

CHAPTER FOUR

IS JUSTIFIED TRUE BELIEF KNOWLEDGE

4.1 The Gettier Problem

Edmund Gettier's famous 1963 paper, "Is Justified True Belief Knowledge?", popularized the claim that the definition of knowledge as justified true belief had been widely accepted throughout the history of philosophy.³⁷ The extent to which this is true is highly contentious, since Plato himself disavowed the "justified true belief" view at the end of the *Theaetetus*.³⁸ Regardless of the accuracy of the claim, Gettier's paper produced major widespread discussion which completely reoriented epistemology in the second half of the 20th century, with a newfound focus on trying to provide an airtight definition of knowledge by adjusting or replacing the "justified true belief" view.

If someone (S) knows some fact (p), several conditions must obtain. A proposition that S does not even believe cannot be a fact that S knows. Therefore, knowledge requires belief. False propositions cannot be facts, and so cannot be known. Therefore, knowledge requires truth. Finally, S's being correct in believing that p, might merely be a luck or matter of fact. For instance, if you believe that your mother who is in a different location from you, is sick, and you have no reason for believing this except on the ground that the thought keep flashing in your mind. If it turns out that you are right, and your mother is truly ill, your being right about this is merely accidental. It is a matter of chance or luck (bad luck, in this case).³⁹ Therefore, knowledge requires a third component, one that excludes the aforementioned chance. This third condition is called justification.

Now, if we take these three conditions of knowledge to be not merely necessary but also sufficient, then: S knows that p if and only if p is true and S justifiably believes that p. According to this account, the three conditions, namely truth, belief, and justification, are individually necessary and collectively sufficient for knowledge of facts.⁴⁰

Recall that the justification condition is introduced to ensure that S's belief is not true merely because of luck. But what must justification be, if it can ensure that? It may be thought that S's belief that p is true not merely because of luck when it is reasonable or rational, from S's own point of view, to take p to be true. Or, it may be thought that S's belief is true not merely because of luck if that belief has a high objective probability of truth, i.e. if it is formed or sustained by

³⁷ D.M. Armstrong, *Belief, Truth, and Knowledge* (Cambridge: Cambridge University Press), 152.

³⁸ Alvin Goldman, "Reliabilism: What Is Justified Belief?". In Pappas, G.S. (ed.). *Justification and Knowledge* (Dordrecht, Holland: Reidel, 1979), 11.

³⁹ For an argument that true belief alone suffices for knowledge, see C. Sartwell, "Why Knowledge Is Merely True Belief", *The Journal of Philosophy*, 89(4), (1992), 167–168.

⁴⁰ M. Steup, *An Introduction to Contemporary Epistemology* (Upper Saddle River, NJ: Prentice Hall, 1996), 112.

reliable cognitive processes of faculties. But on the contrary, if justification is understood in either of three ways, it cannot ensure against luck.

This was precisely what Edmund Gettier demonstrated in showing that there are cases of JTB that are not cases of knowledge. It follows, therefore, that JTB is not sufficient for knowledge. Cases like that, known as Gettier's cases arise because neither the possession of adequate evidence, nor origination in reliable faculties, nor the conjunction of these conditions, is sufficient for ensuring that a belief is not true merely because of luck. Goldman presents a well known case:

Henry drives through a rural area in which what appear to be barns are mere barn façades (imagery), with the exception of just one. From the road he is driving on, these barns look exactly like real barns. But Henry happens to be looking at only one barn, and that is the only real barn there. Looking at this barn, he believes that there is a barn over there. Now, Henry's belief is true, and his visual experience makes it reasonable for him to hold that belief. Furthermore, his belief originates in a reliable cognitive process, namely normal vision of ordinary, recognizable objects in good lighting. Notwithstanding all these, Henry's belief is true in this case merely because of luck. If he had noticed one of the barn-facades instead, his belief may have been false. There is, therefore, broad agreement among epistemologists that Henry's belief does not qualify for knowledge.⁴¹

If JTB is, thus, not sufficient for knowledge, what further condition must be added to it? This is known as the Gettier problem. Some philosophers attempt to solve the Gettier problem by adding a fourth condition to the three conditions mentioned above, while others attempt to solve it by either replacing or refining the three justification conditions, and refining it depends, of course, on how we understand the justification condition itself. Some philosophers reject the Gettier problem altogether. They reject the aspiration to understand knowledge by trying to add something else to JTB. Some of these philosophers try to explain knowledge in terms of virtue. They say that to know a fact is for the truth of one's belief to manifest epistemic virtue.⁴² Some of them also try to explain knowledge by identifying it as a genus of many familiar species. They say that knowledge is the most general factive mental state operator.⁴³ Still other such philosophers try to explain knowledge by explaining its distinctive role in some other activity. Accordingly, to know a fact is for that fact to be a reason for which one can do or think something.⁴⁴ In the view of others, to know a fact is to be entitled to assert that fact.⁴⁵ Still,

⁴¹ A.I. Goldman, "Discrimination and Perceptual Knowledge", *The Journal of Philosophy*, 73(20), (1976), 773–791.

⁴² L.T. Zagzebski, *Virtues of the Mind: An Inquiry into the Nature of Virtue and the Ethical Foundations of Knowledge* (Cambridge: Cambridge University Press, 1996), 11; L.T. Zagzebski, "Reflective Knowledge in the Best Circles", *The Journal of Philosophy*, 94(8), (1997), 411.

⁴³ T. Williamson, *Knowledge and Its Limits* (Oxford: Oxford University Press, 2002), 11.

⁴⁴ J. Hyman, "How Knowledge Works", *The Philosophical Quarterly*, 49(197), (1999), 433.

⁴⁵ T. Williamson, *Knowledge and Its Limits*, 12.

according to others, to know a fact is to a trustworthy informant concerning whether than fact obtains.

Finally, there are those who think that the question “what is it to know a fact?” is misconceived. For them, the verb “to know” does not do the work of denoting anything, but does a different kind of work altogether, for instance, the work of assuring one’s listeners concerning some fact or other, or the work of indicating to one’s audience that a particular person is a trustworthy informant concerning some matter.⁴⁶

To summarize, Edmund Gettier called into question the common conception of knowledge as justified true belief. In just two and a half pages, Gettier argued that there are situations in which one’s belief may be justified and true, yet fail to count as knowledge. That is, Gettier contended that while justified belief in a true proposition is necessary for that proposition to be known, it is not sufficient.

According to Gettier, there are certain circumstances in which one does not have knowledge, even when all of the above conditions are met. Gettier proposed two thought experiments, which have become known as *Gettier cases*, as counterexamples to the classical account of knowledge.⁴⁷ One of the cases involves two men, Smith and Jones, who are awaiting the results of their applications for the same job. Each man has ten coins in his pocket. Smith has excellent reasons to believe that Jones will get the job (the head of the company told him); and furthermore, Smith knows that Jones has ten coins in his pocket (he recently counted them). From this Smith infers: “The man who will get the job has ten coins in his pocket.” However, Smith is unaware that he *also* has ten coins in his own pocket. Furthermore, it turns out that Smith, not Jones, is going to get the job. While Smith has strong evidence to believe that Jones will get the job, he is wrong. Smith therefore has a justified true belief that the man who will get the job has ten coins in his pocket; however, according to Gettier, Smith does not *know* that the man who will get the job has ten coins in his pocket, because Smith’s belief is “...true by virtue of the number of coins in *Jones’s* pocket, while Smith does not know how many coins are in Smith’s pocket, and bases his belief... on a count of the coins in Jones’s pocket, whom he falsely believes to be the man who will get the job.”⁴⁸ These cases fail to be knowledge because the subject’s belief is justified, but only happens to be true by virtue of luck. In other words, he made the correct choice (believing that the man who will get the job has ten coins in his pocket) for the wrong reasons. Gettier then goes on to offer a second similar case, providing the means by which the specifics of his examples can be generalized into a broader problem for defining knowledge in terms of justified true belief.

⁴⁶ E. Craig, *Knowledge and the State of Nature*, 66.

⁴⁷ Alvin Goldman, “Reliabilism: What Is Justified Belief?”, 11.

⁴⁸ “Certainty,” *Stanford Encyclopedia of Philosophy*. Retrieved 28 October, 2021.

4.2 Responses to Gettier's Problem

There have been various notable responses to the Gettier problem. Typically, they have involved substantial attempts to provide a new definition of knowledge that is not susceptible to Gettier-style objections, either by providing an additional fourth condition that justified true beliefs must meet to constitute knowledge, or proposing a completely new set of necessary and sufficient conditions for knowledge. While there have been far too many published responses for all of them to be mentioned, some of the most notable responses are discussed below.

4.2.1 No False Premises Response

One of the earliest suggested replies to Gettier, and perhaps the most intuitive ways to respond to the Gettier problem, is the “no false premises” response, sometimes also called the “no false lemmas” response. Most notably, this reply was defended by David Malet Armstrong in his 1973 book, *Belief, Truth, and Knowledge*.⁴⁹ The basic form of the response is to assert that the person who holds the justified true belief (for instance, Smith in Gettier's first case) made the mistake of inferring a true belief (e.g. The person who will get the job has ten coins in his pocket) from a false belief (e.g. Jones will get the job). Proponents of this response therefore propose that we add a fourth necessary and sufficient condition for knowledge, namely, the justified true belief must not have been inferred from a false belief.

This reply to the Gettier problem is simple, direct, and appears to isolate what goes wrong in forming the relevant beliefs in Gettier cases. However, the general consensus is that it fails.⁵⁰ This is because while the original formulation by Gettier includes a person who infers a true belief from a false belief, there are many alternate formulations in which this is not the case. Take, for instance, a case where an observer sees what appears to be a dog walking through a park and forms the belief: “There is a dog in the park”. In fact, it turns out that the observer is not looking at a dog at all, but rather a very lifelike robotic facsimile of a dog. However, unknown to the observer, there *is* in fact a dog in the park, albeit one standing behind the robotic facsimile of a dog. Since the belief “There is a dog in the park” does not involve a faulty inference, but is instead formed as the result of misleading perceptual information, there is no inference made from a false premise. It therefore seems that while the observer does in fact have a true belief that her perceptual experience provides justification for holding, she does not actually *know* that there is a dog in the park. Instead, she just seems to have formed a lucky justified true belief.⁵¹

4.2.2 Reliabilist Response

Reliabilism has been a significant line of response to the Gettier problem among philosophers, originating with work by Alvin Goldman in the 1960s. According to reliabilism, a belief is

⁴⁹Bimal Krishna Matilal, *Perception: An essay on Classical Indian Theories of Knowledge* (Oxford: India, 2002). The Gettier problem is dealt with in Chapter 4, Knowledge as a mental episode. The thread continues in the next chapter Knowing that one knows.

⁵⁰ Alvin Goldman, “Reliabilism: What Is Justified Belief?”

⁵¹ Ibid.

justified (or otherwise supported in such a way as to count towards knowledge) only if it is produced by processes that typically yield a sufficiently high ratio of true to false beliefs. In other words, this theory states that a true belief counts as knowledge only if it is produced by a reliable belief-forming process. Examples of reliable processes include standard perceptual processes, remembering, good reasoning, and introspection.⁵²

One commonly discussed challenge for reliabilism is the case of Henry and the barn façades.⁵³ In this thought experiment, a man, Henry, is driving along and sees a number of buildings that resemble barns. Based on his perception of one of these, he concludes that he is looking at a barn. While he is indeed looking at a barn, it turns out that all of the other barn-like buildings he saw were façades. According to the challenge, Henry does not *know* that he has seen a barn, despite his belief being true, and despite his belief having been formed on the basis of a reliable process (i.e. his vision), since he only acquired his reliably formed true belief by accident.⁵⁴ In other words, since he could have just as easily been looking at a barn façade and formed a false belief, the reliability of perception in general does not mean that his belief was not merely formed luckily, and this luck seems to preclude him from knowledge.

4.2.3 Infallibilist Response

One less common response to the Gettier problem is defended by Richard Kirkham, who has argued that the only definition of knowledge that could ever be immune to all counterexamples is the infallibilist definition.⁵⁵ To qualify as an item of knowledge, goes the theory, a belief must not only be true and justified, the justification of the belief must *necessitate* its truth. In other words, the justification for the belief must be infallible.

While infallibilism is indeed an internally coherent response to the Gettier problem, it is incompatible with our everyday knowledge ascriptions. For instance, as the Cartesian skeptic will point out, all of my perceptual experiences are compatible with a skeptical scenario in which I am completely deceived about the existence of the external world, in which case most (if not all) of my beliefs would be false.⁵⁶ The typical conclusion to draw from this is that it is possible to doubt most (if not all) of my everyday beliefs, meaning that if I am indeed justified in holding those beliefs, that justification is *not* infallible. For the justification to be infallible, my reasons for holding my everyday beliefs would need to completely exclude the possibility that those beliefs were false. Consequently, if a belief must be infallibly justified in order to constitute knowledge, then it must be the case that we are mistaken in most (if not all) instances in which we claim to have knowledge in everyday situations.⁵⁷ While it is indeed possible to bite the bullet and accept this conclusion, most philosophers find it implausible to suggest that we

⁵²Robert Nozick, *Philosophical Explanations* (Harvard University Press, 1981), 172.

⁵³ Alvin Goldman, "Reliabilism: What Is Justified Belief?"

⁵⁴D.M. Armstrong, *Belief, Truth and Knowledge* (Cambridge University Press, 1973).

⁵⁵ Simon Blackburn, *Think: A Compelling Introduction to Philosophy* (Oxford University Press), 43.

⁵⁶ Cf. Jennifer Nagel, "Knowledge as a Mental State", *Oxford Studies in Epistemology* Volume 4, (Oxford: Oxford University Press, 2013), 274,

⁵⁷ Anthony Brueckner, "Williamson on the primeness of knowing". *Analysis*. 62(275), (2002),197.

know nothing or almost nothing, and therefore reject the infallibilist response as collapsing into radical skepticism.⁵⁸

4.2.4 Indefeasibility Condition

Another possible candidate for the fourth condition of knowledge is *indefeasibility*. Defeasibility theory maintains that there should be no overriding or defeating truths for the reasons that justify one's belief. For example, suppose that person *S* believes he saw Tom steal a book from the library and uses this to justify the claim that Tom stole a book from the library. A possible defeater or overriding proposition for such a claim could be a true proposition like, "Tom's identical twin Sam is currently in the same town as Tom." When no defeaters of one's justification exist, a subject would be epistemologically justified.

In a similar vein, the Indian philosopher B.K. Matilal drew on the Navya-Nyāya fallibilist tradition to respond to the Gettier problem. Nyaya theory distinguishes between *know p* and *know that one knows p*—these are different events, with different causal conditions. The second level is a sort of implicit inference that usually follows immediately the episode of knowing *p* (knowledge *simpliciter*). The Gettier case is examined by referring to a view of Gangesha Upadhyaya (late 12th century), who takes any true belief to be knowledge; thus a true belief acquired through a wrong route may just be regarded as knowledge simpliciter on this view. The question of justification arises only at the second level, when one considers the knowledge-hood of the acquired belief. Initially, there is lack of uncertainty, so it becomes a true belief. But at the very next moment, when the hearer is about to embark upon the venture of *knowing whether he knows p*, doubts may arise. "If, in some Gettier-like cases, I am wrong in my inference about the knowledge-hood of the given occurrent belief (for the evidence may be pseudo-evidence), then I am mistaken about the truth of my belief—and this is in accordance with Nyaya fallibilism: not all knowledge-claims can be sustained."⁵⁹

4.2.5 Tracking Condition

Robert Nozick has offered a definition of knowledge according to which *S* knows that *P* if and only if:

- *P* is true;
- *S* believes that *P*;
- if *P* were false, *S* would not believe that *P*;
- if *P* were true, *S* would believe that *P*.⁶⁰

Nozick argues that the third of these conditions serves to address cases of the sort described by Gettier. He further claims this condition addresses a case of the sort described by D.M.

⁵⁸ Cf. Jennifer Nagel, "Knowledge as a Mental State", 293.

⁵⁹ Hilary Kornblith, *Knowledge and its Place in Nature* (Oxford: Oxford University Press, 2002).

⁶⁰ Robert Nozick, *Philosophical Explanations*, 177.

Armstrong:⁶¹ A father believes his daughter is innocent of committing a particular crime, both because of faith in his baby girl and (now) because he has seen presented in the courtroom a conclusive demonstration of his daughter's innocence. His belief via the method of the courtroom satisfies the four subjunctive conditions, but his faith-based belief does not. If his daughter were guilty, he would still believe her innocence, on the basis of faith in his daughter; this would violate the third condition.

The British philosopher Simon Blackburn has criticized this formulation by suggesting that we do not want to accept as knowledge beliefs which, while they track the truth (as Nozick's account requires), are not held for appropriate reasons. He says that "we do not want to award the title of knowing something to someone who is only meeting the conditions through a defect, flaw, or failure, compared with someone else who is not meeting the conditions."⁶² In addition to this, externalist accounts of knowledge, such as Nozick's, are often forced to reject closure in cases where it is intuitively valid.

An account similar to Nozick's has also been offered by Fred Dretske, although his view focuses more on relevant alternatives that might have obtained if things had turned out differently. Views of both the Nozick variety and the Dretske variety have faced serious problems suggested by Saul Kripke.⁶³

4.2.6 Knowledge-First Response

Timothy Williamson has advanced a theory of knowledge according to which knowledge is not justified true belief plus some extra conditions, but primary. In his book *Knowledge and its Limits*, Williamson argues that the concept of knowledge cannot be broken down into a set of other concepts through analysis—instead, it is *sui generis*. Thus, according to Williamson, justification, truth, and belief are necessary but not sufficient for knowledge. Williamson is also known for being one of the only philosophers who take knowledge to be a mental state;⁶⁴ most epistemologists assert that belief (as opposed to knowledge) is a mental state. As such, Williamson's claim has been seen to be highly counterintuitive.

Today there is still little consensus about whether any set of conditions succeeds in providing a set of necessary and sufficient conditions for knowledge, and many contemporary epistemologists have come to the conclusion that no such exception-free definition is possible.⁶⁵ However, even if justification fails as a condition for knowledge as some philosophers claim, the question of whether or not a person has good reasons for holding a particular belief in a particular set of circumstances remains a topic of interest to contemporary epistemology and is unavoidably linked to questions about rationality.

⁶¹ Duncan Pritchard, John Turri, *Stanford Encyclopedia of Philosophy*. Retrieved 28 October, 2021.

⁶² Duncan Pritchard, "Recent Work on Epistemic Value," *American Philosophical Quarterly*, 44 (2), (2007), 85–110.

⁶³ Cf. Alvin Goldman, "Reliabilism: What Is Justified Belief?"

⁶⁴ Cf. Jonathan L. Kvanvig, *The Value of Knowledge and the Pursuit of Understanding* (Cambridge University Press, 2003).

⁶⁵ *Ibid.*