Epistemic Competence: Empowerment through Luck Minimization

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ABSTRACT: Pritchard explains the putative failure of knowledge in the fake barn case using epistemic safety. I bring out the notion of epistemic luck, and interact epistemic competence with it through epistemic situation. I propose that evidence supervenes on epistemic situation, such that, given an epistemic success, the measure of epistemic luck of the corresponding epistemic act is degree 1.0 minus the degree of one's epistemic competence. This provides a virtue-theoretic understanding of inductive inference, given that statistical intelligence constitutes an epistemic skill that is an element of epistemic competence. The upshot within virtue epistemology is the epistemic obligation to minimize epistemic luck through bettering one's epistemic competence; from without, it seems epistemology, shall it need to explain inductive knowledge, cannot do without epistemic competence.

Epistemic safety has been characterized differently, and my simple theory is that it entails that something is believed only if it is a fact. (Cheung 2025) Since some epistemically correct way of complying with the rule of epistemic safety shall yield any epistemic performance only if perfectly epistemically competent, epistemic safety may be measured with the ratio of epistemic competence to epistemic performance. This leaves us with the question of what epistemic competence is. Competence of an individual with regard to an act measures the proportion of success of the act among its attempts. Since epistemic safety obligates epistemic performance only with epistemic competence, I will discuss, in this paper, the relation between epistemic safety and epistemic competence through the case of the fake barn county. In the first section, I will present Alvin Goldman's case of the fake barn county, and illustrate, instead of his problem of perceptual equivalence, what epistemic reliability is in relation to its variance with a certain parameter: epistemic situation. In the next section, I will present Duncan Pritchard's explanation of the failure to know in the aforementioned case from epistemic luck. What nearby worlds are, especially given his conception of epistemic safety, will play a role in differentiating our theories with regard to relevance. Given an epistemic act using the protagonist's perceptual evidence, how are alternatives to what the evidence

indicates relevant to our evaluation of the act? This brings me to the third section, in which I will discuss Ernest Sosa's conception of competence using skill, shape, and situation. Holding a low competence constant, success of an act is explained with its luck. It is not only that one is lucky, given constancy of one's skill, that one is in good shape, or one is in a favourable situation, but understanding the actuality of success even having held constant all these shall require luck. This brings out the importance of the epistemic situation of the protagonist, in contrast to his epistemic competence. I will end in the last section thus with a discussion on epistemic situation, and how evidence supervenes on it. I will illustrate epistemic competence with intelligence, especially in how sameness in epistemic situation could have outputted different epistemic performance due to such difference in epistemic skill. I thereby isolate epistemic situation from epistemic competence thus.

1. Reliability

Goldman invites us to suppose that Henry drives by a fake barn county, stops by something that happens to be a real barn, and forms the perceptual belief that that was a barn. He does not know that it was a fake barn county, with many such similar construction only as papier-mâché facsimile. Although his perceptual belief was formed with a certain causal process,[1] the epistemic reliability of his perception does not justify his perceptual knowledge.[2] His explanation for Henry's failure to acquire the corresponding perceptual knowledge is with the presence of relevant alternatives, and, given it is perceptual knowledge in question, he accounts for such relevance using perceptual equivalence. Given Henry's putative perceptual knowledge of the object that it is a real barn, the fake barns constituted some perceptual equivalent to it because were any of them to be in a similar spatiotemporal relation to Henry, it would have caused a similar sensation to the effect that Henry would have been caused to have a similar perceptual belief.[3] Given a notion of epistemic context, his suggestion of fake barns being relevant alternatives motivates their inclusion in the epistemic context.[4] I understand, therefore, Henry's failure to know as a case in which his perceptual evidence does not rule out all alternatives in the epistemic context because there are many alternatives that are epistemically relevant to his decision to form the perceptual belief. Notably, even

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[1] Goldman (1967).

[2] See Goldman (1979) for his epistemic reliability theory of epistemic justification.

[3] Since his example using different kinds of dogs is irrelevant here, I will leave out the requirement of causal irrelevance of any difference in sensation. See condition (3) in Goldman (1976, 783).

[4] Epistemic context is constituted by epistemic possibilities. It is the set of epistemically relevant possibilities.

without knowing himself to be in a fake barn county, he ought not have formed the outright belief that it was a real barn because it was not epistemically safe; there are nearby worlds in which his perceptual belief is false and thus not epistemically immune from error.

Consider first epistemic reliability as a justifier, in contrast to when it is that it failed to justify a given perceptual belief. Relative to Goldman, eventually, there are beliefs that are justified not because one can, from the first-person perspective, provide some justification, but simply because the belief was caused with an epistemically reliable process. Perceptual experience, as an output from perception, with which perceptual beliefs are formed, is caused in such a way that, under normal condition, one's perceptual beliefs are to have immediate epistemic justification. It is in virtue of epistemic defeaters, such as that one is suffering from hallucination, that one is to doubt what one perceives, through calling the epistemic reliability of one's perception into question. The question of epistemic defeaters, however, brings in issues with whether one has to have any evidence of them. Relative to Goldman, being in the fake barn county, without Henry knowing it, suffices for the epistemic defeat of his perceptual evidence. Defeats are there even without the agent's awareness. Given the nearby fake barns, what epistemically justified Henry's perceptual belief no longer does.

If epistemic reliability is constituted by the success of the corresponding output, then it measures, with regard to successful epistemic performance that knowledge is, how well an epistemic system performs. Suppose that all knowledge production is constituted by competent epistemic performance. Epistemic reliability thus measures the proportion of epistemic competence among epistemic performance across all possible epistemic situations. A chicken-sexer has a good epistemic reliability with regard to sexing chicken because of the large proportion of epistemically competent performance among all epistemic performances. Notice that the chicken-sexer need not be able to explicitly recall, for any correct decision, how they made the decision. Their individual epistemic competence, with their modular epistemic reliability, constitutes some epistemic justification without the epistemic agent having to express the corresponding epistemic justification verbally. This externalism about epistemic justification permits thus an epistemic agent's epistemic justification that they are not epistemically justified to know what it is. It is possible that, with regard to a given epistemic act, one is epistemically justified, without being epistemically justified to know that one is thus epistemically justified through knowing what the epistemic justification is.

When it was whether one knew that is contended, an illustration with a high epistemic reliability might have settled the issue. However, when it is not

contended, but philosophers seek to understand what constituted the piece of knowledge that is in the common ground, what epistemic competence is shall, as I presented here, have a priority over epistemic performance. Although epistemic performance indicates epistemic competence because it is in virtue of the performance that one's competence be manifested, it is the competence that explained the success of a performance. Epistemic reliability is often confused with epistemic competence, especially when some virtue epistemologies are simply versions of epistemological reliabilism. Notice that, even if epistemic reliability often indicates epistemic competence, it sometimes does not. It failed when, for example, the measurement is not under normal condition, such that some success due to luck is misattributed to competence. These will be discussed in the subsequent sections.

There are two possibilities in which a reliable process is not to be used for competent performance. As Goldman suggests, when there is perceptual equivalence, the alternatives that there are shall have constituted a prohibition of using one's perceptual experience for perceptual belief formation – because such epistemic performance shall have turned out, with a high likelihood, being epistemic unsafe. In fact, the issue is not only with a true perceptual belief failing to constitute perceptual knowledge, as Goldman wants to explain, but with forming false perceptual belief – when it was in fact a fake barn that one formed the perceptual belief of that it was a real barn. Although the epistemic reliability in typical cases explained the epistemic justification of the corresponding perceptual knowledge, in this case, the standing epistemic reliability of Henry's perception does not simply because of the fake barns. Such perceptual equivalence, relative to Goldman, destroys epistemic justification that would have been there had there been no fake barns nearby when he formed the perceptual belief of the real barn that it was a real barn.

In response, I differentiate epistemic reliability into its second possibility in which an epistemically reliable process is not to be used for epistemically competent performance with range – without which something could have failed to sustain its appropriate use. Consider the Müller-Lyer illusion. When presented with such a diagram, although one would have the perceptual experience as of one line being longer than another, the perceptual belief one thereby formed would have been false. This does not destroy the epistemic reliability of our vision; instead, it restricts its appropriate use to cases without illusion. Even if, across all epistemic situations, one's epistemic performances are mostly competent with regard to vision, given the actual epistemic situation of having thus presented with the diagram, the epistemic safety lowered, even holding the epistemic reliability constant. When presented with a case of illusion, if one were to know of the limit of one's epistemic reliability

of one's vision, one may either suspend perceptual belief, or, with what one knows about one's perception, form belief in a different, inferential, way. If, in a typical psychology experiment setup, the experimenter knew of the illusion, and judges the lines with a given set of angles around them to be of the same length, they would have retained some epistemic competence although without the corresponding epistemic reliability of their perception because out of range.

The difference between perceptual evidence and perceptual experience can be illustrated with the following case of epistemic use of evidence of perceptual experience. Consider a further complication with a senior in the psychology laboratory having introduced diagrams with the set of angles around lines that are indeed of different lengths with the corresponding intent to deceive. The fake barn situation resurfaced not with regard to immediate perceptual belief, but reasoning about perceptual experience. One is thereby not in the position to epistemically decide two lines with the corresponding arrangement of angles around them to be of the same length because of nearby fake Müller-Lyer diagrams. Given evidence of one's perceptual experience as of seeing a Müller-Lyer diagram, one ought to suspend belief about the sameness of length between the two lines, because of the misleading evidence about one's perceptual experience. Given one's evidence, one reasons about one's perceptual experience, with the corresponding belief-formation being inferential. When it constituted perceptual belief, one may investigate, empirically, whether there is any gestalt shift as demonstrated with the Necker cube.

The problem here is how it is that Henry's perception is out of its range of epistemic reliability. Why ought Henry, instead of directly using his perceptual evidence for immediate epistemic justification of his perceptual belief, call his perceptual evidence into question? His perceptual experience as of seeing a real barn would thus have been a sensation that might have just as well constituted the perceptual evidence of a fake barn. Notably, if, among the fake barns, Henry were to identify the one real one, perceptual equivalence indeed explained, for any object among them Henry pointed at with the aim of identifying a real barn, that there are relevant alternatives he failed to rule out given only his perceptual evidence acquired given some distance. How, however, holding the non-epistemic facts, such as him having stopped at one that happened to be a real barn, constant, is the epistemic reliability of his perception to be questioned?

2. Luck

Pritchard, given his epistemic safety conception of epistemic luck, explains Henry's failure to know with how easy it is that he formed a false belief. Consider his theory of epistemic safety.

> (1) For any p, someone knows that p only if in all nearby worlds in which they formed their belief about p in the same way as they formed their belief in the actual world, they believe that p only if p.[5]

Henry, in alternative nearby worlds, such as worlds in which he drove for a few more minutes before a halt, would have formed his belief in the same way as he did in the actual world – via looking at what was in front of him –, but believed that it was a real barn that he was looking at although it was not. Since, given this same way of perceptual belief formation, he would have formed a false perceptual belief in nearby worlds, his failure to know in the actual world is explained with his violation of epistemic safety. Since he could have thus easily formed a false belief the way he formed his belief, the truth of his perceptual belief is due only to his luck – relative to Pritchard, his epistemic luck.[6] Knowledge, Pritchard notes, precludes epistemic luck. Henry therefore does not know.

First of all, I should point out that, from Pritchard, the order of explanation had epistemic safety having a priority over epistemic luck instead of otherwise. Although what explained the failure of knowledge is epistemic luck, what epistemic luck is is conceptualized using epistemic safety. Except if it was such epistemic safety conception of epistemic luck that explained the destruction of knowledge by epistemic luck, the explanatory priority brings in the question of their respective metaphysical priority. There is a difference between the success case and the failure case. If epistemic safety explained the success case, and epistemic luck explained the failure case, the metaphysical priority of epistemic safety shall have presupposed an asymmetry between success and failure. However, if we focused on the failure case, and in fact, with regard to false perceptual belief, the mistake case, we need to distinguish between there being too much epistemic luck, and there being too much epistemic risk, the opposite to epistemic safety. An epistemic failure need not be constituted by a false belief; some extreme of an accidentally true belief, such as one not aiming at truth, would do. Epistemic mistake, the outcome of which constitutes epistemic wrong, threatens epistemic safety with epistemic danger. There is thus a difference between its being luck that Henry's perceptual belief constituted

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[5] Pritchard (2005, 163). The raised standard of epistemic safety required of knowledge by the case of lottery – in which one does not know that one will lose with the recent lottery ticket purchase – is assimilated in this formulation. I do not challenge the stringency, and thus I assume it a common ground permissible for discussion here. In his own formulation and some prior versions, it was only with qualifiers such as 'nearly all', and 'most'. See my conception of epistemic safety at Cheung (2025).

[6] Note the notion of ease of something alternative through world neighbourhood risks confusing the metaphysical, or even ethical, with the epistemological. See the corresponding notions of proximity in Cheung (2025).

knowledge – which Pritchard disagrees –, and its being luck that Henry's perceptual belief is not false, but true. I will return to this once the differentiation of epistemic safety into epistemic competence is in place.

I challenge here his notion of epistemic safety by distinguishing the ease with which a belief could have been false, and the ease with which a fact could have been not. I thereby bring into question what nearby worlds ought to have been in considering epistemic safety, interacting with my theory of epistemic context to output the doubt of the relevance of the fake barns as alternative to what Henry's perceptual evidence indicates.[7]

Consider Henry to have the mission to find, among all fake barns in the fake barn county, the real one, only by inspecting at a distance. If that was his mission, that he stumbled upon a real barn, and, through his perceptual belief that it was a real barn, submit to his superior that he had found it would not have constituted its competent performance at the task. The incompetence is explained with how he could have easily failed with it. For example, he did not check against other barns he leaves to be fake to inspect any perceptible difference from that distance. His mission would have been better completed had he done such further work, lowering the likelihood that his judgment be false. Had he performed such further subtasks and concluded with such perceptible differences, he would have better manifested his competence at finding the real barn through having demonstrated a better epistemic safety of his judgment that that was the real barn. Had he been epistemically mistaken about his judgment, the follow-up subtasks would have revealed it to be epistemically wrong. Therefore, I agree with Pritchard that the ease with which his perceptual belief having been false indeed constituted his failure to know, if his perceptual knowledge shall thus contribute to such a mission assigned to him. To its letter, he failed to know *among many fake barns* that it was a real barn.[8]

The problem with the epistemic safety conception of epistemic luck is that, with regard to the epistemic luck of his judgment that it was a real barn, whether it is sufficient for Henry to have only fool proofed his perceptual belief by checking against the nearby barns that they are fake, with the corresponding perceptible

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[7] Circularly, what belonged to an epistemic context about something is what that made an epistemic justificatory difference to the corresponding belief of that thing.

[8] See Dretske, who initiated the relevant alternative theory, on 'contrastive consequence' (1970, 1015). When discussing 'explain why' among other epistemic operators, he writes, '[W]ithin the context of explanation and within the context of our other operators, the proposition on which we operate must be understood as embedded within a matrix of relevant alternatives. We explain why…, but we do so within a framework of competing alternatives'. (1970, 1022).

differences. The ease with which he would have formed a false judgment through a false perceptual belief is countered by his subsequent fool proofing, with the range of neighbourhood to be determined by how easy it is that he drove for a next site. If the chanciness of having driven longer is a matter of 5 minutes, then fool proofing his result with a distance of a 5-minute displacement along the road shall have sufficed. But there are far more fake barns in the county, and it leaves the question of luck having stopped at the real one unsettled. It was luck nonetheless that he had to check only those fake barns but not some others for his judgment to have constituted knowledge.

In any case, he did not drive to the fake barn county with such a mission – let alone being aware that he was in a fake barn county. This brings out the question of epistemic context – with regard to his perceptual belief, what are the non-epistemic facts that we are to hold constant? Although, given his prior decision to drive through one county instead of another, that he stopped at the particular site, which contains a real barn, is quite chancy, the alternatives to having stopped at that barn are relevant to his perceptual knowledge only given some specification – such as the one given in the foregone paragraphs. After all, the light was favourable, and Henry's eyesight is optimal. His perceptual evidence, holding the non-epistemic facts constant, fully justifies, epistemically, his perceptual belief that it was a real barn. Indeed, had he driven for a few more minutes, he would have stopped at a fake barn, and formed a false perceptual belief in a similar way. This does constitute the ease with which he formed a perceptual belief that is false. However, that would have brought in some alternative facts that are not epistemic, but only has to do with his action surrounding the epistemic act – his driving, for example. How, at all, is the alternative to his actual driving distance epistemically relevant? How does it factor into his epistemic decision-making, albeit even externally?

Crucially, although there is a sense in which Henry's perceptual belief could have easily been false, that it was a real barn could not have easily been not a real barn. It would be very difficult for that one real barn to have been a fake barn, and the corresponding ethical proximity it would have constituted is for, for example, the owner of the barn to have at some time prior to Henry's visit sold their estate. Given that it was a barn in operation, the ethical proximity is quite small, and thus the real barn could not have easily been a fake one. If, having introduced this further fact about the ownership of the barn, it is clearer what it is to hold non-epistemic facts constant, I submit that, with Henry's perceptual evidence, his perceptual belief thus formed could not have easily been false. The fake barns, however nearby, are therefore not relevant alternatives to the barn Henry was actually looking at with regard to his perceptual belief that it was a real barn.

It is with this distinction of the alternativity to the truth of a belief and to the actuality of a fact that I highlight what Pritchard gives up, in his theorizing, through ignoring. His notion of evidential epistemic luck, with which one acquired some evidence in favour of a given belief, and his notion of doxastic epistemic luck, with which one believed a given fact, contrast his notion of veritic epistemic luck, with which one's belief is true.[9] Since he focuses on cases in which the agent believed some given fact, it was not the epistemic luck with which they believed it that he theorizes about. However, in the case of Henry, it was indeed his evidential epistemic luck that he received the perceptual evidence, instead of some other, that he had. Further, given such evidence acquisition, it was also his doxastic epistemic luck that he formed his perceptual belief thus – had he known about the fake barns nearby, he might have doubted what his perceptual evidence in fact indicates and refrained from believing.

I shall now turn to discuss epistemic competence to contrast epistemic safety with regard to epistemic luck. The interaction of epistemic luck ought to have been with epistemic competence through epistemic situation, instead of focusing on the contribution of luck in epistemically unsafe situation.

3. Skill

Sosa is sympathetic to Henry's epistemic competence, akin to a competence one has when having eyesight examination, but attributes to Henry no reflective knowledge. Instead, he attributes to Henry animal knowledge that it was a real barn.[10] Competence, relative to him, is a disposition to succeed if one tried. Epistemic competence, as such a disposition, ought not have been affected by what happens in 'modal neighbourhood' in the aforementioned way.

> 'The relevant competence is neighborhood-involving, but the relevant neighborhood need not be spatiotemporally proximate. Rather it is defined modally, by the relevantly similar instances that the subject might easily have encountered… As for the fake barn perceiver, he might easily have been viewing a nearby fake instead of the genuine barn he sees in fact. However, dispositions require no such neighborhood robustness… Whether we define the neighborhood by physical proximity, or by modal proximity, it is not plausible that a competence, skill, or disposition is manifest at a certain location only if the host would have similarly succeeded elsewhere generally in the neighborhood'.[11]

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[9] In this paper, I focus only on veritic epistemic luck as epistemic luck. Other forms are suppressed.
[10] Sosa (2015, 81).
[11] Sosa (2011, 91).

That Henry, given the epistemic reliability of his perception, in exercising his epistemic competence to form, using his perceptual evidence, the perceptual belief that it was a real barn is a fact that ought not have been affected by what happens in nearby worlds in which he drove for a few more minutes and stopped at a fake barn. I add further that what makes a difference is how well he would have formed an epistemically successful belief given his epistemic situation. This is measured with the proportion of success among potential attempts – as his epistemic competence with regard to the given epistemic act. This formulation of epistemic competence is compatible with Sosa's disposition conception. The important issue is with the conception of disposition given metaphysical determinism – how the initial condition could have had a variance constituting a range of potentiality that the attempt has. An attempt, given the specification, has a range of possibilities of initial condition, thus metaphysically determining a set of outcomes – some constituted success, but sometimes some did not. The individuation of the act with the epistemic situation shall have been clarified in the next section. I will first present Sosa's own conception of epistemic competence, through his theory of competence, before doing so.

Relative to Sosa, competence is constituted by skill, shape, and situation.[12] With regard to driving, one's competence is constituted by something innermost to it, one's skill, which one retains even when one was asleep. It is also constituted by something that is inner nonetheless, one's shape, such as one's level of alertness, and how much one is intoxicated by alcohol. Lastly, one's competence with driving is also constituted by something outer, one's situation, such as whether one is in the driver's seat, and also whether the road has any obstacles. One could have had full inner competence, through having the skill and being in a right shape, but failed to have perfect competence because of one's poor situation. Epistemologically, it is only with epistemic competence, and its manifestation in the epistemic accuracy of a belief that the epistemic act is, that the epistemic act be epistemically apt. To achieve knowledge of a human kind, the belief has to be epistemically aptly apt. That is how a belief could have constituted reflective knowledge – the kind of knowledge epistemologists aspire us to have. Epistemic act has a success condition; an epistemic act is epistemically successful if and only if it is epistemically accurate. With regard to a belief, its epistemically accuracy is constituted by the truth of the belief. Epistemic success could have sometimes been due to epistemic luck, and what epistemologists want is an epistemic success that is epistemically competent; an

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[12] Sosa (2015; 2017). In Sosa (2015), he uses the terminology 'seat' instead of 'skill'. I followed his later use of 'skill' here. As shall have been evident, situation contrasts competence with regard to safety, and this differentiates my theory from Sosa's.

epistemic success is epistemically competent if and only if the corresponding epistemic act is epistemically adroit. Lastly, an epistemic performance constituted knowledge if and only if the epistemic act is epistemically apt; an epistemic act is epistemically apt if and only if the corresponding epistemic performance manifests epistemic competence.

What knowledge does Henry have if it was not reflective, nor human, knowledge? Consider Sosa's discussion of the knowledge one had during eyesight examination. When the subject reads the larger letters, one did so with some greater strength of confidence, but once having reached the lower level, the letters are somewhat too small for the subject to retain the confidence one had. However, with the goal of calibrating one's spectacles, one keeps on guessing, aiming at getting an accurate answer. The success rate across time indicates that it was nonetheless performed with some better than chance epistemic competence because of the epistemic reliability. The subject thereby attained animal knowledge of the letters, through the epistemic performance being epistemically apt, but since without aiming to succeed aptly, the corresponding epistemic success did not constitute an epistemically aptly apt performance.[13]

Notice that the epistemic reliability of one's vision under eyesight examination is what that the epistemic agent need not be certain of. The whole point about having the examination is to test one's eyesight, and check its range of epistemic reliability. As the letters get smaller, the examination subject still knows what they are, and this, relative to me, retains the epistemic justification that epistemological reliabilism confers through epistemic reliability. However, as I will point out later, the interaction between epistemic justifiability is better with epistemic competence, at the individual level, than with epistemic reliability, which is at a modular level. This is relevant to when it is that a virtue epistemology constitutes an epistemological reliabilism, which I hope, with a better distinction between epistemic situation – having to do with epistemic risk – and epistemic competence – having to do with epistemic luck –, the issue will have become clearer and more pressing.

Let me borrow the notion of epistemic luck in explaining the case of knowledge in the eyesight examination. Although, as I would agree with Sosa, there is knowledge in this case, the problem is with the epistemic competence that one had. When not perfectly epistemically competent, one's epistemic performance could have failed; when with an epistemic success, there is a residue of epistemic luck. The worse one's epistemic competence with regard to an epistemic act, the larger the epistemic luck given it was an epistemic success. Except when the

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[13] Sosa (2015, 74-7).

epistemic act necessitated the impossibility of its success, even with a lower than chance epistemic competence, one could have still enjoyed epistemic luck in achieving one's epistemic goal, and thus being epistemically successful. Epistemic competence, therefore, simply measures the proportion of success among potential attempts.

Here, with the eyesight examination, epistemic reliability and epistemic competence come apart. How much ought we have attributed the epistemic success of the examination subject to his epistemic luck? Even if with a better than chance epistemic competence, it would have been his epistemic reliability that contributed to the success rate. I submit therefore that there is still a large degree of epistemic luck that one trusted, albeit only through hunches, one's perception, during such examination. The epistemic success, at the individual level, does not manifest the epistemic agent's epistemic competence very much. Although Sosa attributed only animal knowledge to the examination subject, the distinction between epistemic reliability and epistemic competence ought to have been sharper.

Competence of an act by an agent and its reliance on the reliability of one's subsystems bring out the importance of individuation of the act. However, as with the problem of individuation, Sosa's complaint about modal neighbourhood, relative to me, has to do not with how one behaved in similar situation, but how an epistemic situation is individuated for modal comparison. Given Henry's actual decision to halt his driving, with the happenstance that it was a real barn that he stopped himself before, the epistemic competence measurement has as its base the potential epistemic attempts with outcomes alternative to the actual outcome of his actual act given the identical perceptual evidence. When Henry formed his perceptual belief, it was in fact with a perfect epistemic competence because among all worlds in which he formed the perceptual belief given his actual perceptual evidence, he would have succeeded in attaining knowledge. The outcomes possible of his act all constituted epistemic success.

My theory of competence can thus be conceptualized using my specific theory of metaphysical modality. I shall now use Sosa's own analogy using archery to illustrate my conception of modal neighbourhood. Someone who never learned archery is attending an archery lesson. After having been instructed how to hold the bow, she is still too unskilled to have controlled her fingers appropriately. With regard to the upcoming shot as an act thus individuated, the frailty through the almost arbitrary variance of force applied to the string constituted the wide range of possibilities within which the shot will not have hit the target. The proportion thus of success among all potential attempts with outcome alternative to the actual act actually having been performed constitutes the competence of the agent during the

episode with regard to the act. If the learner hit the target, as beginner's luck would have it, the explanation of her success of such incompetent act is with luck. Henry, in the case of the fake barn county, attained knowledge not due to epistemic luck – although it was luck that he stopped at a real barn among so many fake barns. It is clearly his epistemic competence that he attained knowledge. What remains is the epistemic safety of his epistemic situation.

4. Situation

Consider fake barn county to be live option among many barn counties, which is infested with only real barns. My theory implies that Henry in the fake barn county has an epistemic context that is the same as his counterpart in a barn county. With this, having isolated situation from competence, I now turn to discuss the relation between epistemic context and epistemic situation.

Epistemic context is constituted by epistemic possibilities. An epistemic agent's epistemic context of the actual world is constituted by the epistemic possibilities of the actual world relative to the epistemic agent. Epistemic situation may be understood through its variation of epistemic agent, with the identical perception, having different epistemic reliability with regard to the same fact. The perceptual belief that one formed about one line being longer than another is often formed with some better than chance epistemic competence because of the epistemic reliability of vision, but when one encountered perceptual illusion, the decrease in epistemic reliability of the corresponding perception is explained with a difference in epistemic situation. Since perceptual evidence does not differ without a difference in epistemic situation, we have the following metaphysical truth about an epistemological fact.

(2) Evidence supervenes on epistemic situation.

Someone under perceptual illusion is in an epistemic situation such that their perceptual evidence is misleading. The length of two lines, without the angles around them as in any diagram with the Müller-Lyer illusion, when presented visually, constituted some perceptual evidence with which one may have epistemically competently formed the perceptual belief of the sameness in length among them. However, with the angles thus located, the epistemic situation changed to one unfavourable to one's perception, through which its epistemic reliability decreased. With Sosa's theory of epistemic competence, one may understand the restoration of epistemic reliability through the retainment of the agent's skill. The contending point is whether it was poor epistemic situation that one is in, or whether it was bad epistemic shape.

What, then, is the difference between epistemic competence and epistemic reliability? Suppose epistemic reliability to be of different modality of perception: vision, hearing, smell, taste, and touch. Whereas epistemic reliability depends, with regard to perception, on which epistemic apparatus one is using, epistemic competence is of the epistemic agent – the individual itself. It is through using an epistemic apparatus, which, for example, constitutes one's vision, with a given epistemic reliability, that one, instead of staying at the level of sensation and operates only with perceptual experience, uses one's perceptual evidence to form perceptual beliefs, with such epistemic reliability thereby contributing, through epistemic competence, to the epistemic justification of the perceptual knowledge. With the power to suspend belief, human beings could have assessed of one's own epistemic competence, through knowing of one's bad epistemic situation with a decreased epistemic reliability of one's vision, and decided to refrain from judging, knowing the increase in the corresponding epistemic risk due to the misleading perceptual evidence. Therefore, whereby epistemic situation restricts epistemic reliability, epistemic situation interacts epistemic competence with epistemic luck.

Suppose now that you found yourself in a certain epistemic situation with a given piece of evidence. You are to decide whether to believe in a given fact thus. Suppose further that, although without evidence yet sufficient with regard to a certain high standard, that it was a fact. You are awake, and very alert. You are also very attentive. Holding your epistemic skill as you actually have and the epistemic shape you are in constant, your epistemic competence is at a certain level – not perfect, but you are confident of yourself in that epistemic situation. You decided to believe in it, and as it turned out, it was a fact. You attained an epistemic success with the putative insufficient evidence, which, by (2), supervenes on epistemic situation.

Suppose one epistemic skill to be constituted by statistical intelligence. The epistemic situation you had been in were being given a data set, with the fact being alternative to the null hypothesis: that some intervention made no difference. You were to decide whether to believe in the fact through rejecting the null hypothesis. With your epistemic skill, given the epistemic shape that you were in, you ran some t-test, using only paper and pencil, and decided that some difference were made by the intervention, and responded with rejecting the null hypothesis. The data set were only sufficient for the rejection to be at a significance level 0.05, but, given your statistical intelligence, you formed the outright belief that the intervention made some difference with thus full confidence of the fact. You know, therefore, with a epistemic margin for epistemic error the significance level is indicative of. The outright belief bears thus a proportionate epistemic risk.

Holding one's epistemic competence constant, the success of an epistemic performance may be explained with some degree of epistemic luck. In this case, it correlates with the epistemic margin for epistemic error; the likelihood of the outright belief having been false correlates with the significance level, and it is with the statistical intelligence that you had, with which one can do a t-test using paper and pencil, that one had been able to attain such epistemic success. Given the same data set, and thus being in a similar epistemic situation, lower statistical intelligence, which constitutes worse epistemic skill, could have left the epistemic agent making the same epistemic decision to commit the same epistemic act. The corresponding epistemic performance, however much epistemically successful, has a lower epistemic competence, through such success taking up a smaller proportion of its potential attempts. This is where epistemic situation interacts with epistemic context; relative to someone less epistemically competent, the same epistemic situation entails an epistemic context in which some of the epistemic possibilities are more to stay given the present epistemology. Although the epistemic agent shall have succeeded epistemically in using the evidence favourably, it was due very much to their epistemic luck.

Notice that given the sameness of information the data set encoded, it is not a greater achievement that the epistemically lucky epistemic agent did in ruling out those epistemic possibilities. That there is a degree of epistemic luck, which one ought to minimize through improving one's epistemic competence, shall have been the salient theoretical output of the present discussion. Someone with better epistemic competence is in a better epistemic position to take the same epistemic risk. If the sameness in size of epistemic context is compatible with a difference in epistemic justification, the aforementioned better epistemic position is constituted by one's better epistemic justification, suggesting a sameness in evidence with a difference in epistemic justification through a difference in epistemic competence.[14] The focus here, however, is that it was not primarily a difference in epistemic justification, but a better epistemic safety at the individual level that one relied less on epistemic luck through having a better epistemic competence.

Given the interaction of epistemic justifiability with epistemic competence through epistemic situation, a virtue-theoretic notion of epistemic externalism is wanting. I submit that, given the supervenience (2), it was poor epistemic situation that one is in that one's evidence is misleading, although epistemic shape also

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[14] With confidence being degree of belief, and credence probability on evidence, a better epistemic justification is exactly a better conformity of confidence to credence. The conformity is defective when it is merely justified by testimony, such as via the computation by a statistician instead of having done the calculation oneself.

determines whether evidence is misleading – such as when one ingested hallucinogen. Holding evidence constant, epistemic justifiability increases, through variation in epistemic competence, without hallucinogen ingestion in contrast to with it. Even if success is external, the modification is internal as far as it is physiological or neurological.

Lastly, I propose the following numerical relation between epistemic competence and epistemic luck.

Epistemic competence

epistemic competence = 1 - epistemic luck

5. Conclusion

With regard to epistemic safety, one improves one's epistemic situation by, to use Henry's putative predicament, going somewhere where one restored one's epistemic reliability. This is akin to acquiring more evidence to justify the same belief given the supervenience. Since there is no decrease in epistemic reliability of Henry's perception, the corresponding obligation to acquire further evidence is invalid; his perceptual knowledge that it was a real barn is fully epistemically justified where he was. The importance of epistemic competence the discussion brings out highlights an approach to inductive inference that is virtue-theoretic. The adjudication between traditional theories of knowledge and virtue epistemology, given a knowledge-first epistemology, shall include the live option of epistemic competence in explaining cases of seemingly insufficient evidence. This is a way the virtue theoretically interacted with the propositional in epistemology. The distinction between epistemic competence and epistemic situation, through a better clarification of epistemic reliability, brings out, through epistemic responsibility, what is individualistic about epistemic safety.

References

Cheung, Wai Lok. 2025. "Epistemic safety: risk and its negativity in the good case." *Logos & Episteme. An International Journal of Epistemology* 16(2): 139-156. <https://doi.org/10.5840/logos-episteme202516211>

Dretske, Fred. 1970. "Epistemic operators." *Journal of Philosophy.* 67(24): 1007-1023.

Goldman, Alvin. 1967. "A Causal Theory of Knowing." *The Journal of Philosophy.* 64(12): 357-72.

Goldman, Alvin. 1976. "Discrimination and Perceptual Knowledge." *The Journal of Philosophy.* 73(20): 771-91.

Goldman, Alvin. 1979. "What is Justified Belief?" In *Justification and Knowledge: New Studies in Epistemology*, edited by G. Pappas, 1-25. Boston: D. Reidel.

Pritchard, Duncan. 2005. *Epistemic Luck.* Oxford: Clarendon Press.

Sosa, Ernest. 2011. *Knowing Full Well.* Princeton: Princeton University Press.

Sosa, Ernest. 2015. *Judgment and Agency.* Oxford: Oxford University Press.

Sosa, Ernest. 2017. *Epistemology.* Princeton: Princeton University Press.