

# Phil. 450: Discussion 4

## Sensitivity and Epistemic Closure

**Readings:** Dretske [1970], and Nozick [1981]

### 1 Reading Comprehension

#### 1.1 Dretske on Epistemic Operators

1. What is a sentential operator? Provide an example, and if you can, choose an example that is not in the reading. Further, discuss what an *epistemic* operator is, and give at least two examples and at least two non-examples.
2. Discuss your answer to question seven from the reading assignment. Then assess which of the following are penetrating operators. If the operator is not penetrating, provide an example to illustrate why. If it is, discuss some cases that you make think so.
  - (a) “It is unfortunate that”
  - (b) “Conor says that”
  - (c) “It’s likely that”
  - (d) “I believe that”
  - (e) “You are obliged to make sure that”
  - (f) “It might be the case that”
3. Below are four skeptical arguments that have occupied philosophers for some time. Dretske rejects exactly one premise of the external world skeptic’s argument. Guess which one, and justify your answer. In light of his thesis about epistemic operators, should Dretske reject the corresponding premise of the remaining four arguments? Justify your answer.

### *External World Skepticism*

Premise 1: I don't know that I am not handless a BIV.

Premise 2: If I don't know that I am not a handless BIV, then I don't know I have hands.

Conclusion: I don't know I have hands.

### *Other Minds Skepticism*

Premise 1: I don't know that other "people" aren't cleverly programmed robots without feelings.

Premise 2: If P1, then I don't know my best friend likes cherries.

Conclusion: I don't know my best friend likes cherries.

### *Inductive Skepticism*

Premise 1: I don't know the laws of physics won't radically change tonight.

Premise 2: If P1, then I don't know the sun will rise tomorrow.

Conclusion: I don't know the sun will rise tomorrow.

### *Moral Skepticism*

Premise 1: I don't know that there are objective moral laws.

Premise 2: If P1, then I don't know that hitting people with baseball bats for entertainment is wrong.

Conclusion: I don't know that hitting people with baseball bats for entertainment is wrong.

## 1.2 Nozick's Theory of Knowledge

1. Discuss question one from the reading assignment.
2. What four conditions does Nozick argue are necessary and sufficient for knowledge? State those conditions, and then check that your belief that "I am on UW's campus right now" satisfies Nozick's four conditions. Note: When the last two conditions hold, Nozick claims that one's belief in a proposition "tracks the truth" of the proposition.
3. Discuss question four from the reading assignment (which was optional). That question asked the following. Consider Gettier's example involving Brown, Jones, Smith, and Barcelona. Explain why, according to Nozick's theory of knowledge, Smith does not know "Jones owns a Ford or Brown is in Barcelona" in Gettier's original example. Note that Nozick's thought experiment is slightly different from Gettier's, and that I have asked you to apply Nozick's theory to Gettier's original example.
4. Discuss your answers to question five from the reading assignment. Then develop your own example that is analogous to Nozick's grandmother case in that it (i) serves as a counterexample to Nozick's original theory but (ii) provides evidence for Nozick's final theory (involving "methods"). Here, you might also want to discuss what Nozick means by "method."

5. The third condition in Nozick's theory is now called *sensitivity*. Explain why your belief that you have hands satisfies Nozick's third condition. Then explain why your belief in the proposition "I am not a handless brain-in-a-vat (BIV) electro-chemically stimulated by an evil scientist to believe I have a body" does not satisfy that condition.
6. Although the truth-conditions for indicative and subjunctive conditionals differ, it is generally agreed that a conditional ( $P \rightarrow Q$ ) is *false* if its antecedent ( $P$ ) is true and its consequent ( $Q$ ) is false. With this in mind, explain why Nozick rejects the second premise of the external-world skeptic's argument above.
7. Would Nozick agree with Dretske's thesis? Explain.

## 2 Be Creative!

1. What does the causal theory propose as a necessary condition for knowledge? In one sentence, explain how an advocate of a causal theory of knowledge would explain why you know some object that you're perceiving right now has the properties that it does. What might Nozick mean when he says "The causal condition on knowledge ... provides an inhospitable environment for mathematical and ethical knowledge"? Note: Recall, Goldman did not defend the causal theory for logical or mathematical knowledge.
2. Philosophers call a statement/proposition *necessary* if the statement could not be false. Logical tautologies like "Either Tom is a senator, or Tom is not a senator" are generally thought to be necessary. Statements that are true, by definition, like "A bachelor is unmarried" are generally considered necessary. Many philosophers also believe that mathematical theorems like " $2 + 2 = 4$ " are necessary. Historically, many philosophers have argued that moral facts that do not refer to specific people or things (e.g. "It is wrong to inflict pain on another sentient being purely for one's own entertainment") are likewise necessary. Suppose for the moment that  $2 + 2 = 4$  is a necessary truth, and assess whether you know that  $2 + 2 = 4$  according to Nozick's conditions. Which of Nozick's conditions sounds odd when the proposition  $P$  is a necessary truth?
3. Suppose I believe a very complicated mathematical theorem that is a necessary truth, but suppose that I have no evidence whatsoever for

the theorem. Which of Nozick's four conditions are satisfied? Which are not and why?

4. Here is a purported counterexample to Nozick's theory. Explain why some might take it to be a counterexample. Imagine it's a hot summer day and you remove some ice cubes from your freezer and put them in a glass of water on a table in your apartment. You drink half the glass before leaving your apartment in a hurry, and you leave the glass – with the ice cubes still frozen – on your table. Your apartment does not have air conditioning. Three hours later, you remember that you left the glass on the table and you think to yourself, “Oh, the ice cubes will have melted by now.”
5. Most epistemologists believe that Nozick's fourth condition, often called *adherence*, is not necessary for knowledge. Recall the simple version of that condition states:

- If  $p$ , then  $S$  would believe that  $p$ .

The official (more complicated) version of adherence that Nozick defends asserts:

- If  $p$  were true and  $S$  were to use  $M$  to arrive at a belief whether (or not)  $p$ , then  $S$  would believe, via  $M$ , that  $p$ .

Here is a variation of a counterexample due to Saul Kripke to the simple version of adherence. Imagine you have forgotten when your mother's birthday is (you're a bad child). Your mom is angry, but she says she'll tell you her birthday if you correctly identify the next number produced by a random number generator (which generates numbers between 0 and 200 million). You are extraordinarily lucky: you guess correctly, and your mother (who always tells the truth) tells you her birthday is May 3rd. So you now know  $p$  “My mother's birthday is May 3rd.” Explain why your belief does not satisfy the simple version of adherence above. Does your belief satisfy the more complicated version?