The Gettier problem

\[ \text{JTB} \not\Rightarrow K \]
Classical (JTB) analysis of knowledge

S knows that p if and only if
(i) p is true;
(ii) S believes that p;
(iii) S is justified in believing that p.
“Gettier cases”:
(i) p is true;
(ii) S believes that p;
(iii) S is justified in believing that p, but
(iv) The truth of p is not related to the justification of it. (The truth of p is accidental, or lucky.)

Since the belief is true just by luck, or accident, there seems to be something wrong with the belief. But knowledge is good belief, or belief with nothing (too much) wrong with it, so this belief isn’t knowledge.
Gettier has caused headaches ...

S knows that \( p \) iff

I. \( p \) is true,
II. \( S \) is justified [by some evidence \( e \)] in believing \( p \)…,
III. \( S \) believes that \( p \) on the basis of his justification and…
(ivg)…there is an evidence-restricted alternative \( Fs^* \) to \( S \)’s epistemic framework \( Fs \) such that
I. (i) ‘\( S \) is justified in believing that \( p \)’ is epistemically derivable from the other members of the evidence component of \( Fs^* \) and
II. (ii) there is some subset of members of the evidence component of \( Fs^* \) such that
III. (a) the members of this subset are also members of the evidence component of \( Fs \) and
IV. (b) ‘\( S \) is justified in believing that \( p \)’ is epistemically derivable from the members of this subset.

V. [Where \( Fs^* \) is an ‘evidence-restricted alternative’ to \( Fs \) iff
VI. (i) For every true proposition \( q \) such that ‘\( S \) is justified in believing not-\( q \)’ is a member of the evidence component of \( Fs \), ‘\( S \) is justified in believing \( q \)’ is a member of the evidence component of \( Fs^* \),
VII. (ii) for some subset \( C \) of members of \( Fs \) such that \( C \) is maximally consistent epistemically with the members generated in (i), every member of \( C \) is a member of \( Fs^* \), and
VIII. (iii) no other propositions are members of \( Fs^* \) except those that are implied epistemically by the members generated in (i) and (ii).]
Gettier scenario Type 1

**JF:** “It is possible for a person to be justified in believing a false proposition.”

**JD:** The consequences of a justified belief are justified.

(basic logic) A false belief can entail a true belief

Hence a belief may be justified, and true, when a person infers it from a justified false belief.

– “The man who will get the job has ten coins in his pocket”
– “Someone who works in my office owns a Ford”
Reject JF (fallibilism)?

• Many of us have infallibilist intuitions.
  – Can you really know \( p \) if you’re not even justifiably certain that \( p \)?
  – Do you know \( p \) if all your evidence is perfectly consistent with \( p \) being false?

• Yet if we reject fallibilism, then it appears that we are almost never justified in believing anything.

• E.g. I believe that my car is parked in the garage, etc., but of course it might have been stolen since I left it.
• Feldman claims that, for any ordinary knowledge claim (a “Typical Case”) it is possible to construct an imaginary “Unusual Case” in which the proposition is false, yet there’s no difference in the evidence accessible to the subject.

• What’s an example of that?

• Assuming access internalism, the view that justification supervenes on matters cognitively accessible to the subject, “the belief is either justified in both cases or else not justified in both cases.”
  – [N.B. Feldman refers to the “Same Evidence Principle” (SE, evidentialism) rather than internalism here.]
• In other words, rejecting JF takes us away from the “Standard View” of knowledge, and into the “Sceptical View”.
Reject JD?

JD: “justification can be transferred through deduction”

• Can one reject JD?

• “This seems absurd” (p. 30)
“No false grounds” proposal

• Michael Clark (1963)

NFG

S knows that p if and only if

(i) p is true,
(ii) S believes that p,
(iii) S is justified in believing p, and
(iv) all of S’s grounds for believing p are true.
Problem with NFG

• What counts as a “ground for believing p”? 
• Is “Nogot owns a Ford” included in Smith’s grounds, if Smith reasons as follows?

(N). Nogot, who works in Smith’s office, drives a Ford, has Ford ownership papers, etc. T

7. There is someone who works in Smith’s office who drives a Ford, has Ford ownership papers, etc. T

4. There is someone who works in Smith’s office who owns a Ford. T
“Stopped Clock” scenario

• You look at the town clock, and it shows 1:17
• You believe that it is 1:17 on this basis.
• The time is, in fact, 1:17.
• Yet the clock stopped some time ago. It always shows 1:17.
• Are there any false grounds in the stopped clock scenario?

The clock shows “1:17”  

∴ The time now is 1:17
• What about the assumption that *the clock is working*?

The clock shows “1:17”  

The clock is working  

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\[ \therefore \text{The time now is 1:17} \]
Multiple lines of evidence

• N.B. There could be *multiple lines of evidence* supporting \( p \), with only one involving false grounds.

• (E.g. Many clocks I’m now looking at show 1:17. All but one of these clocks are working.)

• E.g. “Smith has two independent sets of reasons for thinking that someone in his office owns a Ford. One set has to do with Nogot. Nogot says he owns a Ford, and so on. As usual, Nogot is merely pretending. But Smith also has equally strong reasons having to do with Havit. And Havit is not pretending. Havit does own a Ford, and Smith knows that he owns a Ford.”
Is NFG externalist?

• On the face of it, NFG (no false grounds) involves the standard (internalist) notion of justification. (A belief that’s justified on false grounds is still justified.)

• But, obviously, a person has no internal access to whether their justification is based on a false belief.
  – So a further externalist requirement of knowledge is introduced.

• One might think that NFG should be part of the notion of justification itself, rather than an extra 4th condition of knowledge. *That* would be externalist.
ND: No “defeaters” for $p$

S knows that $p$ if and only if:

(i) $p$ is true,
(ii) S believes that $p$,
(iii) S is justified in believing $p$, and
(iv) there are no defeaters for S’s justified belief that $p$.

A proposition $q$ is a defeater for S’s justified belief that $p$ just in case:

(i) $q$ is true and
(ii) if S were to learn $q$, S would not be justified in believing $p$. 

Defeater examples

• The fact that the clock has stopped is a defeater for the belief that it is now 1:17.

• The fact that Nogot doesn’t own a Ford is a defeater for Smith’s belief that someone in the office owns a Ford.

• Problem: some defeaters can themselves be defeated!
Defeater defeaters

- “Black sees her student Tom Grabit stick a tape in his coat pocket and sneak out of the library. She knows that Tom took the tape. Now, imagine that Tom’s crime is reported to Tom’s mother in her room at the psychiatric hospital. And she replies that Tom didn’t do it, that it was his twin brother Tim. And imagine further that he has no twin, that this is just another one of her delusions. Black is ignorant of all this.”

- “Tom’s mother said that Tom’s twin Tim took the tape.” T
- “Tom has no twin. Tom’s mother is delusional” T
Problem with counterfactuals?

• Smith is sitting in his study with his radio off and Smith knows that it is off. At the time, Classic Hits 101 is playing ... “Girl, You’ll Be a Woman Soon.” If Smith had the radio on and tuned to that station, Smith would hear the song and know that it is on.

• Is (9) below a defeater for Smith’s belief: *the radio is off*?

(9). Classic Hits 101 is now playing “Girl, You’ll Be a Woman Soon.”

We can suppose that the only way that Smith could come to learn (9) is by listening to his own radio. In that case, if Smith were to learn (9), then the radio would have had to have been on.
• “There are lots of possible variations on (ND), and perhaps some versions avoid the examples considered here. The other variations add more complexity to the analysis, and there are even more odd counterexamples proposed against them, but we will not pursue them here.”
No “Essential Dependence on Falsehood”

S knows that p if and only if

(i) p is true,
(ii) S believes that p,
(iii) S is justified in believing p, and
(iv) S’s justification for p does not essentially depend on any falsehood.

Qu. Is condition (iv) something that the subject has cognitive access to?
• “this idea [of essential dependence] has not been spelled out in complete detail”
Fake Barns Case (Carl Ginet)

• “Henry is driving in the countryside with his young son, identifying landmarks for him as they drive past. ‘Look, son— a cow! Over there—a tractor! There’s a barn over there, in that field!’

• Henry’s belief that there’s a barn in the field is caused by his perceptual experience of the actual barn.

• He doesn’t know this, but Henry is driving through Fake Barn County, where the zany locals have put up dozens of barn façades, false fronts that just look like barns when seen from the highway. It’s sheer luck that Henry is right now looking at the one real barn in the region”
• N.B. Not all philosophers have a clear intuition that Henry doesn’t know “There’s a barn over there, in that field”.

• Unlike the usual Gettier cases, the JTB in this case isn’t inferred from a JFB.

• Does S’s justification for there’s a barn “depend essentially” on a falsehood?

• Perhaps the falsehood that the other barn-looking things in the area are barns? (As Goldman originally told the story, the barn Henry points to is the first barn-looking thing he has encountered in Fake Barn County.)
• An aging forest ranger is living in the mountains, with a set of wind chimes hanging from a bough. The ranger is unaware of the fact that his hearing has been degenerating of late, and it has gotten to the point where he can no longer hear the chimes. He is also unaware that he is occasionally subject to small auditory hallucinations in which he *appears* to hear the wind-chime. On one occasion, he is thus appeared to and comes to believe that the wind is blowing. As it happens, the wind is blowing at that time and causing the chimes to ring.

• Does the belief that *the wind is blowing* depend essentially on a falsehood?
• Is that why the ranger lacks knowledge here?
Are these extra conditions *ad hoc*?

- What is an *ad hoc* theory?
- An *ad hoc* theory is generally the result of a theory being repeatedly modified.
- The theory *had* to be modified, since the original version (while perhaps simple and intuitive) was contradicted by experience, or suffered from counterexamples.
- The modifications are made solely to protect the theory from refutation. Elegance and intuitive plausibility are sacrificed for this goal.
- The final result then is an ugly hodgepodge of ideas.
Causal Theory of Knowledge (Goldman)

• Alvin Goldman notes that, in the original Gettier cases, there’s no causal connection between the JTB that $p$ and the fact that $p$.

• E.g. the Smith’s belief that someone owns a Ford isn’t caused by Havit owning a Ford.

• The belief that there are sheep in the field isn’t caused by the actual sheep (since they’re out of view) but by a wolf in sheep’s clothing.
Causal Theory of Knowledge (Goldman)

S knows that $p$ iff

(i) the fact $p$ is causally connected in an “appropriate way” with S’s believing $p$.

(‘Appropriate’ knowledge-producing causal processes include memory, perception, and inference.)

• Wow! Just one condition! (You could see it as 3)
• Qu: what makes these causal processes “appropriate”?
• E.g. Goldman allows claims about the future to be known, if formed by inductive inference. What makes such inferences justified?
Externalism

“But in spite of this historical consensus, many recent epistemologists have argued that the internalist conception of justification is fundamentally mistaken, that epistemic justification can depend in part or perhaps even entirely on matters to which the believer in question need have no cognitive access at all, matters that are entirely external to his or her cognitive viewpoint.”

Laurence Bonjour, *Epistemology*, p. 203

“My conviction is that views of this kind are merely wrong-headed and ultimately uninteresting evasions of the central epistemological issues.” (Bonjour, *In Defense of Pure Reason*, p. 1, n. 1.)
Where’s the justification condition?

Goldman’s causal theory can be expressed as

S knows that \( p \) iff

(i) \( p \) is true (so that there is a fact that \( p \))
(ii) \( S \) believes that \( p \)
(iii) the fact \( p \) is causally connected in an appropriate way with \( S \)’s believing \( p \).

• So the usual conditions (i) and (ii) implicitly present, and a third causal condition is added.
• But why no justification condition? (Isn’t justification even necessary for knowledge?)
“Goldman’s view is that there are many cases in which people should count as knowing things even if they can’t now justify themselves by pointing to any supporting evidence. Average educated adults might know, for example, that Julius Caesar was assassinated, even if they can’t remember where they learned this fact, or give you any supporting reasons for their claim.”

• Jennifer Nagel, pp. 51-52
Fake Barns Case (Carl Ginet)

• What about the fake barns case though? Isn’t this a problem for the causal theory?
Fake Barns Case

• The fake barns case led Goldman to modify the causal theory, and create the (now) standard externalist theory of knowledge, the reliability theory.

• This says (roughly) that, for a belief to be knowledge, it must be probably true in the objective (rather than epistemic) sense of probability.
E.g. David Armstrong

“... there must be a law-like connection between the state of affairs $Bap$ [i.e., a’s believing that $p$] and the state of affairs which makes ‘$p$’ true, such that, given $Bap$, it must be the case that $p$.”

*(Belief, Truth and Knowledge (1973), p. 166)*

Bonjour comments: This is what Armstrong calls the “thermometer-model” of non-inferential knowledge: just as the readings of a reliable thermometer lawfully reflect the temperature, so one’s basic beliefs lawfully reflect the states of affairs that make them true. A person whose beliefs satisfy this condition is in effect a reliable cognitive instrument; and it is, according to Armstrong, precisely in virtue of this reliability that these basic beliefs are justified.
• Note that reliabilists like Armstrong often take reliabilism to solve an important difficulty for foundationalism:
  – How are basic beliefs justified?

(More about this later!)
Internalism

“… epistemic justification or reasonableness can … depend only on matters which are within the cognitive grasp of the believer in question, that is, of which he or she is or at least can be in some way justifiably aware: matters that are, as it might be put, accessible from within his or her first-person cognitive perspective.”

Bonjour, Epistemology, p. 203
Internalism

E.g. an internalist will accept the Same Evidence Principle

SE If two subjects $S_1$ and $S_2$ have exactly the same evidence concerning $p$, then $S_1$ is justified in believing $p$ if and only if $S_2$ is justified in believing $p$. 
Basic challenge for externalism

“Indeed, if features of a belief that are in this way external to the believer’s cognitive perspective can yield justification, why could truth itself not play this role? Surely the fact that a belief is true is, in a way, the best possible reason for holding it …

In fact, no externalist is willing to go quite this far, but in a way that merely heightens the puzzling character of the externalist view: why should some external facts and not others be relevant to justification?”

Bonjour, Epistemology, p. 204, emphasis added.
Naturalistic approach to epistemology

• A naturalistic approach to epistemology considers the human mind (or brain) to be a knowledge-producing system, and examines how it works.

• This “naturalistic stance” views the human mind from the outside, and takes account of factors that the mind itself might not have access to.

• “The most extreme view along these lines recommends replacing traditional epistemology with the psychological study of how we reason.” – SEP. (e.g. Quine has such a view)
“Epistemology, or something like it, simply falls into place as a chapter of psychology and hence of natural science. It studies a natural phenomenon, viz., a physical human subject. This human subject is accorded a certain experimentally controlled input — certain patterns of irradiation in assorted frequencies, for instance — and in the fullness of time the subject delivers as output a description of the three-dimensional external world and its history....”

(Quine, “Epistemology Naturalized”, 1969: 82–3)
The “engineering standpoint”

• A very different ‘naturalistic’ approach to epistemology is proposed by Alvin Plantinga in *Warrant and Proper Function*, 1993.

• Plantinga takes an “engineering standpoint” toward human cognitive processes, regarding them as having a “design plan”.

• Within this framework, Plantinga proposes that the key ingredient of knowledge is *warrant* rather than justification. $K = WTB$. 
What is ‘design’?

- For most of the book, Plantinga allows that either God or some process of evolution may be the designer.
- ‘Design’ here refers to an observable fact, rather than a speculative hypothesis. Whatever you think about the origin of species, all living things are obviously products of design (albeit fantastically high-tech design, well beyond our present understanding).
- Towards the end of the book, Plantinga argues that evolution (as conceived by neo-Darwinians) would not account for the reliability of our cognitive processes. Hence God is the designer.
Plantinga says that a belief, B, is warranted if:

(1) the cognitive faculties involved in the production of B are functioning properly...;
(2) your cognitive environment is sufficiently similar to the one for which your cognitive faculties are designed;
(3) ... the design plan governing the production of the belief in question involves, as purpose or function, the production of true beliefs...; and
(4) the design plan is a good one: that is, there is a high statistical or objective probability that a belief produced in accordance with the relevant segment of the design plan in that sort of environment is true.
An “authoritarian” theory of knowledge?

• Roughly speaking, *Knowledge is authorized belief*, i.e. belief that is authorized by the designer. (Authorized by the truth?)

• (N.B. When a mechanism is working properly its output is authorised by, and carries the authority of, its designer.)
  – This is similar to the way a written text carries the authority of the author, but only so long as the text has not be altered or corrupted.

• Plantinga (when asked about views of this sort): “I guess a lot would depend on the credentials and aims of the designer. If the designer is God, fine. But if it’s Satan, or that committee of infant deities, . . .”
Chain of authorization

• Imagine an army where the ultimate authority is the General. The General issues orders that the privates must obey. But the privates never deal directly with the General. They get their orders from their own Captain (who receives orders from the General).

• Suppose the General sends an order to the Captain (to retreat) but the order doesn’t get through. The Captain, lacking an order, makes his own decision to retreat. He orders the privates to retreat, pretending that the order came from the General.
  – Is the retreat authorized?
• In a similar way, the idea I have about knowledge is that it must be authorized by the truth, with every link of the chain being intact and working properly.

• Fact that \( p \) \( \rightarrow \) Cognitive apparatus \( \rightarrow \) Belief that \( p \)
Bonjour’s question for externalists

**Qu:** “why should some external facts and not others be relevant to justification?”

– E.g. why not make the *truth* of \( p \) sufficient for \( p \) to be justified?

**Ans:** If knowledge is *authorized* belief, then knowledge arises just when authorization is transferred down the causal chain. External states of affairs are relevant to knowledge only when they’re part of that chain.
• E.g. suppose there’s a leopard in the tree up ahead, planning to attack you when you walk underneath. The leopard is totally invisible, etc.

• As a result of some kind of leopard neurosis, induced by childhood trauma, you believe there’s a leopard in the tree ahead.

• Your belief is true, but not authorised.

• Reliability is necessary for warrant, since it is part of the design plan.
Is there a role for justification?

• What are epistemic duties, and what role do they play in knowledge formation, from an engineering standpoint?

• For example, why not design human brains in such a way that all our beliefs form involuntarily, free of conscious management (or ‘meddling’)?

• In order to integrate multiple channels of information?
  – (multiple senses, memory, background knowledge, reasoning)
E.g. response to defeaters

• If Black finds out what Tom’s mother said, then Black no longer *knows* that Tom stole the tape?
• A good thinker retracts their belief in that case.