

Manifest Failure: The Gettier Problem Solved

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LORE HAS IT THAT BEFORE 1963, many philosophers thought knowledge was justified true belief, which view met its doom in Edmund Gettier's 1963 paper "Is Justified True Belief Knowledge?" Gettier produced two cases wherein, intuitively, the subject gains a justified true belief but fails thereby to know, demonstrating that knowledge differs from justified true belief, the latter not sufficing for the former. Examples in this mold we call Gettier cases.

Gettier cases follow a recipe. Start with a belief sufficiently justified (or warranted) to meet the justification requirement for knowledge. Then add an element of bad luck that would normally prevent the justified belief from being true. Lastly add a dose of good luck that "cancels out the bad," so the belief ends up true anyhow. It has proven difficult to explain why this "double luck" prevents knowledge.¹

Here are two Gettier cases to focus our discussion.

(FORD) Sarah observes her trusted colleague, Mr. Nogot, arrive at work driving a new Ford. Nogot reports to Sarah that he is ecstatic with his new Ford. Sarah has no reason to mistrust him, so she believes Nogot owns a Ford. From this she infers that someone in her office owns a Ford. But Nogot uncharacteristically is playing a practical joke on Sarah: he doesn't really own a Ford. Nevertheless, unbeknownst to Sarah, Mr. Havit, the newly hired clerk on his first day in the office, does own a Ford.²

1. My characterization is modeled on Zagzebski's (1994: 66; 1996: 288–9; 1999: 100–1). (Compare Sosa 1991: 238.) My interpretation of Zagzebski's analysis of Gettier cases is fairly standard (compare Pritchard 2005: 149), and Zagzebski informs me (personal communication) that the double-luck structure is common to all Gettier cases she's familiar with. But it's worth noting, as an anonymous referee pointed out, that at one point (1999: 115 n. 32) Zagzebski says, "Not all counterexamples in the Gettier literature have the double luck feature, although, of course, I have argued that cases with this feature can always be produced whenever there is a gap between truth and the other components of knowledge." It's not entirely clear what this qualification amounts to, but it at least suggests that Zagzebski doesn't think the double-luck structure is essential to Gettier cases. In any event, I'm claiming that the double-luck structure is essential to Gettier cases.
2. I adapted the case from Lehrer (1965: 169–70).

(HUSBAND) Mary enters the house and looks into the living room. A familiar appearance greets her from her husband's chair. She thinks, "My husband is sitting in the living room," and then walks into the den. But Mary misidentified the man in the chair. It's not her husband, but his brother, whom she had no reason to think was even in the country. However, her husband was seated along the opposite wall of the living room, out of Mary's sight, dozing in a different chair.³

Gettier cases generate the Gettier problem. The Gettier problem challenges us to diagnose why Gettier subjects don't know. Many assume that surmounting the challenge will lead to the correct theory of knowledge. Some denounce or reject the challenge.⁴ But few are fully immune to its allure, and none denies its profound impact on contemporary epistemology.⁵

Harman's Solution

Gilbert Harman's solution to the Gettier problem is that reasoning from a false belief precludes knowledge, but Gettier subjects do reason from false beliefs, and so do not know.⁶ If we distinguish implicit assumptions from beliefs, then we might extend Harman's proposal to cover false implicit assumptions too.

Harman's proposal handles both Gettier cases described above.

3. I adapted the case from Zagzebski (1996: 285–6). It resembles Chisholm's sheep-in-the-field case (1989: 93).
4. Pollock calls the Gettier problem a mere "intriguing side issue" that "warped the course of epistemology" (1999: 386). Foley laments its "corrupting consequences" (2004: 69–70). Some contend that Gettier subjects do know; see Matilal 1986: 137–40, Hetherington 1999, and Weatherson 2003. See also Sartwell 1992.
5. Matilal teaches us (1986: 135–7) that Gettier cases appeared long before Edmund Gettier. The classical Indian philosopher Śrīharṣa constructed similar examples in the 1100s to confound his opponents.
6. Harman 1973: 195. See also Clark 1963: 47.

Each subject reasons from a false belief: Sarah from *Nogot owns a Ford* and Mary from *My husband is in that chair*.

Some object that the proposal fails to rule out enough because Gettier cases needn't involve reasoning from false belief.⁷ This objection is not fatal, however, because any Gettier subject arguably bases her belief on a false implicit assumption,⁸ which, as I already noted, Harman's proposal naturally extends to exclude.

Harman's view faces a more pressing problem: it rules out too much. You can gain knowledge by reasoning from false beliefs. Consider:

(COUNT) Hans brings 100 copies of his handout to the talk. He wonders whether he brought enough for every attendee. He does a careful head-count, concludes there are 53 attendees, and infers that his 100 copies suffice. But Hans's head-count was wrong: there are only 52 attendees. One person, Franz, unobtrusively switched seats and got counted twice.⁹

Hans knows that his handouts suffice even though he infers this from a false belief. Harman's view gives the wrong result in such cases.¹⁰

Later I propose a solution to the Gettier problem that not only is consistent with knowledge from falsehood, but helps us understand why it is possible.

Zagzebski's Solution

Linda Zagzebski's solution to the Gettier problem is that knowledge

7. *E.g.*, Feldman 1974. See also Saunders and Champawat 1964.
8. See Sosa 1991: Chapter 4. See also Lycan 2006: 153–8.
9. I adapted the case from Warfield 2005: 407–8. Saunders and Champawat 1964 also provide a nice example.
10. Harman specifies that knowledge precludes only reasoning essentially involving falsehood. This accommodates cases where your belief is based on multiple independent lines of cogent reasoning, each sufficing to fixate belief. You could know your conclusion provided at least one relevant line of reasoning was sound, even if others involved falsehood. In such a case, your reasoning does not essentially involve falsehood. But COUNT is not like this.

requires you to believe the truth “because of” your intellectual virtues, but Gettier subjects do not believe the truth because of their virtues, and so do not know.¹¹ For present purposes we may rely on our intuitive understanding of intellectual virtue, so I won’t elaborate Zagzebski’s theory of it.¹²

Consider her diagnosis of why Mary doesn’t know in HUSBAND. Mary exhibits

all the relevant intellectual virtues and no intellectual vices in the process of forming the belief, but she is not led to the truth through those virtuous processes or motives. So even though Mary has the belief she has because of her virtues and the belief is true, she does not have the truth because of her virtues.¹³

Crucial here is the distinction, as we might put it, between *having a belief, which is true, because of virtue* and *having a true belief because of virtue*. Some find the distinction “obscure”.¹⁴ Others object that Zagzebski’s view is uninformative absent an account of the distinction.¹⁵ Others

11. Zagzebski offers a different definition of knowledge, which she says “roughly coincides” with the definition I discuss in the main text (2009: 127). For our purposes, the important point is that both definitions feature the crucial “because of” relation.
12. Virtue epistemologists disagree over what constitutes an intellectual virtue, the two main camps being “virtue responsibilists” and “virtue reliabilists”. This disagreement needn’t concern us here. See Greco and Turri 2009 for more details.
13. Zagzebski 1996: 297.
14. Pritchard 2005: 197. See also Murphy 1998: 212. Pritchard interprets Zagzebski as requiring *sensitivity* for knowledge. “Zagzebski seems to have a modal claim in mind here. Not only should the agent form her true belief via her stable and reliable epistemic virtues, but she should also believe what she does *because* it is true where, intuitively, this means that were what is believed not true, then she would not form the belief that she did via her stable and reliable epistemic virtues. So construed, Zagzebski seems to be wanting to add a sensitivity condition to her virtue theory ...” (Pritchard 2005: 197). But Zagzebski rejects defining *because* of counterfactually (1999: 111).
15. Murphy 1998: 212; Roberts and Wood 2007: 14–15.

argue that there is no notion of *because of* suited to her purpose.¹⁶ Relatedly, some commentators object that Mary does believe the truth because of virtue.¹⁷

Zagzebski admits it is a shortcoming that she lacks an account of the pertinent *because of* relation.¹⁸ Later I will make a suggestion helpful to her.

Greco’s Solution

John Greco’s solution is that knowledge is intellectually creditable true belief, but Gettier subjects are not creditable for true belief, so they don’t know.¹⁹

Intellectual credit (“credit” for short) accrues just in case you believe the truth “because” of your reliable cognitive abilities (“abilities” for short). Greco provides a detailed and principled account of the relevant *because* relation, derived from a general theory of the pragmatics of causal discourse. You believe the truth because of your abilities just in case (i) those abilities form “an important and necessary part of the total set of causal factors that give rise” to your true belief, and (ii) no other factor “trumps” your abilities’ explanatory salience.²⁰

Gettier cases centrally feature “abnormalities” that trump your abilities’ “default salience”. As a result, you fail to believe the truth because of your abilities.²¹ In FORD Sarah believes the truth because Havit happens to own a Ford, not because of her good eyesight or cautious consumption of testimony.²² In HUSBAND Mary believes the truth because

16. Levin 2004.

17. Greco 2002: 309; Pritchard 2005: 196; Baehr 2006: 487–8; Battaly 2008: 16.

18. Zagzebski 1999: 108, 111, 112.

19. Greco 2003. He advertises a “solution” to the Gettier problem, but later restricts his remarks to “at least many” Gettier cases (2003: 131), and suspects his account will need refinement to handle some Gettier cases (2003: 132 n. 33). I restrict my discussion to Gettier cases that Greco says his view handles.

20. Greco 2003: 123, 127–132. See also Greco 2002: 308–11.

21. Greco 2003: 131.

22. Greco 2003: 131.

of the strange confluence of the unexpected brother and the hidden dozing husband, not because of her good eyesight and attentiveness. “In none of these cases,” Greco says, “does the person believe the truth because of” her abilities.²³

Many find this last judgment implausible.²⁴ They think the subject clearly does believe the truth because of her abilities. Indeed they think it is importantly because of them. This is hard to deny. Perhaps sensing this difficulty, Greco suggests that credit requires the subject’s abilities to be the most salient part of the explanation, not just an important part.²⁵ If correct, this modification arguably handles our sample Gettier cases, because the Gettier subjects’ abilities are not most salient.

But the modification rules out too much. In particular it rules out much testimonial knowledge. Consider this case:

(TOWER) Morris just arrived at the Chicago train station and wants directions to the Sears Tower. He approaches the first adult passerby he sees (“Passerby”) and asks for directions. Passerby knows the city extraordinarily well and offers impeccable directions: the tower is two blocks east of the station. Morris unhesitatingly forms the corresponding true belief.²⁶

Morris gains knowledge of the tower’s location. But Passerby’s contribution is most salient in explaining why Morris learned the truth.²⁷ Greco’s theory gives the wrong verdict in this case, as it will in many cases of testimonial knowledge.

Greco responds that Morris still deserves credit for learning the

23. Greco 2003: 130. Greco 2003 doesn’t explicitly address HUSBAND, but his account is clearly intended to apply to it.

24. See, e.g., Pritchard 2005: 193; 2006: 38–9, and Lackey 2007: 347–8, 354.

25. Greco 2003: 130. Of cases like FORD and HUSBAND he says, “[the subject] does use reliable abilities or powers to arrive at her belief, but ... this is not the most salient aspect of the case.” See also Greco 2002: 309.

26. I adapted the case from Lackey 2007: 352.

27. Lackey 2007: 352.

truth.²⁸ Credit for cooperative success can accrue to multiple individuals, even ones who contribute less than others. It generally requires only that your “efforts and abilities” be “appropriately involved.”²⁹ Suppose we’re playing ice hockey and you make an extraordinarily brilliant play to set me up for a goal. With the goalie prostrate outside his crease, and the defensemen dizzy and confused behind the net, I simply tap the puck in. Your contribution dwarfs mine, but I still deserve credit for the goal. Likewise in TOWER, Passerby does most of the work, yet Morris still gets credit because his intellectual abilities were appropriately involved.

I find this response plausible. But Greco’s solution to the Gettier problem does not survive the exchange. If you are to gain knowledge, your abilities need only be “appropriately involved”. But what is appropriate involvement? It requires more than believing the truth because of your abilities. For Gettier subjects believe as they do because of their abilities, yet their abilities are not appropriately involved.³⁰

Lacking a better understanding of appropriate involvement, many will judge Greco’s proposal incomplete. Later I will make a suggestion helpful to Greco.

Sosa’s Solution

Ernest Sosa’s solution to the Gettier problem is that knowledge is apt belief, but Gettier subjects do not believe aptly, so they do not know.³¹

What is apt belief? Beliefs share the “AAA structure” common to all

28. Greco 2007.

29. Greco 2007: 65.

30. Greco’s latest work on these issues (2009) remains faithful to the same basic line of thought advanced in his earlier work canvassed here. Lately Greco says, “S knows p if and only if S believes the truth (with respect to p) because S’s belief that p is produced by intellectual ability,” where ‘because’ is “intended to mark a causal explanation” (2009: 18). I detect no development of additional resources that would help resolve the question raised here.

31. Sosa 2007: Lectures 2 and 5. On Sosa’s view, *animal knowledge* is apt belief. *Reflective knowledge* is “apt belief aptly noted”, which is effectively knowing that you know. Here we set aside reflective knowledge.

evaluable performances. We can assess performances for accuracy, adroitness, and aptness. Accurate performances achieve their aim, adroit performances manifest competence, and apt performances are accurate because adroit. For beliefs, Sosa identifies accuracy with truth, adroitness with manifesting intellectual competence, and aptness with being “true *because* competent”.³² (Often I substitute ‘competence’ for ‘intellectual competence’.) Apt belief, then, is belief that is true because it is competent.

Regarding FORD, Sosa concedes that Sarah’s competence helps explain her true belief’s existence but denies that this entails that her competence helps explain, even “in the slightest”, why her belief is true.³³ Sosa is right about the lack of entailment. Generally speaking, A might explain why B exists despite being irrelevant to B’s having a certain property. A carpenter’s skill might explain the existence of an abandoned house despite being utterly irrelevant to its state of abandonment. A printing press’s efficient operation might explain the existence of a stolen book despite being irrelevant to its theft.

Correct as far as it goes, the point does not take us far enough. It may not necessarily follow that the Gettier subject’s belief is, even ever so slightly, true because it is competent, but it might nevertheless seem plausible. As noted earlier, some think it’s plausible in HUSBAND. It seems especially so in this case:

(HOBbled) A competent, though not materful, inspection of the crime scene would yield the conclusion that a man with a limp murdered Miss Woodbury. Holmes saw through it and had already deduced that Dr. Hubble poisoned the victim under pretense of treating her.

Holmes also recognized that the scene would fool Watson, whose own inspection of the scene was proceeding

32. Sosa 2007: 22–3.

33. Sosa 2007: 95–97. See also Sosa 2003: 171–2, and compare Zagzebski 1996: 297.

admirably competently, though not masterfully. Watson had, after years of tutelage, achieved competence in applying Holmes’s methods, and while Holmes was no sentimentalist, he didn’t want Watson to be discouraged. “Look at him,” Holmes thought, “measuring the distance between footprints, noting their comparative depth, and a half dozen other things, just as he ought to. There’s no doubt where this will lead him — think how discouraged he will be.” Holmes then resolved, “Because he’s proceeding so competently, I’ll see to it he gets it right!”

Holmes sprang into action. Leaving Watson, he hastily disguised himself as a porter, strode across the street to where Hubble was, and kicked him so hard that Hubble was thereafter permanently hobbled with a limp. Holmes then quickly returned to find Watson wrapping up his investigation.

“I say, Holmes,” Watson concluded triumphantly, “whoever committed this brutal crime has a limp.”

“Capital, Watson!” Holmes grinned. “I’m sure he does.”

Watson’s belief that the criminal has a limp is true, competent, and true because competent. But it doesn’t amount to knowledge.³⁴

Sosa could plausibly respond that Watson’s belief is true because competent, but not in the right way. Knowledge requires more than merely being veridical because competent, more than mere

34. Notice that Watson’s relevant belief is in the simple present tense: the criminal *has* a limp. On the most natural reading of the story, he also believes that the criminal *had* a limp at the time of the crime. But the latter belief isn’t relevant for present purposes. (Thanks to an anonymous referee for pointing out the potential for a misreading here.)

aptness.³⁵ Knowledge is belief *properly* apt. But what more does proper aptness require?

Watson exercises his competence in an environment normal for its exercise, so requiring normalcy isn't the answer. Elsewhere Sosa speaks of a performance succeeding "through the exercise of a competence."³⁶ (Zagzebski also speaks of succeeding "through" virtue.)³⁷ Presumably it is this relation, lacking in Watson's case, that makes for proper aptness and thereby knowledge. But what is it for a performance to succeed through the exercise of a competence?

My Solution

Consider these two cases.

(OJ) I sat at the table feeding baby Mario his breakfast. I took a sip of orange juice and unwisely set the glass down within Mario's reach. His little hand darted out to retrieve the glass and its colorful contents. Spoon in one hand, baby in the other, I helplessly watched the glass tumble down, down, down. It broke.

(CARAFE) We just finished a delicious dinner. Maria turned to say something but in the process carelessly knocked a glass carafe, sending it careening from the table in my direction. Glass is fragile, so I reached out and caught it before it hit the ceramic tile floor. It remained intact.

In each case the outcome obtains because the glass is fragile. Yet we all recognize an important difference: the outcomes are not due in the

35. Alternatively Sosa could retain the thesis that knowledge is apt belief, and claim that aptness requires something more than being true because competent.

36. Sosa 2007: 36, 31. He also speaks of performances succeeding "out of" competence (1991: 288), and "deriving from the proper exercise" of a competence (1991: 292), and "deriving sufficiently from a competence (2003: 172; cf. 1991: 144–5).

37. Zagzebski 1996: 297; 1999: 107.

same way to fragility. In OJ the glass breaks because it is fragile, and its breaking manifests its fragility. In CARAFE the glass remains intact because it is fragile, but its remaining intact does not manifest its fragility. Neither outcome obtains only because of fragility – in OJ Mario and the floor help out, in CARAFE my dexterity – but that doesn't spoil the point.

The examples highlight a general distinction between (a) an outcome manifesting a disposition and (b) an outcome happening merely because of a disposition. A glass may remain intact because it is fragile, or it may break because it is fragile, but only the latter outcome manifests its fragility. Outcomes include conditions, events, and processes. Dispositions include powers and susceptibilities. No metaphysical theory teaches us this distinction.

We excel at applying this distinction in a wide range of cases. Albert Pujols crushes home runs regularly because of his power; he also receives intentional walks regularly because of his power; his power manifests itself in the former case, but not the latter. Roger Federer regularly smashes wicked forehands because of his skill; he is also lauded regularly because of his skill; his skill manifests itself in the former case, but not the latter. Compare also these examples.

(BOIL) You place a cup of water in the microwave and press start. The magnetron generates microwaves that travel into the central compartment, penetrate the water, and excite its molecules. Soon the water boils.

(FIRE) You place a cup of water in the microwave and press start. The magnetron generates microwaves that cause an insufficiently insulated wire in the control circuit to catch fire, which fire deactivates the magnetron and spreads to the central compartment. Soon the water boils.

The outcome in BOIL manifests the microwave's boiling power. The outcome in FIRE does not. We have a plain way to mark the distinction: in BOIL, but not FIRE, the microwave boils the water.

I'll now deploy this intuitive metaphysical distinction to solve the Gettier problem.

Sosa identified a triple-A structure for performances. I suggest they have a quadruple-A structure.³⁸ To Sosa's three I add *adeptness*. A performance is adept just in case its succeeding manifests the agent's competence. For beliefs, adeptness is truth manifesting competence.

I further propose that knowledge is adept belief. More fully spelled out, you know Q just in case your truly believing Q manifests your cognitive competence. ('Truly believing' means "having a true belief that" not "strongly believing that".) I use 'cognitive competence' inclusively to cover any reliable cognitive disposition, ability, power, skill, or virtue.³⁹ I treat 'manifests' as primitive, relying on our robust pretheoretical understanding of it.

My solution to the Gettier problem is that knowledge is adept belief, but Gettier subjects don't believe adeptly, so they don't know. Gettier subjects believe the truth, so they succeed in a sense, but this success (*i. e.*, their believing the truth) does not manifest their competence. In a word, the Gettier subject is a manifest failure.

The manifest failure in Gettier cases resembles the manifest failure in FIRE. Recall the "double luck" recipe for generating Gettier cases (see Section 1). FIRE exemplifies that same pattern. The microwave initiates a process that would normally result in the water's boiling. Bad luck strikes: the magnetron is disabled, which would normally result in the water's not boiling. But then "good" luck strikes: the damaged circuit starts afire, resulting in the water's boiling anyhow. This all prevents the outcome (*i. e.*, the water's boiling) from manifesting the microwave's boiling power. Exactly the same thing happens in Gettier cases.

38. They actually have more than just a quadruple-A structure, but I set aside the presently irrelevant details. See Section 7 for more details.

39. Zagzebski, Sosa, and Greco (and others in the virtue epistemology camp) disagree over just which features of the subject's cognitive character are relevant to knowledge. I aim to avoid this dispute at present, since it can't be settled here, which is why I use 'competence' broadly. Elsewhere I question whether the relevant disposition, ability, etc., must be reliable. Here I assume it must be, since I cannot responsibly treat the issue here.

My proposal has several virtues. First, it places Gettier cases in a familiar pattern. We recognize in them the same thing we recognize in CARAFE, FIRE, and others: the outcome fails to manifest the relevant disposition.⁴⁰ Second, it deepens our understanding of knowledge by illuminating its relationship to other concepts fundamental to our way of thinking about the world, particularly manifestation. Third, it packages an elegant theory of knowledge. Fourth, it illuminates what some attractive proposals got right, and can explain phenomena that confounded others. Let me elaborate this fourth point.

Commentators criticized Zagzebski's special *because* relation as obscure, unworkable, and uninformative. But it avoids all those charges when supplemented by our principal distinction between (a) and (b). We desired Greco to provide an account of our ability's appropriate involvement in success. He could answer that our ability is appropriately involved just in case the success manifests it. We desired Sosa to provide an account of proper aptness. He could answer that we have proper aptness just in case the successful outcome manifests our

40. CARAFE and FIRE differ in why the outcome fails to manifest the disposition. I distinguish between *atypical* failure and *interventional* failure. A disposition associates with paradigmatic outcome types. *Breaking* and *cracking*, etc., are associated with fragility; *being carefully packed* and *remaining intact* are not, even if an item's being fragile frequently causes it to remain intact by being carefully packed or otherwise specially treated. CARAFE's outcome fails to manifest fragility because it is atypical for fragility. By contrast FIRE's outcome (*i. e.*, the water's boiling) is paradigmatic of the microwave's boiling power, but it still fails to manifest the power because something intervenes in the production of the outcome. Gettier cases appear to be interventional failures. The fake-barn case (considered below) involves neither atypical nor interventional failure; at worst, it involves *environmental* failure.

The inclusion of 'relevant' doesn't render the suggestion objectionably vague. It's included because there's no informative way of specifying in advance what the relevant disposition(s) will be. Sometimes it will be a power of perception, other times of intuition, other times of reasoning, other times of introspection, etc. Absent details, it's impossible to say whether Smith believes the Pythagorean theorem through, say, intuition, reasoning, or testimony. The same is true generally of the relation between outcomes and dispositions. The boulder resides at the top of the hill. Absent details, it's impossible to say whether this outcome manifests my herculean physical strength (I carried it up the hill), or my engineering skill (I devised a lever to easily convey it).

competence. My solution directly builds upon and enhances the insights embodied in these three proposals. Indeed one might view my solution as a charitable way of interpreting and consistently developing the basic idea behind them.⁴¹

My proposal also can help explain why knowledge from falsehood is possible. You can proceed competently despite relying on false premises. Falsehood in the form of idealization pervades scientific theorizing and reasoning, much of which is competent and confers knowledge. (Some even consider falsification through idealization to be theoretically ideal in some ways.)⁴² And for some purposes it doesn't matter if we believe that the gravitational constant is exactly, as opposed to approximately, $6.7 \times 10^{-11} \text{ m}^3/\text{ks}^2$ or that π equals exactly 3.14.⁴³ We might nevertheless reason from these false premises to reach a true conclusion, which outcome would manifest competence. For instance, by relying on that value for the gravitational constant, we could come to know that within the next thousand years the Moon will not crash into Earth due to Earth's gravity. Or by relying on that value for π , we could come to know that a ten-meter-diameter circle has an area greater than fifty square meters.⁴⁴

41. Greco and Sosa both mention "alternative" proposals that strongly suggest my way of putting things. Greco speaks of true beliefs "revealing reliable cognitive character" (2003: 123; but compare: "what does it mean to say that an action reveals character, other than that the action results from character?" 120); Greco understands "subjective justification" in terms of dispositions you "manifest" when believing conscientiously (2003: 127); Sosa speaks of success that "manifests competence," though he chooses to not "tarry over this promising alternative" (2007: 80). More recently Sosa has tarried over it, much to our benefit (2009). See also Shope 2004: 306.

42. See Strevens 2008.

43. Compare Warfield 2005: 414. The latest experiments suggest the gravitational constant equals $6.693 \times 10^{-11} \text{ m}^3/\text{ks}^2$ (Fixler et. al. 2007).

44. I don't pretend that my discussion here settles all questions related to knowledge from falsehood. I claim only that we have located a principled explanation for why it is possible, which is a virtue of the view.

A related issue is whether you can know a proposition that is approximately true but nevertheless, strictly speaking, false. I think this is a possibility worth considering; indeed, it may even be correct. Fortunately my proposed definition of knowledge can be adjusted to accommodate it without

A Fake Objection

Objection: "Your view can't handle the fake-barn case. Ordinarily when Henry sees a barn, he knows it's a barn. So on your view, in the ordinary case Henry's belief is adept — his truly believing manifests his perceptual competence. Now change the case — Henry still sees the barn, but we recently secretly populated the surrounding countryside with fake barns. Totally unaware of our machinations, Henry happens to perceive the one real barn in the whole county. On that basis he believes it's a barn, and his belief is true. But had he instead set eyes on any of the numerous nearby fakes, he would have falsely believed it was a barn. Intuitively, in the modified case Henry doesn't know it's a barn. But nothing about his perceptual relationship to this barn differs from the ordinary case. So if his belief is adept in the ordinary case, it's adept in the modified case too. So your view gives the wrong verdict."

I lack the intuition that Good Henry (as I shall call him) does not know in the modified case, and my preferred response is simply to deny that my view gives the wrong verdict. But I recognize that some others will intuit otherwise, so I will try to say more. I begin with an argument that Good Henry does know that it's a barn.

Meet Bad Henry.

(HOOLIGAN) Bad Henry is a hooligan who does bad things. He wants to destroy a barn. He will destroy a barn. He drives out into the country to find one. He pulls over after an hour, retrieves his bazooka, and takes aim with unerring accuracy at the roadside barn he sees. Calm, cool, and collected as he pulls the trigger, he thinks, "That sure is a nice barn ... now *was* a nice barn — ha!" He destroyed the

sacrificing the ability to solve the Gettier problem. Call a performance that fails but nearly succeeds *an approximation*. Now we can simply append a disjunct to my proposal in the main text: You know Q just in case either your truly believing Q manifests your cognitive competence, or your approximating Q manifests your cognitive competence. Call this the *approximation (or better)* account of knowledge. (Thanks to Pavel Davydov for convincing me that it was worth mentioning this view in this context.)

barn. He feels no remorse. He is forever after known as “Bad Henry, bane of barns.” He is bad — *very* bad.

Bad Henry knowingly destroyed a barn. He knew he was destroying a barn as he pulled the trigger. To know that, he had to know it was a barn as he took aim. So he did know it was a barn.

Now we add the twist: Bad Henry was in Fake Barn Country and just happened to shoot at the only barn around. Indeed, Bad Henry destroyed the very barn that Good Henry gazed upon earlier that same day, from the very spot that Good Henry stood gazing. All the other “barns” were holograms. Nevertheless, the intuition remains: Bad Henry knew he was destroying a barn. So he did know it was a barn as he took aim.

I submit that Bad Henry knows it’s a barn only if Good Henry knows it’s a barn.⁴⁵ Bad Henry does know it’s a barn. So Good Henry knows too.

But suppose I’m wrong about that. In that case, I offer three further responses to the original objection. One response is that while in Fake Barn Country, Henry lacks the perceptual competence to discriminate barns. And if he lacks the relevant competence, then his truly believing cannot manifest the competence, in which case he does not know, and the view gives the desired verdict.⁴⁶

Another response is that adept performance requires the manifestation of competence in normal conditions.⁴⁷ Henry occupies an abnormal environment for the perceptual discrimination of barns, so he fails to believe adeptly, so he does not know. But this response probably rules out too much. If someone temporarily operates under conditions that make success unusually difficult, he might nonetheless perform adeptly. Tiger Woods won the U.S. Open playing on a

45. I imagine that those attracted to the view that your “practical environment” can affect what you know might have principled grounds for disagreeing. See *e.g.* Fantl and McGrath 2002, 2007, Hawthorne 2004: Chapter 4, and Stanley 2005: Chapter 5.

46. Greco suggests something similar (2007: section 5).

47. Sosa requires such for apt performance (2007).

damaged knee and multiply fractured leg. His victory manifested skill despite the inhospitable abnormal conditions. (You might think this victory manifests skill more than a victory under normal conditions does.) We should want to allow the same for more purely intellectual competences.

A third response involves a natural but more radical change to my theory of knowledge. We begin with a natural extension to our theory of performance-assessment. Performances have a quintuple-A structure. To the four previously mentioned I add *amplitude*. A performance is ample just in case its *safety* manifests the agent’s competence. A performance is safe just in case it (i) succeeds and (ii) would not easily have failed. We then propose that knowledge is ample belief. Henry’s belief is adept but not ample, so he doesn’t know. And since ample belief requires adept belief, the modified proposal handles our Gettier cases the same way my earlier proposal did.

Does knowledge alone require amplitude? If so, it would not mark a fatal objection to the amended proposal because knowledge is bound to be unique in some respect. But locating something else with a similar modal profile would add credibility to this third response. I submit that *to overwhelm* also requires amplitude. To overwhelm an opponent in competition, you must not only succeed, but do so with a margin of safety manifesting your skill. So knowledge, understood as ample belief, shares its modal profile with another relation. Those attracted to this third response thus might liken knowledge to *overwhelming a fact*.⁴⁸

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