

Frege's theory of sense

1. Frege's argument that there is more to meaning than reference

We have now seen how a theory of reference – a theory that assigns to each expression of the language a reference, which is what it contributes to determining the truth or falsity of sentences in which it occurs - might look for a fragment of English. (The fragment of English includes proper names, n -place predicates, quantifiers, and compound sentences connected with 'and'.)

With this on the table, we can now ask: can this theory of reference serve as a theory of meaning? In the terms we have been using to pose this question, it amounts to: can this theory of reference explain both (i) the connections between language and the world (facts about the truth and falsity of sentences) and (ii) the connections between language and its users (facts about our understanding of sentences).

Some time in the early 1890's, Frege came to think that a theory of reference could not do all the work of a theory of meaning. (We have already discussed one version of his argument for this.) His main reason is that, it seems, two sentences can be the same with respect to reference and yet differ in important ways which seem related to meaning. Consider the following two pairs of sentences, each of which are constructed out of terms with the same reference:

- 1a Jeff Speaks is Jeff Speaks.
- 1b The teacher is PHI 415 is Jeff Speaks

- 2a Mammals are cordates.
- 2b Mammals are renates.

Here are two Fregean arguments that these sentences must have different meaning, each of which is suggested by the opening of 'On Sense and Reference':

Argument from understanding

1. It is possible for two sentences to be the same with respect to reference, and for someone to understand both sentences and yet know that one is true without knowing that the other is true.
2. Understanding a sentence is knowing its meaning. So, if two sentences mean the same and someone understands both, that individual will know that both sentences mean the same thing, and hence will know that if one of them is true, the other must be as well.
3. So two sentences can be the same with respect to reference, but not be the same with respect to meaning, and meaning is not reference.

Argument from informativeness

1*. It is possible for two sentences to be the same with respect to reference, and yet for one of them to be informative and the other not.

2*. If two sentences differ in informativeness, they differ in meaning.

3*. So two sentences can be the same with respect to reference while differing in meaning, and meaning is not reference.

If you accept that the reference of a sentence is its truth-value, then even more obvious examples of premises 1 and 1* can be given. Example of 'Mt. Everest' and 'Gaurisanker'.

2. Changes in truth-value without changes in reference

A theory of reference is supposed to explain the links between language and the world by assigning to expressions what those expressions contribute to the truth or falsity of sentences in which they occur. We've just argued that such a theory can't *also* explain the links between languages and their users.

But there are sentences which seem to show that a theory of reference cannot, by itself, even explain the connections between sentences and the world. Sentences about mental states and about necessity and possibility. This a further argument against taking a theory of reference to do all the work of a theory of meaning.

3. Sense as a way of thinking about reference

Sense as a mode of presentation of reference; as something which gives a perspective on the reference. This makes sense of (i) the fact that different expressions can have the same sense but different reference, and (ii) the cases of difference in informativeness we have discussed.

A potential worry: doesn't this mean that Frege is back in the camp of those he criticized, who thought of meanings as mental? Frege's response:

"The reference of a proper name is the object itself which we designate by its means; the idea, which we have in that case, is wholly subjective; in between lies the sense, which is indeed no longer subjective like the idea, but is yet not the object itself. The following analogy will perhaps clarify these relationships. Somebody observes the Moon through a telescope. I compare the Moon itself to the reference; it is the object of the observation, mediated by the real image projected by the object glass in the interior of the telescope, and by the retinal image of the observer. The former I compare to the sense, the latter is like the idea or experience. The optical image in the telescope is indeed one-sided and dependent upon the standpoint of observation; but it is still objective, inasmuch as it can be used by several observers. At any rate it could be arranged for several to use it simultaneously. But each one would have his own retinal image." (60)

4. Sense determines reference

Sense determines reference: any two expressions with the same sense/meaning will also have the same reference.

Why would one think that sense determines reference? One reason: intuitively, if two sentences have the same sense, they say the same thing about the world; and if two sentences say the same thing about the world, they cannot differ in truth-value. But if the reference of a sentence is its truth-value, that means that the sense of a sentence determines its reference. (Can you see how you could use this as a premise to argue that the senses of sub-sentential expressions determine their reference?)

Reference does not determine sense: often, two expressions with the same reference will differ with respect to sense.

Compositionality and language understanding.

5. Another use for sense: indirect reference

Sense is needed not only to explain facts about understanding and informativeness of sentences, but also the truth-values of sentences about mental states. (“On Sense and Reference,” 58-59)

6. The distinction between sense and force

Frege’s view that one can do more than one thing with a sense: one can assert it, grasp it, ask it, command it, We might say that the following sentences have the same sense, but different force:

You are doing the reading for this course.
Are you doing the reading for this course?
Do the reading for this course!

7. The distinction between sense and tone

From “Thought,” p. 331:

“It makes no difference to the thought whether I use the word ‘horse’ or ‘steed’ or ‘nag’ or ‘prad.’ . . . What is called mood, atmosphere, illumination in a poem, what is portrayed by intonation and rhythm, does not belong to the thought.

Somebody using the sentence ‘Alfred has still not come’ actually says ‘Alfred has not come’, and at the same time hints - but only hints - that Alfred’s arrival is expected. Nobody can say: since Alfred’s arrival is not expected, the sense of the sentence is false.”

Frege’s criterion for picking out what parts of the sentence matter only to the ‘tone’ seems to be that it must, at least potentially, make a difference to the truth value of the sentence. Further examples of the same sort: but/and, ‘I have two children.’

8. A concluding puzzle: the third realm and the metaphysics of meaning