

# The Gettier Problem

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## Search for „gettier problem“ on [www.philpapers.org](http://www.philpapers.org). Some results:

- Brent G. Kyle (forthcoming). Knowledge as a Thick Concept: Explaining Why the Gettier Problem Arises. *Philosophical Studies*.
- Ian M. Church (2013). Manifest Failure Failure: The Gettier Problem Revived. *Philosophia* 41 (1):171-177.
- Allan Hazlett, A Gricean Approach to the Gettier Problem.
- B. Brogaard (2004). Contextualism, skepticism, and the Gettier problem. *Synthese* 139 (3):367 - 386.
- John Turri (2011). Manifest Failure: The Gettier Problem Solved. *Philosophers' Imprint* 11 (8).
- L. Floridi (2004). On the logical unsolvability of the Gettier problem. *Synthese* 142 (1):61 - 79.
- Timothy McGrew & Lydia McGrew (1998). Internalism and the Collapse of the Gettier Problem. *Journal of Philosophical Research* 23:239-256.
- Engel (2000). Internalism, the Gettier Problem, and Metaepistemological Skepticism. *Grazer Philosophische Studien* 60:99-117.
- Daniel Howard-Snyder (2003). Infallibilism and Gettier's Legacy. *Philosophy and Phenomenological Research* 66 (2):304-327.
- Arkadiusz Chrudzimski (2000). Ist das Gettier-Problem wirklich ein Problem? *Conceptus* 33 (82):45-56.
- Igor Douven (2005). A contextualist solution to the Gettier problem. *Grazer Philosophische Studien* 69 (1):207-228.
- Stephen Hetherington (2001). A Fallibilist and Wholly Internalist Solution to the Gettier Problem. *Journal of Philosophical Research* 26:307-324.
- Richard L. Kirkham (1984). Does the Gettier problem rest on a mistake? *Mind* 93 (372):501-513.
- Elijah Chudnoff (2011). What Should a Theory of Knowledge Do? *Dialectica* 65 (4):561-579.
- Sven Bernecker (2011). Keeping track of the Gettier problem. *Pacific Philosophical Quarterly* 92 (2):127-152.
- Adrian Heathcote (2006). Truthmaking and the Gettier Problem. In Stephen Hetherington (ed.), *Aspects of Knowing: Epistemological Essays*.
- Richard Creath (1992). Induction and the Gettier problem. *Philosophy and Phenomenological Research* 52 (2):401-404.
- Scott Sturgeon (1993). "The Gettier Problem". *Analysis* 53 (3):156-164.
- Don S. Levi (1995). The Gettier Problem and the Parable of the Ten Coins. *Philosophy* 70 (271):5-.
- Richard Greene & N. A. Balmert (1997). Two notions of warrant and plantinga's solution to the Gettier problem. *Analysis* 57 (2):132-139.
- S. Cohen (2011). The Gettier Problem in informed consent. *Journal of Medical Ethics* 37 (11):642-645.
- Lukasz Lozanski (2007). The Gettier Problem. *Philosophy Now* 63:28-29.
- James Summerford (2000). Virtue Epistemology and the Gettier Problem. *Southern Journal of Philosophy* 38 (2):343-353.
- Thomas Morawetz (1975). Skepticism, Induction and the Gettier Problem. *Journal of Critical Analysis* 6 (1):9-13.
- John Turri (forthcoming). A Conspicuous Art: Putting Gettier to the Test. *Philosophers' Imprint*.
- Emerson Carlos Valcarenghi (2011). Os anulabilismos de Klein e de Swain e o problema de Gettier. *Principia* 14 (2):175-200.
- Stephen Hetherington (2005). Gettier problems. *Internet Encyclopedia of Philosophy*.
- Guy Axtell (2001). Epistemic luck in light of the virtues. In Abrol Fairweather & Linda Zagzebski (eds.), *Virtue Epistemology: Essays on Epistemic Virtue and Responsibility*.

...and many more!

## Knowledge as **Justified True Belief**

S knows that  $p$  iff

- i.  $p$  is true;
- ii. S believes that  $p$ ;
- iii. S is justified in believing that  $p$ .

**Descriptive knowledge**, also **declarative knowledge** or **propositional knowledge**, is the type of [knowledge](#) that is, by its very nature, expressed in declarative sentences or indicative propositions. This distinguishes descriptive knowledge from what is commonly known as "know-how", or [procedural knowledge](#) [...], and "knowing of", or [knowledge by acquaintance](#) ...“

[http://en.wikipedia.org/wiki/Descriptive\\_knowledge](http://en.wikipedia.org/wiki/Descriptive_knowledge)

**W.V.O. Quine: Doubts that an isolated statement can be true or false:**

**The dogma of reductionism survives in the supposition that each statement, taken in isolation from its fellows, can admit of confirmation or infirmation at all. My countersuggestion, issuing essentially from Carnap's doctrine of the physical world in the *Aufbau*, is that our statements about the external world face the tribunal of sense experience not individually but only as a corporate body.<sup>17</sup>**

# Knowledge as true opinion with explanation - Plato

SOCRATES: [...] And so, Theaetetus, knowledge is neither sensation nor true opinion, **nor yet definition and explanation accompanying and added to true opinion?**

Platon: *Theaetetus* [210b]

## 1<sup>st</sup> Gettier counterexample (Edmund Gettier, 1963)

### *Case I:*

Suppose that Smith and Jones have applied for a certain job. And suppose that Smith has strong evidence for the following conjunctive proposition:

(d) Jones is the man who will get the job, and Jones has ten coins in his pocket.

[...] Proposition (d) entails:

(e) The man who will get the job has ten coins in his pocket.

[...] But imagine, further, that unknown to **Smith, he himself, not Jones, will get the job**. And, also, **unknown to Smith, he himself has ten coins in his pocket**. [...] In our example, then, all of the following are true: (i) (e) is true, (ii) Smith believes that (e) is true, and (iii) Smith is justified in believing that (e) is true. But it is equally clear that Smith does not know that (e) is true; for (e) is true in virtue of the number of coins in Smith's pocket, while Smith does not know how many coins are in Smith's pocket [...]"



## The Principle of Epistemic Closure:

If person  $S$  knows  $p$ , and  $p$  entails  $q$ , then  $S$  knows  $q$ .

<http://www.smbc-comics.com/index.php?db=comics&id=2458>

<http://plato.stanford.edu/entries/closure-epistemic>

## Relevance of the Gettier Problem

The Gettier counterexamples show that knowledge does not only depend on only one external factor (truth), but on a further one (**the objective non-fortuity of truth**).

The Gettier counterexamples are conceived as cases of **epistemic luck**. Smith's belief is true, but only because he is lucky. There is too much luck involved.

The Gettier counterexamples prove that the **Standard Analysis of Knowledge is insufficient**.



## 2<sup>nd</sup> Gettier counterexample (Gettier, 1963)

### *Case II:*

Let us suppose that Smith has strong evidence for the following proposition:

(f) Jones owns 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:

- (g) Either Jones owns a Ford, or Brown is in Boston.
- (h) Either Jones owns a Ford, or Brown is in Barcelona.
- (i) Either Jones owns a Ford, or Brown is in Brest-Litovsk.

[...] ...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, the place mentioned in proposition (h) happens really to be the place where Brown is.”

## **Fake barn-example** (Alvin Goldman, 1976)

Henry is driving in the country-side with his son. For the boy's edification Henry identifies various objects on the landscape as they come into view. "That's a cow," says Henry, "That's a tractor," "That's a silo," "That's a barn," etc. Henry has no doubt about the identity of these objects; in particular, he has no doubt that the last-mentioned object is a barn, which indeed it is.

[...] Suppose we are told that, unknown to Henry, the district he has just entered is full of papier-mâché facsimiles of barns. [...] ...if the object on that site were a facsimile, Henry would mistake it for a barn. Given this new information, we would be strongly inclined to withdraw the claim that Henry knows the object is a barn. How is this change in our assessment to be explained?

# The Gettier Problem – medicine-related examples

## Thermometer

Harald takes a thermometer out of a box which contains some thermometers and measures the temperature of his child. The thermometer works correctly, and Harald acquires a justified true belief about the temperature of his child. But let's suppose now that all the other thermometers in the box are defect...

Thomas Grundmann: *Analytische Einführung in die Erkenntnistheorie*. De Gruyter, Berlin-New York 2008, p. 144.

## Evaluation of HSP 27 serum levels

Matthias measures HSP 27 serum levels using an ELISA-kit from R&D. The ELISA-kit is reliable and produces true results. But let's suppose that other ELISA-kits from other companies show results which differ from that of the R&D Elisa-kit.

## The Gettier Problem in Informed Consent

„Mr A sees an ophthalmologist for a persistent deterioration in the sight of his right eye. The doctor tells Mr A that he has a cataract and recommends surgery. He explains [...] Mr A listens to the detailed explanations; he is an intelligent man and he understands perfectly well. [...] In the evening Mr A plays poker in the local bar. Those who lose all their money can keep playing on the condition that they fulfil whatever the winner requests of them should they lose again. Mr A feels strongly that his next hand will be a winning one and agrees to the terms. He loses again and is asked to undergo eye surgery.“

### All three conditions for Informed Consent are fulfilled:

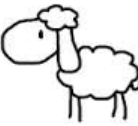
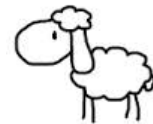
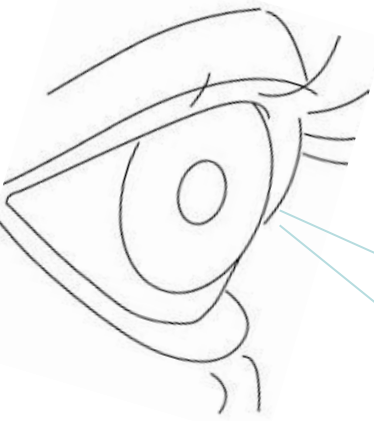
- (i) The patient is competent.
- (ii) The doctor did a good job in explaining the situation to him.
- (iii) The patient gave his free consent.

# The Gettier Problem as a conflation of perspectives

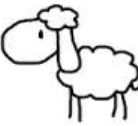
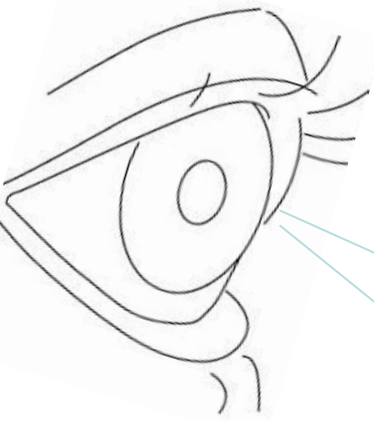
## Sheep in the field-example (Roderick Chisholm, 1966)

The sheep in the field (Chisholm 1966/1977/1989). Imagine that you are standing outside a field. You see, within it, what looks exactly like a sheep. What belief instantly occurs to you? Among the many that could have done so, it happens to be the belief that there is a sheep in the field. And in fact you are right, because there is a sheep behind the hill in the middle of the field. You cannot see that sheep, though, and you have no direct evidence of its existence. Moreover, what you are seeing is a dog, disguised as a sheep. Hence, you have a well justified true belief that there is a sheep in the field. But is that belief knowledge?

# The Gettier Problem as a conflation of perspectives



# The Gettier Problem as a conflation of perspectives



## Three strategies

1. Strategy: It is denied that the Gettier examples are real counterexamples to the Standard Analysis of Knowledge. **It is argued that one of the three conditions is not fulfilled.**
2. Strategy: The Gettier cases are accepted as counterexamples to the Standard Analysis of Knowledge. It is tried to complete the Standard Analysis of Knowledge by **adding a forth condition.**
3. Strategy: The Gettier cases are accepted as counterexamples to the Standard Analysis of Knowledge. **It is tried to replace the justification-condition by another condition.**



**Gettier Problem**

„**Quartettlösungen**“ (Knowledge = JTB + G)

Knowledge = Justified true belief + X. X = the knowledge-generating factor.

„**Terzettlösungen**“

The Standard Analysis of Knowledge is taken to be neither sufficient nor necessary. The internal justification condition is replaced by an external knowledge-generating factor.

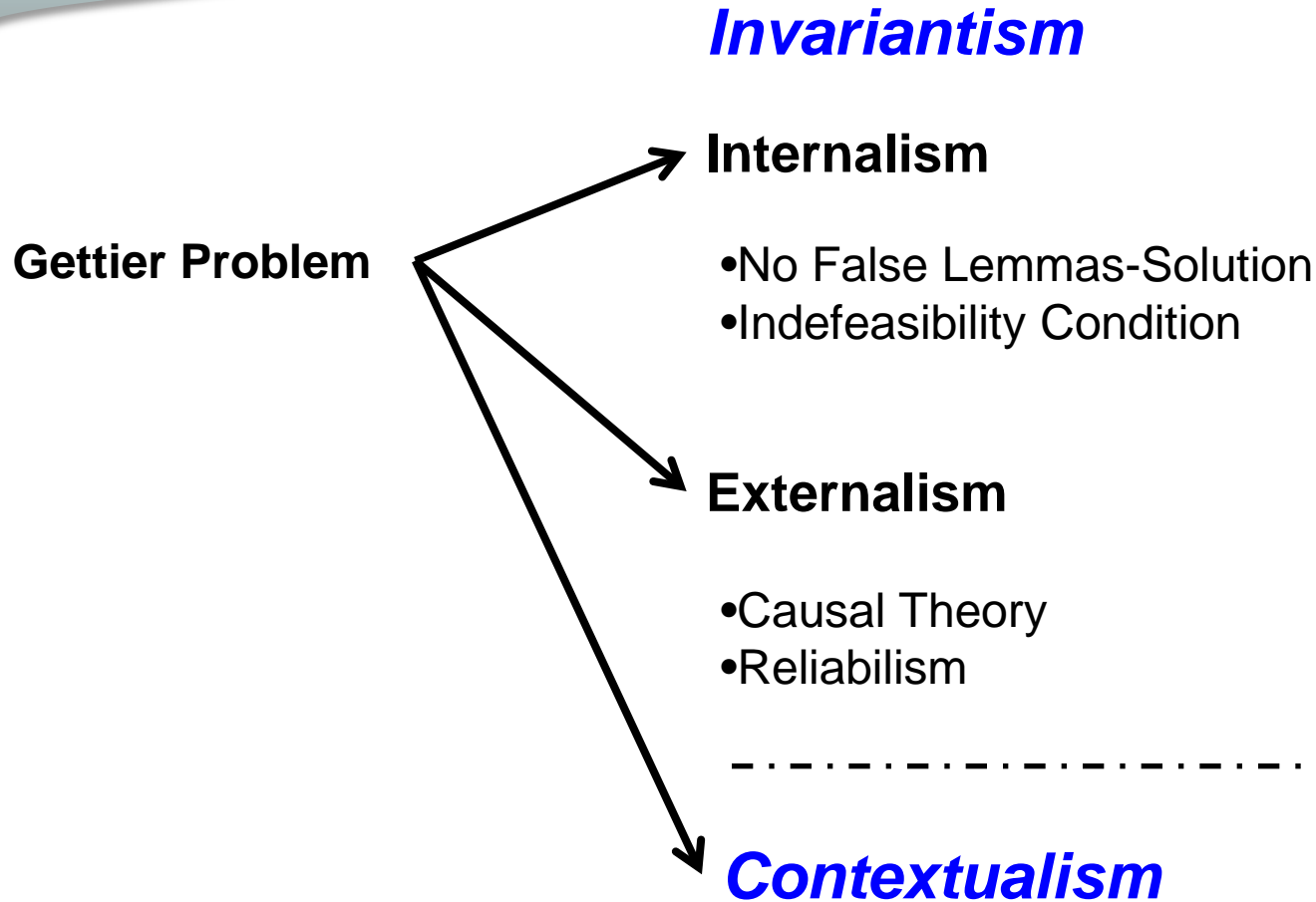
## Gettier Problem

### Internalism

„The basic idea of internalism is that justification is solely determined by factors that are *internal* to a person.“

### Externalism

„Externalists deny this, asserting that justification depends on additional factors that are external to a person. A significant aspect of the I-E debate involves setting out exactly what counts as internal to a person.“



## 1. No false lemmas/no false premises-solution (Clark 1963, Armstrong 1973)

1. S believes that p
2. S is justified in believing p.
3. P is true.
4. S's justification is not be based on a false premise.

### Objection:

It does not apply to Goldman's fake barn-example.

## 2. No defeaters theory (Keith Lehrer and Thomas Paxson 1969)

1. S believes that p
2. S is justified in believing p.
3. P is true.
4. S's justification should be indefeasable by any (relevant!) facts.

### **Objection:**

There can be misleading defeaters (Anfechtungen).

How can relevant facts be discriminated from irrelevant facts?

## Tom Grabit-example

You see Tom Grabit hide a book underneath his jacket and sneak out of Bobst Library. On the basis of this, you form the justified belief that Tom stole a library book. As it happens, your belief is true. However, unbeknownst to you, Tom's mother was going around today telling people that Tom was thousands of miles away, and that Tom's evil twin John was visiting NY. The fact that Tom's mother said this is a potentially defeating piece of evidence. If you were to learn of it, it would defeat your justification for believing that Tom stole the book. However, as it turns out, it really was Tom who stole the book. Tom has no twin brother and his mother is a compulsive liar.

### 3. Alvin Goldman (1967): Knowledge as appropriately caused belief

1. S believes that p
2. P is true
3. The fact that makes p true causes S's belief that p.

#### Objections:

The causal theory cannot explain why the fake barn-example is not a case of knowledge.

The causal theory cannot explain mathematical knowledge.

## 4. Alvin Goldman (1976): Relevant alternatives - theory

1. S believes that p
2. This belief is caused by a process
3. This process takes into account all relevant factual and counterfactual situations.

### Objection

It is not clear which factual and counterfactual situations are relevant. (Grundmann: *Analytische Einführung in die Erkenntnistheorie*, p 147)



## 5. Robert Nozick (1981): Truth-tracking theory of knowledge

1. P is true
2. S believes that p
3. if p were true, S would believe that p
4. if p weren't true, S wouldn't believe that p

### Objections:

Stability of belief is not necessary for knowledge.

Sensitivity of belief (without regard to the method according to which it was formed) is not necessary for knowledge. (Grundmann: *Analytische Einführung in die Erkenntnistheorie*, p 143)

## 6. Fred Dretske (1981): Conclusive reasons

1.  $p$  is true
2.  $S$  believes that  $p$
3.  $S$ 's belief that  $p$  is caused by a reason  $r$  in the right manner
4. Reason  $r$  is a conclusive reason for  $p$ .

### Objections:

Knowledge of necessary truths is impossible.

The principle of epistemic closure for knowledge cannot be universal. (Grundmann: *Analytische Einführung in die Erkenntnistheorie*, p 146)

## (7) Contextualism (Stewart Cohen, Keith DeRose, and others):

### Polio is caused by a virus

Suppose we are interested in whether Jones, an ordinary non-medically trained person, has the general information that **polio is caused by a virus**. If his response to our question is that he remembers the paper reporting that Salk said it was, then this is good enough. He has performed adequately given the issue-context. But **suppose the context is an examination for the M. D. degree**. Here we expect a lot more. If the candidate simply said what Jones did, we would take him as being very deficient in knowledge. Thus relative to one issue-context a person may be justified in believing *h* but not justified relative to another context. (*Ibid.*, 215)