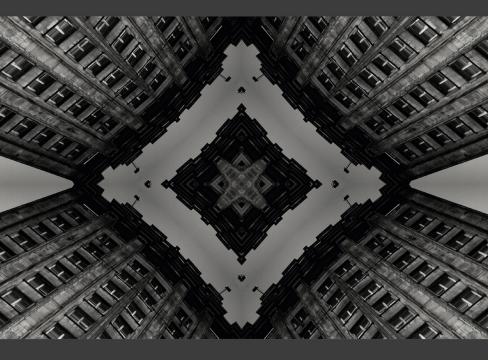


Epistemology

50 Puzzles, Paradoxes, and Thought Experiments



KEVIN MCCAIN

EPISTEMOLOGY: 50 PUZZLES, PARADOXES, AND THOUGHT EXPERIMENTS

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Kevin McCain is Associate Professor of Philosophy at the University of Alabama at Birmingham. His published works include *Evidentialism and Epistemic Justification* (2014), *The Nature of Scientific Knowledge: An Explanatory Approach* (2016), (with Ted Poston) *Best Explanations: New Essays on Inference to the Best Explanation* (2017), and (with Kostas Kampourakis) *Uncertainty: How It Makes Science Advance* (2019).

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EPISTEMOLOGY: 50 PUZZLES, PARADOXES, AND THOUGHT EXPERIMENTS

Kevin McCain



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PREFACE

Welcome to the world of epistemology! This book brings together fifty of the most important and widely discussed puzzles, paradoxes, and thought experiments in epistemology. The entries are grouped around themes, but they can be read in any order. Additionally, there are cross-references throughout to help readers connect relevant points of contact between various entries. Each entry includes a brief discussion of the major responses to the puzzle, paradox, or thought experiment described so that readers can get a sense not only of the example itself but also of the positions on it that have emerged in the epistemological literature. The suggested readings that accompany each entry offer readers direction for diving more deeply into the issues surrounding entries that pique their interest.

Given the structure of this book, there is a variety of ways that it might be used in an epistemology or general philosophy course or even for individual study. One way would be to pair this book with an epistemology textbook so that students can explore the thought experiments and puzzles that motivate the general theories covered in the textbook. Another way would be to use this book as the sole primary text using the entries to spark engaging class discussions. Of course, there are many other ways that one might use this book in class or in one's own study. The entries in this book are accessible to

the beginning epistemology student, and yet informative enough—especially with the suggested readings—to be a handy resource for researchers.

I have many people to thank for their help with this project. Andy Beck enthusiastically supported this project from the start, and he, like the entire team at Routledge, was a pleasure to work with at every stage of the process. Adam Carter and Jon Matheson pointed me to key literature for several of the entries. Maddie Burchfield, Peter Graham, Nikolas Pham, Parker Rose, Karthik Sadanand, Tanvee Sinha, and anonymous reviewers graciously provided very helpful feedback on an earlier draft of the book. Ted Poston is owed a special debt of gratitude for this project. He came up with the idea for this book and, when it turned out that he would not be in a position to be my coauthor, encouraged me to go solo. Finally, Molly, Kaison, and Wallace gave me the love and support needed to make any project worthwhile. Thank you all.

Of course, while I have endeavored to make sure that each and every claim I make in this book is accurate and I believe each of these claims, surely some errors remain. Any errors that remain are entirely my own and not attributable to any of the wonderful people mentioned in the previous paragraph. (If you think it is strange for me to admit that I think every claim I make in this book is true and at the same time say that there are some errors, see entry 49 on the Preface Paradox.)

PART I

NATURE OF KNOWLEDGE

GENERAL BACKGROUND: THE TRADITIONAL ACCOUNT OF KNOWLEDGE

The entries to follow begin with a bit of background information to help situate and make clear the particular puzzles, paradoxes, and thought experiments discussed. However, some general background on the traditional account of knowledge is helpful to have in hand for most all of the entries in this book. So, let's begin by taking a brief look at how knowledge has been understood for many years.

Epistemologists have distinguished between three primary kinds of knowledge: acquaintance knowledge, knowledge-how, and propositional knowledge. Although our focus for this background, and most of the book, is the last sort, it will be helpful to take a quick look at the other two as well.

Acquaintance knowledge is knowledge you have of people and things you are familiar with personally. For example, let's say that you have a dog, which your new acquaintance, Fred, has never seen. You tell Fred all sorts of facts about your dog. She is a Yorkshire Terrier. She is ten (human) years old. And so on. After you share this information about your dog, Fred will know a lot of facts about her. But, Fred doesn't know your dog. After all, Fred has never seen your dog or interacted

with her in any way. You know your dog in a way that Fred does not. You have acquaintance knowledge of your dog; Fred doesn't.

Knowledge-how is different from acquaintance knowledge, and it at least seems to be different from knowledge of facts. Knowledge-how is the sort of knowledge common of abilities or skills. You know how to swim. You know how to throw a baseball. And so on. Knowing how to do something is different from having acquaintance knowledge, and it seems different from merely knowing facts. For instance, you might know all sorts of facts about how to swim and yet be in danger of drowning if you're ever thrown into deep water! Conversely, you might be an excellent swimmer but completely incapable of expressing your ability to swim in terms of facts about swimming. (Relatively recently, a debate has emerged concerning whether knowledge-how reduces to knowledge of facts, but we can set that aside for now—traditionally the two have been taken to be different.)

Propositional knowledge (which we will simply refer to as "knowledge"in the entries that follow) is knowledge of facts. This knowledge is called "propositional" because we mentally represent (think about) facts by way of thinking of propositions. In simplest terms propositions are what declarative sentences mean. Consider these three declarative sentences: "The dog is brown", "El perro es cafe", and "Der Hund ist braun". These three sentences are all declarative, but they are very different. They contain different words, and they are in different languages (English, Spanish, and German, respectively). However, they all mean the same thing. They all mean what we express with the English sentence "The dog is brown". How can they mean the same thing though? After all, the sentences look completely different, and if they were spoken out loud, they would sound completely different. The answer to this question is that although these declarative sentences are different in important ways, they express the same proposition (which represents the same fact, namely that the dog is brown). It is the fact represented by the proposition that you know when you have propositional knowledge (for simplicity, we will later simply speak of knowing a true proposition). This is why an English speaker, a Spanish speaker, and a German speaker might know that the same dog is brown, even though they would express this knowledge differently by using different sentences.

Now, let's take a closer look at the traditional account of propositional knowledge. This is sometimes referred to as the Justified True Belief (JTB) theory because it says that knowing that some proposition, p, just is having a justified true belief that p. Hence, in order for you to know that p, "the dog is brown" say, you must believe that p, p must be true, and your belief that p must be justified. It also says that any time you believe that p, p is true, and your belief that p is justified you know that p. It's worth briefly examining each of these three components of the traditional account of knowledge.

Belief. You might think that knowledge doesn't require belief because we sometimes say things that seem to suggest this. For example, if you were in an argument with someone who believes the Earth is flat, you might plausibly say: "I don't believe the Earth is spherical, I know it is!" It would be a mistake to take this as showing that you don't actually believe that the Earth spherical. Why? Because you behave the same way as someone who believes that the Earth is spherical does. You answer affirmatively if asked whether the shape of the Earth is a sphere. You are willing to use the proposition that the Earth is spherical in your reasoning, e.g. you reason that since the Earth is spherical, if someone were able to start walking in a straight line and do so long enough, she would end up where she started. So, the best explanation for why you might assert something like "I don't believe the Earth is spherical, I know it is!" is that you want to emphasize that this is not something that you merely believe. You are making it clear that this is something that you believe for good reasons, i.e. you have strong justification for accepting that the Earth is spherical. To make the general point clearer, think about your acquaintance Fred again, who not only doesn't believe the Earth is spherical, he actually believes that it is flat. Would we say that Fred knows that the Earth isn't flat? It seems not. Rather, it seems that we might say that he should know that the Earth isn't flat. Even if Fred is aware of all sorts of evidence for thinking that the Earth is spherical, it doesn't seem that he knows it isn't flat since he doesn't believe this. Hence, the traditional account of knowledge holds that belief is necessary for knowledge.

Truth. As with belief, there may be a temptation to think that knowledge doesn't really require truth. For example, when your team loses a big game that you thought you were going to win, you might say something like: "I just knew we were going to win." Superficially,

it seems that you are saying that you have knowledge of something false—you had knowledge that the team would win, but it's false that the team would win. Is this the best way to understand what you are saving here though? It doesn't seem so. A much better explanation is that what you are really expressing is the fact that you were confident that the team would win or that you thought you knew that the team would win. In order to see this even more clearly, imagine that you and Fred, the flat earther, place a bet, the loser has to walk the other's dog. Fred bets that the Chicago Bears will win a particular football game, and you bet that they won't. Assume (unfortunately, for many years this has been a safe assumption!) that the Chicago Bears in fact lose the game. You come to collect on your bet, but Fred responds, "I know that they won, so you have to walk my dog."Would you think that Fred knows that the Chicago Bears won even though they didn't? Or would you think that Fred doesn't know what he's talking about and needs to get to walking your dog? Presumably, you'd conclude that Fred doesn't actually know that the Chicago Bears won regardless of how convinced he is that they did. Why not? Because it's not true. They didn't win, so Fred can't know that they did.

Justification. We've seen that knowledge requires true belief. Is that enough though? It seems not. Consider the following sort of situation: you and your new friend (talking about the JTB theory has led you to move from acquaintances to friends) Fred, the flat earther, are discussing another football game that neither of you watched. Neither of you has heard the game's final score, and you both know that the odds going into the game were even, i.e. it was predicted that the teams were equally likely to win. However, Fred decides to believe that the Detroit Lions won. You ask Fred why he thinks they won, and he responds: "No reason, I just really want them to win, so I believe that they did." Let's assume that in fact Fred, by pure luck, is correct because the Detroit Lions really did win the game. Does Fred know that the Detroit Lions won before you and he look up the score? Surely not. Fred has no reason to think that the Detroit Lions rather than their opponents won—he is simply believing because of wishful thinking. Not only does Fred fail to know that the Detroit Lions won, but it's also unreasonable for him to believe that they did. The rational thing for Fred to do is to suspend judgment about who won the game—he shouldn't believe the Detroit Lions won or believe

that they lost. The rational thing is for Fred to not believe one way or other about the outcome of the game until he has some evidence about the score. Although Fred has a true belief about how the game went, he clearly doesn't know that the Detroit Lions won. Something more is needed for knowledge. This something more is justification. Roughly, justification amounts to having good reasons/evidence to believe something. Fred clearly lacks good reasons/evidence, so he fails to know. (For more discussion of justification, see *General Background: The Nature of Justification* pp. 113–119.)

We can put these insights together to get a precise formulation of the traditional account of knowledge:

Someone, S, knows that p if and only if: (1) S believes that p, (2) p is true, and (3) S's belief that p is justified.

PROMOTIONS AND TRAVELING FRIENDS (THE GETTIER PROBLEM)

Background: In order to appreciate one of the classic "Gettier cases", it is important to keep in mind a particular rule of logic, what is called "disjunction introduction". It is the inference rule that says that if p is true, then "p or q" is true. For example, if it is true that you have a dog, then it is also true that you have a dog or a cat. And, it is true that you have a dog or no pet; you have a dog or the moon is made of cheese; and so on. Hence, if it is true that you have a dog or (any claim whatsoever can be plugged in here).

EPISTEMOLOGICAL ISSUES: ANALYSIS OF KNOWLEDGE; GETTIER PROBLEM

Let's think about two people who are often referred to in philosophical examples, Smith and Jones. Smith and Jones work for the same company, and they are both vying for the same promotion. Smith can't help but do a bit of snooping concerning who got the promotion. As a result of his snooping, Smith comes to have excellent reasons for believing that Jones got the promotion, though it hasn't been officially announced yet. He overheard the boss saying that Jones got the promotion, he saw a letter congratulating Jones on the promotion, and he even saw the new plaque that will go on

the coveted corner office that belongs to the person who got the promotion and it had "Jones" on it. On the basis of this information, Smith believes that Jones got the promotion. Smith also knows that Jones owns an Armani jacket. While sitting at his desk, Smith gets bored and starts thinking about facts concerning the person who got the promotion. He thinks to himself, "Jones got the promotion and Jones owns an Armani jacket," so "the person who got the promotion owns an Armani jacket."

So far the case of Smith and Jones is not all that interesting. However, let's consider a twist to the narrative. Imagine Smith also owns an Armani jacket. And despite all of the evidence, it is actually Smith who got the job—he misheard the boss, the letter congratulating Jones was for a different Jones and a different promotion, and the new plaque was for the other Jones and her new office. Does Smith know that the person who got the promotion owns an Armani jacket? It doesn't seem so. But, this appears to be a problem for the traditional account of knowledge. Smith justifiedly believes that Jones got the promotion, he knows that Jones owns an Armani jacket, and on the basis of his justified belief and knowledge he comes to believe that the person who got the promotion owns an Armani jacket. This belief is true because Smith owns such a jacket and he's the one who got the promotion. Smith believes it. And, Smith's belief is justified because it is the result of a simple logical inference from other things he justifiedly believes. Thus, it seems like this is a case of a justified true belief that doesn't amount to knowledge.

Let's consider another situation involving Smith and Jones as well as Smith's friend Brown. Smith has excellent reason to think that Jones owns a Ferrari. He's seen Jones driving a Ferrari. Jones has been telling everyone at the office that he owns a Ferrari. Being a bit of a snoop, Smith has noticed Jones looking at clubs for Ferrari owners on his computer. As a result of all of this information, Smith believes that Jones owns a Ferrari. Again, while sitting at his desk bored, Smith is thinking about his friend Brown. He knows that Brown is on vacation but has no idea where. Then, as often seems to be the case, Smith's thoughts turn to Jones and Jones' Ferrari. As he's sitting there, Smith decides to practice his logic skills to clear his head (it's a wonder he got the promotion given how he spends his time!). He thinks to himself "Jones owns a Ferrari," so "Jones owns a Ferrari or Brown is

in Bucharest." Then he thinks "Jones owns a Ferrari," so "Jones owns a Ferrari or Brown is in Baltimore." Smith continues, "Jones owns a Ferrari," so "Jones owns a Ferrari or Brown is in Boston." Finally, he reasons "Jones owns a Ferrari," so "Jones owns a Ferrari or Brown is in Barcelona." Smith believes each of these propositions because he believes that Jones owns a Ferrari, and he knows that disjunction introduction is a legitimate rule of logic.

Now, let's add a twist to this situation as well. Let's assume that Jones doesn't actually own a Ferrari at all. Jones has been renting a Ferrari and doing everything possible to make it seem like he owns a Ferrari because he wants everyone at the office to think that he's doing great despite not getting the recent promotion. However, as luck would have it, Brown is actually on vacation in Barcelona. So, "Jones owns a Ferrari or Brown is in Barcelona" is true. Smith believes it, and his belief is justified. But, again, it seems that we have a situation where Smith's justified true belief doesn't amount to knowledge. Hence, it appears that the traditional account of knowledge fails.

Examples of the sort discussed in this entry are known as "Gettier" cases because Edmund Gettier was the first person to really emphasize that such cases pose a threat to the traditional account of knowledge (though other philosophers had discussed such cases prior to Gettier's discussion). Gettier cases, such as these, tend to follow a general pattern. In such cases, the subject has a justified belief, but as a result of bad luck their justification isn't tied to the truth of the proposition believed. However, as a matter of good luck, it turns out that what the subject believes is true. It is this correction of the bad luck by way of the later good luck that makes it so that there's always a twist to the stories depicted in Gettier cases.

Before considering responses to these cases, it is worth noting something extraordinary about this purported counterexample to the traditional account of knowledge: almost all epistemologists agree that it works. That is to say, almost all epistemologists think that the traditional account of knowledge is flawed. It is important to keep in mind though that what Gettier cases show is that justified true belief is not sufficient for knowledge. The cases do not show that justified true belief isn't necessary for knowledge. In other words, Gettier cases make it clear that someone might have a justified true belief while failing to

have knowledge. However, they don't demonstrate that one can have knowledge without having a justified true belief. In fact, most epistemologists agree that justified true belief is necessary for knowledge. As a result, many of the responses to Gettier cases involve trying to solve the Gettier Problem, i.e. trying to determine what condition(s) must be added to justified true belief in order to have knowledge.

RESPONSES

One of the first responses to the Gettier Problem attempts to do away with justification as a requirement for knowledge altogether. The idea behind the causal theory of knowledge is that knowledge requires that one's true belief that p be causally connected in the appropriate way to the fact that p (Goldman 1967). In both of these cases, the fact that makes Smith's belief true isn't what is causing him to believe as he does. So, the causal theory of knowledge yields the correct result that Smith doesn't know in these cases.

Another early response is what is called the "no false reasons/ evidence" approach (Clark 1963). Roughly, this says that in order for a justified true belief that p to count as knowledge, none of the justified beliefs that constitute one's evidence for p can be false. Smith fails to know on this account because in both cases he relies upon justified false beliefs (and so justified but false reasons) in his reasoning. A related response is that the strength of justification required for knowledge is incompatible with the falsity of the justified belief (Sutton 2007, Littlejohn 2012). This response denies Gettier's assumption that the amount of justification required for knowledge still allows for the possible falsity of the belief in question. The idea here is that you simply cannot have justified false beliefs, so Smith's beliefs about Jones getting the promotion and having a Ferrari wouldn't count as justified in the first place. Of course, this would mean that the conclusions he comes to believe based on these beliefs aren't justified either. So, again, Smith wouldn't count as knowing under this view.

Yet another early response appeals to the notion of "defeat" (Lehrer and Paxson 1969). Essentially, the idea behind this response to the Gettier Problem is that in addition to having a justified true belief it must also be the case that one's justification is not *defeated* in order for

one to have knowledge. The relevant sense of "defeat" here concerns whether or not there are true propositions that if they were added to one's evidence would make it so that one no longer had justification. For example, there is a true proposition that if added to Smith's evidence would make it so that his belief that Jones owns a Ferrari or Brown is in Barcelona is unjustified. Specifically, the true proposition that Jones doesn't own a Ferrari would defeat Smith's justification. Since Smith's belief is defeasible in this way, this response rules it out as an instance of knowledge.

A different kind of response involves adding modal conditions such as sensitivity or safety to the traditional account of knowledge. S's belief that *p* is *sensitive* just in case if *p* were false, S wouldn't believe that *p* (Dretske 1969, Nozick 1981). S's belief that *p* is *safe* just in case in the closest worlds to this one ("closest worlds to this one" are ways that our universe could be different that are very similar to how the universe actually is) where S believes that *p*, *p* is true (Sosa 1999). Smith fails to satisfy either a sensitivity or safety condition in these cases, so again adding these sorts of conditions seems to spare the traditional account from having to say that Smith knows.

Finally, some respond to the Gettier Problem by claiming that it cannot be solved, and we should instead take knowledge to be unanalyzable (Williamson 2000). The thought here is that instead of trying to break knowledge down into components (such as justification, truth, and belief), we should take knowledge to be primitive and use it to understand other epistemic properties such as justification.

RECOMMENDED READING

GENERAL OVERVIEWS

The Analysis of Knowledge. The Stanford Encyclopedia of Philosophy. URL = https://plato.stanford.edu/archives/sum2018/entries/knowledge-analysis/ Gettier Problems. Internet Encyclopedia of Philosophy. URL = www.iep.utm.edu/gettier

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A GRISLY DISCOVERY (CAUSAL THEORY OF KNOWLEDGE)

Background: One of the early responses to the Gettier Problem attempted to do away with the justification component of knowledge altogether by introducing a causal requirement on knowledge. There are various versions of causal theories of knowledge. However, the general idea is that a causal theory of knowledge replaces justification with an "appropriate" causal connection. One of the first and simplest versions of a causal theory of knowledge was put forward by Alvin Goldman. It says that S knows that p if and only if (1) S believes p, (2) p is true, and (3) the fact that p is appropriately causally connected with S's believing that p. One way that the fact that p could be causally connected with S's believing that p is for that fact to be a cause of her believing as she does. For example, the fact that there is a tree in the yard is part of the causal story for why S believes that there is a tree in the yard when she's gazing out a window overlooking the yard. Another way that the fact that p could be causally connected with S's believing that p is for her believing and the fact that p to have a common cause. An example of this might be S's belief that there is smoke coming out of the chimney because she is inside and sees the fire. In such a case, a common cause of her belief and the fact that smoke is coming out of the chimney is the fire in the fireplace. Unfortunately, it is very difficult to say precisely what counts as an "appropriate" causal connection and what doesn't. Fortunately for our purposes, we don't need an exact account of appropriateness in this sense.

EPISTEMOLOGICAL ISSUES: ANALYSIS OF KNOWLEDGE; CAUSAL THEORY OF KNOWLEDGE

Detective Skyrms has just arrived at the scene of a potential crime. Upon arriving, he immediately notices a body and the severed head that belongs to that body a few feet away. Skyrms, as would anyone else, immediately forms the true belief that the person is dead based upon what he sees.

As with the Gettier cases discussed in the previous entry though, the story here isn't quite so simple. Yes, the person is clearly dead. However, losing their head isn't what killed them. What actually happened was that the person was walking home from a party late at night when they heard a frightening sound. The person ran, tripped over a stone and fell to the ground. While lying there on the ground, the person became so frightened that they had a massive heart attack. Since there was no one around (the sound was simply the wind blowing through old chimes that had been left in some nearby trees), the person wasn't taken to the hospital. As a result, the person died of the heart attack. Unfortunately, the gruesome tale doesn't end there. A few hours later, after the person had been dead for quite some time, a deranged psychopath happened by the person's body and decided it would be fun to cut the head off. Of course, having just arrived on the scene, Skyrms isn't aware of all of these grisly details. He simply sees that the body and head are separated by a few feet and comes to believe that the person is dead.

Why does this example and its grisly details matter? Because it poses a significant problem for simple causal theories of knowledge. The reason is that in this case, it is clear that Skyrms knows that the person is dead. However, the fact that leads Skyrms to believe that the person is dead is that the person's head has been severed. But, the fact that the person's head has been severed isn't actually a cause of this person's death. So, the fact that the person died doesn't cause Skyrms' belief. Additionally, the fact that the person is dead isn't causally responsible for Skyrms' belief that their head has been severed. Hence, it seems that the fact the person is dead is neither a cause of Skyrms' belief that they are dead nor does it have a common cause with Skyrms' belief. As a result, the simple causal view that we discussed in the background yields the result that Skyrms doesn't really know that the

person is dead. But, of course, he clearly does know. You don't have to be an ace detective like Skyrms to know that the person whose head has been completely severed from their body is dead.

Generally, this sort of example achieved its intended effect—showing that simple causal theories of knowledge are mistaken. This is something that even Alvin Goldman, who initially defended the simple sort of causal theory, accepts. However, this realization didn't lead to the complete abandonment of such theories. Instead, proponents of such views added various restrictions to the relevant causal processes.

RESPONSES

Some causal theorists responded to these sorts of examples by adding that if the fact that p is overdetermined (roughly, this means that there is more than one cause in play and any of those causes would ensure that p is true), an overdetermining cause can allow one to know that p. For example, in the above case, the person's death is overdetermined—the heart attack actually killed them, but even if it hadn't, having their head severed certainly would have done so (Swain 1972, 1978). Hence, on this sort of view, Skyrms counts as knowing that the person is dead because his belief is caused by an overdetermining cause of the fact that the person is dead.

A different revision to the causal account holds that one knows that p when one's belief that p is caused by the information that p (Dretske 1981). This would also seem to avoid the above problem, because the information that the person is dead is causing Skyrms' belief even though the cause of the person's death isn't. On this view, plausibly Skyrms knows that the person is dead, but he doesn't know the cause of the person's death.

Finally, the most prominent revision to simple causal theories came from Goldman (1976, 1979, 1986) himself when he developed his theory of reliabilism (see *General Background: The Nature of Justification* pp. 113–119). Reliabilism, which is a theory of justification, can be extended to an account of knowledge. Instead of requiring that the fact that p causes one's belief that p, reliabilism as it pertains to knowledge holds, roughly, that in order to know that p one's true belief that p must be caused by (be the output of) a reliable belief forming process (a process that tends to produce more true beliefs than false ones).

Reliabilism seems to be able to get the correct result in this case as well. Skyrms' belief that the person is dead seems to be reliable. After all, believing that someone is dead because you see that their head has been severed seems like a very reliable way of forming true beliefs about whether or not someone is dead.

RECOMMENDED READING

GENERAL OVERVIEW

The Analysis of Knowledge. *The Stanford Encyclopedia of Philosophy*. URL = https://plato.stanford.edu/archives/sum2018/entries/knowledge-analysis/

SEMINAL PRESENTATITONS

- Goldman, A.I. 1967. A Causal Theory of Knowing. *Journal of Philosophy* 64: 357–372.
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ADDITIONAL IMPORTANT DISCUSSIONS

- Dretske, F. 1971. Conclusive Reasons. Australasian Journal of Philosophy 49: 1–22.
- Dretske, F. 1981. Knowledge and the Flow of Information. Cambridge, MA: MIT Press
- Goldman, A. 1976. Discrimination and Perceptual Knowledge. Journal of Philosophy 73: 771–791.
- Goldman, A. 1979. What Is Justified Belief? In G. Pappas (ed), Justification and Knowledge. Dordrecht: D. Reidel, 1–23.
- Goldman, A. 1986. Epistemology and Cognition. Cambridge, MA: Harvard University Press.
- Goldstick, D. 1972. A Contribution towards the Development of the Causal Theory of Knowledge. *Australasian Journal of Philosophy* 50: 238–248.
- Hanson, P. 1978. Prospects for a Causal Theory of Knowledge. Canadian Journal of Philosophy 8: 457–473.
- Swain, M. 1972. Knowledge, Causality, and Justification. Journal of Philosophy 69: 291–300.
- Swain, M. 1978. Reasons, Causes, and Knowledge. *Journal of Philosophy* 75: 229–249.

A STRANGE COUNTY (FAKE BARNS)

Background: Two of the earliest responses to the Gettier Problem were to opt for a causal account of knowledge or to accept the no false reasons/ evidence response (see Promotions and Traveling Friends pp. 6–11 and A Grisly Discovery pp. 12–15). As has been common in the literature surrounding the Gettier Problem, soon after these responses were proposed new Gettier-style examples were put forward. These examples revealed that both the causal account of knowledge and the no false reasons/evidence response failed to solve the Gettier Problem. The problem with the causal account (aside from the counterexample described in the previous entry) is that it seems that there can be Gettier-style cases where the fact that p causes one's true belief in what seems to be the appropriate way, and yet one fails to know that p. The problem with the no false reasons/evidence response is that it relies on the subject making an explicit inference, i.e. reasoning from a justified false belief, but it is possible to construct Gettier-style examples where it doesn't seem that the subject is engaging in an inference at all. After this problem became clear, other responses were proposed. Many of these responses had the common feature of trying to restrict the reasoning or evidence that the subject is allowed to rely upon if knowledge is to be generated. However, a key feature of these sorts of responses is that they didn't put restrictions upon the environmental conditions in which the subject is found. It is this feature of fake barn scenarios like the one described in this