Gettier *v.* Justified True Belief: A Brief Legal Refutation of The Gettier Problem

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Edmund L. Gettier III (1927-2021)

1. Introduction

In his 1963 paper published in the journal *Analysis*, Edmund L. Gettier III (Gettier, 1963), presented two alleged counter-examples to the justified true belief account of knowledge, an account which has a long philosophical history, being considered by Plato in *Theaetetus* (201), and was possibly accepted by him in *Meno* (98) (Gettier, 1963, 121).

Since 1963 there has been an enormous body of work in epistemology attempting to deal with Gettier and Gettier-style alleged counter-examples, now numbering well over 100 such examples (Shope, 1983; Zagzebski, 1994). Most epistemologists accept that Gettier has refuted the justified true belief account of knowledge, and have sought a fourth condition to escape the problem. There have been some radical proposals,

such as dispensing with the justification condition entirely (Pollack, 2021). For Robert Kirkham (Kirkham, 1984), the Gettier problem is insoluble, as no account of knowledge can be wide enough to embrace our common-sense intuitions of what is knowledge, but narrow enough to exclude Gettier-inspired counter-examples (Floridi, 2004). Kirkham concludes that a "very radical form of skepticism is correct. This conclusion entails that most of the knowledge claims we make in ordinary life are simply incorrect" (Kirkham, 1984, 512).

A minority of philosophers have seen the Gettier style counter-examples as "illegitimate," and inherently incoherent (Schreiber, 1987, 50), a position one of us argued for as a philosophy student (Smith, 1984). An interesting paper looking at the Gettier problem from a legal perspective and arguing along the same lines, is by Robert Sanger (Sanger, 2018), which I'll discuss below. I believe that Sanger is right to deal with Gettier examples from a legal perspective. However, I recognize that there are contested and problematic relationships between legal proof and epistemological concepts such as knowledge and justification, as well as controversies about most aspects of evidence theory (Pardo, 2010; 2011), but these cannot be addressed here.

2. Analysis of Gettier's Alleged Counter-Examples

Gettier gives the following definition of the justified true belief account of knowledge:

(JTB) S (an epistemic subject) knows a proposition p if and only if:

(1) p is true, and
(2) S believes that p, and
(3) S is justified in believing that p.

Gettier then proceeded to argue that (JTB) is false, as the conditions, (1) & (2) & (3), do not constitute a sufficient condition for the truth of the claim that S knows that p. Gettier then adds two points. First, while not detailing what exactly "justified" means, he stipulates that it is possible for a person to be justified in believing a proposition which is false. The history of science supplies numerous examples of this. The second point is the epistemic principle that for a proposition p, if S is justified in believing p, and p entails q, and S deduces q from p, and came to therefore accept q because of this deduction, then S is justified in believing that q.

Gettier's case 1 involves two people, Smith and Jones who have applied for a certain job. Gettier says that Smith has strong evidence for this conjunctive proposition:

(4) Jones is the person who will get the job, and Jones has 10 coins in his pocket.

Smith's evidence for (4) may be that the president of the company told him that Jones would be selected, and that Smith had counted the number of coins in Jones' pocket 10 minutes ago (Gettier, 1963,122). Now, proposition (4) entails:

(5) The person who will get the job has ten coins in his pocket.

Smith is allegedly justified in believing that (5) is true. But it turns out that Smith himself gets the job, although unknown to Smith he also has ten coins in his pocket. So, proposition (5) is true, but proposition (4), from which Smith inferred (5) is false. Thus, (i) (5) is true; (ii) Smith believes that (5) is true and (iii) Smith is justified in believing that (5) is true. However, Smith does not know that (5) is true, as (5) is true because of the number of coins in Smith's pocket, which he does not know. His belief in (5) is based upon his counting of the coins in Jones' pocket, whom he falsely believes will get the job.

3. Criticism

Here I'll only discuss Gettier's case 1, not case 2, involving Jones' ownership of a Ford, as the examples are analogous to each other. The form of the Gettier counter-examples is that a subject with a supposed JTB in an empirical proposition does not know that p as S's justification for her true belief is accidental, fortuitously, or coincidentally related to the true belief. Perhaps an even better example illustrating this was given by Bertrand Russell, *In Human Knowledge: Its Scope and Limits* (Russell, 1948), before Gettier. The example involves a person who sees a clock that reads on its face, two o'clock and believes that the time at that moment is actually two o'clock. But the clock had stopped, so the belief is a justified true belief, but only accidentally true (Russell, 1948, 170-171). Oddly, Gettier does not refer to Russell in his paper.

Another classic example was given by Roderick Chisholm, the "sheep in the field" example (Chisholm, 1989, 23). A person claims to know that there was a sheep in the field, but what she saw was a dog disguised as a sheep. There was a sheep in the field, but it was out of sight, behind a hill. Thus, p is true (there is a sheep in the field); S believes that there is a sheep in the field, and S is justified in believing that p. Thus, S has a justified true belief, but not knowledge.

I believe that Sanger is taking the right approach in putting the Gettier problem in a court room setting, which he discusses in the context of US law, especially the Federal Rules of Evidence. He sees the problem as based upon a shift in meaning as to what is counted as belief and knowledge, there being a shift of meaning of "belief of" and "knowledge of." Sanger does not discuss Gettier's original example of the Smith case, seeing the factual pattern as "convoluted," but instead uses the sheep in the field example.

This could be viewed as a civil suit between say, defendant Bettier and plaintiff Descartes. The claim is made by the plaintiff that Bettier's sheep was not in the field at a particular time but was eating his, defendant Descartes' lawn. (We would substitute prize flowers for a larger quantum of damages, as there may only be nominal damages from trespass from eating grass that is cut anyway). The defendant Bettier testifies that he saw his sheep in the field, not over at Descartes' property at a particular time. But under cross-examination a photograph reveals a dog disguised by someone as a sheep. Bettier admits that this is what he saw. Hence, after cross-examination Bettier had only a "belief of" the object being a sheep, but a false one, as it was a dog. Bettier therefore cannot claim to have knowledge of his sheep being in the field, and his testimony is of no probative value. Thus, the belief is not based upon JTB, and is not knowledge.

My approach is simpler, and first recognises the differences between how evidence is thought of in the Anglo-American analytic epistemology model, and the law of evidence, as also noted by Sanger. The analytic model assumes that the epistemic subject faithfully represents her observations and beliefs. However, in court, this is open to challenge since a witness could be lying, or mistaken. As well, the truth of p needs to be decided by the tribunal of fact, often a jury, but many cases, a judge depending upon the jurisdiction and matter. In all cases, the witness/s, would be cross-examined on what evidence they had relevant to the matter, as in accordance with, for an Australian example section 55(1) of the *Evidence Act 1995* (Commonwealth of Australia). Courts have concerns about the reliability of witness statements, such as witnesses lying, misunderstanding, having faulty memory or cognition and inaccurate perceptions.

Thus, in the Bettier case, as I see it, Bettier had neither justified true belief, or knowledge that he saw his sheep, as what he saw was a dog disguised as a sheep. Now, philosophers play strongly with thought experiments involving deceptions, and in the limiting case could invoke holograms and even evil deceiving demons. But, if we keep things to the normal world, even a dog disguised as a sheep would be an unusual thing. Anyone who knows anything about sheep knows that they graze almost continuously while awake. Dogs do not, only occasionally eating grass, but never grazing. Someone giving anything more than a casual glance at what they think is their sheep would surely come, within a few moments, to suspect that something is wrong, when no grass is eaten. The behavioural patterns are too different. The philosopher may counter, well, the dog has been trained to eat grass and do everything a sheep does. At that point we put the philosopher to proof, rather than endlessly grant "just so" assumptions. We bring in expert dog trainers, who testify that this is unlikely. So, within normal bounds, the sheep example can be dismissed; it is neither JTB nor knowledge.

Much the same can be said about Gettier's example of Smith and Jones. Note that the example depends upon Smith's evidence for:

(4) Jones is the person who will get the job, and Jones has 10 coins in his pocket.

First, the 10 coins in the pocket scenario is something which few sensible people would use to make judgments upon. Sure, Smith may have counted the coins in Jones' pocket only ten minutes ago, but things can change fast in the world of pockets and coins. Coins can fall out, say when taking something else out, it happens to one of us all the time. Coins can quickly be spent on a coffee. By the time Smith begins to infer anything, (4) may be false.

Since in the real world few issues depend upon unrealistic matters such as the number of coins someone's pocket, the more important issue is evidence that Smith allegedly has that Jones is the person who will get the job. All Gettier says here is "the president of the company assured him that Jones would in the end be selected" (Gettier, 1963, 122). That is presumably taken to constitute the justification part of the scenario. Yet, it is from a legal view, hearsay. Citing legislation that one of us has worked with in our jurisdiction (the same point can be made for other jurisdictions), section 59 of the *Evidence Act 1995* (Commonwealth of Australia), states that the hearsay rule is : "Evidence of a previous representation made by a person is not admissible to prove the existence of a fact that it can reasonably be supposed that the person intended to assert by the representation." That is not easy to follow, but fortunately the legislation gives us a relevant example: "P had told W that the handbrake on W's car did not work. Unless an exception to the hearsay rule applies, evidence of that statement cannot be given by P, W or anyone else to prove that the handbrake was defective." There are simply too many reasons for doubting that the evidence is reliable. Clearly this example and the Smith/company president one are parallel; simply replace "handbrake' by "job."

There are many reasons why the mere assurance of the company president does not constitute reliable evidence. The president could have been lying, or mistaken. She may also not have even had the authority to make the employment decision, it being made by a committee. But, most likely, the president may have been sincere, and the assurance was more an expression of her hope that Jones would be selected. But then, something happened. Maybe Jones resigned or was sacked because he was stealing coins, which he hid in his pocket! The point to be made is that the evidence that Gettier cites for (4) is unsatisfactory and would not withstand cross-examination, so (4) is false.

While (5) is accidentally true, and Smith believes that (5) is true, Smith is not justified in believing that (5) is true. There is no evidence for the belief at all, as Smith has no basis for this belief. It was merely an inference made from a false assumption. The

deductive justification principle cited by Gettier: if S is justified in believing *p*, and *p* entails *q*, and S deduces *q* from *p* and accepts *q* on this basis, then S is justified in believing *q*, requires that S be initially justified in believing *p*. But Smith is not justified in believing (4) or (5), so Smith does not even have justified true belief, let alone knowledge. Hence the alleged Gettier counter-example collapses.

It could be objected that the legal response to the Gettier problem is unsatisfactory, as epistemology is more general than law, so legal considerations about hearsay evidence may be relevant to court proceedings, as conventions, but not so for the general theory of knowledge. Against this, I maintain that given this proposal that epistemology is more general than law, we should expect that epistemology therefore accommodates legal evidence and knowledge as well, as law does constitute a large part of modern life, and any adequate theory of knowledge should therefore incorporate legal knowledge. But, in the alternative the objection made above, namely that Smith does not have either justified true belief, or knowledge, stands independently of the hearsay objection.

Finally, what about Russell's clock? Well, as I see it, S certainly does not know the time, at the point when the stopped clock is correct. But nor is there any JTB either. Under cross examination of a witness who claimed that a certain event occurred at that time, the actual clock would be tendered as evidence on court, and examined, and found not to be functional. Russell in 1948 was presumably thinking of an analogue clock, with moving hands, including a second hand. It would be far-fetched and fanciful, as a famous legal phrase goes, to suppose. that someone would look at a clock and not notice it had stopped, as the second hand would be readily observed not to move. But, what if the second hand was removed or broken? Then the analogue clock would not be ticking, something a clock user would, or should, be aware of. But what if the clock was digital? Even worse, as while there may be no tick, the second digits should have been observed not to move. In all these cases a mere glance at a clock does not justify knowing the time, time defined to some accepted local standard clock. And any given household clock is most likely some fraction of time off the standard clock anyway, so our day-to-day clock-telling may be strictly false, but close enough to being true to get by in daily practical life, and does not lead ordinary, non-philosophers to epistemological scepticism about clocks. Once again there is no justified belief here, for Russell's clock-looker was not justified in their belief that it was two o'clock.

4. Conclusion

I conclude that at least some of the leading Gettier counter-examples can be rejected for failing to meet a plausible justification standard, as would be seen in court proceedings under cross examination. Of course, that does not solve the Gettier problem in its full generality, but it does suggest that each of the examples could, if

one had a large army of research help, be subjected to the same sort of critique. And, as has been made clear in post-empiricist philosophy of science, refutations of theories by isolated observations (parallel to the counter-examples of analytic philosophy) is no simple mechanical process, as observations, like counter-examples, are fallible (Feyerabend, 1975). Or in other words, I'm proposing that the Gettier counter-example be subjected to more scrutiny than they have been given.

REFERENCES

Chisholm, R. (1989). *Theory of knowledge*. Englewood Cliffs: Prentice Hall.

Feyerabend, P. K. (1975). *Against method*. London: New Left Books.

Floridi, L. (2004). On the logical unsolvability of the Gettier problem. *Synthese*, *142*, 61-79.

Gettier, E.J. (1963). Is justified true belief knowledge? *Analysis*, *23* (6), 121-123.

Kirkham, R. (1984). Does the Gettier problem rest on a mistake? *Mind*, XCIII, 501-513.

Pardo, M. S. (2010). The Gettier problem and legal proof. *Legal Theory*, *16*, 37-57.

Pardo. M. S. (2011). More on the Gettier problem and legal proof: Unsafe nonknowledge does not mean that knowledge must be safe. *Legal Theory*, *17*, 75-80.

Pollack, G. (2021). Overcoming Gettier, An immodest proposal. *Academia Letters*, Article 1541, July. Retrieved from https://doi.org/10.209351. (Accessed, 29 April, 2022)

Russell, B. (1948). *Human knowledge: Its scope and limits*. New York; Simon & Schuster.

Sanger, R. M. (2018). Gettier in a court of law. *Southern Illinois University Law Journal*, *42*, 409-420.

Schreiber, D. G. G. (1987). The illegitimacy of Gettier examples. Metaphilosophy, *18* (1), 49-54.

Shope, R. K. (1983). *The analysis of knowledge: A decade of research*. Princeton: Princeton University Press.

Smith, J. W. (1984). Justified true belief is knowledge. *Darshana International*, *14* (4), 82-84.

Zagzebski, L. (1994). The inescapability of Gettier problems. *Philosophical Quarterly*, *44* (174), 65-73.