# 16. Kripke's objections to Russell's theory of names

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Saul Kripke is yet another top logician of his time. He is widely credited with the discovery of *possible world semantics* for modal logic, a feat he accomplished at a young age. The series of lectures published as *Naming and Necessity* have been very influential in the philosophy of language, metaphysics, and perhaps the philosophy of mind.

Thought there is much to be said about these series of lectures, we'll focus on some aspects of his discussion of Russell's and Frege's theory of names. By the time Kripke gave these lectures, Russell's theory was taken as orthodoxy, with philosophers disagreeing only about the details. Kripke's objections represent a serious challenge to the theory, and together with Hilary Putnam's influential work, gave rise to a philosophical doctrine called *externalism*.

### 1 Kripke's reconstruction of the Frege/Russell theory of names

We have discussed the theories of names by Frege and Russell. Though Russell thought of his theory as a competitor to Frege's, many people thought that it was instead a natural development of the former, which improved it in some important ways. We won't examine these exegetical issues here.

For our purposes, it will suffice to say that there is a certain interpretation of Frege's theory on which Russell's theory can be seen as its development. On this interpretation, a name's sense is something like a definite description. Definite descriptions are treated according to Russell's analysis.

In his second lecture, Kripke explicitly states the theory he wants to attack as a conjunction of six theses and one independent constraint:

- (1) To every name or designating expression 'X', there corresponds a cluster of properties, namely the family of those properties  $\phi$  such that A believes ' $\phi$ X'.
- (2) One of those properties, or some conjointly, are believed by A to pick out some individual uniquely.
- (3) If most, or a weighted most, of the  $\phi$ s are satisfied by one unique object y, then y is the referent of 'X'.
- (4) If the vote yields no unique object, 'X' does not refer.
- (5) The statement 'If X exists, then X has most of the  $\phi$ s' is known a priori by the speaker.

- (6) The statement, 'If X exists, then X has most of the  $\phi$ s' expresses a necessary truth (in the idiolect of the speaker).
- (C) For any successful theory, the account must not be circular. The properties which are used in the vote must not themselves involve the notion of reference in such a way that it is ultimately impossible to eliminate.

Kripke thinks that (1)-(6) pretty much summarize Russell's theory, if not in letter, certainly in spirit. Recall that according to Russell, ordinary names are usually just definite descriptions in disguise. So, for instance, the name 'Aristotle' is just an abbreviation for 'the most famous teacher of Alexander the Great'. John Searle, another philosopher, pointed out that this couldn't be right. If 'Aristotle' is just an abbreviation for the description 'the most famous teacher of Alexander the Great', then the sentence 'Aristotle was the most famous teacher of Alexander the Great' would express a tautology, and as such, it would express a necessary truth.

But that sentence doesn't express a necessary truth: Aristotle could have failed to be the most famous teacher of Alexander the Great. He could have hit his head early on and died at a young age, or the rock could have caused him some sort of cognitive impairment, ultimately preventing him from being a teacher of Alexander the Great. You see where this is going. Moreover, as Frege himself noted, different people could associate different descriptions (or modes of presentation) with the same name.

Because of these problems, Searle and others thought that Russell's theory had to be reformulated. On the reformulation of the theory, names are not abbreviations of definite descriptions, but clusters of such descriptions. So perhaps 'Aristotle' would be something like the cluster of descriptions 'the most famous teacher of Alexander the Great, or the author of the Nicomachean Ethics, or the most prominent disciple of Plato, ...' The view that Kripke considers is this reformulated view.

However, even this reformulated view has several problems. These notes present Kripke's arguments against the reformulated descriptivist view.

## 2 Against (6)

Call  $\Gamma$  the cluster of properties that are associated with the name 'Aristotle'. Thesis (6) states that 'if X exists, then X has most of the  $\phi$ s' expresses a necessary truth (in the idiolect of the speaker). For instance, that 'If Aristotle exists, then Aristotle has most of the properties in  $\Gamma$ ' expresses a necessary truth.

But this is not so: that Aristotle did all the things that he in fact did is merely a contingent matter. For instance, Aristotle could have died early on in his life, in which case he would not have been able to do any of the great deeds that we now attribute to him. Even if we somehow introduced the name 'Aristotle' by using the properties in  $\Gamma$ , it would still not have been necessary that Aristotle had had those properties.

For instance, suppose that someone introduces the name Aristotle in the following way: 'I will use the name "Aristotle" to denote the person who wrote the Nicomachean Ethics, was the most famous teacher of Alexander the Great, invented syllogistic logic, etc.' In that case, would thesis (6) hold of the thing that is in fact denoted by the name 'Aristotle'? Kripke doesn't think so.

According to Kripke, proper names in ordinary language are *rigid designators*: they name the same thing in all possible worlds. So that if *in fact* the name 'Aristotle' names Aristotle, then it

would name Aristotle regardless of how his life was or of the things he did. Of course, if I introduce the name 'Aristotle' by means of the description above, it *could have turned out* that the name 'Aristotle' had named something else. But given the actual referent of the name—given how we in fact use the name, if you wish—it names Aristotle in all possible worlds. Here is a clarificatory note by Kripke:

When I say that a designator is rigid, and designates the same thing in all possible worlds, I mean that, as used in *our* language, it stands for that thing, when *we* talk about counterfactual situations. I don't mean, of course, that there mightn't be counterfactual situations in which in the other possible worlds people actually spoke a different language. One doesn't say that 'two plus two equals four' is contingent because people might have spoken a language in which 'two plus two equals four' meant that seven is even. Similarly, when we speak of a counterfactual situation, we speak of it in English, eve if it is part of the description of that counterfactual situation that we were all speaking German in that counterfactual situation. (p. 77)

We won't discuss at length his arguments for this claim. If you are interested in those arguments, you should read the first lecture in *Naming and Necessity*. We shall continue to focus on the objections to the descriptivist theory.

## 3 Against (2)

(2) says that a person who uses a name and associates certain property or properties in  $\Gamma$  with that name believes that some or all of those properties pick out an individual *uniquely*. That Russell endorsed something like this thesis should be clear from his analysis of definite descriptions. On that analysis, a sentence like 'the door is open' says that there is exactly one door (i.e. a unique thing that is a door) and that thing is open. The thesis seems to have some plausibility insofar as we usually think that, when we use a name, there is a unique thing that we want to talk about.

However, Kripke points out that, even if people normally associate certain properties with a name, those properties rarely pick out a unique thing. Should we think that every person in the street associates some uniquely instantiated description with the name 'Cicero'? Presumably not. If anything, most of us will associate with the name something like the description 'a roman orator', which doesn't pick out an object uniquely, since there were many roman orators.

Here is another example. Suppose I tell you that Feynman is one of my intellectual heroes. When you ask me: who is Feynman? It may suffice that I answer 'a famous physicist'. But again, there are many famous physicists, so it doesn't seem that my answer would be adequate if the descriptivist theory was correct. **Question:** Kripke further elaborates his argument using the non-circularity condition (C); what kind of response is he trying to counter?

## 4 Against (3)

According to (3), "if most of the  $\phi$ s, suitably weighted, are satisfied by a unique object y, then y is the referent of the name for the speaker." (p. 83). Against this thesis, Kripke uses a compelling example. Perhaps you don't know this, but Kurt Gödel proved the incompleteness of arithmetic—the first incompleteness theorem states that any effectively generated theory capable of expressing

elementary arithmetic cannot be both consistent and complete; in particular, for any consistent, effectively generated formal theory that proves certain basic arithmetic truths, there is an arithmetical statement that is true, but not provable in the theory.

Let's suppose that you don't know much more about Gödel than this. According to (3), then whoever turns out to have proved the first incompleteness theorem will be the referent of the name 'Gödel'. But suppose (contrary to fact) that Gödel did not prove the incompleteness of arithmetic. Instead, some other man called 'Schmidt' did. Gödel just stole his proof or something like that and then made sure that Schmidt disappeared under mysterious circumstances.

If (3) is true, then when you use the name 'Gödel' you are really referring to Schmidt, because he is the person who satisfies the description you associate with the name. So whenever you use the name 'Gödel', you really are talking about Schmidt. But, Kripke points out, that simply isn't true. If you were to utter something like 'Gödel seems to be a smart guy', you will be saying something about Gödel, not about Schmidt.

The argument doesn't merely rely on intuition. As Kripke points out, we often use names on the basis of incorrect beliefs. If (3) were true, instead of having false beliefs about certain people that we want to talk about, we would instead have true beliefs about people that we have never met; moreover, those beliefs would be tautological (see objection to (6) above).

### 5 Against (4)

According to (4), if there is no unique object that satisfies most of the properties or a weighted majority of them, then the name in question doesn't refer. The examples above already cover this thesis:

First, the vote may not yield a *unique object*, as in the case of Cicero or Feynman. Second, suppose it yields *no* object, that nothing satisfies, or even any, substantial number of the  $\phi$ s. Does that mean the name doesn't refer? No: in the same way that you may have false beliefs about a person which may actually be true of someone else, so you may have false beliefs which are true of absolutely no one. And these may constitute the totality of your beliefs. (p. 86)

## 6 Against (5)

According to (5), it is known a priori by someone who uses the name 'X' that if X exists, then X has most of the properties in  $\Gamma$ . Of course, there can be counterexamples of the style Kripke has already presented. Yet he is more interested in showing that some more sophisticated ways of fixing the theory won't succeed.

Suppose, for instance, that the property that Gödel is supposedly known to have a priori (if it exists) is not that of having proved the incompleteness of arithmetic, but rather, the property of *being thought* to have proved the incompleteness of arithmetic by most people. Kripke points out that, besides the possibility of counterexamples, this requirement potentially violates the non-circularity requirement. In order for us to know a priori that *if Gödel exists, then he is thought to have proved the incompleteness theory*, we first need to be able to think about Gödel. But how will our reference to Gödel be guaranteed? If reference were only guaranteed by the use of the description 'the man

who is thought to have proved the incompleteness of arithmetic', this would violate the circularity condition, and similarly for any other putatively reference-fixing description.

So how, then does the reference itself get started? At this point, and after having examined the descriptivist theory, Kripke proposes a new theory, or rather, a new picture of how reference works. Here is his new picture, in his own words:

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 elsewhere, may be referring to Richard Feynman even though he can't remember from whom he first heard of Feynman or from whom he ever heard of Feynman. He knows that Feynman is a famous physicist. 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, he doesn't know what the Feynman theory of pair production and annihilation is. Not only that: he'd have trouble distinguishing between Gell-Mann and Feynman. 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'. (pp. 91-2)

**Question:** Is this new picture compatible with Frege's original solution to the puzzles about identity? why or why not? if not, how can we solve the puzzle if Kripke's objection are correct?

Kripke ends this lecture by arguing that identity statements involving names are necessarily true, but known a posteriori. He summarizes his argument as follows:

We use 'Hesperus' as the name of a certain body and 'Phosphorus' as the name of a certain body. We use them as names of those bodies in all possible worlds. If, in fact, they are the same body, then in any other possible world we have to use them as the name of that object. And so in any other possible world it will be true that Hesperus is Phosphorus. 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 two planes in the sky, without the planets being the same. (p. 104)