Recall:

**Descriptivism**: the semantic value of a name is the same as the semantic value of some definite description.

We saw there were many different ways of implementing Descriptivism. Kripke raised challenges for almost all versions of Descriptivism with three, now famous, arguments:

(I) The Modal Argument  
(II) The Epistemic Argument  
(III) The Semantic Argument

(I) THE MODAL ARGUMENT

To understand this argument we need to get a little clearer on *modal* notions (those involving necessity and possibility). Kripke pointed out that there are two notions of modality which it is crucial to keep separated.

**Epistemic Modality**: A kind of modality concerned with (roughly) what is possible or necessary *given what some person or group of persons knows or thinks*.

**Metaphysical Modality**: A kind of modality concerned with what is possible or necessary independently of what anyone knows or thinks.

Some examples which would typically express epistemic modality:

1. For all I know, Jan may have been away this weekend.  
2. Ulrike must have phoned earlier. That would explain why Silas was so happy.  
3. Irma might have been here, but she might not—no one can say for sure.

Examples which would typically express metaphysical modality (or something close to it):

4. If the laws of physics were different, objects could travel faster than the speed of light.  
5. It's possible that life never would have arisen on Earth, but on some other planet instead.  
6. It's necessary that bachelors are male.
Some things seem to be epistemically possible, but not metaphysically possible. It might be okay to say:

(7) [For all we know] Goldbach's conjecture might be true.
(8) [For all we know] Goldbach's conjecture might be false.

What this means is given the state of our knowledge, things could turn out either way. But surely in some important sense mathematical claims are necessary. There is no state of the world in which the truths of mathematics will fail. So, in a different sense we can say

(9) If Goldbach's conjecture is true, it is necessarily true (it couldn't have been false).
(10) If Goldbach's conjecture is false, it is necessarily false (it couldn't have been true).

Since Goldbach's conjecture is either true or false, one of the necessity claims holds. So this can't be the same notion of necessity and possibility used in (7)–(8): metaphysical and epistemic necessity come apart. The distinction is important because Kripke's arguments against descriptivism focus on metaphysical modals (and the arguments don't obviously work with epistemic modals).

Here's a version of the modal argument. Consider the following two sentences:

(11) The first president of the US could have not been the first president of the US.
(12) George Washington could have not been George Washington.

(11) seems like it has a true reading, but (12) seems blatantly and almost confusingly false. The data to help reveal that definite descriptions “pick out” or refer to different individuals relative to different circumstances. To see what I mean consider.

(13) If John Jay had got the grand majority of votes in the first presidential election, the first president of the US would have been John Jay, not George Washington.

What does the definite description “the first president of the US” refer to in (13)? John Jay, and not George Washington. (In the terminology we've developed, many definite descriptions have non-constant intensions.)

Q: Do all definite descriptions behave this way?

(12) seems to show that names behave differently. Suppose that the name “George Washington” could pick out different individuals in different counterfactual circumstances. Then there would be some possible scenario in which the name “George Washington” picked out someone other than George Washington. But then it would be possible Washington was not Washington. But that seems absurd. So it seems that the extension of a name (its referent) can't change across possible circumstances of evaluation.

Don't confuse this with the claim that the words “John Jay” or “George Washington” might have been used to talk about someone different. Contrast (14) and (15).

(14) If Jay and Washington’s mothers had given them different names, (the person) John Jay could have been (the person) George Washington.

(15) If Jay and Washington’s mothers had given them different names, the person named “John Jay” could have been (the person) George Washington.

(This seems to show that the semantic value of “John Jay” and “the person named “John Jay” are different.)
Kripke developed a special term to talk about the semantic behavior of names.

A referring expression $e$ is a **rigid designator** if there is some object or individual $o$ such that the referent of $e$ at any world $w$ is $o$ provided $o$ exists at $w$, and the referent of $e$ is never other than $o$.

This gave the materials for his most famous argument against descriptivism.

M1: Definite descriptions are not rigid designators.
M2: Names are rigid designators.
C: The semantic values of names are not identical with the semantic values of definite descriptions.

(II) THE EPISTEMIC ARGUMENT

Recall, if the semantic value of two expressions are the same, then you should be able to substitute them and preserve the *proposition* expressed. Why might this be a problem for descriptivism?

Consider some name, like “Aristotle”. According to descriptivism the semantic value of this name identical with that of some definite description the D. So by the above principle (16) and (17) should express the same proposition.

(16) Aristotle is the D.
(17) The D is the D.

E.g. Suppose that D is "teacher of Alexander the Great". Then (18) and (19) express the same proposition.

(18) Aristotle is the teacher of Alexander the Great.
(19) The teacher of Alexander the Great is the teacher of Alexander the Great.

But (19) is trivial (except perhaps carrying information that there is a unique teacher of Alexander the Great), and (18) seems like a substantive piece of information. At least, one that could not be known *a priori*.

$p$ is knowable *a priori* if one can know $p$ without any justification from experience.

(Mathematical truths, for example, might be knowable *a priori*).

Now maybe we chose the wrong description D here, but the problem seems to be systematic. Any piece of information which one takes to be “definitive” of knowledge of the meaning of the name seems to be something which can in principle be wondered about the bearer of the name.
What about metalinguistic descriptivism? Can this avoid the charge?

(22) Aristotle is the person referred to as "Aristotle"

Kripke points out that this is actually false if construed as a general claim about what everyone calls Aristotle (e.g., the Greeks didn't use that name). But worse, this view of the meaning of the name “Aristotle” seems to lead to circularity. Who is the person referred to by “Aristotle”? Well it's whoever satisfies the description associated with the name. Who is that? The person referred to by “Aristotle”! Who is that? ...etc.

This gives the material for a second argument.

   E1: If the semantic values of names were identical with the semantic values of definite descriptions, then we could know non-trivial information about the bearers of names a priori.
   E2: We cannot learn non-trivial information about the bearers of our names a priori.
   C: The semantic values of names are not identical with the semantic values of definite descriptions.