

Modal Conditions on Knowledge: Sensitivity and safety

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Outline

A sensitivity condition on knowledge?

Goldman's Sensitivity Constraint

Safety

Problems with Safety

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Introduction to sensitivity

Sensitivity, to a first approximation, is this counterfactual relation:

(Sensitivity) S 's belief that p is **sensitive** if and only if, if p were false, S would not believe that p .

A sensitivity condition on knowledge was first defended by Robert Nozick (1981).

Introduction to sensitivity

What does sensitivity amount to, really?

(Lewis's counterfactuals) if p were false, S would not believe that p iff in the nearest possible worlds in which not- p , the subject does not believe that p .

So a belief is sensitive just in case in the nearest possible worlds in which not- p , the subject does not believe that p .

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Goldman's first analysis

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Goldman's first attempt to capture his basic idea goes as follows. S perceptually knows that P iff:

- ▶ P is true.
- ▶ S has a perceptual belief that P.
- ▶ There is no alternative Q which is both relevant and which is such that, if Q obtained, S would still have a perceptual belief that P.

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- ▶ S forms the true belief that there's a barn.
- ▶ One alternative would be the hypothesis that it's just an empty field.
- ▶ However, if that alternative obtained, then S would have different experiences and so he would no longer believe that there's a barn.
- ▶ Hence, S is able to discriminate this alternative from what believes to be true.

Sensitivity and Gettier cases

- ▶ One motivation for including a sensitivity condition in an analysis of knowledge is that there seems to be an intuitive sense in which knowledge requires **not merely being correct, but tracking the truth in other possible circumstances.**

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- ▶ One motivation for including a sensitivity condition in an analysis of knowledge is that there seems to be an intuitive sense in which knowledge requires **not merely being correct, but tracking the truth in other possible circumstances**.
- ▶ This seems to be a plausible diagnosis of what goes wrong in at least some Gettier cases.
- ▶ For example, Smith's belief that Jones owns a Ford or Brown is in Barcelona seems to be insensitive.

Sensitivity and Gettier cases

- ▶ For if that disjunction were false, if Jones didn't own a Ford and Brown wasn't in Barcelona, Smith would have held the same belief on the same grounds, viz., the misleading evidence vis-a-vis Jones's car.

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- ▶ But does sensitivity help in all of Gettier cases?

Sensitivity and Gettier cases

- ▶ For if that disjunction were false, if Jones didn't own a Ford and Brown wasn't in Barcelona, Smith would have held the same belief on the same grounds, viz., the misleading evidence vis-a-vis Jones's car.
- ▶ But does sensitivity help in all of Gettier cases?
- ▶ Let us consider a few cases.

Barn facades

Suppose there is a county in the Midwest with the following peculiar feature. The landscape next to the road leading through that county is peppered with barn-facades: structures that from the road look exactly like barns. Observation from any other viewpoint would immediately reveal these structures to be fakes: devices erected for the purpose of fooling unsuspecting motorists into believing in the presence of barns. Suppose Henry is driving along the road that leads through Barn County.

Barn facades

Barn facades, continued

Naturally, Henry will on numerous occasions form false beliefs in the presence of barns. Since Henry has no reason to suspect that he is the victim of organized deception, these beliefs are justified. Now suppose further that, on one of those occasions when he believes there is a barn over there, he happens to be looking at the one and only real barn in the county.

Sensitivity and Gettier cases

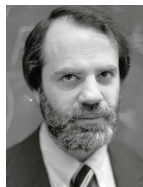
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Sensitivity and Gettier cases

- ▶ In the Barn Facades, the sensitivity condition of knowledge rules out Henry's belief from being a case of knowledge.
- ▶ However, consider Kripke's variation of the case.

Saul Kripke

Cast of Characters



- ▶ Logician and philosopher. Huge, immense contributions to analytic philosophy.
- ▶ Never got a PhD. After graduating from high school in 1958, graduated from Harvard in mathematics.
- ▶ Upon graduation (1962) he received a Fulbright Fellowship, and in 1963 was appointed to the Society of Fellows.
- ▶ Distinguished Professor of Philosophy at CUNY graduate center.

Kripke (2011), Barn facades

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- ▶ Suppose that barn facades are always green, but genuine barns are always red.
- ▶ In this case, Henry's belief that he sees a red barn will be sensitive: if the animal is looking at were not red, he would not believe it was.

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- ▶ On the other hand, his belief that he sees a barn will be **non-sensitive**, for the previous reasons.
- ▶ So the prediction is that Henry knows that he is seeing a red barn but does not know that he is seeing a barn.
- ▶ That seems like a bad prediction.

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- ▶ The chief motivation against a sensitivity condition is that, given plausible assumptions, it leads to unacceptable implications called “abominable conjunctions.”
- ▶ To see this, suppose first that skepticism about ordinary knowledge is false, ordinary subjects know at least many of the things we ordinarily take them to know. For example, George, who can see and use his hands perfectly well, knows that he has hands.

Against Sensitivity

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- ▶ Now imagine a skeptical scenario in which George does not have hands.
- ▶ Suppose that George is the victim of a Cartesian demon, deceiving him into believing that he has hands.
- ▶ If George were in such a scenario, of course, he would falsely believe himself not to be in such a scenario.

Against Sensitivity

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Against Sensitivity

- ▶ So given the sensitivity condition, George cannot know that he is not in such a scenario.
- ▶ These two verdicts, the knowledge-attributing one about ordinary knowledge, and the knowledge-denying one about the skeptical scenario, are arguably each intuitive, it is intuitively problematic to hold them together.

Against Sensitivity

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Against Sensitivity

- ▶ Their conjunction is, in DeRose's term, **abominable**:
“George knows that he has hands, but he doesn't know that he's not the handless victim of a Cartesian demon.”
- ▶ A sensitivity condition on knowledge, combined with the nonskeptical claim that there is ordinary knowledge, seems to imply such abominable conjunctions.

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Introduction to safety

- ▶ Although few epistemologists today endorse a sensitivity condition on knowledge, the idea that knowledge requires a subject to stand in a particular modal relation to the proposition known remains a popular one.
- ▶ In his 1999 paper, “How to Defeat Opposition to Moore,” Ernest Sosa proposed that a safety condition ought to take the role that sensitivity was intended to play.
- ▶ Sosa characterized safety as the counterfactual contrapositive of sensitivity:

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 - (Sensitivity) S 's belief that p is sensitive if and only if, if p were false, S would not believe that p .
 - (Safety) S 's belief that p is safe if and only if, if S were to believe that p , p would not be false.

Introduction to safety

- ▶ Sensitivity and safety are not equivalent!

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- ▶ An example of a safe belief that is not sensitive, according to Sosa, is the belief that a distant skeptical scenario does not obtain.

Introduction to safety

- ▶ If we stipulate that George, discussed above, has never been at risk of being the victim of a Cartesian demon, because, say, Cartesian demons do not exist in George's world. then George's belief that he is not such a victim is a safe one, even though we saw in the previous section that it could not be sensitive.

Introduction to safety

- ▶ If we stipulate that George, discussed above, has never been at risk of being the victim of a Cartesian demon, because, say, Cartesian demons do not exist in George's world. then George's belief that he is not such a victim is a safe one, even though we saw in the previous section that it could not be sensitive.
- ▶ Notice that although we stipulated that George is not at risk of deceit by Cartesian demons, we did not stipulate that George himself had any particular access to this fact.

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- ▶ If water now flowed from your kitchen faucet, it would not then be the case that water so flowed while your main valve was closed. (TRUE) $p \Box \rightarrow q$

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- ▶ If it were the case that water flowed from your kitchen faucet while the main valve was closed, then water would not flow from the kitchen faucet. (FALSE) $\text{not } q \Box \rightarrow \text{not } p$

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(Safety, II) S 's belief that p is safe if and only if, In all nearby worlds where S believes that p , p is not false.

Safety and Gettier

- ▶ Safety seems to help with Gettier cases: Henry does not know that somebody in his office owns a Ford because Henry would have believed that even if nobody in his office owned a Ford.

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- ▶ Safety seems to help with Gettier cases: Henry does not know that somebody in his office owns a Ford because Henry would have believed that even if nobody in his office owned a Ford.
- ▶ What about the barn facade cases? Does safety help with those too? if so, how?

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Safety and mathematical knowledge

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- ▶ So every mathematical belief is trivially safe.
- ▶ But one can come to have a mathematical belief that is true only by luck.
- ▶ So safety does not work as an anti-luck condition on mathematical beliefs.

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- ▶ But I do not know in that case, intuitively.
- ▶ So safety cannot be sufficient for knowledge.