

Philosophy 2<sup>2</sup>3<sup>3</sup>: Intuitions and Philosophy  
Fall 2009  
Tuesdays and Thursdays, 1pm - 2:15pm  
Library 209

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## Class 12 - Descriptivism and Direct Reference

### I. Introduction

The work we have read so far has brought into question our intuitions about inductive inference and epistemology, and their role in philosophical methodology.

The paper by Machery, Mallon, Nichols, and Stich translates those questions to philosophy of language. This paper has been influential, and controversial.

See the end of the notes, below, for links to more readings and lots of blogging, some of which gets amusingly nasty.

The result of the Machery et al. paper is that there are cultural differences in intuitions with significance for philosophy of language, if we adopt a method which relies on our intuitions.

Briefly, it seems that East Asians (EAs) are likely to be descriptivists, whereas Westerners (Ws) are likely to be direct reference theorists.

Machery et al. quickly summarize the differences between descriptivism and direct reference.

I do not agree with them that Kripke's arguments for direct reference are commonly taken to have refuted descriptivism.

But, direct reference is certainly the view with the greater research intensity, at the moment.

To get a better grip on the significance of the Machery et al. study, we should get a better understanding of the debate.

### II. 117 years of philosophy of language: descriptivism direct reference

Direct reference theories of proper names derive from John Stuart Mill, but were revived by Saul Kripke in the 1970s in his influential book *Naming and Necessity*.

Mill claimed that the semantic value (or meaning) of name is just the thing to which it refers.

This is a bit of an oversimplification, but he held that thesis for at least some names.

For example, Mill argued that 'Dartmouth' doesn't mean 'the city at the mouth of the Dart River', since the river could dry up, or change course, without the city changing name.

Andrew is not a miller, even if he is a Miller.

That is, Mill's claim is that the semantic value of a name is just the thing to which it refers.

Mill's theory had been more or less discredited by work by Gottlob Frege (in the late-nineteenth century); Bertrand Russell (around 1900); and John Searle (originally in the 1950s, but then again in response to Kripke).

For these notes, I won't distinguish Frege's theory from Russell's, though they differ significantly.

Frege's version of descriptivism claims that the sense (or meaning) of a name is the description associated with it by the user of the name.

Frege arrives at descriptivism via the sense/reference distinction, and its ability to solve three puzzles which Mill's theory of direct reference engenders.

FP1. Identity statements

FP2. Failure of presupposition/ empty reference

FP3. Opaque contexts

The problem of identity statements (FP1) is to explain why 1 and 2 differ in cognitive content. ('Hesperus' is the Greek name for the evening star; 'Phosphorus' denotes the morning star.)

1. Hesperus is Hesperus.
2. Hesperus is Phosphorus.

While the Greeks thought they saw two different stars, both of them were actually the planet Venus. 1 seems uninformative, knowable a priori, an analytic truth of language or logic, and necessarily true. 2 seems informative and knowable only a posteriori, a synthetic, contingent, empirical truth. Given that 'Hesperus' and 'Phosphorus' refer to the same thing (i.e. Venus), the difference between 1 and 2 seems puzzling. If the semantic content of a name were just the thing to which it refers, 1 and 2 should have the same content.

Frege's solution to the puzzle is that names, in fact all singular terms, have both sense and reference. 'Hesperus' and 'Phosphorus' have the same reference. But, they have different senses.

The sense/reference distinction also helps solve FP2, the failure of presupposition 3 is problematic for a Millian.

3. Santa Claus lives at the North Pole.

Given that the meaning of a whole proposition should be composed of the meanings of its parts, 3 seems to be meaningless. For, one of its parts lacks reference. Frege's solution is that 3 can be meaningful (i.e. have a sense) because 'Santa Claus' has sense, even though it lacks reference.

Lastly, the sense/reference distinction solves FP3, too. 4, on the standard Superman story is true, but 5 is false.

4. Lois Lane believes that Superman can fly.
5. Lois Lane believes that Clark Kent can fly.

If the meaning of Clark Kent and Superman were the same, 4 should have the same truth value as 5. The distinction between sense and reference explains why the substitution of one for the other changes the truth value of the whole: Lois Lane's belief is about the senses of the proper names, not about their referents.

Once we make the sense/reference distinction, it is natural to ask about the meaning of a name. For Frege, the sense of a name is just the list of properties that we associate with that name. 'Dartmouth' need not have the sense 'city at the mouth of the river Dart', but any sense it has must be sufficient to pick out its referent. Indeed, the function of the sense of a term is precisely to pick out a referent, under a mode of presentation for the person grasping that sense. For Frege, sense determines reference. (Okay, that's a bit technical. Don't worry too much about it.)

Frege's descriptivism is liable to a standard objection.

To understand the objection, note that we call sentences like 6 analytic, because to determine their truth, we need only examine the meaning of the term 'bachelor'.

6. Bachelors are unmarried.

We need not examine any bachelors.

Thus, we take such analytic statements to be knowable a priori, and necessarily true.

Let's say that we associate with 'Aristotle' the description that he was Plato's most famous student.

It follows that the meaning of 'Aristotle' includes the fact that he was a student of Plato.

Then 7 turns out to be analytically true, just like 6.

7. Aristotle was a student of Plato.

If 'Aristotle' just means or abbreviates its associated description, all we have to do is analyze the term 'Aristotle' to find out that he was a student of Plato.

On simple descriptivism, 7 should also be knowable a priori and necessary.

But, 7 is, in fact, contingent, knowable only a posteriori, and synthetic.

So, the simple descriptivism of Frege is untenable.

Searle's version of descriptivism, the target of Kripke's original criticism, was influenced by the later Wittgenstein, and is more sophisticated.

It may be called cluster descriptivism (CD).

Searle argues that a name must be logically connected with its characteristic description because that is the only way the name could get applied to the object.

We need to identify the object, through description or pointing, in order to name it.

But then those characteristics must be part of the description of the name.

Kripke presents cluster descriptivism in seven claims.

CD1. Every name 'n' is associated with a cluster of properties: the properties that x believes are true of n.

CD2. x believes that these properties pick out a unique individual.

CD3. If y has most of these properties, then y is the referent of 'n'.

CD4. If nothing has most of these properties, 'n' doesn't refer.

CD5. The sentence 'n has most of these properties' is known a priori by x.

CD6. The sentence 'n has most of these properties' as uttered by x expresses a necessary truth.

CDN-C. These properties must be chosen in such a way that there is no circularity. (The properties must not use the notion of reference.) (This claim is not a conclusion, but a non-circularity condition that underlies the other six claims.)

CD avoids some portion of the standard objection to simple descriptivism.

Since being Plato's greatest student is just one of many properties in the cluster, it does not follow from CD that 'Aristotle is Plato's student' is a necessary truth.

CD thus avoids the claim that any particular property in the cluster is a necessary property.

Kripke's criticism of the cluster theory picks up on an insight, from Keith Donnellan, that reference may be successful under a false description of an individual.

Donnellan noticed that we can pick out a man in the corner drinking water, even if we describe that

person as 'the man in the corner drinking a martini'.

Kripke asks about the case in which what we know about a person is incorrect, so that any description we give of that person is entirely false.

In such a case, on no version of descriptivism could we successfully refer.

The cluster version allows the descriptivist to be wrong about some of the properties of the object.

Aristotle could have never studied with Plato, but that fact could still be part of the sense of 'Aristotle', since CD only requires that most of the characteristics in the sense are true.

But, by CD4, using 'Aristotle' to refer to Aristotle must fail if every characteristic we associated with 'Aristotle' were false.

Kripke argues that what one uses to pick out the object are not essential features (senses) of the object. He presents thought experiments intended to undermine most of the central claims of CD.

Against CD2, Kripke presents the Feynman case.

Against CD3, Kripke presents the Gödel case.

Against CD4, Kripke presents the Jonah case.

Against CD5 and CD6, Kripke revisits the Aristotle case.

Machery et al. only focus on the Gödel and Jonah cases, but I'll take a moment here to describe all four.

CD2 requires that the definite description that the speaker associates with a name be sufficient to pick out a unique individual.

But often we do not have enough information to pick out one and only one person with the information that we associate with that individual.

In the case of the physicist Richard Feynman, many people can use his name to refer successfully, even though many of them can not tell you anything more about the man than that he was a famous physicist.

They could not, for example, distinguish him from other physicists, like Stephen Hawking.

'Famous physicist' could describe many people, and not pick out any unique individual.

Still, people use 'Feynman' to refer to Feynman.

CD3 says that when we use a name, we refer to the person who has the majority of the characteristics we associate with that name.

Most people's cluster of information associated with Gödel includes mostly, and most prominently, the fact that Gödel was the man who proved the incompleteness of arithmetic.

Kripke asks us to imagine that Gödel had stolen the proofs from his neighbor, Schmidt, who disappeared years ago, under mysterious circumstances, in Vienna.

Then the only characteristic that most people associate with 'Gödel' turns out to be false of Gödel, but true of Schmidt.

So, when we use 'Gödel', according to the descriptivist, we are actually referring to Schmidt.

Kripke urges that, intuitively, we still refer to Gödel when we use his name, and thus that CD3 is wrong.

In the Jonah case, Kripke argues that everything we know about Jonah is wrong.

There was a Jonah, according to Kripke's story.

But, he never went to Nineveh, or rode in the belly of a whale, or did any of the things that we associate with him.

We can still, Kripke says, refer to that person.

But, descriptivism, according to CD4, says that we can not.

Against CD5 and CD6, Kripke says:

It just is not, in any intuitive sense of necessity, a necessary truth that Aristotle had the properties commonly attributed to him. There is a certain theory, perhaps popular in some views of the philosophy of history...according to [which] it will be necessary, once a certain individual is born, that he is destined to perform great tasks and so it will be part of the very nature of Aristotle that he should have produced ideas which had a great influence on the western world. Whatever the merits of such a view may be as a view of history or of the nature of great men, it does not seem that it should be trivially true on the basis of a theory of proper names. It would seem that it's a contingent fact that Aristotle ever did *any* of the things commonly attributed to him today, *any* of these great achievements that we so much admire... (*Naming and Necessity*, 74-5).

If all of the properties we attribute to an individual are contingent, then not only is it not necessary that the individual have most of them, that individual might even lack all of them. We could not know something to be true a priori, if it could in fact be false.

If descriptivism is wrong, even in its most plausible form, then we must pick out our references by using terms without any necessary connections to their meanings or characteristic extensions.

Kripke calls such reference rigid designation.

A rigid designator is a term that names the same object in all possible worlds, in all counterfactual circumstances.

To distinguish between rigid and non-rigid designators, Kripke uses the example of Ben Franklin.

8. Ben Franklin is the inventor of bifocals.

Even if 'the inventor of bifocals' referred to some one else, 'Ben Franklin' would still refer to Ben Franklin.

Thus, 'the inventor of bifocals' refers non-rigidly, whereas 'Ben Franklin' refers rigidly.

'Feynman', 'Gödel', 'Jonah', and 'Aristotle' all refer rigidly, too.

We have returned to Mill's theory of denotation: the semantic value of 'Dartmouth' is just the place.

The notion of rigid designation is no more contentious than the notion that we can say something coherently counterfactual about objects.

If we say that I would have been happier had you brought me a cheesecake is just to say that there is another possible world, in which I exist, and in which you brought me a cheesecake.

Thus, 'I' rigidly designates me, in the other possible world.

We stipulate other possible worlds under the assumption that we can refer rigidly.

The central motivation for descriptivism is the belief that we need it in order to make sense of reference. How else could people pick up a name in the first place?

Kripke and some followers developed a causal theory of reference to answer the charge that only descriptivism could account for reference.

The causal theory of reference (CTR) supports Kripke's work on rigidity by providing an account of how we can learn names without ascribing senses to them.

But CTR is technically an independent account of an independent question.

Descriptivism and rigidity are claims about the meanings (or semantic values) of names.

CTR is a theory about how we learn names.

CTR involves two elements.

An object is named through an initial baptism.

We can baptize through ostension, by pointing at an object.

Or, we can baptize by describing an object.

For instance, I can say that the next apple I see I will call Henry.

After baptism, a causal chain connects referrers to the initial object.

I dub the apple Henry, then you hear me, and tell others, and eventually everyone calls the apple Henry.

Thus, we might say that a use of a name refers to an object iff there has been an appropriate causal chain from the initial baptism, through all users of the name, which ends in the particular use in question.

### III. Methods

We can see pretty clearly that Kripke's arguments for direct reference rely on our intuitions.

We intuitively refer to Gödel, when we say 'Gödel'; we intuitively refer to Jonah, despite believing only false characteristics of him.

Kripke's method, as Machery et al. say, is widely shared in the philosophy of language.

There is widespread agreement among philosophers on the methodology for developing an adequate theory of reference. The project is to construct theories of reference that are consistent with our intuitions about the correct application of terms in fictional (and nonfictional) situations. Indeed, Kripke's masterstroke was to propose some cases that elicited widely shared intuitions that were inconsistent with traditional descriptivist theories (48).

The survey conducted by Machery et al. calls into question the intuitions on which Kripke's arguments are based.

Following the lead of Weinberg et al., Machery et al. contrast the intuitions of East Asians (EAs), specifically English-speaking students at the University of Hong Kong, with those of Westerners (Ws), specifically students at Rutgers University, in New Jersey.

They hypothesize different intuitive responses, and claim that such differences, given Kripke's methods, have wide-ranging ramifications.

Suppose that semantic intuitions exhibit systematic differences between groups or individuals. This would raise questions about whose intuitions are going to count, putting in jeopardy philosophers' methodology (49).

### IV. Results and conclusions

Machery et al. found significant differences in the Gödel case, though not in the Jonah case.

They hypothesize that the cause of those differences is that Ws are more likely to make causation-based, or analytic, judgments than EAs, who are more likely to make holistic judgments.

The contrast between analytic and holistic thought derives from work by Nisbett et al.

Machery et al. claim that these results undermine direct reference theories since they are based on intuitions of philosophers, which are not universal.

We find it *wildly* implausible that the semantic intuitions of the narrow cross-section of humanity

who are Western academic philosophers are a more reliable indicator of the correct theory of reference (if there is such a thing...) than the differing semantic intuitions of other cultural or linguistic groups. Indeed, given the intense training and selection that undergraduate and graduate students in philosophy have to go through, there is good reason to suspect that the alleged *reflective* intuitions may be *reinforced* intuitions. In the absence of a principled argument about why philosophers' intuitions are superior, this project smacks of narcissism in the extreme (54).

If Kripke's method were to rely essentially on infallible intuitions about reference, the results confirming their hypothesis would be as devastating as Machery et al. claim.

But, there are two mitigating factors.

First, as we have seen, the method of reflective equilibrium does not depend on infallible intuitions.

It depends only on developing a theory which accommodates mature intuitions.

Machery et al. seem to be caricaturing Kripke's method.

Second, the results do not seem to hold up in the Jonah case.

One further worry I have about the claims of Machery et al., specifically about their account of the differences they found, is that the causal element of Kripke's theory of direct reference is inessential.

Kripke's theory does pair nicely with a causal-historical account of how reference is transferred.

But, direct reference, and the notion of rigid designation, is independent of the causal theory of reference.

One could, for instance, hold that descriptivism governs an initial baptism, which then leads (causally) to the transfer of reference through a community.

Machery et al. are careful not to claim that their hypothesis concerning the causal/holistic account of the difference has been confirmed, though.

There have been lots of other responses to this paper.

Here are a small sample:

[Kripke himself, with some nasty blogging](#)

[Blogging about the article](#)

[Michael Devitt, "Experimental Semantics"](#)

[More blogging, about Devitt's response](#)

[A recent paper with contrasting results, by Barry Lam](#)

[A new paper from Machery et al. \(actually Mallon et al.\), defending their work](#)

[Links to lots of other papers](#)

I haven't kept up with all of this further research, but this topic could make for an excellent term paper.