

Class 17 - Kripke and Intuitions

I. Intuitions

Descartes, famously, tried to ground all of our knowledge on indubitable foundations.
His project ran adrift on the problem of circularity.
The empiricist's project of founding all of knowledge on direct apprehension of sense data faltered as well.

It seems that there is no unassailable notion of direct experience.
Alternatives to foundationalism, though, are all unsatisfying.
Coherent theories may lack connections to reality.
Inferences to the best explanation beg the question of whether our best explanations are any good.
We seem led to a Humean, or worse, skepticism.
But, skepticism misrepresents our undeniable ability to know lots of things.

All arguments must start somewhere.
Quine argues that we start with sensations, but that the theories we build out of them are not founded in these incorrigible sensations.
We are like the sailor, adrift on the sea, repairing our ship.
We stand in one place, to fix another.
No one position is privileged, but we always have some place to start.
As scientists, we start with observations, not unassailable apprehension of the external world, but fallible impingement of our sense organs.
As philosophers, we often start with intuitions.

The central questions at which we have been looking in the philosophy of mind are questions about possibility:

Are zombies possible?
Would the Chinese nation, or other homunculi-headed robots, have qualia?
Is it possible to reduce mental states to neural states?

The problem with arguments which rely on possibility is that they inevitably rely on our intuitions about what kinds of cases are possible, and what kinds of cases are not possible.

Knowledge of possibility inevitably relies on our intuitions.

And intuitions about possibility vary among individuals.

In the last fifty years, there has been an explosion of technical work in modal logic, the logic of possibility, and its partner, necessity.

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On Thursday, we will look at the technical work.

Briefly, Kripkean modal logics provide the mechanics for determining logical consequences about possible worlds.

Many philosophers think that this technical work has eliminated philosophical worries about arguments concerning possibility.

But, although modal logic has given us tools to reason, to make inferences involving possible worlds, the premises still rely on intuition.

For example, consider the case of the Chinese nation. Some of us believe that it is just intuitively obvious that the Chinese nation lacks qualia. That intuition supports Block's original inference, and was the source of his argument. In response, some of you thought that there was something wrong with the argument. And Chalmers presented a theory which entailed that the Chinese nation had qualia. Perhaps this argument gave voice to some of your intuitions.

One response, and one that is very compelling to me, in some kind of position of authority, is to say, "Shut up."

I mean, I want to say that some intuitions are stronger, or more substantial. After all, when students don't follow me, or disagree with me, it is often due to their not understanding, perhaps not doing enough of the homework. So, I want to say, go back and think about it some more, and then your intuitions will line up with mine. Perhaps there is some misunderstanding of the case. And, after all, I've thought about it longer than you have. You should respect my authority, my experience.

There was a clear disagreement about whether zombies are possible. In fact, Chalmers' dancing and fading qualia cases allowed us to see strong intuitions on both sides of the question. The Kripke argument, which we will examine in a moment, supports the basic dualist intuition that whatever physical arrangement of particles that forms the supervenience base for my conscious experience, it is possible to have the same physical arrangement without the conscious experience. That is, Chalmers' open question test will apply to any physical reduction of consciousness, in the absence of some psychophysical theory. On the other hand, some of you have argued, both in public and in private conversation, that the chauvinist neuroscientific theories suffice, that chauvinism is no vice, in this case.

The question of the role of intuition in contemporary philosophy will not disappear in the second half of the course. We will be looking at more thought experiments in philosophy of science. In particular, Carroll's brilliant argument for the reality of laws relies on intuitions about small possible worlds. On Thursday, we will take a look at possible worlds semantics, before attacking intuitions more generally next Tuesday. Let's look a bit more closely at Kripke's argument.

Kripke's argument against the identity theory, indeed his work in *Naming and Necessity*, generally, relies on some basic intuitions about names and designation. *Naming and Necessity* is extremely influential in philosophy of language, philosophy of mind, metaphysics, and epistemology. Indeed, it is one of the most influential books of philosophy in the twentieth century. It has revived the medieval concept of essence, and has its roots in contemporary modal logic. It also triggered a violent reaction to his methods. Some philosophers have responded with attempts to find data, where Kripke used intuition. Others reject his conclusions just because of their intuitive bases.

II. The nature of identity

Kripke criticizes identity theory for identifying mental states with brain states, since even if they share actual properties, they have different possible properties.

Kripke's worry about identity theory is perhaps clearest on p 9.

He claims that if two objects are identical, then they share all properties, including modal properties.

Kripke claims that mental states can not be identical to brain states, since mental states and brain states have different possible properties.

Place and Smart initially responded to this kind of argument with a distinction between contingent and necessary identity.

They agreed that the identity was not necessary, that mental states and physical states have different possible properties.

But, they argued, there is an empirical fact about their identity such that our mental states just happen to have certain physical instantiations, or supervenience bases.

Place framed his argument in terms of the 'is' of composition against the 'is' of definition.

The table is a packing case compositionally, contingently, but not definitionally, or necessarily.

Kripke has called into doubt the legitimacy of contingent identity.

If two objects are identical, then they have to share all properties.

Thus, they share all modal properties.

So, to say that two objects are necessarily identical is to say no more than that they are identical.

The distinction between identity and necessary identity collapses.

It is more typical to distinguish between the 'is' of identity and the 'is' of predication.

Compare, 'the table is red' with 'a bachelor is an unmarried man'.

Identities provide necessary and sufficient conditions.

Predications just indicate one property of an object.

Even if the property is essential, it may not be sufficient.

So, it is essential to a bachelor that he be unmarried, but unmarried women are not bachelors.

In logic, we use '=' between objects to represent their identity, and we introduce axioms governing that relation:

1. Reflexivity: $\forall x(x=x)$
2. Symmetry: $\forall x\forall y(x=y \equiv y=x)$
3. Indiscernibility of Identicals: $\forall x, x=y \vdash \forall y$

We use any of a variety of predicates, without any further logical properties, to represent predication.

Place's 'is' of composition is more properly an 'is' of predication, and not an identity at all.

III. Identity and rigid designation

Kripke introduces the notion of rigid and non-rigid designators to highlight the difference between necessary and contingent identity statements.

A rigid designator is something that names the same object in all possible worlds, in all counterfactual circumstances.

Consider

A. The number of planets is greater than seven.

A is true, but it might be false.

Contrast that claim with

B. Nine is greater than seven.

B is necessarily true, since 'nine' rigidly designates a particular number.

'The number of planets' designates a different number in different possible worlds.

Notice that since four plus five is identical to nine, we can substitute:

C. four plus five is greater than seven

Kripke argues that names are rigid designators.

Even if the facts about a person were different, the person's name still refers to that person.

Kripke uses the examples of Ben Franklin and Nixon.

Even if 'the inventor of bifocals' referred to some one else, 'Ben Franklin' would still refer to Ben Franklin.

Thus, 'the inventor of bifocals' refers non-rigidly, whereas 'Ben Franklin' refers rigidly.

In another case, Kripke tells a story about a possible discovery about Kurt Gödel.

Gödel actually proved that arithmetic, and other related theories, are essentially incomplete.

That is about all that most people know about him.

So, when people use the name Gödel, they mean to refer to the person who proved the incompleteness theorems.

What if Gödel actually stole the theorems from his neighbor Schmidt?

If people mean 'the person who proved incompleteness' when they use 'Gödel', then they really are referring to Schmidt, by the name 'Gödel'.

But, says Kripke, that's just not the case.

When people use 'Gödel', they refer to Gödel, no matter who actually proved incompleteness.

That is the case because names are rigid designators.

Notice that identity statements between rigid designators must be necessary.

Let's say that a is identical with b.

Then, in any possible world, 'a' refers to a, and 'b' refers to b.

So, there are no possible worlds in which a is not identical to b, nor where 'a=b' is false.

There are possible worlds in which 'Ben Franklin is the inventor of bifocals' is false, because 'the inventor of bifocals' refers, in any possible world, to the actual inventor of bifocals.

In some possible worlds, Franklin was not the inventor of bifocals.

But, in all possible worlds Franklin was Franklin.

'Russell=Professor Marcus' is true, in all possible worlds, even though there are some possible worlds in which I did not become a professor, because we use 'Professor Marcus' in this world to refer to me, in all possible worlds.

Kripke argues that 'heat' and 'molecular motion' are rigid designators.

'Heat' is a rigid designator, since in counterfactual situations in which people, or Martians, did not feel warmth when putting their hands near fires, we would not say that they did not feel heat.

We would say that they get a different sensation from heat than the one that we get.

Even if there are no people to feel it, fire heats up the air around it.

Heat thus rigidly designates molecular motion.

Similarly, 'molecular motion' is also a rigid designator, referring to the same thing, the motion of molecules, in all possible worlds.

Thus, the identification of heat with molecular motion is necessary.

That there are people who feel heat in a certain way is contingent.

Our skin could be constructed differently, say made of asbestos.

But we should not confuse the contingent property of heat (that people feel it in a particular way) with a necessary property of heat (that it is molecular motion.)

That we discovered that heat is molecular motion is also a contingent fact.

For aeons, people had no idea that heat was molecular motion.

In fact, they did not even know what a molecule was.

But, that contingent (epistemic) fact about our knowledge is irrelevant to the (metaphysical) fact about the nature of heat.

IV. Necessary a posteriori?! Contingent a priori?!

This section is an aside on the importance of Kripke's claim.

We talked, at the beginning of the term, about the distinction between semantic claims (involving analyticity, syntheticity, synonymy, etc.); epistemic claims (involving apriority and aposteriority); and metaphysical claims (involving necessity and contingency).

Traditionally, it was believed that all and only necessary claims were known a priori.

Contingent claims were known from experience.

Further, it was traditionally (before Kant) supposed that the way we know a priori claims is by analysis.

So, all necessary claims are known a priori because they are analytic.

And all contingent claims are known a posteriori because they are synthetic.

Kant threw a little twist into that story by claiming that there are synthetic a priori claims, like those of mathematics.

You all should know that story, already.

Kripke's innovation is involves the relation between epistemic and metaphysical notions.

Put the semantic claim aside.

Kripke's claims both that there are necessary truths that are known a posteriori, and that there are a priori but contingent truths.

In particular, the identification of heat with molecular motion is necessary.

Our discovery of that fact is a posteriori: we discovered it empirically.

Conversely, that the standard meter bar is one meter is a contingent fact.

It could be otherwise, longer or shorter.

But, it is known a priori that the standard meter is one meter.

V. Identity, rigid designation, and the identity theory

According to Kripke, the identification of water with H₂O, or lightning with electrical discharge, is necessary, just like the identity of heat with molecular motion.

There is a contingent fact about how we experience heat, or lightning, or water.

We pick out heat, or light, according to contingent facts about how they effect us.

But, all theoretical identity statements are, in fact, necessary identities, not contingent identities, p 8.

Since theoretical identity statements are necessary, the identification of pain states with brain states must also be necessary.

For, Kripke claims that pain is a rigid designator, p 11.

Nothing could be a pain if it did not hurt in the way that pains do.

Similarly, if 's' designates a brain state, it does so rigidly.

The identity of any two rigid designators must be necessary, since neither term could refer to anything other than its referent.

There were three (overlapping) considerations against the necessary identification of brain states and mental states.

The first two claimed that if the identity were necessity, then the meanings and the logic of statements involving the terms should be the same.

We can ignore those claims.

Really, the problem distills to this: it seems possible that pain could be something other than a particular state of the brain.

But, if it is possible that pain is not a state of the brain, then the identity of the two must be contingent.

As we have seen, such theoretical identifications must be necessary.

So, the necessary identification must be false.

Thus, Kripke's argument is:

1. The identification of mental states and brain states must be either contingent or necessary.
2. Since mental states and brain states refer rigidly, the identification can not be contingent.
3. Since it is possible that mental states are not states of the brain, the identification can not be necessary.

Thus, mental states and brain states must not be identical.

A different version of the argument relies on the incoherence of contingent identity:

1. Theoretical identities must be necessary.
 2. But, it is possible that mental states are not states of the brain.
- So, mental states and brain states must not be identical.

VI. Kripke and intuitions

The identity theorist agrees with Kripke that the identifications of brain states with mental states should not be necessary.

Kripke's argument against contingent identity depends on his notion of rigid designation, and its application in this particular case.

Kripke's critic might deny his allegation that 'water', 'lightning', and 'heat' are rigid designators. If 'water', 'lightning', and 'heat' are not rigid designators, then maybe 'pain' is not rigid either.

His argument seems to rely, once again, on intuitions about what we would say in other possible worlds.

Kripke claims that we would say that heat exists, even if there are no people to feel it.

If we say, instead, that fires do not heat up the air, but that they transfer molecular motion only, then Kripke's claim that heat rigidly designates is unsupported.

Note that this criticism is just using the old primary-secondary distinction.

Consider also Kripke's description of the Martians, whose sensations of heat and cold are the reverse of ours.

Kripke claims that we would say that heat exists, even if there are no people to feel it.

What do we say about such worlds?

What do we say about Twin Earth?

What do we say about zombies, and homunculi-headed robots?

Kripke, the philosopher, started his career as Kripke, the modal logician.

In *Naming and Necessity*, he argues that we stipulate other possible worlds.

Still, we need a base from which to argue about them.

I mean, we need some account of the basis on which we make claims about other possible worlds.

On Thursday, we will look at the machinery for reasoning about possible worlds, modal logic, and see if Kripke's innovations ameliorate our worries about reliance on intuitions about those possible worlds.