

Causal Theories of Names

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Lecture I

The Topic

How do names come to refer to what they refer to?

“Cambridge” refers to Cambridge, not London. Why?

(A complication we will set aside: Is the expression “Cambridge” the name of *two* cities – our Cambridge and the one in Massachusetts? Or are names individuated by more than syntax?)

Two approaches: *Descriptive* versus *Causal* Theories of Names

Descriptivism about Names

Key Thought: Explain the reference of names in terms of *other* referring expressions, namely descriptions.

Naïve Version

Each name is associated with a particular definite description, and the name refers to the object picked out by the description.

Example: *Cambridge* refers to *the city which is home to the second-oldest university in England*.

One could also maintain that name and description have the same meaning, or that the name is an abbreviation of the description. (Kripke reads Frege and Russell in this way.)

Sophisticated Cluster Theory

For every speaker *A*:

- (1) To every name or designating expression 'X', there corresponds a cluster of properties, namely the family of those properties φ such that *A* believes ' φX ',
- (2) One of the properties, or some conjointly, are believed by *A* to pick out some individual uniquely.
- (3) If most, or a weighted most, of the φ '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 φ 's' is known *a priori* by the speaker.
- (6) The statement, 'If X exists, then X has most of the φ 's' expresses a necessary truth (in the idiolect of the speaker).

(As presented by Kripke in *Naming and Necessity*. The cluster idea derives from Wittgenstein, Searle, Strawson).

Against Descriptivism

Kripke's arguments in *NN* can be divided into four categories: simple, semantic, modal, epistemic. I will focus on the first two.

The Simple Argument

Suppose someone has heard about Richard Feynman and Murray Gell-Mann, but only knows that they are both American physicists. For this speaker (2) will be false: they don't associate the names with properties that they believe to pick out their referents uniquely.

It seems bizarre to maintain, however, that such a speaker would be unable to talk about Feynman and Gell-Mann.

Response: Fine, but this problem seems fixable. Maybe as formulated the description theory is too individualistic, and we should instead demand that the speaker is part of a *community* in which each name is associated with a description-cluster by *someone* (the experts?).

See Hilary Putnam's "Meaning of Meaning" for the *linguistic division of labour* and the idea that *meanings just ain't in the head*.

The Semantic Argument: Gödel and Schmidt

Suppose that (2) has been saved somehow. The semantic argument attacks (3).

What actually happened: Kurt Gödel was an Austrian logician who proved an important result in mathematical logic called the incompleteness theorem. Published in the paper "Über formal unentscheidbare Sätze der *Principia Mathematica* und verwandter Systeme, I." in 1931.

For those in the know, condition (2) of the description theory is fulfilled for the property *having proved the incompleteness theorem*.

Some Counterfactual History:

Suppose that Gödel was not in fact the author of this theorem. A man named 'Schmidt', whose body was found in Vienna under mysterious circumstances many years ago, actually did the work in question. His friend Gödel somehow got hold of the manuscript and it was thereafter attributed to Gödel. (Kripke *NN*, 83-84)

Imagine we find out about this dark (and purely fictional!) secret. How would we react?

Reaction 1:

We would say "It turns out that Gödel didn't actually prove the incompleteness theorem!"

Reaction 2:

We would say: "It turns out that the name "Gödel" doesn't refer to whom we thought it refers to!"

The description theory predicts reaction 2. But reaction 1 seems to be one we would actually have. If so, then condition (3) is false.

Various moves can be made in response, but the general point seems sound: We can be *massively mistaken* about what properties an object or person has, and *still* be able to talk about it.

The Epistemic and the Modal Argument

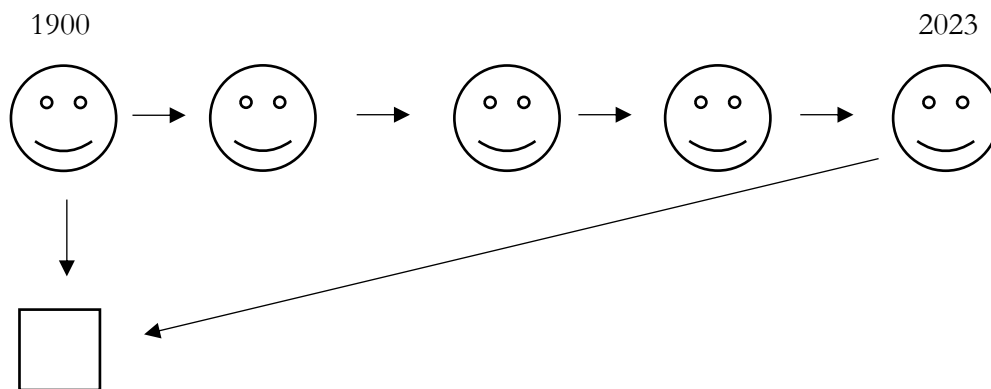
These arguments target conditions (5) and (6). Kripke argues that descriptivism leads to incorrect verdicts about which statements are a priori and necessary.

The Alternative

Causal theory of reference, or – preferred by Kripke – *historical chain picture* of reference:

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 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 he hears the name 'Napoleon' and decides it would be a nice name for my pet aardvark, I do not satisfy this condition. (Kripke, *Naming and Necessity*, 91, 96)



Suppose that, in 1900, the name “Frank” is introduced to refer to the rectangle \square .

If the name is passed on with the right intentions, then we can still use “Frank” in 2023 to refer to the same rectangle.

Suppose further that, in 1900, the rectangle \square was the largest rectangle, and that the reference of “Frank” was fixed descriptively: “Frank” is to refer to the to the largest rectangle.

What’s the difference to the description theory? Well, suppose that in 2023 Frank is no longer the largest rectangle. Then in 2023 “the largest rectangle” refers to a different object (\square), but “Frank” still refers to the same object as in 1900 (\square).

We thus need to distinguish between *giving the meaning* and *fixing the reference* of a name.

According to the casual theory of reference, descriptions can be used to fix the referent of a name in the initial baptism. But after that the reference is transferred through a historical chain and is unaffected by changes in what the description refers to.

For the description theory proper, on the other hand, descriptions give the meaning of a name, so the referent of the name changes if the referent of the description changes.

The Contingent A Priori

From the previous lecture:

(7) Hesperus = Phosporus

(8) the planet seen in the morning = the planet seen in the evening

Suppose we introduce the term 'meter' to our language by fixing its reference in the following way: 'one meter' is to refer to the length of a particular stick *S* at time *t₀*.

What then, is the *epistemological* status of the statement **(9) 'Stick *S* is one meter long at *t₀*'**, for someone who has fixed the metric system by reference to stick *S*? It would seem that he knows it *a priori*. For if he used stick *S* to fix the reference of the term 'one meter', then as a result of this kind of 'definition' [...], he knows automatically, without further investigation, that *S* is one meter long. (Kripke *NN*, 56)

(9) is not necessary, however, for the stick *S* could clearly have been shorter or longer than it actually was at *t₀*. So we seem to have an example of the contingent a priori.

	A priori	A Posteriori
Necessary		(7)
Contingent	(9)	(8)

(See also Gareth Evans's Julius, the inventor of the zip at *Varieties of Reference* p. 31)