

Suppose we want to know what knowledge is. How do we answer this question? One way to start is to consider our concept of knowledge. We try to figure out what knowledge is by systematically investigating our applications of the concept of “knowledge”. From this we try to arrive at a set of necessary and sufficient conditions for knowledge.

This was dominant approach to the study of knowledge, from the 1960s.

The Justified-True-Belief Analysis of Knowledge

According to one attractive account (sometimes credited to Plato’s Meno), knowledge can be analyzed as follows:

Subject S knows proposition P if and only if:

1. S believes P,
2. P is true, and
3. S is (adequately) justified in believing P.

This is called the JTB analysis of knowledge. Philosophers often claim that “before Gettier” this was the commonly accepted view and refer to it as the traditional view.

Gettier’s Counterexample

In a short, hugely influential paper published in 1963, Gettier presented two counterexamples to the JTB analysis of knowledge.

Gettier’s original case:

Smith has strong evidence for the proposition that Jones owns a Ford. ... Jones has at all times in the past within Smith's memory owned a car, and always a Ford, and that Jones has just offered Smith a ride while driving a Ford. Let us imagine, now, that Smith has another friend, Brown, of whose whereabouts he is totally ignorant. Smith selects three place names quite at random and constructs the following three propositions: (a) Either Jones owns a Ford, or Brown is in Boston. (b) Either Jones owns a Ford, or Brown is in Barcelona. (c) Either Jones owns a Ford, or Brown is in Brest-Litovsk. Each of these propositions is entailed by Jones owns a Ford. Imagine that Smith realizes [this] and proceeds to accept [(a), (b), and (c)] Smith has correctly inferred [all three] from a proposition for which he has strong evidence. Smith is therefore completely justified in believing each of these three propositions, Smith, of course, has no idea where Brown is.

But imagine now that two further conditions hold. First Jones does not own a Ford, but is at present driving a rented car. And secondly, by the sheerest coincidence, and entirely unknown to Smith, [Barcelona] happens really to be the place where Brown is. If these two conditions hold, then Smith does not know that (b) is true, even though (i) (b) is true, (ii) Smith believes that (b) is true, and (iii) Smith is justified in believing that (b) is true (Gettier, IJTBK?, with minor adjustments as indicated)

A more straightforward case, in the same spirit:

Suppose Tom, whom I know to be generally honest, has told me he has a puppy, I’ve seen him walking a puppy several times. I have also seen him receive a dog-owner magazine in his Faculty mailbox. On this basis I come to believe:

P1. Tom, who is a member of my Faculty, has a puppy.

My belief seems justified. From this I infer:

Q1. Someone in my Faculty has a puppy.

As it turns out, Tom was just faking dog-ownership with the help of the website “Borrow My Doggie”. However, Q1 is true because, unbeknownst to me, Huw Price just acquired a puppy. So I have a justified true belief in Q1, although I don’t know Q1.

It’s worth pointing out that Gettier makes two substantive assumptions in constructing his cases:

Fallibilism: It is possible for one to be justified in believing a false proposition.

Deductive transfer: If S is justified in believing P, and if P entails Q, and if S deduces Q from P and believes Q as a result of this deduction, then S is justified in believing Q.

It’s possible to challenge these assumptions. But as a matter of fact, the overwhelming response to Gettier has been to try to amend the JTB-analysis.

Amending JTB: No-False-Lemmas

Michael Clark suggested the following amendment:

Subject S knows proposition P if and only if:

1. S believes P,
2. P is true,
3. S is justified in believing P, and
4. all of S’s grounds for believing P are true.

This takes care of the original Gettier case. But it does not yield sufficient conditions for knowledge. Consider the following counterexample:

Fake Barn Country: I’m driving through the countryside. I look to my right and see a (real) barn in broad daylight, under good viewing conditions, etc. As a result, I come to believe that I just passed a barn. However, in the vicinity there are a large number of fake, papier-mâché barns, any of which would have fooled me into thinking it was a real barn.

Amending JTB: No-Defeater-Account

Subject S knows proposition P if and only if:

1. S believes P,
2. P is true,
3. S is justified in believing P, and
4. there is no true proposition Q such that, if S were justified in believing Q, then S would not be justified in believing P.

This helps with the fake barn case. But it’s vulnerable to other counterexamples:

Radio Case: Smith is sitting in his study with the radio off and he can clearly see that it is off, that no sounds are emanating from it, etc. At the time, Classic Hits 101 is playing the Neil Diamond song “Girl, You’ll Be a Woman Soon.” If Smith had the radio on and turned to that station, Smith would hear the song and immediately recognize it.

The No-Defeater Account yields the incorrect verdict that Smith does not know that the radio is off.

Amending JTB: Causal Account

Goldman suggests that in order for one's belief to constitute knowledge it must be causally related in the right way to the truth.

S knows that p iff S's belief that p is causally connected in an appropriate way with the fact that p.

Caveat: this can only apply to empirical knowledge.

The Causal-Account successfully avoids the original counterexamples. But it is vulnerable to the fake barn case. And it's tricky to get specify just what exactly the right causal connection is. Consider:

Blow to the Head: James slips on the ice outside and falls, hitting his head. The blow to his head scrambles his brain, causing him to form all sorts of wild beliefs, including that pink rats are stalking him, that $2 + 5 = 8$, and that he has just slipped on some ice. In fact, he has no recollection of having slipped. His belief that he has just slipped is caused by his having just slipped, but not in the appropriate way.

Amending JTB: Tracking Account

The No-Defeater Account points to the fact that knowledge has modal conditions. Whether we take someone to have knowledge depends not only on how things are but also on how they could have been. Based on this insight, Nozick suggests the following:

S knows P iff:

1. P is true;
2. S believes P;
3. if P weren't true, S wouldn't believe P (Sensitivity); and
4. if P were true, S would believe P (Safety).

Conditions (3) and (4) are meant to ensure that one's belief *tracks* the truth.

So formulated, the tracking theory gets the central idea right but faces some counterexamples. Nozick himself is aware of that. He considers the following:

the glance: "Suppose [a] person only happened to see a certain event.... He knows it occurred. Yet if he did not happen to glance that way..., he would not believe it, even though it occurred" (p. 258). Intuitively, the person knows. But Nozick's condition 4 fails.

the grandmother: "A grandmother sees her grandson is well when he comes to visit; but if he were sick or dead, others would tell her he was well to spare her upset. Yet this does not mean she doesn't know he is well (or at least ambulatory) when she sees him" (p. 259). Intuitively, the person knows. But Nozick's condition 3 fails.

Nozick proposes revising his theory to take into account the method by which a belief is formed. S knows P iff there is some method M such that:

1. P is true;
2. S believes P via M;
3. if P weren't true and S were to use M to arrive at a belief as to whether or not P is true, then S wouldn't believe P via M; and
4. if P were true and S were to use M to arrive at a belief as to whether or not P is true, then S would believe P via M.

It's tricky to find out a principled way to pinning down the method. And the account faces some counterexamples.

Kripke's barn: I'm driving through the countryside in my new Prius and see a red barn. However, it turns out that, although I passed a real barn, there are lots of fake barn facades scattered throughout the countryside. One catch: all of the fake barns are yellow. So I fail condition 3 with respect to the proposition that I passed a barn (there are nearby worlds in which I pass a facade instead of a barn, but believe that I passed a barn), but I meet all four conditions with respect to the proposition that I passed a red barn. However, this is counterintuitive: either I know both propositions or I know neither, but I don't know one but not the other

Giving up Hope

Zagzebski argues that:

“As long as the property that putatively converts true belief into knowledge is analyzed in such a way that it is strongly linked with the truth, but does not guarantee it, it will always be possible to devise cases in which the link between such a property and the truth is broken but regained by accident” (p. 209).

Assumption 1: we analyze knowledge as “true belief that possesses property x” (where property x is either a third constraint on knowledge that replaces the justification condition, or a combination of the justification condition and a fourth condition).

Assumption 2: the truth condition is not redundant in this analysis, so that a belief can have property x without being true.

Then Zagzebski provides the following recipe for constructing a Gettier counterexample to our (would-be) analysis of knowledge (pp. 209-210):

1. Start with a case in which a false belief possesses property x.
2. Make that belief possess property x to a great enough degree to satisfy the third (and possibly fourth) conditions on knowledge.
3. Emend the case so that, due to an element of luck, the belief ends up being true, though it still possesses property x to the same degree.

Readings:

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Goldman, A. I., 1967, “A Causal Theory of Knowing,” *The Journal of Philosophy*, 64(12): 357–372.

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