Kripke on the necessary a posteriori I: identity sentences

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So far we have discussed Kripke's argument that the categories of necessary truths and a priori knowable truths are conceptually distinct, and his case that examples of the standard meter show that there are some propositions in the latter category which are not in the former. He also argues that there are some propositions in the former category which are not in the latter: necessary a posteriori propositions. These fall into three main categories:

- Identity sentences involving two distinct proper names. (pp. 97-105, 107-110)
- Attributions of essential properties to objects. (pp. 110-115, 126-127)
- Theoretical identities involving natural kinds. (pp. 116-126, 127-134, 140-144)

We will discuss these in turn. Today, we will begin by discussing Kripke's treatment of identity sentences.

1 Identity sentences are examples of the necessary a posteriori

Kripke argues, first, that a certain class of identity sentences express necessary truths and, second, that these truths are knowable only a posteriori.

1.1 The necessity of identity

We can give two arguments for the necessity of true identity claims, one linguistic and one metaphysical.

The linguistic argument follows from material we have already covered. Take any identity sentence $\lceil n=m \rceil$, where *n* and *m* are both rigid designators. Suppose that the sentence is true. It then seems to follow that it is also necessarily true, by the following argument:

- 1. Suppose (for reductio) that the identity sentence involving two rigid designators is actually true, but not necessarily true.
- 2. Then there is some possible world w with respect to which the proposition expressed by the sentence is false.
- 3. Then, with respect to w, n and m must not refer to the same object (for, if they did, the proposition expressed by the sentence would be true with respect to that world).
- 4. But then either n or m must refer to different objects with respect to w and the actual world, since the two expressions refer to the same object with respect to the actual world and different objects with respect to w.
- C. But then either m or n must fail to be a rigid designator, which contradicts our initial hypothesis. So it is not possible that an identity sentence involving two rigid designators could be true, but not necessarily true.

Kripke also thinks that there is an intuitive metaphysical argument for the necessity of identity, which he gives in the 'Introduction':

"Already when I worked on modal logic it had seemed to me ... that the Leibitzian principle of the indiscernibility of identicals was as self-evident as the law of contradiction. That some philosophers could have doubted it always seemed to me bizarre. ... Waiving fussy considerations ... it was clear from $(x) \Box (x = x)$ and Leibitz's law that identity is an 'internal' relation: (x)(y) $(x = y \supset \Box x = y)$. (What pairs $(x, y \text{ could be counterexamples? Not pairs of distinct objects, for then the antecedent is false; nor any pair of an object and itself, for then the consequent is true.)" (3)$

The argument here is from Leibniz's law and the fact that every object is necessarily identical to itself to the necessity of identity.

1.2 A prioricity and qualitatively identical situations

Given the conclusion that true identity statements involving rigid designators are necessary, all that remains to show is that sometimes the propositions expressed by sentences like

Hesperus is Phosphorus

are knowable only a posteriori. This certainly seems to be intuitively correct: it seems that we found out that this is true only by empirical research, and could not have done so by a priori reflection. But Kripke also gives an argument for the conclusion that these sorts of claims are knowable only a posteriori:

"So two things are true: first, that we do not know *a priori* that Hesperus is Phosphorus, and are in no position to find out the answer except empirically. Second, this is so because we could have evidence qualitatively indistinguishable from the evidence we have and determine the reference of the two names by the positions of the two planets in the sky, without the planets being the same." (104)

Kripke's point seems to be that we could be in a qualitatively identical situation with respect to the contexts of introduction and use of these names, and yet, in that possible situation w, the sentence 'Hesperus is Phosphorus' could be false.

Why this argument seems puzzling: the sentence 'Hesperus is Phosphorus' expresses a different proposition as used in w than it does as used in the actual world. So why does the fact that the proposition expressed by this sentence in w is false show anything about the epistemic status of the proposition expressed by this sentence in the actual world?

A way to fill the gap in the argument via principles connecting acceptance of sentences with belief in the propositions expressed by those sentences. Consider, e.g., the following such principle:

If an agent understands some sentence S which expresses the proposition p, then: (the agent is justified in accepting S iff the agent is justified in believing p)

We can then read Kripke as arguing that agents cannot know a priori that 'Hesperus is Phosphorus' is true, and using the above principle to reach the conclusion that they cannot know a priori that Hesperus is Phosphorus.

Some reasons to be skeptical about principles of this sort.

Why we might be inclined to grant Kripke's claim that it is not knowable a priori that Hesperus is Phosphorus, even if his argument for this claim is unconvincing. The example of 'Gaurisanker' and 'Mt. Everest'.

2 Some sources of skepticism about Kripke's claim

We can distinguish three lines of response to Kripke's claim that identity sentences are examples of the necessary a posteriori. The first two argue that identity sentences are not necessary if true; the last argues that they are, if true, knowable a priori.

2.1 Contingent identities?

As Kripke notes, there appear to be identity statements which are true, but only contingently so. An example is: The inventor of bifocals was the first Postmaster General of the United States.

Doesn't this show that identity statements are not always necessary, if true, and hence that identity is a relation between objects which can sometimes hold of them only contingently?

Response 1: the restriction to identity sentences involving rigid designators.

Response 2: the sense in which sentences like the above do not single out objects and claim of those objects that they stand in the identity relation.

2.2 The illusion of contingency

Our intuition that 'It could have turned out that Hesperus wasn't Phosphorus.' The problem that 'It could have turned out that p' seems to entail 'It is possible that p.' But if it is possible that Hesperus wasn't Phosphorus, then our original identity sentence is not necessary after all.

Kripke's explanation of the illusion of contingency: the original intuition rests on the fact that we can imagine ourselves in some qualitatively identical situation w which is such that 'Hesperus is Phosphorus' is false, as used in w. This is what we are imagining when we are imagining a situation in which, as we put it, 'It turns out that Hesperus is not Phosphorus.' But the fact that this sentence is false as used in w does not entail that, as we use it, it is false with respect to w. (This is the same distinction that we have been stressing, between the reference of an expression with respect to a possible world, and the reference of an expression as used in that possible world.)

2.3 Millianism about names

Suppose that you took it to be the moral of Kripke's three arguments against the classical picture that the meanings of names are not to be identified with the meanings of any definite descriptions; and suppose further that, given this result, you concluded that the meaning of a proper name could only be its referent. If you thought this, then you would think that all coreferential proper names have the same content. But then it would be hard to avoid the conclusion that, since

Hesperus is Hesperus.

expresses an a priori knowable proposition, and 'Hesperus is Hesperus' says the same thing as 'Hesperus is Phosphorus', it follows that

Hesperus is Phosphorus.

also expresses an a priori knowable proposition. So on this view, Kripke was right that identity sentences involving names are necessary, he was wrong to think that they are a posteriori. Why this is a counterintuitive result.

(Strictly, you might well doubt that even 'Hesperus is Hesperus' expresses an a priori knowable proposition, since it seems that in order for this proposition to be true, Hesperus must exist, and we cannot know a priori that Hesperus exists. We can always restate such claims about the a priori in terms of conditionals, like 'If Hesperus exists, then Hesperus is Hesperus.')

A class of identity sentences which seem to be necessary and cannot be argued to be a priori on the basis of a Millian theory of names: identity sentences involving descriptions which are turned into rigid designators by use of the indexical 'actual', as in 'the actual inventor of bifocals.' This appears to rigidly designate Benjamin Franklin. If so, then the following identity sentence seems to express a necessary truth:

Benjamin Franklin is the actual inventor of bifocals.