

Lecture 3 Epistemic Closure

1. Review and Set-up

Argument from Ignorance

SCEPTICAL HYPOTHESIS. I do not know I am not in a sceptical scenario (e.g. dreaming/B.I.V/evil demon/etc).

CLOSURE. If I do not know I am not in a sceptical scenario, then I do not know I have hands.

¬ORDINARY KNOWLEDGE. I do not know I have hands.

Last week, we looked at responses to this argument that challenge the first premise on the grounds that there are *at least* equally good reasons (if not better reasons) for accepting **OK** as the first premise of the argument instead.

This week we'll look at responses to scepticism that reject **C**. Anti-sceptics of this sort argue that, given **¬C**, even if we don't know we're not in a sceptical scenario, we can still know ordinary things.

2. The Principle of Epistemic Closure

Above, the Closure Principle is stated thus:

If I do not know I am not in a sceptical scenario, then I do not know I have hands.

This is a specific instance of a more general principle that looks (roughly) like this:

PEC₁: If S knows that p, and p entails q, then S knows that q.

The thought behind the principle is the intuition that **knowledge is closed under entailment**. That is, it seems like it should be the case that knowledge is preserved through entailment; if I make a valid deductive inference, and I knew all of the inputs (i.e. premises) into that inference, then it should be the case that I also know the output (i.e. conclusion) of that inference.

Of course, **PEC₁** can't quite be right, since it is quite clearly false. For instance, I may not have the belief that *q*. And surely I can't know that *q* if I don't believe it.

So, if there's something right about the intuition about entailment being knowledge-preserving, then we need a different way to state the principle.

First, it seems like we should at least include the requirement that *S* believes that *q*. What is more, what made closure intuitive in the first place was the thought that if I *arrived at* my belief that *q* by way of understanding an entailment relationship between *p* and *q* then this should 'preserve' knowledge. That is, I should also know *q*. So the mere existence of an entailment relation between *p* and *q* isn't enough. (After all, I might come to believe that *q* because I believe I've divined *q* from tea leaves in my cup. In this case, if it happens that some *p* I know independently entails that *q*, it seems wrong to say that I *know* that *q*.) So, perhaps something more like the following is correct:

PEC₂: If *S* knows that *p*, and *S* comes to believe *q* via a valid inference from *p*, then *S* knows that *q*.

It is worth noting that there may *still* be grounds for taking issue with the wording of **PEC₂**. For instance, if you think that *S* must know that they know *p* in order for the inference process to be knowledge-preserving in this way, then you might disagree with the principle as we've just stated it.

Nozick is one philosopher known for responding to the sceptic by reject the principle of closure. He acknowledges that giving a precise statement of the principle is a challenge; however, he argues that there are bigger issues with the very intuition motivating the principle. Once these are brought to light, there is no further reason to quibble over the exact wording of **PEC**.

3. Problems for Closure

Argument from Sensitivity

Nozick argues that knowledge is not closed under entailment because *sensitivity* is necessary for knowledge, and sensitivity is not closed under entailment.

Sensitivity: If *p* were false, then *S* would not believe that *p*

If sensitivity were closed under entailment, then (roughly), it should follow from this and from '*p* entails *q*' that 'If *q* were false, then *S* would not believe that *q*'. However, as Nozick puts it,

[the latter] talks of what S would believe if q were false, and this may be a very different situation than the one that would hold if p were false, even though p entails q. [...] There is no reason to assume the (closest) not-p world and the (closest) not-q world are doxically identical for you, and no reason to assume, even if p entails q, that your beliefs in one of these worlds would be a (proper) subset of your beliefs in the other. (1981: 206, 207)

Nozick appeals to the contents of the sceptical argument itself in order to show why this is the case. More precisely, he shows that **sensitivity** and **closure** are inconsistent. Suppose for the sake of argument that you know you have hands. This belief is sensitive because, at the closest worlds where you don't have hands, you wouldn't believe that you did (e.g. because you would see your prostheses instead). Now, that you have hands entails that you are not a BIV. But even if you arrived by inference at the belief that you're not a BIV from your belief that you have hands, the former belief would not be sensitive. At the closest possible worlds where you *are* a BIV, you would still believe that you're not one. So, **sensitivity** is not closed under entailment.

At this point, it may look as though Nozick is simply denying closure *because* it leads to scepticism. But there's more to this move than that. The sceptic has already appealed to sensitivity in their argument for **SH**. Why don't we know we're not BIVs? Because if we *were* BIVs we would still believe that we weren't. But then, in order to make the inference from **SH** to **¬OK**, the sceptic depends on **C**, which Nozick has just shown to be inconsistent with sensitivity. In other words, the sceptic's argument for **SH** is inconsistent with **C**. So, we can understand Nozick's argument as presenting the sceptic with a dilemma: either (1) give up sensitivity, and so too their argument for **SH**, or (2) give up **C**. In either case, **¬OK** will no longer follow.

Nozick himself argues that there are independent reasons for adopting sensitivity (e.g. Gettier cases), and as such we should accept **SH**. But, since sensitivity is inconsistent with **C**, it is consistent to also accept **OK**.

Argument from Modes of Knowing

Dretske (1970) argues that there are many other *modes* of knowing that aren't closed under entailment. Consider the following:

- S perceives that *p*, and *p* entails *q*, so S perceives that *q*
- S remembers that *p*, and *p* entails *q*, so S remembers that *q*
- S received testimony that *p*, and *p* entails *q*, so S received testimony that *q*

These sentential operators ('perceives that', 'remembers that', 'received testimony that') are not closed under entailment. Dretske's terminology for this is that they are not **penetrating operators**. Since these operators refer to ways of knowing, there is reason to think that 'knows that' also is not a penetrating operator (it is what he calls a **semi-penetrating operator** since it carries through some entailments, but not others).

Dretske argues that 'S knows that p ' is only closed under entailment when p entails q , and q is **relevant**. So, while being a BIV is not relevant to knowing I have hands, it *is* relevant to knowing I'm not a BIV. This is because $\neg p$ is always relevant to p .

4. Against Rejecting Closure

There are, of course, several objections to the rejection of closure. Some stand against particular arguments in favour of closure, while others are independent of those arguments.

Counterexamples to Sensitivity

Recall that Nozick's rejection of closure in part turned on the incompatibility of closure with sensitivity. However, if there are independent reasons for rejecting sensitivity, then these would be reasons in favour of accepting the other horn of Nozick's dilemma. And while this would still stop this particular version of the **argument from ignorance**, there are versions of scepticism that do not depend on this argument. For instance, Unger's argument also appealed to sensitivity, but his was a much stronger version of sensitivity, and so ordinary knowledge claims failed to meet the condition. There was no need to appeal to closure in

Against the Modes of Knowing Argument

Against this, opponents argue that it doesn't follow from the non-penetrating nature of epistemic operators like 'perceives that' that 'knows that' is also non-penetrating. What we need to determine is whether something like the following holds:

If, while knowing p via perception, testimony, proof, memory, or something that indicates or carries the information that p , S believes q because p entails q , then S knows q . (SEP, "Epistemic Closure")

And this does seem to hold. In which case there is still reason to accept **PEC₂**.

"Abominable Conjunctions"

Some have argued that denying closure commits one to "abominable conjunctions" that we should not be allowed to accept. So, for instance, it would follow on a view that rejected closure that, "I know I have hands, but I don't know that I'm not a handless BIV", or "I know I'm not in a vat, but I don't know that I'm not a brain in a vat".