First Prize Trinity 2025: **Pirin Erdoğdu** (UAE)

Course: Theory of Knowledge course (online): tutor Ilhaam Isaacs

Describe and explain why Gettier-style cases demonstrate that the tripartite account of knowledge is unsustainable. How should one go about offering a theory of knowledge that is immune to Gettier-style cases, do you think? Can one offer a theory of knowledge that is immune to Gettier-style cases?

Epistemology has traditionally pursued the Platonic goal, articulated in the *Theaetetus* (148c, cited in Zagzebski, 2017), of bringing the many forms of knowledge under a single definition. This ambition underpins the long-standing assumption that knowledge is a form of belief — specifically, true belief plus something else. The resulting tripartite model, often termed the JTB (Justified True Belief) account, holds that:

S knows that *P* if and only if:
(i) *P* is true,
(ii) S believes (or accepts, or is sure) that *P*, and
(iii) S is justified in (or has evidence for, or has the right to) believing that *P*.

This analysis was famously challenged by Gettier (1963), who demonstrated through counterexamples that even when all three conditions are met, a belief can still fall short of knowledge. Gettier notes two important aspects of this formulation: (1) that truth and justification conditions are independent of each other, and (2) since deductive inference is truth preserving, justification is also preserved through valid deduction. That is, if S is justified in believing P, and P entails Q, and S deduces Q from P and believes Q on that basis, then S is also justified in believing Q.

Gettier uses these two principles against the tripartite account (JTB) by constructing cases where:

    (a)   P is false (due to bad luck)
    (b)   S believes that P
    (c)   S is justified in believing that P
    (d)   P entails Q, and Q is accidentally true (due to good luck)
    (e)   (b), (c) and (d) together imply that Q satisfies conditions (i), (ii) and (iii) in JTB formulation

In Gettier's original cases, the accidental truth arises through deduction from a false premise. However, the core issue is not merely that a true belief is inferred from a false belief, but that the connection between justification and truth is merely coincidental—the result of epistemic luck. While many take this to be obviously objectionable, the idea that knowledge must be insulated from luck is not trivial. It reflects a deeper epistemic commitment: that knowledge should arise from intellectual virtue or reliable cognitive agency — not as a mere accident, but as the result of a responsible, truth-conducive process.

At first, Gettier cases might appear to threaten only those accounts of knowledge where justification is equated with having good reasons or believing for the right reasons. However, as Zagzebski (1994) points out, the problem does not lie with a particular kind of justification. As long as knowledge is defined as justified true belief and the justification and

truth conditions are independent, Gettier cases remain structurally unavoidable — whether one adopts an internalist (where justification grounds are consciously accessible to the believer) or an externalist (like reliabilism, where justification stems from reliable belief-forming processes) account of justification. This is because even a minimal separation between truth and justification allows the possibility of epistemic luck.

In an effort to salvage the JTB model, many have tried to avoid the problem by redefining what counts as justification, tweaking it so it lines up more closely with the truth. One example is to introduce defeasibility constraints that rule out defeating evidence (see Pritchard, 2023). Yet these attempts face a dilemma: strong defeasibility conditions risk making justification entail truth, thereby collapsing the distinction, while weaker versions leave Gettier-style counterexamples intact. Zagzebski's medical example illustrates this well: a doctor justifiably and undefeatedly believes her patient has virus X based on compelling evidence, but the belief is only accidentally true and thus is not knowledge—the patient has virus X for entirely unrelated reasons.

Examples like this can be endlessly varied because all justification is ultimately inductive: it draws on limited observations to support broader claims, even the strongest inference can result in false belief, which inevitably introduces an element of luck. As a result, Gettier-style problems are not occasional glitches. The only way to avoid them entirely is to give up on the traditional tripartite definition of knowledge — either by collapsing the distinction between justification and truth so that justification guarantees truth, or by relaxing the connection so that even lucky true beliefs qualify as knowledge.

Theories that attempt to block Gettier-style cases by collapsing the distinction between justification and truth typically aim to ensure that justification itself is sufficient for truth, thereby eliminating the possibility of epistemic luck. These include infallibilist views (e.g. Descartes, 1641; Unger, 1971), which demand that justified beliefs must entail truth; Nozick's (1981) truth-tracking theory, where knowledge requires belief-forming methods that reliably distinguish true from falsehoods; virtue epistemology (e.g. Sosa, 1991; Greco, 2010; also see Turri, Alfano & Greco, 2021), which grounds justification in the exercise of intellectual virtues that reliably lead to truth; and knowledge-first epistemology (Williamson, 2000), which treats knowledge as a primitive concept and defines justification in terms of it.

In contrast, other theories relax the connection between justification and truth, allowing that some degree of epistemic luck may be compatible with knowledge. These include views such as "knowing luckily" (Hetherington, 2001), liberal forms of reliabilism (e.g. Goldman, 1979), contextualism (DeRose, 2009; Cohen, 1988) and naturalized epistemology (Quine, 1969). While the former group tends to treat knowledge as an epistemically virtuous achievement, closely tied to ethical notions of responsibility and credit, the latter approaches are often more permissive or practice-based, viewing knowledge as a tool embedded in human cognition and inquiry. Each of these positions has generated extensive debate, the details of which lie beyond the scope of this essay.

To explore whether a theory immune to Gettier-style problems is genuinely possible, I follow Gettier's lead by introducing a case — not a hypothetical puzzle, but an example from the history of science. This real-world example, I suggest, presses the same philosophical pressure points as Gettier cases do and illustrates the limitations of rigid analytic models of knowledge.

Consider Einstein's introduction of the cosmological constant (Λ). Einstein believed the universe was static, a view consistent with the prevailing assumptions of the time and not yet challenged by empirical evidence. To maintain this view within the framework of general relativity, Einstein introduced Λ into his field equations as a repulsive term to counterbalance gravitational collapse and preserve a static model. Later, when the universe's expansion was discovered, Λ was abandoned and Einstein called it his "greatest blunder." Yet decades later, Λ re-emerged as central to our current understanding of the accelerated expansion of the universe — now interpreted as dark energy. In effect, Einstein's belief in Λ was true, but not for the reasons he thought.

This case suggests that if our concept of knowledge demands a perfect alignment between truth and justification, it may exclude beliefs that function as knowledge in actual epistemic practice. Rather than seeing this as a flaw, I take it to show that knowledge should be approached more pragmatically — as a functional category embedded in the practices of fallible, inductive reasoning. Justification, in this light, is always subject to some degree of epistemic luck, yet we continue to treat it as knowledge because of the role it plays in explanation, inquiry, and decision-making.

This is why I am drawn to Quine's (1969) naturalised epistemology. Quine rejects the traditional idea that epistemology must either conceptually define knowledge or doctrinally ground it in pure sense-data and logic. Instead, he proposes that epistemology should be continuous with science—that it should describe, not prescribe, how we actually form and revise beliefs. As he puts it, *"Epistemology, in its new setting, is contained in natural science, as a chapter of psychology"* (Quine, 1969, p. 83). This approach repositions epistemology within empirical investigation, treating justification not as a priori but as something to be studied naturalistically — in terms of how cognitive agents move from sensory stimulation to scientific theory. *"The stimulation of his sensory receptors is all the evidence anybody has had to go on, ultimately, in arriving at his picture of the world. Why not just see how this construction really proceeds?"* (p. 75). In Quine's holism, there are no fixed foundations, only a dynamic web of interdependent hypotheses, constantly revised in light of new data. In this respect, Quine's account embraces the inevitability of epistemic luck rather than resisting it. What matters is not whether a belief meets idealised conditions, but whether it participates effectively in the broader cognitive system.

I find this move compelling. It shifts the focus away from abstract definitions and toward the empirical study of our cognitive practices. In that sense, Quine's project resonates with my own view: that the value of a belief lies less in how it meets idealised criteria, and more in how it functions within the broader system of inquiry.

In the end, I recognise that the account of knowledge one finds persuasive depends as much on a decisive argument as one's epistemic temperament — whether one is more drawn to normatively rich accounts such as epistemic virtue theories or to pragmatic accounts that downplay normativity in favour of more naturalised views of epistemology. Perhaps, then, the enduring challenge of Gettier is not only conceptual, but a matter of philosophical orientation.

Bibliography

Cohen, S. (1988) 'How to Be a Fallibilist', *Philosophical Perspectives*, 2, pp. 91–123

DeRose, K. (2009) *The Case for Contextualism*, Oxford: OUP.

Descartes, R. (1641) *Meditations on First Philosophy*

Gettier, E.L. (1963) "Is justified true belief knowledge?" *Analysis*, 23(6), pp.121–123.

Goldman, A. (1979) 'What is Justified Belief?' In G. Pappas (Ed.), *Justification and Knowledge*. D. Reidel.

Greco, J. (2010) *Achieving Knowledge*, Cambridge: CUP.

Ichikawa, J.J. and Steup, M. (2024) "The analysis of knowledge," *The Stanford Encyclopedia of Philosophy*. Fall 2024. Edited by E.N. Zalta and U. Nodelman. Metaphysics Research Lab, Stanford University.

Hetherington, S. (2001) *Good Knowledge, Bad Knowledge*, Oxford: OUP.

Hetherington, S. (2005) "Gettier Problems", *The Internet Encyclopedia of Philosophy*

Huemer, M. (ed.) (2002) *Epistemology: Contemporary Readings*, London and New York, Routledge

Nozick, R. (1981) 'Knowledge', in *Epistemology: Contemporary Readings*, Routledge, pp. 475–90

Pritchard, D. (2023) *What is this thing called Knowledge?* 5th ed. London, England: Routledge.

Quine, W.V.O. (1969) Epistemology Naturalized, in: *Ontological Relativity and Other Essays*. New York: Columbia University Press, pp.69–90.

Sosa, E. (1991) "The raft and the pyramid: coherence versus foundations in the theory of knowledge," in *Knowledge in Perspective*. Cambridge: Cambridge University Press, pp. 165–191.

Turri, J., Alfano, M. and Greco, J. (2021) "Virtue Epistemology," *The Stanford Encyclopedia of Philosophy*. Winter 2021. Edited by E.N. Zalta. Metaphysics Research Lab, Stanford University.

Unger, P. (1971) 'A Defense of Skepticism', in *Philosophical Studies*, 1(1), pp. 1–24.

Williamson, T. (2000) *Knowledge and its limits*, Oxford: Oxford University Press.

Zagzebski, L. (1994) "The Inescapability of Gettier Problems," in *The Philosophical Quarterly*, 44(174), p. 65. Available at: https://doi.org/10.2307/2220147.

Zagzebski, L. (2017) "What is knowledge?," in *The Blackwell Guide to Epistemology*. Oxford, UK: Blackwell Publishing Ltd, pp. 92–116.