

Mind, Matter, and Language

Lecture 11: The Causal Theory of Reference

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Review

- According to **direct reference theory**, the meaning of a name is just its referent.
- According to **descriptivism**, names (also) have a descriptive meaning.
- 4 arguments against descriptivism:
 - The argument from variable descriptions
 - The argument from unspecific descriptions
 - The argument from false descriptions
 - The epistemic argument: it could turn out that Gödel didn't prove the incompleteness theorem.

Kripke's "modal argument" against descriptivism

Kripke's "modal argument" against descriptivism

A sentence is **modal** if it concerns what must, might, can, could, would, or should be the case.

- I could have chosen a different topic for this lecture.
- We might have another election soon.
- You should come to the class on writing.
- ...

Kripke's "modal argument" against descriptivism

Philosophers are especially interested in "metaphysical modality", which concerns what is compatible with the nature of things.

- If a glass contains water, it must contain hydrogen.
- Aristotle could have become a carpenter instead of a philosopher.
- Aristotle could not have been a suburb of Melbourne.

Problem 5: Kripke's "modal argument"

- Aristotle could have failed to have any of the properties by which he is known today.
- The following could have been the case: Aristotle was not called 'Aristotle', he was not a philosopher, etc.
- The following could **not** have been the case: The philosopher called 'Aristotle' was not called 'Aristotle', he was not a philosopher, etc.
- So 'Aristotle' is not equivalent to 'the philosopher called 'Aristotle''.

Kripke's "modal argument" against descriptivism

Problem 5: Kripke's "modal argument"

1. For any non-trivial condition C associated with a name ' N ', it could have been the case that N is not C .
2. But it could not have been the case that the C is not C .
3. So ' N ' is not equivalent to a description.

This time, it looks like descriptivists can't respond that we've chosen the wrong condition.

Kripke's "modal argument" against descriptivism

Why can we not replace names by descriptions in statements about what could have been the case?

- Michael Gove could have been the current Prime Minister.
- Sajid Javid could have been the current Prime Minister.
- Jeremy Corbin could have been the current Prime Minister.

- Michael Gove could have been Boris Johnson.??
- Sajid Javid could have been Boris Johnson.??
- Jeremy Corbin could have been Boris Johnson.??

Kripke's "modal argument" against descriptivism

Descriptions like

- the current Prime Minister
- the inventor of the lightning rod
- the famous physicist called 'Feynman'

pick out different things in different possible worlds.

But names pick out the same thing in every possible world.

Kripke's "modal argument" against descriptivism

Philosophy jargon:

An expression is **rigid** if it has the same reference in every possible world.

Rigidity test: Could X not have been X? If yes, the term 'X' is non-rigid.

- The current Prime Minister could not have been the current Prime Minister.
- Boris Johnson could not have been Boris Johnson.??

Kripke's "modal argument" against descriptivism

Problem 5: Kripke's "modal argument" (2nd version)

1. Names are rigid.
2. The descriptions that are supposed to give the meanings of names are non-rigid.
3. So the names are not equivalent to these descriptions.

Kripke's "modal argument" against descriptivism

The modal argument for direct reference theory:

(1) Aristotle could have been a carpenter.

(1) is true iff there is a possible world at which **Aristotle** was a carpenter.

- In general, '*N* is *F*' is true at a possible world iff **the actual referent of '*N*'** is *F* at that world.
- So the contribution a name '*N*' makes to the proposition expressed by '*N* is *F*' is just the actual referent of '*N*'.
- So the meaning of a name is just its referent.

One more argument

Problem 6: The buck-passing problem

What is the condition/description that gives the meaning of 'Aristotle'?

- *the student of **Plato** and teacher of **Alexander**?*

No, we have to replace these names by suitable descriptions.

But these descriptions will involve other names!

Can we specify the relevant conditions without using any (ordinary) names?

Summary

- According to **direct reference theory**, the meaning of a name is just its referent.
- According to **descriptivism**, names (also) have a descriptive meaning.
- 6 arguments against descriptivism:
 - The argument from variable descriptions
 - The argument from unspecific descriptions
 - The argument from false descriptions
 - The epistemic argument
 - The modal argument
 - The buck-passing argument

The divide between direct reference theory and descriptivism is not just about names, but also about kind terms:

- 'gold' refers to the element with atomic number 79.
- 'water' refers to the chemical structure H_2O .

Direct Reference Theory: the meaning of a kind term is (just) its referent.

Descriptivism: kind terms (also) have a descriptive meaning: a mode of presentation for the referent.

- 'gold': the rare yellowish metal used in jewellery and stored by central banks
- 'water': the clear liquid in our rivers and lakes

The Causal Theory of Reference

The Causal Theory of Reference

Semantics: What is the meaning of expression X ?

Meta-Semantics: What makes it the case that M is the meaning of X ?

- What makes it the case that 'وعث زمل سيار' means that quicksand is present?
- What makes it the case that 'Aristotle' refers to Aristotle?

The Causal Theory of Reference

What makes it the case that 'Aristotle' refers to Aristotle?

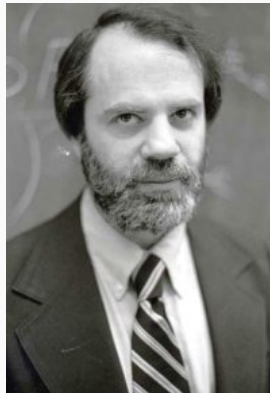
Descriptivist answer: a name refers to whatever satisfies the condition/description associated with the name.

Kripke suggests a different answer: the "Causal Theory of Reference".

The Causal Theory of Reference

A rough statement of the 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.

Kripke, "Naming and Necessity" (1980)



The Causal Theory of Reference:

- A name starts to refer to an object through an act of initial baptism.
- Here the object can be picked out ostensively or by description.
- After the baptism, subsequent uses of the name refer to the baptised object, as long as speakers intend to use it with the same reference as previous speakers.

The Causal Theory of Reference

Also works for kind terms:

- Initial baptism: ‘Let’s call this stuff ‘water’.’
- The term is then passed on from speaker to speaker.
- Speakers don’t need to know that they are picking out H_2O .
- Nor do they need to know any descriptive theory involving ‘water’.

Semantic externalism

Internalism about a property is the view that whether a thing has the property is determined by the thing's internal constitution.

Externalism about a property is the view that whether a thing has the property depends on the thing's environment.

Semantic externalism

Earth



H₂O

Twin Earth



XYZ

Hilary Putnam (1975):

1. When Oscar uses the word 'water', he talks about H_2O .
2. When Oscar's twin uses the word 'water', he talks about XYZ.
3. This is a difference in the meaning of the word 'water'.
4. Therefore: What our words mean depends on our environment.

“Cut the pie any way you like, meaning just ain't in the head.”



Tyler Burge (and others):

1. Oscar believes that water quenches thirst.
2. Oscar's twin believes that twin water quenches thirst (and he does not believe that water quenches thirst).
3. Therefore: What we believe depends on our environment.



Another example:

1. Oscar believes that London is overcrowded.
2. Oscar's twin believes that Twin London is overcrowded (and he does not believe that London is overcrowded).
3. Therefore: What we believe depends on our environment.

According to the Causal Theory of Reference, the meaning of our words, and the content of our beliefs, often depends on our **social** environment.

- The word 'elm tree' was introduced to refer to a particular kind of tree.
- When you use the word (in thought or talk), you refer to that kind of tree.
- Which kind of tree you refer to depends on how the term was introduced.

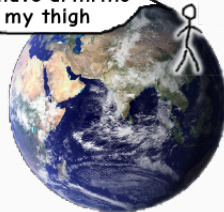
Social externalism

Earth



I have arthritis
in my thigh

Twin Earth



I have arthritis
in my thigh



Tyler Burge:

1. Oscar believes that he has arthritis in his thigh.
2. Oscar's twin believes that he has myositis in his thigh (and he does not believe that he has arthritis in his thigh).
3. Therefore: What someone believes can depend on their social environment.

Brains in vats

Consider another Oscar twin, living as a brain in vat.

- Vat-Oscar does not mean H_2O by 'water'.
- Vat-Oscar does not mean vat by 'vat'.
- Most expressions in Vat-Oscar's language refer to parts of a computer program.
- So: In Vat-Oscar's language, 'I am a brain in a vat' is false.

Could we be brains in a vat?

1. If I am not a brain in a vat, then 'I am a brain in a vat' is false.
2. If I am a brain in a vat, then 'I am a brain in a vat' is false.
3. So I am not a brain in a vat.