The Sources of Knowledge
OUTLINE

This course will span **four lectures**. In these lectures, we will survey three of the topics in the Sources of Knowledge section of the syllabus. The objective will be to understand the shape of the debate on each distinct source of knowledge.

The lectures will proceed as follows:

1. **A Priori Knowledge**

2. **Testimony I: Reductionism**

3. **Testimony II: Anti-Reductionism, Testimonial Injustice**

4. **Induction**

Lecture 1 – A Priori Knowledge

1. Background

On the face of it, there seem to be different broad categories of things we can know. Things we can know from *experience*. And things we can know independent of experience.

By now, you'll have come across the *a priori/a posteriori* distinction in the context of numerous other debates in philosophy. But what exactly does it mean to say that there are things we can know "independent" of experience? And why should we think there is any such kind of knowledge?

Last year, you likely looked at this distinction and the relationship it stands in (if any) to the analytic/synthetic distinction, and the necessary/contingent distinction. Here is a reminder of what these terms each mean (roughly):

A priori knowledge – gained independent of experience
A posteriori knowledge – gained by experience

Analytic truths – true in virtue of meaning
Synthetic truths – true in virtue of facts about the world

Necessary truths – could not possibly be false
Contingent truths – could have been false (but in fact are not)

We'll start here to understand why the arguments from Quine and Kripke were, and continue to be, so central to this debate. We'll then look at more contemporary positions on the existence and nature of a priori knowledge.

2. A Brief History of the Debate

(i) Hume's Empiricism

Relations of Ideas	Matters of Fact
- Known ***a priori*** - Negation entails contradiction - Includes geometrical, mathematical, logical truths - E.g. The interior angles of a triangle total 180º	- Known ***a posteriori*** - Negation *does not* entail contradiction - E.g. Cambridge is in the United Kingdom

(ii) Ayer's Empiricism

Ayer is concerned to show that, contrary to many objections, empiricists *can* explain how we know **necessary truths** like mathematical truths. He does this by arguing that all **necessary truths** are **analytic truths**, which he defines as propositions true solely in virtue of "the definitions of the symbols [e.g. words, signs, operators] it contains".

Now, if all we need to do to know **analytic truths** is reason about the definitions of the words and symbols in the proposition, then we can know those truths independently of experience. I.e. we can know them **a priori**. So, on Ayer's empiricism, we know **necessary truths** (which are all analytic truths) **a priori**. The rest (the **contingent truths**) we know by experience.

(iii) Quine's Two Dogmas: Against Analyticity

Quine challenges what he calls an empiricist dogma: the very existence of an **analytic/synthetic** distinction. He makes several different attempts to define analyticity in a way that would preserve the distinction that empiricists need. In each case, he shows there is no way of providing a definition of analyticity without using the notion of analyticity itself. So, he concludes, there is no reason to think that there is an analytic/synthetic distinction at all.

But, the **analytic truths** were supposed to be the things we can know **a priori**. So Quine ultimately argues that, since there *aren't* any analytic truths, there aren't truths that can be known completely independent of experience.

(iv) Kripke's Solution

Kripke enters the picture at this point. He argues that Quine and Ayer (among other empiricists) have all made a mistake in taking the three pairs of concepts to be coextensive. To argue this, he focuses on the **necessary**/**contingent** distinction, and the **a priori**/**a posteriori** distinction. He begins by providing more precise definitions of these four concepts:

A priori – An epistemological concept that refers to a way of knowing things. You come to know something a priori just in case you come to know it independent of experience. Knowledge gained this way *does not have to be gained this way*. Certain facts can be said to be **knowable a priori**.

A posteriori – A complementary epistemological concept that refers to a way of knowing. You come to know something a posteriori just in case you come to know it by way of experience. Knowledge gained this way can sometimes

also be gained a priori (e.g. mathematical knowledge can be gained by testimony). Certain facts can be said to be **knowable a posteriori**.

Necessary truths – A metaphysical concept that concerns facts and whether or not they could have been otherwise. If something could not possibly be false, then it is a necessary truth.

Contingent truths – A complementary metaphysical concept that concerns facts and whether or not they could have been otherwise. If something could have been false (but in fact is not), then it is a contingent truth.

Kripke then presents counterexamples that demonstrate that these distinctions cut across one another.

The Contingent A Priori

The meter standard in Paris

The meter standard is a metal bar in Paris (call it '*S*') based on which the length of a meter is defined. A meter is defined as the length of *S* at (let's say) time t_0.

Now let's consider the following:

"*S* is a meter long at time t_0."

We can know this is true without having measured *S* because we know that what it is to *be* a meter long is to be the length of *S* at time t_0. So, without consulting experience in any way, we can know that it is true that *S* is a meter long. We can know it **a priori**.

But, argues Kripke, it is only **contingently true** that *S* is a meter long at t_0.

Note that we can pick things out by description or by *rigid designation*. So here, we can *describe* a given length as "the length of *S* at t_0", or we can *rigidly designate* a length by using the name 'meter'. That is, when I talk about "the length of *S* at t_0", it's a bit like talking about "the temperature outside right now" – it could have been different. But when I refer to a meter by name, I am picking out the length of a meter here and now and saying "*this* length". I am picking out the same length *across* possible worlds; so that length could not have been different.

Now, think about *S* again. *S* could have been a different length at t_0. It could have been heated, and so expanded; it could have been cut in half; it could have been lengthened or shortened in various ways. So, *S* might not have been *this* length—*S* might not have been a meter long. Hence, "*S* is a meter long at t_0" is a **contingent truth**.

3. "Independent of Experience"

In the debate to this point, we have seen an argument for and a rejection of an account of a priori knowledge in terms of analytic truths. Nevertheless, we also seem to be left with reason to think that there are things that it makes sense to describe as known or knowable *a priori*. But if it is not even the case that those things knowable a priori are coextensive with the necessary truths, then what *is* the class of a priori knowable truths, and how exactly are they knowable?

The kinds of things we tend to think are known a priori are (1) mathematical truths, (2) logical truths, (3) conceptual truths (Boghossian 1996). And, speaking loosely, we often say that these are knowable "independent of experience" (indeed, we glossed the concept this way earlier). But it's not immediately clear what 'independent' and 'experience' mean here.

'Not revisable in light of experience'

One problem faced by this understanding of the expression comes from "Two Dogmas" once again (among other sources). The thesis that stands in opposition to this has come to be called the 'Quine-Duhem Thesis' (QDT), which states that *nothing is immune from revision in light of experience*.

'The a priori elements of knowledge are those elements that reflect or derive solely from features of our native cognitive machinery' (Anthony 2004)

Anthony (2004) responds to the challenge that, because of QDT, 'naturalised epistemology' is inconsistent with the existence of a priori knowledge. She argues that some warrant (or justification) is independent of experience in the relevant sense (and so a priori) just in case that warrant comes from "features of our native cognitive machinery". She also argues that the natural epistemologist can hold this position without giving up QDT.

On the surface of it, it looks as though QDT entails that beliefs like (LNC) 'necessarily, not P and not-P' revisable in light of experience. But, she argues, "the word 'revision' in [QDT] has to mean '*real* revision' and it has to mean '*rational* revision'" (9, original emphasis).

Anthony then suggests that if we distinguish between a priori warrant and a priori knowledge, we can distinguish between revision in the sense of giving up our belief in LNC, and revision in the sense of changing the system of logic we use. She defines our system of logic as "that system of rules that characterizes the rules governing the manipulations of representations by the mental machinery" (10). And, she continues, that system cannot be altered without altering "the overall architecture of one's cognitive machinery". So, in *this* sense, on her view, it is true that our logic can be said to be immune to revision in light of experience, despite the truth of QDT.

'Not justified by sense-experience' (Burge 1998)

The difficulty with this understanding of independence from experience lies in its extension. It seems as though some of our beliefs are justified by some means other than sense perception, but nevertheless should not be considered to be justified a priori. For instance, some of my beliefs are justified by memory, other by introspection, but it seems strange to say that such beliefs are justified a priori.