

# Kripke's *Naming and Necessity*: Lecture II

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## 1. VARIETIES OF DESCRIPTIVISM (END OF LECTURE I)

We've already seen two distinctions Kripke makes between different versions of descriptivism:

- The distinction between descriptivist views which let a single description do the work, and those which rely on a cluster of descriptions
- The distinction between views according to which a description gives the meaning of a name, and those according to which it merely fixes the reference of the name

Here Kripke introduces a third distinction: between circular and non-circular descriptivist views. This distinction is not like the others; it is less a distinction between varieties of descriptivism than a constraint on descriptivist views.

What exactly is this constraint? Suppose we identified the meaning of the name "Aristotle" with the meaning of the description "the person called 'Aristotle'" or "the referent of 'Aristotle.'" These would be examples of descriptivist views which fail to meet the non-circularity condition, since to determine what object satisfies the description, we must first know which object is the referent of the name in question.

What would be wrong with using descriptions of this sort to give the meaning of, or fix the referent of, "Aristotle"?

## 2. KRIPKE'S ARGUMENTS AGAINST DESCRIPTIVISM (71-90)

### 2.1. *The modal argument (48-49, 71-77)*

In Lecture I, Kripke introduced the notion of rigid designation. There we saw that we could give the following test for the rigidity of a term:

*Intuitive test for rigid designation*

$n$  is a rigid designator iff  $\ulcorner n$  could not have existed without being  $n$ , and nothing other than  $n$  could have been  $n \urcorner$  is true.

Kripke thinks that ordinary proper names are rigid designators, whereas ordinary definite descriptions are not. (There are some descriptions which are plausibly rigid designators — e.g., 'the sum of 3 and 4' — but these are the exception.)

But if one expression is a rigid designator, and another is not, the two cannot mean the same thing. One way to see this: consider sentences of the form

$\ulcorner$ Necessarily,  $n$  is  $n \urcorner$

and

$\ulcorner$ Necessarily,  $n$  is the  $F \urcorner$

and note that we can never transform a truth into a falsehood by replacing one synonym with another.

This is the modal argument:

1. Ordinary proper names are rigid designators.
2. Ordinary descriptions are not rigid designators.
3. If  $e$  is a rigid designator, and  $e^*$  is not a rigid designator, then  $e$  and  $e^*$  cannot mean the same thing.

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C. Ordinary names do not mean the same thing as any (ordinary) definite description.

Why this argument counts against the view that the meanings of names are given by their associated descriptions, but not against the view that the reference of a name is fixed by its associated descriptions.

Let's consider a few replies to this argument.

### 2.1.1. Rigidified descriptions

One might not, first, that even if many descriptions are non-rigid, some are rigid. And we can always turn a non-rigid description ‘the F’ into a rigid description by using the “actuality” operator to form the description ‘the actual F.’ Descriptions of this form will always be rigid. Hence, it seems, the modal argument does not refute descriptivism — it just shows that the descriptivist should always use rigidified descriptions.

The problem with this move can be brought out by considering counterfactuals of the form

Were there one more molecule on the sun, I would still believe that Aristotle is a philosopher.

Counterfactuals of this sort seem to be true; but the rigidified descriptivist must treat them as false. Can you see why?

### 2.1.2. Wide-scoping descriptions

One might instead say that names have the meanings of descriptions, but that these descriptions always take wide scope over modal operators. This offers an explanation of how

Necessarily, n is the F

can come out false, even if ‘the F’ gives the meaning of ‘n’ — the idea is that since the description corresponding to a name always takes wide scope, the meaning of the above is

[the x: Fx] □ x is the F

which might well be false, unlike

□ [the x: Fx] x is the F

A worry with this move is that we can state the modal argument without using sentences containing any modal operators, by asking about the modal profiles of simple sentences. We can, for example, ask whether

n is the F

The F is the F

are necessary, or contingent. The descriptivist can’t say that the first is contingent and the second necessary since, according to her, they express the same proposition.

A second worry concerns the interaction between modal operators and propositional attitude verbs. Consider this sentence:

Necessarily, if Bob believes that the F is G, and the F is G, then Bob's belief is true.

All sentences of this form seem to be true. But we don't get this result if names descriptions which always take wide scope over modal operators. For then the meaning of this will be:

[the x: Fx]  $\square$  [(Bob believes that [the y: Fy] Gy & Gx)  $\rightarrow$  what Bob believes is true]

Suppose now that the actual F is Adam, and that in some world w, the F is Wendy. Consider the embedded sentence

((Bob believes that [the y: Fy] Gy & Gx)  $\rightarrow$  what Bob believes is true

and ask whether this is true at w relative to an assignment of Adam as value to 'x'. Plainly, it need not be — since it says that if (Bob believes that Wendy is G and Adam is G), then Bob's belief is true. But what if Wendy is G in w but Adam is not?

For more on these arguments, see Soames, *Beyond Rigidity*.

## 2.2. *The semantic argument (78-85)*

Kripke has two other arguments against the descriptive theory. The first of these is surprisingly simple, and is sometimes called the 'semantic argument.' Consider a name you are competent with using, and count as understanding, like 'Cicero' or 'Richard Feynman.' What descriptions do you associate with the name? If you are like most people, you don't know of any uniquely identifying description of people like this. (If you do know such a description, we can come up with another case for you where you can't.)

But in these cases do we want to say that the name has no reference for you, just because the descriptions you associate with the name do not pick anyone out uniquely? No, we don't want to say this.

There's a further twist on the argument. Sometimes speakers not only do not have uniquely satisfied descriptions to associate with a name, but also associate the wrong descriptions with the name: descriptions that are in fact not even true of the referent. The example Kripke gives is 'Albert Einstein.' Evidently lots of people think that Einstein was the inventor of the atomic bomb, and this is the description they most associate with the name. But of course just because they associate this description with the name, they do not use the name to refer to Oppenheimer; after all, when they say 'Einstein invented the bomb', what they say is false, not true!

A plausible example of case in which many of us would supply the wrong description: Peano and Dedekind.

These examples are all ways of making the same point: the descriptions speakers associate with names often do not even have the same reference as the name, and hence can't either give the meaning of the name, or fix its reference.

### *2.3. The epistemic argument (86-87)*

There is another powerful argument against the description theory, on which Kripke touches only briefly. Consider a sentence of the form,

If the F exists, then the F is F.

This appears to be knowable a priori. If so, then it seems that every sentence of the following form is true:

It is knowable a priori that if the F exists, then the F is F .

But now suppose that n is some name whose meaning, according to the description theory of names, is given by the description 'the F.' Then our principle of replacing synonyms without change of truth-value leads us to the claim that the following sentence is true:

It is knowable a priori that if the F exists, then n is F.

But for many name/description pairs which might be employed in a descriptivist theory, this will not hold. Compare:

It is knowable a priori that if the greatest philosopher of antiquity exists, then the greatest philosopher of antiquity is the greatest philosopher of antiquity.

It is knowable a priori that if the greatest philosopher of antiquity exists, then Aristotle is the greatest philosopher of antiquity.

This argument also works against the view that the reference of a name is fixed by its associated description, if we accept Kripke's claims about a priori knowledge of reference-fixers which we discussed in connection with the example of the standard meter.

## **3. KRIPKE'S ALTERNATIVE PICTURE OF REFERENCE (91-97)**

We began this discussion by noting several arguments in favor of the classical theory of names. One of these which seemed particularly powerful was that it gives a story about how the reference of names is determined. Kripke reiterates this argument on p. 80.

Recall that the puzzle was to explain how our words get linked up with referents: how we manage to connect symbols with the things they refer to. The descriptivist answer was that names are connected with their referents via a process of association: speakers associate the names with certain properties (in the form of a description), and the name

refers to whatever object in the world has those properties. This is an elegant picture, but we have already seen that it has several important defects. Recall the semantic argument in its different forms: no object, many objects, wrong object.

So how does the reference of a name get fixed? Kripke discusses the example of how a the reference of a speaker's use of the name 'Richard Feynman' might get fixed:

"Someone, let's say a baby, is born; his parents call him by a certain name. They talk about him to their friends. Other people meet him. Through various sorts of talk the name is spread from link to link as if by a chain. A speaker who is on the far end of this chain, who has heard about, say Richard Feynman in the market place or somewhere, may be referring to Richard feynman [through his use of name 'Richard Feynman'] even though he can't remember from whom he first heard of Feynman or from whom he ever heard of Feynman. . . . A certain passage of communication reaching ultimately to the man himself does reach the speaker. He then is referring to Feynman even though he can't identify him uniquely. He doesn't know what a Feynman diagram is . . . Not only that: he'd have trouble distinguishing between Feynman and Gell-Mann. So he doesn't have to know these things, but, instead, a chain of communication going back to Feynman himself has been established, by virtue of his membership in a community which passed the name on from link to link, not by a ceremony that he makes in private in his study: 'By "Feynman" I shall mean the man who did such and such and such and such'." (91-2)

He returns to the view a few pages later:

"A rough statement of a theory might be the following: An initial 'baptism' takes place. Here the object may be named by ostension, or the reference of the name may be fixed by a description. When the name is 'passed from link to link', the receiver of the name must, I think, intend when he learns it to use it with the same reference as the man from whom he heard it. If I hear the name 'Napoleon' and decide it would be a nice name for my pet aardvark, I do not satisfy this condition. . . ." (97)

This effectively divides the theory of reference into two parts: questions about initial fixation of reference, and questions about maintenance of reference.

A difference in kind between Kripke's explanation of reference and that of the descriptivist: one is given in terms of facts about linguistic communities, and one in terms of facts about the psychologies of individual language users. How this leads to externalism. Two molecule-for-molecule duplicates could mean different things by their words. This seems to imply that they could also have different thoughts. Is this puzzling?

Note that we can do the same thing with predicates. The examples of ‘arthritis’ and ‘tharthritis.’

#### 4. IDENTITY SENTENCES AND THE NECESSARY A POSTERIORI (97-105)

At this stage, Kripke turns from questions about how the reference of names are fixed to a consideration of the category of the necessary a posteriori. This category — and particularly its relation to the mind/body problem — will occupy him for the rest of this lecture, and Lecture III.

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

##### *4.1. 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  $\ulcorner n=m \urcorner$ , 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. (1)
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). (2)
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  $w$ . (3)

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C. But then either  $m$  or  $n$  must fail to be a rigid designator, which contradicts our initial hypothesis. (4)

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  $(x, y)$  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.

#### 4.2. *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 believing that  $S$  is true 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; Kripke’s “Puzzle About Belief.”

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.

#### *4.3. 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.

##### *4.3.1. 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.

##### *4.3.2. The illusion of contingency*

As Kripke says, we have the 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, and we don’t have a genuine example of the necessary a posteriori.

Kripke explains away this 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.)

#### 4.3.3. *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. (‘What else could it be?’ you might ask.) 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.’)

There are, however, two classes of sentences closely related to the ones which Kripke discusses which seem to be necessary and cannot be argued to be a priori on the basis of a Millian theory of names:

The first are 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.

But this seems to be a posteriori, even if Millianism is true and the meaning of ‘Benjamin Franklin’ is its referent.

The second are true non-identities, like

Jeff Speaks  $\neq$  Saul Kripke.

If both names are rigid designators, then sentences like this are necessary if they are true. But Millianism provides us with no reason to think that these claims are a priori, since there is no way to turn them into an a priori truth by substituting coreferential names for each other.

Hence, even if one has doubts about Kripke's claims about 'Hesperus is Phosphorus', there are still closely related examples which seem to establish the intended conclusion.