*Problems of Philosophy*, Chapter 6

*Philosophy 101 - Class 08*

**Brian Weatherson** ⓘ

*weath@umich.edu*
*University of Michigan*

September 21, 2023

# Sources of Knowledge

## Two Relatively Uncontroversial Sources
*Reason*

We can know some things, especially in logic and mathematics, by thinking hard about them.

These are sometimes called *a priori* knowledge, because we could (in theory, sort of) know about them *prior* to observing the world.

## Two Relatively Uncontroversial Sources
*Observation*

And we know some things by opening our eyes and ears, reaching out our limbs, and stumbling around.

Russell, following a distinctive tradition in 17th-20th century European philosophy, thinks that what we learn in the first instance this way is something about our own mind.

What we really observe is the nature of our own sensations; these are the sense-data.

This is a *very* strange view, and I'm mostly going to set it aside here.

## Two Relatively Uncontroversial Sources
*Observation*

It is a big question in **philosophy of mind** courses. Or, better, it's a few big questions.

1. Does observation require conscious awareness?
2. If so, do the conscious states matter because they are *what* we are aware of, or they are *how* we are aware of external things?
3. If the latter (which is I think the intuitive view), what explains perceptual mistakes.

## Two Relatively Uncontroversial Sources
*Observation*

As I said, if you're interested in all of this, you are not short of options of courses.

- Perception is a big question in philosophy of mind, and also in epistemology.
- It's also a huge part of what we study in cognitive science.
- And there are any number of physiology like courses, particularly on varieties of perception.
- And, these days, there are computing courses on artificial observation.

## Going Beyond That
*Knowing about the unobserved world*

We'll often talk here about knowing about the future.

But as Russell makes clear, that's a special case of what we really care about: knowing about the unobserved.

The same issues arise when thinking about how much we know about the distant past, the ocean depths, distant galaxies, or even (perhaps) other minds.

## Quiz Alert

The next slide is a **quiz**.

That means it's an iClicker question that you have to answer correctly for full marks.

You'll have two minutes to answer it. (We'll reduce this in future classes if this feels like it is dragging.)

## Quiz Question

What is Russell's main example of something we know about the unobserved part of the world.

1. Unobserved frogs are green.
2. Everyone now alive will eventually die.
3. The sun will rise tomorrow.
4. Bread that we have not eaten will be nourishing.

## Plan

We're going to talk about past -> future inferences, understanding these as special cases of observed -> unobserved inferences.

I'm not going to do the rest in the order Russell does, but instead go through some themes.

- What is the role of persistence assumptions in Russell, and why does he think this might lead to circularity?
- Russell has three distinctive features of this theory of induction: he gives **laws**, **probability**, and **enumerative induction** special places. I'll go over these three, and mention some odd features of Russell's account.

# Persistence

## Basic Idea

- Why do we think the sun will rise tomorrow? Because it always has.
- Russell think we can give a better answer than this. Because the laws of (Newtonian) physics imply that it will
- But why believe they will persist?

# Knowledge of Laws

There is a prior question that Russell kind of glides over here.

- Why think the laws are right about the **observed** world?
- Remember the time Russell is writing: 1912.
- We already had some evidence that the laws weren't quite right.
- In fact, we had evidence that there were slightly wrong in predictions, and very wrong in the underlying structure.
- Is this a problem for Russell's approach to induction?

# Inductive Habit

It's important here to distinguish **descriptive** questions, about how we actually infer, from **evaluative** questions, about which inferences are good and bad.

Clearly we do make inductive inferences; no one wonders whether the hot plate will hurt again this time.

But the evaluative question is much harder.

# Circularity Worry

This is something that goes back to Hume, and we'll see it again when we get to Hume's book. Consider this argument:

1. In the past, regularities have persisted from the then past to the then future.
2. So in the future, regularities will persist from the then past to the then future

- Russell says this "begs the question".

# Question Begging

By this he means something like that you'd only believe the argument was any good if you already believed the conclusion.

There are (at least) two kinds of question-begging:

1. You'd only believe the premises if you (already) believed the conclusion;
2. You'd only believe that premises support conclusion if you (already) believed the conclusion.

The latter is rarer, but is what's at issue here.

# Three Distinctive Features

## Laws

*According to Russell, it is law-conforming inferences that are central*

- Russell makes a big claim here, which is plausible but worth considering.
- The patterns that it is reasonable to expect to continue are those that follow from laws.
- It's not surprising when we find things like balloons or airplanes that violate regularities.

## Laws

*Quick historical reminder*

- Again, remember the time Russell is writing: 1912.
- Balloons had been around for a bit; they are used for military purposes in the French Revolution.
- But Russell is writing just a few years after Kitty Hawk. They are a surprising variation to familiar experience.
- Russell thinks they shouldn't be too surprising, because they are law-conforming.

## Laws

*Knowledge of laws*

- What he thinks would be really surprising would be changing the laws.
- Of course - our views on the laws did in fact change really soon after this.
- Gravity is understood very differently in Einstein's theory of motion to Newton's.

# Laws

*Alternatives*

What would be an alternative to giving laws this central place. Two important alternatives:

1. Simply stress correlations. Russell I think dislikes this because correlations (like flying objects are not man-made) break so often.

2. Stress causal connections. You don't have to have a law to know that Y doesn't just follow X, it was caused by X. Russell for independent reasons is sceptical of making causation central, but this is a very popular move historically.

# Probability

*A caveat on Russell's theory?*

- Russell states something that would have been very surprising to philosophers even a few years earlier.

- He had been convinced of it by a then graduate student working with him: John Maynard Keynes.

# Probability

*A caveat on Russell's theory?*

- The surprising claim is that what we really get from induction is that things will *probably* continue the same way.

- In a slogan: **Induction yields probability**.

# Probability

*Induction yields probability*

- This is actually a somewhat sceptical position, contra Russell's purported aims.

- This concession happens 2/3 of the way in, and I don't think it's flagged how big a change it is.

- On Russell's view, I'm not sure we really know that the sun will rise tomorrow, just that it **probably** will.

# Probability

*What is probable*

Russell thinks that after enough repetitions, the following happens.

- The probability that the next F is G rises really high; close to 1.
- The probability that all Fs are Gs rises really high; close to 1.

Actually this is odd; if there are lots of Fs, and each one has some probability of being not-G, it seems surprising that the probability in the generalisation gets so high.

# Enumerative Induction

*The basic method for Russell*

The only inductive method that Russell uses is enumerative induction.

Input: Lots of Fs that are also Gs.

Output 1: The next F is (probably) G.

Output 2: (Probably) All Fs are Gs.

# Enumerative Induction

*Isn't something missing*

Russell doesn't make a big deal of something I was making a big deal about: the variety of inputs.

This looks like a serious weakness to me.

# Enumerative Induction

*Can It Do All The Work?*

- Maybe it can do argument by analogy, which looks kind of close to enumerative induction.
- And maybe Russell thinks some inductive methods, like from percentages to probabilities are actually part of logic.
- But beyond that?

## Enumerative Induction

*Can It Do All The Work?*

- How do you get testimonial knowledge by induction, especially when you're very little?
- How do you get inference to the best explanation?
- Does Russell think these are reducible to enumerative induction, or that they're bad methods? (It actually might be the second.)

# For Next Time

## Onto chapter 9

Russell deals with one of the oldest philosophical problems: universals.

What are attributes, and how do we know about them?