of their actual belief. If the subject actually believes a probabilistic claim, this probability would have to translate into their conclusion. For example, in The Lottery Case, the appropriate conclusion would be something like ‘I will most likely not be able to buy a yacht’. Once again, if we accept these claims, these cases are not genuine counterexamples to the sufficiency of No False Lemmas.

While these objections cast doubt on these two cases as counterexamples to No False Lemmas, they do not necessarily establish the theory as a set of sufficient conditions for knowledge. One could reasonably be convinced from these examples (or similar ones) that simply having a chain of justified true beliefs does not always lead to knowledge. While I do not find these supposed counterexamples convincing, one’s thoughts on this largely depend upon one’s concepts of belief and justification. Thus, to provide a more definitive verdict regarding these examples and what they mean for No False Lemmas would reach outside of the scope of this paper. The burden of proof falls on those who take issue with these particular counterexamples but still want to maintain that No False Lemmas does not establish a set of sufficient conditions for knowledge. My goal is simply to show that these two particular cases are not as convincing as they appear at first glance, which suggests that No False Lemmas might provide a sufficient definition of knowledge.
VI. Conclusion

All things considered, I have shown that the No False Lemmas theory of knowledge is resilient to the common objections that it faces. I maintain that No False Lemmas is a necessary condition on knowledge, and that the question of whether it produces a sufficient set of conditions may be open to debate. I have argued that No False Lemmas is successful as a fourth condition for knowledge in that it successfully precludes subjects from having knowledge in both inferential and perceptual Gettier cases. While perceptual Gettier cases are often viewed as irreconcilable by the No False Lemmas theory, I have argued that the theory can accommodate two variations of such cases. In regard to ‘mistaken identity’ Gettier cases, I have illustrated that the subject’s perceptual belief as it is presented in such cases is not immediate – rather, it is a generalization based upon a prior (false) perceptual belief that is truly immediate. This immediate false belief constitutes a false lemma in such cases. In my analysis of perceptual Gettier cases such as Fake Barn Country, I have attempted to show that the subject’s belief is predicated upon a falsehood by resting upon false grounds.

In regard to benign falsehoods, which have also been considered an irreconcilable objection to No False Lemmas, I have argued that the subject’s conclusion in such cases does not actually depend upon a falsehood. In some of these cases, such as The Appointment Case, the falsehood in question is irrelevant to the subject’s conclusion. In cases such as The Handout Case, the subject’s conclusion is adequately grounded by a number of true beliefs. Alternatively, Williamson’s ‘margin for error’ theory provides a way to understand benign falsehood cases in which the subject’s conclusion does not depend upon an exact, singular piece of evidence. I have illustrated that subjects in these
cases reason in a deductive manner that takes into account the margin for error. For both kinds of benign falsehood cases, the subject knows in virtue of her true beliefs, rather than a false belief.

Finally, I have discussed two possible interpretations of cases such as The Lottery Case that are meant to show that No False Lemmas does not produce a set of sufficient conditions for knowledge. Such cases are successful counterexamples if one maintains that all four conditions for No False Lemmas are satisfied and that the subject lacks knowledge. While I find this to be a reasonable position, I am not convinced that the subject believes (or justifiably believes) all of his premises, and do not think these cases pose a genuine problem to No False Lemmas. Thus, it is possible that the theory establishes a set of necessary \textit{and} sufficient conditions for knowledge. Regardless of whether one agrees with me on this matter, I have demonstrated throughout this paper that No False Lemmas is a robust and defensible theory of knowledge.
References


