
THE CHALLENGES WITH ALVIN GOLDMAN'S RELIABILISM AS A RESPONSE TO THE GETTIER PROBLEM

Imoter Mark Shenge

Rev Fr Moses Orshio Adasu University, Makurdi
imotershenge@gmail.com

and

Emmanuel Terkula Or-Ongu

Emmyter800@gmail.com

Abstract

This paper is a Critique of Alvin Goldman's Reliabilism as a Reaction to the Gettier problem. In a three (3) paged article, Edmund L. Gettier shook the very foundation of traditional epistemology which had it that, Justified True Belief accounts for knowledge. The formulation holds that three conditions are necessary and jointly sufficient for knowledge. Firstly, there are beliefs which imply that one does not know something unless he holds it as true in the mind, what this means is that, if you do not believe it then you do not/cannot know it. Secondly, we have truth, which means that there can be no knowledge of false propositions; belief in a falsehood is delusion or misapprehension, not knowledge and thirdly, there is justification which means that the belief must be appropriately supported; there must be sufficient evidence or argument for the belief. This tradition was inherited from Plato in one of his works, namely, *Theaetetus*. Gettier argues that there are situations in which one's belief may be justifiable while not qualifying as knowledge. In the bid to provide answers to what has now been termed 'The Gettier Problem', Alvin Goldman proposed that Reliabilism is the key to gaining knowledge and the solution to the Gettier Problem. On the one hand, Goldman believes that a proposition is accounted for as knowledge if the process by which we gain the knowledge is reliable (Process Reliabilism); and on the other hand, a belief, for Goldman, is justified if it proceeds from an intellectual virtue and unjustified if it proceeds from an intellectual vice. It is premised on this, that the paper argues that Reliabilism is circular in its nature, and as a result, fails in its attempt at a plausible solution to the Gettier problem. As a result, the paper further argues that virtue epistemology offers a more promising response by grounding knowledge in the intellectual virtues and competences of the knower. On this view, knowledge is "apt belief," true belief creditable to the agent's intellectual virtue rather than to coincidence

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Introduction

Alvin Goldman's theory of Reliabilism as an epistemological theory of justification was birthed in response to Edmund Gettier's attack on the traditional foundations of knowledge. In his 1979 paper, *What is Justified Belief?* Goldman sets the tone for a refreshed perspective on the traditional Justified True Belief theory that was put to question by Edmund Gettier. While Goldman has contributed greatly to the strife towards solving the problem of Epistemic luck observed by Gettier, his theory of justification falls short in its circulatory character. This circulatory character is the problem that this paper attempts to engage with the goal of showing how Goldman's reliabilism does not explain away the potency of epistemic luck identified by Gettier.

In *What is Justified Belief?* Goldman proposed the concepts of *Belief-Causing* or *Belief-Producing Processes* in the bid to distinguish beliefs that are reliable and those that are not (38). Thus, Goldman strongly believes that if the process that led to the production of a particular belief is not reliable, then the belief will not be a true belief. For instance, beliefs that are products of emotions and wistful thinking are not reliable and thus do not make up for a reliable source of belief, and the process of such a belief becomes unfit to account for knowledge. If, however, a belief was produced from a process of good reasoning and introspection, then such a belief is reliable and can account for knowledge.¹

The processes of emotions and wistful thinking highlighted above have the characteristic of *unreliability in common*: they tend to produce error a large majority of the time. On the contrary, effective processes such as sound reasoning, standard perceptual processes, short term memory, and sound empirical evidence all share the characteristic of *reliability*: they tend to produce beliefs that are generally true a large majority of the time. Thus, Goldman argued that the justificational status of a belief must come from the reliability of processes used to arrive at or to sustain said belief. Reliable processes are those that are truth conducive a large majority of the time whereby non-reliable process are only truth conducive a small fraction of the time, or not at all. More succinctly, Goldman's account of justification as reliability is this: P's belief in Q at time T is justified if and only if Q is formed by a reliable process at time T2.²

These positions of Goldman are plausible, but they however do not explain away the fact that the source of a belief might be reliable, but the belief might still be false and, hence, does not account for knowledge. It is the task of this paper, therefore, to analyze Goldman's response thoroughly, and present how it did not sufficiently explain away the problems raised by Gettier.

¹. Goldman, Alvin I. "Epistemic Folkways and Scientific Epistemology." in *Liaisons: Philosophy Meets the Cognitive and Social Sciences* (Cambridge: MIT Press, 1992), 155.

². Edmund L. Gettier, "Is Justified True Belief Knowledge?" *Analysis* 23, no. 6 (1963): 121–23, at 122.

The Gettier Problem in Perspective

Edmund Gettier's landmark 1963 paper, *Is Justified True Belief Knowledge?* Laid the background for what is now called "The Gettier Problem" which has remained one of the most persistent challenges in contemporary epistemology. Philosophers had accepted the tripartite definition of knowledge, first systematized in Plato's *Theaetetus*, which held that knowledge could be defined as justified true belief. Plato had opined therein that, "For true opinion, with the addition of an account, is knowledge".³ This position suggests that if a belief is true, the believer is justified in holding it, and it corresponds to reality, then knowledge has been attained. However, Gettier's two counterexamples shook this assumption, showing that one could possess justified true belief without actually possessing knowledge. It is imperative to not that Gettier does not slip into skepticism to say that knowledge cannot be attained. His challenge, therefore, is with a form of knowledge that does not sufficiently satisfy this tripartite criterion.

Before Gettier, the justified true belief (JTB) account was widely accepted as both necessary and sufficient for knowledge. According to this view, the conditions of justification, truth, and belief jointly exhaust the meaning of knowledge. Roderick Chisholm summarized this position by noting, "We may say that S knows that p if and only if (1) p is true; (2) S accepts p; (3) S has adequate evidence for p".⁴ The neatness of this formulation gave epistemology a firm foundation until Gettier disrupted it.

However, in 1963, Gettier published a brief three-page paper that altered epistemological discourse permanently. He constructed scenarios in which all three conditions of JTB were met, yet it seemed inappropriate to claim knowledge. In one case, Smith has strong evidence to believe "Jones owns a Ford." From this, Smith infers the disjunctive statement, "Either Jones owns a Ford, or Brown is in Barcelona." Unbeknownst to Smith, Jones does not own a Ford, but by coincidence, Brown actually is in Barcelona. Thus, Smith's belief is true and justified, but intuitively, he does not *know* it.⁵ This showed that justified true belief is not sufficient for knowledge. As Gettier concludes, "It is possible for a person to be justified in believing a proposition that is in fact true, but where the justification rests on a false premise".⁶

The Gettier problem shook the confidence in the classical definition of knowledge. As Linda Zagzebski remarks, "What Gettier did was to show in a strikingly simple way that the three traditional conditions for knowledge are not jointly sufficient".⁷ The problem forces

³. Plato, *Theaetetus*, trans. M. J. Levett, revised by Myles Burnyeat (Indianapolis: Hackett, 1992), 201d.

⁴. Roderick M. Chisholm, *Theory of Knowledge*, 2nd ed. (Englewood Cliffs, NJ: Prentice-Hall, 1977), 16.

⁵. Gettier, "Is Justified True Belief Knowledge?" 122.

⁶. Gettier, "Is Justified True Belief Knowledge?" 123.

⁷. Linda Trinkaus Zagzebski, *Virtues of the Mind: An Inquiry into the Nature of Virtue and the Ethical Foundations of Knowledge* (Cambridge: Cambridge University Press, 1996), 66.

epistemologists to rethink the relationship between truth, belief, and justification. Specifically, Gettier cases reveal that justification can be accidentally connected to truth, producing what epistemologists call “*epistemic luck*”. This challenges the very core of epistemology, which aims to distinguish genuine knowledge from mere true belief. Though many responses have been offered, none has gained universal acceptance. As Zagzebski remarks, “Gettier's challenge remains unsolved because it is grounded in the very way luck interacts with justification and truth”.⁸ The Gettier problem not only questions whether knowledge can be defined but also demonstrates the inherent complexity of human cognition and its relationship to truth. The task of this paper is to, hence, evaluate the problems associated with one of these responses as has been formulated by Alvin Goldman as the theory of reliabilism.

Goldman on Reliabilism

Alvin Goldman's reliabilism is a prominent theory in epistemology that connects the justification of beliefs with the reliability of the processes used to form those beliefs. At its core, reliabilism holds that a belief is justified if it is produced by a cognitive process that reliably leads to true beliefs. Goldman argues that: “If S believes P as a result from a reliable cognitive belief-forming process (or set of processes), then S's belief in P is justified”.⁹ This approach moves away from traditional accounts of justification that emphasize internalist conditions, such as having accessible reasons or evidence for one's beliefs, and instead adopts an externalist perspective, focusing on the objective reliability of the belief-forming process.

Reliabilism begins with the premise that the goal of belief formation is truth. For a belief to be epistemically justified, it must result from a method or process that has a high likelihood of producing true beliefs in a significant proportion of cases. For Goldman, “A reliable process is one that produces a high ratio of true to false beliefs”.¹⁰ Examples of such reliable processes include perception, memory, logical inference, and introspection – when functioning properly in appropriate environments. Conversely, unreliable processes, such as wishful thinking or guessing, fail to consistently yield true beliefs and thus cannot confer justification.

Goldman's reliabilism is particularly concerned with the causal and functional aspects of belief formation. For him, a process is reliable if it has a strong track record of truth-conduciveness in the kinds of environments in which it typically operates. Little wonder then that Goldman had argued that “the justificational status of a belief is a function of the reliability of the process or processes that cause it”.¹¹ Hence, this reliability does not require that the individual who holds the

⁸. Zagzebski, *Virtues of the Mind*, 78.

⁹. Gettier, “Is Justified True Belief Knowledge?” 123.

¹⁰. Goldman, Alvin I. “Reliabilism.” in *The Oxford Handbook of Epistemology*, edited by Paul K. Moser (Oxford: Oxford University Press, 2002), 346.

¹¹. Gettier, “Is Justified True Belief Knowledge?” 122.

belief knows about the reliability of the process. Instead, justification depends on the external fact of reliability, irrespective of whether the believer has access to or awareness of this fact.

Goldman makes a distinction between simple perceptual beliefs and complex inferential beliefs. According to Goldman, “Perceptual beliefs are paradigm cases of justified beliefs when the perceptual systems are functioning normally in their proper environments”.¹² For example, “There is a car in front of me”, is a clear instance of a simple perceptual belief since such a belief is born from basic sensory mechanisms or impressions. On the other hand, more complex inferential beliefs might rely on the process of reasoning. Regardless of the situation however, justification is hinged on any of these processes being dependable in producing accurate beliefs within the contexts they are applied. Succinctly put, Goldman's reliabilism emphasises that cognitive processes like perception, memory, and logical reasoning are central to belief formation. These processes are considered reliable if they function correctly in typical or appropriate conditions, producing a high proportion of true beliefs. For example, vision is a reliable process for identifying objects in normal lighting conditions but may not be dependable in darkness or through heavy fog. Similarly, memory is usually reliable for recalling recent events but becomes less so when attempting to recall distant or detailed memories under stress or distraction.

From our analysis, it becomes evident that Goldman's reliabilism places the onus of justification on the dependability of the process that led to the formulation of such a belief in the first place. Goldman puts this simply: “Reliabilism is an externalist theory because it makes justification depend on factor – namely, the reliability of belief-forming processes – that are external to the believer's subjective awareness”.¹³

Challenges with Goldman's Reliabilism

One common criticism involves the “new evil demon problem,” which questions whether individuals in deceptive environments can have reliable knowledge. Imagine a scenario in which an individual is subjected to an “evil demon” who deceives them about the nature of reality. For instance, the individual might believe they see trees, hear birds, and feel the wind, but in reality, all these experiences are illusions created by the demon. The individual's perceptual and cognitive processes are systematically manipulated so that their beliefs about the world are mostly false. Based on this scenario, Cohen argues that: “Even if the subject's cognitive faculties are functioning as they normally do and the subject's beliefs are justified in the actual world, their beliefs would not count as justified in the demon world if justification is dependent on

^{12.} Alvin I. Goldman, *Epistemology and Cognition* (Cambridge, MA: Harvard University Press, 1986), 63.

^{13.} Alvin I. Goldman, “Internalism, Externalism, and the Architecture of Justification,” *Journal of Philosophy* 77, no. 6 (1980): 271–93, at 289

reliability”.¹⁴ Keith Lehrer purports that “the new evil demon problem challenges externalist accounts by questioning whether subjects in radically deceptive environments can be said to have justified beliefs if their cognitive processes are unreliable due to factors beyond their control”.¹⁵ However, Goldman argues that “a process can still be said to be epistemically virtuous, and its outputs justified, even if the subject is placed in a systematically deceiving environment”.¹⁶ That is, despite this deception, the individual's belief-forming processes function in the same way they would in a normal, non-deceptive environment. For example, their vision, reasoning, and memory operate in a manner that would generally produce true beliefs if the environment were not tampered with.

The question then remains: are the individual's beliefs justified? In such cases, the individuals' processes may be unreliable due to the environment, yet intuitively, we might still consider their beliefs justified because they are doing their epistemic best. Ernest Sosa argues that “the demon problem illustrates that justification must accommodate scenarios where agents are cognitively blameless yet systematically mistaken, suggesting a reevaluation of strict reliabilist criteria”.¹⁷ It is no wonder then that BonJour Laurence surmises that “if epistemic justification is to make sense of our practices of praise and blame, then it must depend on factors internal to the believer's perspective, not external facts about reliability”.¹⁸ This suggests that reliability alone might not fully capture the nature of justification.

Another major problem of reliabilism is its character of epistemic circularity. Epistemic circularity occurs when the justification of a belief or criterion presupposes the validity of that same belief or criterion. In the context of reliabilism, epistemic circularity is seen in the theory's dependence on reliable processes to establish the reliability of belief-forming methods. Critics argue that this undermines reliabilism's ability to provide a non-circular account of epistemic justification, as the standard of reliability seems both the premise and the conclusion of the justificatory process.

The following event may be used to show what we frequently do when attempting to determine whether our sense perception is consistently truth-conducive: P forms a belief using their perceptual processes, and that belief turns out to be true. How we go about confirming the veracity of each of our perceptual beliefs is the issue with this line of thinking. Because the very

¹⁴. Stewart Cohen, “Justification and Truth,” *Philosophical Studies* 46, no. 3 (1984): 279–95, at 280.

¹⁵. Keith Lehrer, *Theory of Knowledge* (Boulder, CO: Westview Press, 1990), 156.

¹⁶. Gettier, “Is Justified True Belief Knowledge?” 123.

¹⁷. Ernest Sosa, *A Virtue Epistemology: Apt Belief and Reflective Knowledge* (Oxford: Oxford University Press, 2007), 92.

¹⁸. Laurence BonJour, *The Structure of Empirical Knowledge* (Cambridge, MA: Harvard University Press, 1985), 41.

perceptual processes we are attempting to evaluate are truth-promoting, the only way to accomplish this is to rely on them. Because we employ perpetual procedures to arrive at our opinion that perceptual processes are trustworthy sources of genuine beliefs, this belief is epistemically circular. For example, if I want to verify that what I am seeing from across the street is a cat, I must then use my sight to test whether I am really seeing a cat. That is to say, in order to verify that my sight is reliably truth conducive, I must first presuppose that it is reliably truth conducive in order to judge whether or not it is reliably truth conducive. Consequently, one can argue that judgments about the truth conducive reliability of our processes are formed through circular reasoning.

Because it engages in the same circularity that certain analytic epistemologists have historically been concerned with resolving, reliabilism may not be a sufficient theory of justification. Furthermore, Goldman's involvement in circularity may exceed its contribution to the long-standing epistemic problem of luck, despite the fact that it has helped to provide a potential solution. This is due to the fact that reliabilism is a theory of justification, as Goldman described and later others have also interpreted. Therefore, some epistemologists believe that Goldman has not only not helped to resolve the long-standing problem of circularity, but that reliabilism as a whole may be rejected as a theory of justification because it is circular, insofar as some may contend that circular reasoning cannot be a means of justification and/or is incapable of justification. One could argue that, this situation might be resolved in one of two ways (1) Make the case that we can avoid circularity, or (2) Admit that reliabilism is circular but maintain that it is still feasible to have epistemically circular, justified views using reliabilism.

Verifying our perceptual processes through an impartial procedure might be one way to get around circularity. We might be able to avoid circularity if we discover that our perceptual perceptions are accurate through this separate route of verification. But it appears that the same circularity affects this line of thinking as well. The technique we employ to confirm that this independent process is consistently truth-promoting must likewise be devoid of circularity if it is to assist us in overcoming it. For instance, I would have to utilize my memory to confirm that, I had indeed accurately recalled a memory if this other process is short-term memory and I am attempting to determine whether it is consistently truth-conducting. Of course, I could write down the precise words I want to memorize or record the incident I am attempting to remember, but doing so would also need me to remember that I took those steps to confirm my recollection.

Goldman and other proponents of reliabilism have acknowledged the charge of epistemic circularity and offered several responses. One argument is that epistemic circularity is not necessarily vicious or detrimental to the theory. Goldman has suggested that, certain kinds of circularity, particularly when they arise in foundational domains, may be unavoidable but not necessarily problematic. For example, foundational epistemic practices, such as perception or

memory, may require a degree of self-validation because no external criterion exists to evaluate them. Goldman argues that these processes are “epistemically basic,” meaning they do not derive their justification from other processes but are instead justified by their general success in producing true beliefs.

Virtue Epistemology as an Alternative Solution to the Gettier Problem

Virtue epistemology offers a different approach, drawing analogies with virtue ethics. Instead of defining knowledge in terms of processes, it locates epistemic success in the intellectual character and abilities of the knower. Ernest Sosa characterizes knowledge as “apt belief,” which is true belief formed through the exercise of intellectual virtue.¹⁹ On this view, a belief counts as knowledge not merely because it comes from a reliable process but because it is the product of the agent's intellectual competence.

This agent-centered approach avoids the circularity of reliabilism. By grounding knowledge in the virtuous functioning of the intellect, virtue epistemology ties justification and truth together without appealing to an external standard of reliability that must itself be justified. It is not surprising that Zagzebski proffered that within the framework of virtue epistemology, “Knowledge arises from acts of intellectual virtue, which are motivated by the love of truth and reliably lead to it”.²⁰ Unlike Goldman's process reliabilism, virtue epistemology emphasizes the agent's responsibility and motivation, providing a richer account of why a belief is not just luckily true.

The strength of virtue epistemology lies in its capacity to block epistemic luck more effectively than reliabilism. In Gettier cases, the problem is that the belief happens to be true by accident, even though justified. Reliabilism cannot always exclude such cases, because a belief could be formed by a generally reliable process but still be accidentally true in a specific instance. By contrast, virtue epistemology requires that the truth of a belief be creditable to the intellectual virtue of the agent. As Sosa emphasizes, “A belief must be true through the exercise of intellectual ability, not merely through accident, if it is to count as knowledge”.²¹

This credit condition is crucial: if Smith in Gettier's Ford case believes that “either Jones owns a Ford or Brown is in Barcelona,” his true belief about Brown's location is not due to his intellectual virtue but to sheer coincidence. Thus, the belief fails the aptness condition. Virtue epistemology captures this intuition neatly, whereas reliabilism struggles to explain why the belief is not knowledge if the disjunctive inference is based on a generally reliable inferential process.

¹⁹. Sosa, *A Virtue Epistemology*, 83.

²⁰. Zagzebski, *Virtues of the Mind*, 270.

²¹. Sosa, *A Virtue Epistemology*, 90.

Conclusion

Goldman's reliabilism defines justification and knowledge in terms of the reliability of the cognitive processes involved in belief formation. As previously explored, his theory offers a naturalized, externalist account of justification, emphasizing the role of external factors – like the truth-conduciveness of a process – over internal accessibility to reasons or evidence. However, one of the significant criticisms against reliabilism which this paper engages is its vulnerability to epistemic circularity. The paper argues that, this circularity arises because the theory seems to rely on justifying the reliability of cognitive processes themselves by appealing to those very processes. For example, if one uses perception to confirm the reliability of perception, this appears to be circular reasoning. Reliabilism asserts that a process like perception or memory is reliable if it tends to produce true beliefs in a significant proportion of cases. But assessing whether a process is reliable often requires using that same process, which creates a self-referential problem.

One is right to argue, consequently, that this epistemic circularity undermines the justificatory power of reliabilism. If the justification for believing in the reliability of a process is itself derived from the process, it is unclear whether this justification is independently secure or valid. For instance, if one uses their memory to validate the reliability of their memory, they are assuming the very thing they aim to justify. This kind of circularity does not necessarily lead to incoherence, but it challenges the intuitive demand for justification to avoid reliance on the conclusion it seeks to establish.

Goldman acknowledges this issue and offers a nuanced response. He argues that epistemic circularity does not necessarily render a process unjustified or illegitimate. Instead, he contends that some degree of circularity may be unavoidable in any fundamental epistemological theory because all justificatory chains must eventually terminate somewhere. If reliabilism can provide a satisfactory explanatory framework for how reliable processes lead to true beliefs, it might still be epistemically valuable, even if it is circular in certain respects. It is based on this that Goldman emphasizes the distinction between *vicious* and *benign* circularity. He suggests that the type of circularity found in reliabilism could be benign, as it does not involve a logical fallacy but rather reflects the pragmatic necessity of relying on basic cognitive faculties to validate their own reliability.

Ultimately, one can logically argue that while reliabilism might be a well thought out response to the problems raised by Edmund Gettier, it does not completely rule out the problems raised by Gettier. While it provides a more robust response to the problem of epistemic luck, it falls prey in the problem of epistemic circularity. Goldman's claim that every theory will necessarily have to be circular was defeatist and attempts to leave not room for the possibility of a superior argument. By making reliability the centerpiece of knowledge, Goldman reintroduces the very dependence

on truth that reliabilism was meant to clarify. Virtue epistemology, however, offers a more promising response by grounding knowledge in the intellectual virtues of the agent. Unlike reliabilism, it does not merely ask whether the process is generally truth-conducive but whether the agent deserves credit for the truth of the belief. In this way, virtue epistemology provides a more comprehensive response to the Gettier problem, one that avoids circularity and better accounts for the normative dimension of knowledge.

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