Circularity and Hume's Problem of Induction

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Phil 450: Epistemology
Lecture 11

Discussion
8 minutes
Review questions 1-3 from the reading assignment.

Circularity

Circular Reasoning

It is common, especially in philosophy, to call arguments "fallacious" if they are "circular."

Philosophers often say such arguments "beg the question."

Circular Reasoning

Question: What makes an argument problematically circular?

Problem: That question is nasty (impossible?) to answer using the standard concepts of logic, i.e., truth, validity, and soundness.

- "P therefore P" is a valid argument.
- Some circular arguments have true conclusions; some don't.
- Most arguments in real-life don't contain the conclusion as an explicit premise. So saying "the argument contains the conclusion as its premise" isn't helpful.
  - Saying the argument contains its conclusion as a premise (whether implicit or not) is also rather uncharitable, since the author would disavow assuming the conclusion of her argument!

Circular Reasoning

van Cleve's idea: Use theories of justification and/or knowledge to determine what counts as a circular argument.

- More generally, we might think van Cleve's idea is to use **epistemic** terms to define "circular", which might include "evidence" or "reason" in addition to "justification" and "knowledge."

Circular Reasoning

Motivation: "Circular" is a normative term; circular arguments are bad or defective in some way.

- Even if some normative terms can be analyzed in descriptive terms (as Goldman alleges "justification" can be), we might expect a definition of "circular" to involve other, more primitive normative terms.
- In particular, if logical terms are purely descriptive (because they characterize only what follows from what), therefore, an analysis of "circular" will not be possible using purely logical terms.

Epistemically Circular

Definition: An argument is epistemically circular if one cannot use the argument to acquire knowledge (or justified belief) in the conclusion.

Important: That definition does *not* mention the premises of the argument.

Question: What types of arguments are *epistemically circular*?

Story Time with Conor

I live in Germany for a couple years, and I learned the Germans love paperwork and rules . . .

Story Time with Conor

1. I tried to rent an apartment, and my future landlady said I needed proof I had an income. "Go to the bank," she said.
2. So I went to the bank to open an account, and they said, "You need a permanent, home address in Germany to open an account."

See a problem?

Rules of Conduct

A rule of conduct cannot require both

- To do X before Y, and
- To do Y before X.

Rules of Conduct

A rule for forming beliefs cannot require one

- To believe φ before one believes ψ, and
- To believe ψ before one believes φ.

van Cleve's Characterization of Premise Circularity

An argument is premise circular if

- To justifiably believe (for van Cleve, to know) the conjunction of its premises,
- One must *already* justifiably believe (for van Cleve, to know) its conclusions.

Premise Circularity

Like van Cleve's definition of "epistemically circular", this definition uses more than simply "logical" predicates (e.g., validity, proof, and truth). It also invokes:

- **Epistemic** terms: Justification (or knowledge), and
- **Temporal** terms: it discusses *when* one has justification for a belief.

Premise and Epistemic Circularity

Premise circular arguments are, by definition, epistemically circular.

van Cleve's Question: Are there any epistemically circular arguments that are *not* premise circular?

Avoiding Humes' Circle

Consider the argument:

> Premise: The sun has risen everyday for thousands of years.
>
> Conclusion: The sun will rise tomorrow.

Discussion Questions: Using reliabilism,

- Explain why one can justifiably believe the premise of the argument.
- Explain why one could come to justifiably believe the premise *before* justifiably believing the conclusion.
- Explain why, if one were justified in believing the premise, one could justifiably believe the conclusion on the basis of inferring it from the premise.
- Conclude the argument is *not* epistemically circular, and hence, not premise circular.

Discussion

12 minutes

- Review the definition of "rule circular."
- Give an example of a rule circular argument.

Rule Circularity

Consider the following argument:

> **Premise 1:** If the standard truth-table for the conditional is correct, then modus ponens is valid.
>
> **Premise 2:** The standard truth-table for the conditional is correct.
>
> **Conclusion:** *Modus ponens* is valid.

Objection: The argument is an instance of modus ponens! Even if one could believe the premises before the conclusion, isn't this a viciously circular argument?

Rule Circularity

van Cleve defines an argument to be rule circular if

> *it is sanctioned by a rule of inference that one could know to be correct only if one already knew that its conclusion was true.*

Here, "sanctioned by" means "is an instance of."

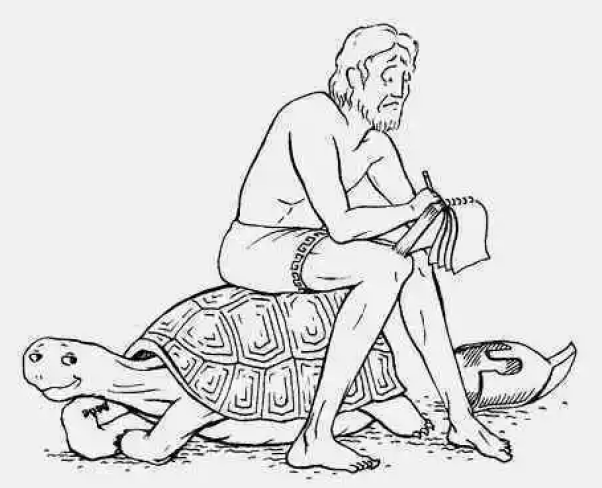
Example: The last argument is rule circular. One can know that modus ponens is "correct" (here, valid) only if one knew the conclusion ("Modus ponens is valid") to be true!

Rule and Epistemic Circularity

Question: Are rule circular arguments epistemically circular?

van Cleve's answer: Not necessarily.

- Perhaps the last argument involving modus ponens is epistemically circular (and rule circular).
- But in general, according to reliabilism, we're not required to know a rule is "correct" in order to use that rule to acquire knowledge or justified belief. Why?



To answer that question, let's now have a dramatic reading of Lewis Carroll's "What the Tortoise Said to Achilles". I need three volunteers.

Discussion

12 minutes

Review questions 6 and 7 from the reading assignment.

Reliabilism and Externalism

Claim: According reliabilism, we're not required to know a rule is "correct" in order to use that rule to acquire knowledge or justified belief.

Why?

- Reasoning is a belief-forming process, just like memory or perception.
- For a belief-forming process to produce justified belief, according to the reliabilist, all that is required is that the process is reliable, not that we know (or justifiably believe) the process to be reliable.
  - E.g., Young children may have justified beliefs about the color of their clothes, or that their parents said something in the past. But they don't know anything about the reliability of perception or memory.
- Similarly, we don't need to know that a rule for reasoning is valid (or even typically truth-preserving) to use the rule to gain knowledge or justified belief.

Inductive arguments and circularity

Question: Which if any inductive arguments are epistemically circular?

Rule Circularity

Consider the argument:

> Premise: In the past, my metereologists' predictive methods will be successful.
>
> Conclusion: In the future, my metereologists' predictive methods will be successful.

Discussion Questions: Is the argument premise circular? Rule circular? Epistemically circular?

Avoiding Humes' Circle

Consider the argument:

> Premise: In the past, the future has resembled the past.
>
> Conclusion: In the future, the future will resemble the past.

Discussion Questions: Is the argument premise circular? Rule circular? Epistemically circular?

Writing Prompt: What forms of inductive inferences (e.g., causal inferences, statistical generalizations, etc.), if any, will van Cleve will designate as epistemically circular?