

Essay

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Intro

Externalist theories of knowledge analyze knowledge without emphasis on an agent's reasons, justification, or evidence. Some popular examples of externalist theories are modal analyses, like that of Robert Nozick. These analyses provide a list of modal conditions necessary for knowledge. These conditions are crafted to avoid issues in epistemology, like Gettier cases, and conform to our general understanding of what knowledge is. In this essay, I will first outline Nozick's theory of knowledge. Then I will propose a modified Gettier case, inspired by Indian philosopher Dharmottara, to show that his modal analyses of knowledge are insufficient to analyze knowledge—they are too permissive and cannot account for epistemic coincidence or luck. I will go on to show that similar modal conditions are too permissive. Finally, I will respond to objections from the externalist and argue that the externalist is committed to a wildly unintuitive idea of knowledge by sticking solely to modal analyses of knowledge. However, something like Sosa's virtue epistemology can add a much-needed layer to externalist theories of knowledge.

Summary Section

Externalist theories of knowledge analyze knowledge without regard to something like introspection, contrasting with internalist theories of knowledge. Rather, the externalist places emphasis on something external to the agent typically understood as a reliable method or process

of forming beliefs.¹ If one can show that visual perception reliably forms true beliefs, then when a belief is formed by that process, that belief is said to be justified.

But what exactly a reliable method or process is still needs spelling out. Robert Nozick proposes a theory of knowledge that analyzes reliability in modal terms.² S knows that p if and only if:

(1) *S believes p.*

(2) *p is true*

(3) $\sim p \square \rightarrow \sim (S \text{ believes } p)$

(4) $p \square \rightarrow S \text{ believes } p$ ³

Condition (4) is the tracking condition. If p were true, then S believes p is true. In short, S can track when p is true. Condition (3) is the sensitivity condition. It states that if a proposition p were not true, it would not be the case that S believes that p. To illustrate, imagine R is red-green colorblind. They are not sensitive to red and green, as if p were "the Coke can is red" and this was not true (say it was painted green for St Patrick's Day) R might very well believe that the "Coke can is red." That "the Coke can is red" is not true, but S believes it is true. So, R fails sensitivity. However, the average color-seeing agent would recognize that the Coke can is green—not red—and not believe that it is red.

¹ Goldman, 14

² Nozick, 23

³ Handout 9, 1 – specific format of the conditions

Part of the motivation for a sensitivity condition is that it protects us from Gettier cases.⁴ Gettier cases are tricky; they are intuitively not cases of knowledge but are considered knowledge by many theories of knowledge (particularly the justified true belief theory of knowledge). Consider the Dharmottara case.⁵ Cheslie is a traveler in a strange land. In the distance, they see what appears to be smoke and induce that there is a fire burning beneath it. However, it was not smoke but a swarm of flies. Turns out, there was a smokeless fire beneath the swarm purely on coincidence. However, it seems wrong to say that Cheslie knew that there was a fire in the distance. Under the JTB theory of knowledge, however, Cheslie has fulfilled all the sufficient conditions for knowledge. But Gettier cases show that JTB is insufficient for knowledge.

However, the Dharmottara case does not pass Nozick's sensitivity condition and is therefore not knowledge. If there had not been a fire underneath the swarm, then Cheslie would still have believed there was a fire. She only mistook the swarm for smoke. Thus, Nozick's theory does not count the Dharmottara case as knowledge.

Section 2

I would like to propose a modified Gettier case that does pass the sensitivity condition. It is inspired by the Dharmottara case, and I will refer to it as *the fire-finders* case.

Consider that Camden is a traveler in a strange land. He thinks he sees smoke in the distance, and induces that there is a fire beneath it. However, it turns out that this is just a swarm of flies above a smokeless fire. But these flies are special: they

⁴ Nozick, 24

⁵ Handout 2, 1

*are attracted to and only swarm in such a way to look like smoke when they are above a fire. And whenever there is a fire, they always come and swarm above it. Camden has no clue about these special flies and their odd behavior. Furthermore, Camden consistently mistakes flies for smoke in his everyday life.*⁶

Camden still has a justified true belief, but he mistakes the flies for smoke. This seems to similarly show that JTB is not sufficient for knowledge. I maintain an intuition that Camden does not have knowledge in the *fire-finders* case.

However, *the fire-finders* case passes Nozick's sensitivity requirement. Consider that if it hadn't been the case that the fire was burning, then Camden would not have believed the fire was burning. The fire is smokeless, and there is nothing to suggest that there is a fire in the distance. He would not have seen the flies. Nor, does Nozick's tracking condition discount the *fire-finders* case. If it were the case that the fire is burning, then Camden would believe the fire is burning. He would see the flies, and form the belief that there is a fire. These flies always swarm above a fire when one is out, and do not swarm otherwise. So, it seems that *the fire-finders* case passes all of Nozick's conditions, and should be counted as knowledge on his theory.

I maintain this is very unintuitive, and that Camden does not know that there is a fire in the distance. This intuition can and should be challenged, but I would like to first discuss another condition commonly thought to improve on sensitivity, safety, and whether or not it similarly counts the *fire-finding* case as knowledge.

⁶ Part of my thinking for this case was inspired by in class discussions about a casual link between the fire and the flies. I think it was Aidan who talked about it.

First suggested by Ernest Sosa, the safety requirement appears to be the contrapositive of the sensitivity requirement:⁷

Safety: S believes in p $\square \rightarrow p$ ⁸

If S were to believe that p, then it would be the case that p. This does not suggest that S's believing in p would make it that p; just in all worlds that S believes p, p is true. Sosa maintains that it is an improvement on the sensitivity condition and that it responds better to skeptical scenarios.⁹ It also serves as a response to Gettier. But for our purposes, we would like to see how it fairs against *the fire-finders* case. And it seems that the *fire-finders* case does pass the safety requirement. In all worlds where Camden believes that the fire is burning, the fire is burning. Remember the flies swarm in this peculiar way whenever a fire is in the distance. We can confidently conclude that *fire-finders* does pass safety.

So far, my argument has been:

- (1) Camden does not have knowledge in the *fire-finders* case.
- (2) If externalist modal analyses of knowledge are adequate, then Camden does have knowledge in the *fire-finders* case.
- (C) It is not the case that externalist modal analyses of knowledge are adequate

Premise (1) is based on what I believe to be a plausible intuition. Premise (2) has been shown during this section, and the conclusion follows logically.

⁷ Sosa, 25

⁸ Handout 10, 1—modal interpretation taken from the handout

⁹ Sosa, 25

Objections

The first major objection from the externalist will likely be to premise (1). They will bite the bullet and assert that Camden does have knowledge. To understand this, we must understand how the *fire-finders* case systematically passes externalist analyses of knowledge. To many externalists, forming a belief through a reliable process is all that is needed to justify belief in a proposition. In addition, the externalist moves the emphasis away from introspection. Camden, by mistaking the flies for smoke, has stumbled upon a reliable process for fire finding by accident or coincidence. It is lucky that he found this reliable process.¹⁰ However, it is a reliable process nonetheless, regardless of the mistake on Camden's part. If an externalist places all knowledge creation in reliable processes, then it seems that Camden does really have knowledge. So, they bite the bullet and assert that Camden really does have knowledge despite his accident.

In this way, the *fire-finders* case is a lot like BonJour's Norman case.¹¹ Norman is a clairvoyant and has reliable premonitions about the whereabouts of the president of the US. He has no other evidence for his knowledge, it just pops into his head where the president is. And, as it turns out, he is always right. While it seems unintuitive to some that Norman "knows" where the president of the US is, externalists claim that he does have knowledge due to Norman being a reliable process of president finding. In the *fire-finders* case, Camden also forms his belief through a reliable process. But Camden's belief that *the fire is burning* doesn't just "pop" into his head, rather he thinks he has a good reason to believe it (he thinks he sees smoke). Camden could not have too easily been false it seems, due to his persistent mistake. So, externalists will assert

¹⁰ The problem of epistemic luck was first made aware to me in class, if I'm not mistaken. I also read an argument by Job de Greffe in his article "Epistemic justification and epistemic luck", which helped me to understand the problem some more. Here's the link: <https://link.springer.com/article/10.1007/s11229-016-1306-7>

¹¹ BonJour, 62

that Camden knows that the fire is burning, just like how they assert that Norman knows where the president of the US is.

However, I would like to push back against the intuition that Camden has knowledge in the *fire-finders* case. It is less intuitive to ascribe knowledge to Camden than Norman. This is because of his systematic mistaking of flies for smoke. This mistake is a persistent and reliable one, so Camden does fail the sensitivity and safety conditions for identifying smoke and flies. However, this mistake makes Camden a very good *fire-finder*. But he seems to be a good fire finder for all the wrong reasons.

Imagine another similar scenario: you are a teacher grading Susie's math test. When you look at her answers, she has gotten them all correct. But to your astonishment, when you look at Susie's work it is always wrong.¹² She performs a series of mistakes in her mathematical reasoning, but turns out to have the correct answer at the end.

But I think it is wildly unintuitive to say that Susie or Camden has knowledge, more unintuitive than ascribing knowledge to Norman. All are reliable sources of true beliefs, but Susie and Camden make persistent mistakes in their reasoning. And this mistake is not merely luck on one or two occasions, but rather a very robust and persistent mistake. The hallmark of many Gettier cases is that the subject is right *just this once* on accident or by coincidence. And a mere mistake made by a subject that happens to lead to a true, justified belief does not constitute knowledge in the externalist modal analyses of knowledge. It is not modally robust enough. However, if the subject is inclined to make more mistakes, to the point where they are reliable

¹² Of course, most reasonable teachers would assume she is cheating! However, it is possible that Susie is systemically mistaken in such a way as to have all the wrong reasons for ultimately coming to the correct answer.

about making the same kinds of mistakes, it seems that the subject will stumble across a reliable process. It will be modally robust enough to be considered knowledge. I think this is absurd, and that only the most extreme proponents of externalism will find this acceptable. So rather than relying on this intuition, let's move on to a different objection from the externalist.

Perhaps the externalist might look to a solution to the *fire-finders* problem by way of the *no false grounds/lemmas* theory. Originally proposed by Michael Clark, this solution proposes that there can be no false reason or step that the subject infers through when they believe a proposition.¹³ All the subject's grounds for believing that proposition must be true. However, the externalist will need to slightly amend this theory to exclude references to evidence, introspection, or reasons and include reliable processes. Now, we have already identified that Camden is not a reliable fly and smoke distinguisher. In fact, he often conflates them. This could be seen as a false ground, an unreliable process, during the course of Camden's reliable fire finding. So, the externalist could adopt a *no-false-grounds* theory which suggests Camden does not have a justified belief if at some point he relies on an unreliable process in the course of his belief formation.

However, *no-false-grounds* theory for the externalist seems very implausible. For starters, we would need to discuss what makes a reliable process a *relevant* reliable process to the belief-forming mechanism at hand. And hashing out exactly what is relevant is a daunting task. Furthermore, it is difficult to see how the false grounds theory can transition from a theory about reasons and evidence to a theory about reliable processes. Finally, it seems possible that through many interlocking unreliable processes, we can create a reliable one. Imagine that I am

¹³ Feldman, 31

trying to stop a bowling ball from falling down a chute. I insert a single wooden rod in the chute, but the bowling ball crashes through the rod. However, if I placed a couple dozen rods in the chute, they together stop the ball from falling. No individual rod can reliably stop the bowling ball, but together they can reliably stop it. I think that it is plausible certain belief-forming mechanisms work the same way, where perhaps many unreliable sensors collectively work together to sense a certain phenomenon. In short, adopting some kind of *no-false-grounds* theory shows very little promise for the externalist.

Ultimately, I propose that the externalist theories discussed so far are inadequate; but all this means is that something must be added to the current theories. We need not be so extreme as to all-out reject modal externalist theories of knowledge and turn towards an internalist theory. A strictly modal externalist theory is inadequate; it lacks a little special something. One possible solution Ernest Sosa's virtue epistemology. Other than just adding the safety condition, Sosa proposes that we should evaluate knowledge as a kind of performance.¹⁴ Sosa emphasizes the importance of coming to a true belief due to one's epistemic skill—adroitness. A true belief formed by one's adroitness is said to be an "apt" belief. While what exactly Sosa means by adroitness is unclear, it seems obvious that Camden's true, justified belief through a reliable method was not an apt one. It just happened to be true that the fire was burning, and it was not formed by some skill or competency on his part. Adopting a kind of virtue epistemology, in general, helps to avoid problems of lucky or coincidentally true justified beliefs, even if that belief is formed by a reliable method. A second upshot of adopting a virtue epistemology is that the externalist has an alternative to asserting that Camden has knowledge in the *fire-finders* case.

¹⁴ Sosa, 22

So, rather than all-out rejecting externalist theories of knowledge, the externalist can admit their theory is inadequate without an addition like Sosa' virtue epistemology.

Conclusion

In the course of this essay, I argued that Nozick's modal externalist analysis of knowledge is inadequate. I proposed the *fire-finders* case, and showed that modal analyses cannot account for certain cases of epistemic luck and coincidence. After responding to objections, I suggested that Sosa' virtue epistemology provides a solution to the *fire-finders* case.