

5 problems for Fregean semantics

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1 The modal argument

On pp. 48-49 on *Naming and Necessity*, Kripke introduces the notion of a *rigid designator*. He says: "Let's call something a *rigid designator* if in every possible world it designates the same object." (48)

Some examples to illustrate this: 'the first president of the United States', 'the tallest student in this class', 'the sum of 3 and 5.' Some descriptions, but not most, are rigid designators. Now consider a name like 'Aristotle.' Is this a rigid designator? Kripke thinks so:

"One of the intuitive theses I will maintain in these talks is that *names* are rigid designators. Certainly they seem to satisfy the intuitive test mentioned above: although someone other than the U. S. President in 1970 might have been the U. S. President in 1970 . . . no one other than Nixon might have been Nixon." (48)

Kripke is here relying on an intuitive test for the rigidity of a singular term:

Intuitive test for rigid designation

$\ulcorner n \urcorner$ is a rigid designator iff $\ulcorner n \urcorner$ could not have existed without being n , and nothing other than n could have been n is true.

The right hand side of this, the thought goes, will come out true iff n refers to the same object with respect to every possible world. An important clarificatory point: the distinction between the reference of a term with respect to a possible world w and the reference of a term as used in w . (See Kripke's discussion of this distinction at p. 77.)

Kripke thinks that ordinary proper names are rigid designators, whereas ordinary definite descriptions are not. (There are some descriptions which are plausibly rigid designators — e.g., 'the sum of 3 and 4' — but these are the exception.)

But if one expression is a rigid designator, and another is not, the two cannot mean the same thing. Suppose that ' n ' is an ordinary name which refers to some object o , and let 'the F ' be an ordinary description which is (in the actual world) uniquely satisfied by o , but which is not a rigid designator. Then there is some possible world w with respect to which ' n ' and 'the F ' differ in reference. We can, using this, argue by cases to show that sentences differing only with respect to substitution of ' n ' and 'the F ' differ in truth-value with respect to w :

Case 1. Suppose that o exists in w . Then ' n is n ' is true, whereas ' n is the F ' is not true.

Case 2. Suppose that o does not exist in w . Then 'The F is the F ' is true, whereas ' n is the F ' is not true.

But, if sentences differ in truth-value with respect to a possible world, then they have different truth conditions. If they have different truth conditions, they have different meaning. And if two sentences differing only by substitution of a pair of expressions differ in meaning, that pair of expressions must differ in meaning. So, no rigid designator can mean the same thing as any non-rigid designator. So, further, if Kripke is right that most simple names are rigid designators and most descriptions are not, it follows that proper names do not have the meanings of any definite description.

What does this have to do with Fregeanism? Well, we know that the senses associated with proper names are modes of presentation of objects. What is the relation between those modes of presentation and the objects they are modes of presentation of? A plausible thought here is that the mode of presentation is some condition which the object uniquely satisfies. But definite descriptions just are expressions which refer to whatever uniquely satisfies some condition. So, it looks like the senses associated with names should be expressible by definite descriptions. There's a reason that when Frege gave informal expositions of the senses of names, he always used descriptions to do so.

This suggests the following argument against Fregean treatments of names:

1. If Fregeanism is true, then the meanings of names are also the meanings of definite descriptions.
 2. Names are rigid designators.
 3. Definite descriptions are not rigid designators.
 4. Names and definite descriptions never have the same meaning.
- (2,3)
-
- C. Fregeanism is false.

Most Fregeans now would accept premise (3), and respond to this argument by denying either (1) or (3).

If they reject (1), then they must reject the idea that senses are conditions which refer to objects by those objects uniquely satisfying those conditions. (This is sometimes called ‘non-descriptive Fregeanism.’) This view is not immediately open to the modal argument, but makes the nature of senses, and their relation to their referents, obscure.

Other Fregeans reject (3), by claiming that the definite descriptions which give the meanings of names are always in that subclass of descriptions which rigidly designate their referent. One popular version of this view associates names with descriptions of the form ‘the actual F .’ This view leads to a number of other problems.

This is one way of presenting Kripke’s *modal argument*. The best place to look for a detailed examination of the modal argument — including discussion of each of the two lines of response above — is Chapter 2 of Scott Soames’ *Beyond Rigidity*.

2 The epistemic argument

There is another powerful argument against the description theory, on which Kripke touches only briefly. Consider a sentence of the form,

If the F exists, then the F is F .

The proposition expressed by this sentence appears to be knowable a priori. If so, then it seems that every sentence of the following form is true:

It is knowable a priori that if the F exists, then the F is F .

But now suppose that n is some name whose meaning, according to the description theory of names, is given by the description ‘the F .’ Then our principle of replacing synonyms without change of truth-value leads us to the claim that the following sentence is true:

It is knowable a priori that if the F exists, then n is F .

But for many name/description pairs which might be employed in a descriptivist theory, this will not hold. Compare:

It is knowable a priori that if the greatest philosopher of antiquity exists, then the greatest philosopher of antiquity is the greatest philosopher of antiquity.

It is knowable a priori that if the greatest philosopher of antiquity exists, then Aristotle is the greatest philosopher of antiquity.

The Fregean can also reply to this argument by dissociating the senses of names from the senses of definite descriptions, but again only at the cost of incurring the burden of explaining what senses, and the relation between sense and reference, could be on this view.

3 Quantifying in

Sentences are common in which one apparently quantifies into the scope of a propositional attitude verb. For example,

Someone on Notre Dame's faculty is such that I believe that he's a spy.

This clearly differs in meaning from

I believe that someone on Notre Dame's faculty is a spy.

The former but not the latter requires that my belief be *of* a particular person; it is a *de re* belief. The natural analysis of the quantification in the former is

$\exists x (x \text{ is on Notre Dame's faculty} \ \& \ \text{I believe: } x \text{ is a spy})$

Here we have a quantifier with wide scope over the sentence which apparently binds one variable within, and one variable outside of, the propositional attitude verb.

The standard semantics for the existential quantifier says that a formula $\exists x\phi x$ is true iff there's some object o in the domain such that ϕx is true relative to an assignment of o to x . So, in this case we'd say that the formula is true iff there's some object o such that o is on Notre Dame's faculty, and I believe the proposition which attributes spy-hood to o .

The Fregean, however, cannot take this formula at face value. There is no such thing as "the proposition which attributes spy-hood to o ", since objects cannot be constituents of Fregean propositions. There are, rather, indefinitely many propositions which attribute spy-hood to o under some mode of presentation or other. For this reason, the formula

$\exists x (x \text{ is on Notre Dame's faculty} \ \& \ \text{I believe: } x \text{ is a spy})$

is not one that the Fregean can accept as intelligible, if ' x ' is a standard variable over objects, rather than over Fregean senses. (And it can't be a variable over Fregean senses, since there are no Fregean senses on Notre Dame's faculty.) The standard Fregean reinterpretation will be some version of the following, where ' α ' is a variable over Fregean senses:

$\exists x (x \text{ is on Notre Dame's faculty} \ \& \ \exists \alpha (R(x, \alpha) \ \& \ \text{I believe: } \alpha \text{ is a spy}))$

Intuitively: there is someone on ND's faculty, and there's some mode of presentation of that person such that I believe a proposition whose content is that mode of presentation + the sense of 'is a spy.'

The clear problem here is that we need to spell out some very strong conditions on R . Otherwise, the worry is that the following argument will end up valid:

1. The spy on Notre Dame's faculty is the most sneaky person on the faculty.
 2. I believe that the most sneaky person on the faculty is a spy.
-
- C. There is someone on Notre Dame's faculty such that I believe that he's a spy.

But this argument should clearly not be valid. I might believe that the most sneaky person on the faculty is a spy without having any idea who that person is.

For an extended discussion of possible Fregean solutions to this problem, see David Kaplan's paper, 'Quantifying in.' In general, quantifying into belief contexts does not seem problematic — so it is worrying that Fregeanism makes it seem as though it is.

4 Frege's puzzle: the revenge

One of the principal motivations for Fregean semantics is supposed to be that it solves Frege's puzzle: the puzzle that two sentences can be about the same objects and properties, even though one seems trivial and uninformative, and the other doesn't. The proposed solution to Frege's puzzle is, for each instance of the puzzle, to supply a difference in meaning to explain the difference between the two sentences.

The problem is that there are instances of Frege's puzzle for which this solution seems implausible. Salmon's catsup/ketchup example. Kripke's Paderewski example.

Suppose that a Fregean bites the bullet, and follows the strategy of responding to instances of Frege's puzzle by supplying a difference in meaning. Then, in Salmon's case, the Fregean should say that Bob means different things by 'ketchup' and 'catsup.'

But this leads to a different problem. Suppose that I am a normal speaker, so that 'catsup' and 'ketchup' mean the same thing out of my mouth. The problem comes when I try to report Bob's speech and beliefs. The problem is that if Bob means different things by the two words, and I mean the same by them, one of my lines in the following (very boring) dialogue must be false:

Bob: There's a bottle of catsup on the table.
 me: Bob said that there's a bottle of catsup on the table.

Bob: There's a bottle of ketchup in the fridge.
 me: Bob said that there's a bottle of ketchup in the fridge.

But this is very hard to believe; how could I do better in reporting truly what Bob said?

5 More problems with propositional attitude ascriptions

A further problem is very simple. Suppose that I say:

Aristotle believed that Plato was pretty smart.

Then I am attributing to Aristotle a belief whose content includes some mode of presentation of Plato, along with whatever sense is expressed by 'pretty smart.' Let's suppose that what I say is true. Then it must be the case that Aristotle had thoughts about Plato under some mode of presentation which is identical to the mode of presentation corresponding to my term 'Plato.' But what are the odds of that?

The Fregean can respond by relaxing the conditions on reporting the thoughts of others — maybe it is enough for the truth of the ascription if the sense expressed by 'Plato' out of my mouth is 'close enough' to one of Aristotle's modes of presentation of Plato. But this is a dangerous move for the Fregean to make.

Are the senses I attach to 'Fritz Warfield' and 'Ted Warfield' also close enough? If so, then imagine that someone says to me 'I didn't know that Ted Warfield was Fritz Warfield'. Presumably I can report what they say by saying to someone else:

So-and-so didn't know that Ted Warfield was Fritz Warfield.

but then, if the senses I attach to these two names are 'close enough', it is also true for me to say

So-and-so didn't know that Fritz Warfield was Fritz Warfield.

Are we supposed to believe that 'Plato', out of my mouth, is more similar in sense to some mode of presentation under which Aristotle thought about Plato than are the modes of presentation that I associate with the names 'Fritz Warfield' and 'Ted Warfield'? This seems crazy.

One suspects that there is not more concern about this kind of problem only because we've been told too little about Fregean senses to generate more specific counterexamples.

For a good discussion of this kind of problem, see Chapter 9 of Nathan Salmon's *Frege's Puzzle*.