

FREGE AND RUSSELL LECTURE 1

1. What is the meaning of a word? For a name like 'Fido' or 'London' you might think it is its *bearer*: in this case a particular dog or city. Philosophers call the bearer of a name its **reference**. Frege's famous argument that meaning is *not* reference is simultaneously an argument for a famous distinction, between the **sense** of a name and its bearer. (Frege, 'On sense and reference': anthologized as 'On sense and meaning' in Black, M. and P. Geach, *Translations from the Philosophical Writings of Gottlob Frege*. Oxford: Blackwell 1980.)

2. That argument runs as follows. First, a story. The ancient Babylonians used the name 'Hesperus' for the brightest celestial body visible in the evening (other than the sun or the moon). They also used 'Phosphorus' for ditto in the morning. What they did not know was these were in fact the same body i.e. Venus. It follows, from the fact that they *are* the same body, that:

[A] If the meaning of a name is just its reference then 'Hesperus' and 'Phosphorus' mean the same.

3. Second: Frege also assumed that the meaning of a sentence is *composed* of the meaning of its parts. This is the *principle of compositionality*. Of course that way of putting it isn't very precise because 'composition' can mean various things; but we can spell out its literal content in terms of this *principle of substitution*:

[B] If two words mean the same then substituting one for the other in a sentence doesn't change the meaning of the sentence.

4. Third, Frege assumed a notion of meaning that tied it very closely to information: it is the meaning of a sentence that determines what information it conveys.

[C] If two sentences have the same meaning then they convey the same information (to anyone).

This is perhaps especially obvious if you focus as Frege did on the language of mathematics and science. In fact [C] though maybe not its converse is true of a much wider range of sentences.

5. To see how the argument works, consider the sentences 'Hesperus is Hesperus' and 'Hesperus is Phosphorus', which I'll abbreviate 'H = H' and 'H = P'. They plausibly convey different information: after all, according to Frege 'H = H' would not have been news to the ancient Babylonians (or I suppose anyone else) whereas 'H = P' certainly would. By [C] therefore, they have different meanings. But you can get 'H = P' from 'H = H' by substituting the name 'Phosphorus' for one occurrence of Hesperus. It follows from [A] and [B] that if the meaning of a name is its reference then 'H = H' and 'H = P' *do* have the same meaning. Therefore the meaning of a name *isn't* just its reference.

6. What is it then? What the argument shows is that there has to be some meaning-dimension along which 'Hesperus' and 'Phosphorus' differ. This

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additional dimension of meaning is what Frege called *sense*. And he described the sense of a name as the *mode of presentation* of its reference: two names might thus present the same reference in different ways. (See his letter to Jourdain, in Moore, ed., *Meaning and Reference*, for a vivid example.)

7. To convey the sense of a name, we must specify the manner of presentation of its bearer: that specification has the *same* sense. We could do this, for instance, by giving what Russell called a definite description: the sense of 'Hesperus', for instance, might be that of 'The brightest celestial body (other than the moon) visible after sunset'. Frege thinks that like 'Hesperus' and 'Phosphorus', this definite description refers to the planet Venus; and he thinks that it presents that object – at least to the ancient Babylonians – in the same way as 'Hesperus' does but not in the same way that 'Phosphorus' does.

8. It is crucially important for understanding Frege that you appreciate the distinction between the sense of any expression and what he called the *idea* you or I associate with it. The sense of an expression is *objective* and *abstract*. Objective because it is not dependent on anyone's mind but rather exists in a third realm along with numbers and maybe also God. Abstract in the sense of not spatio-temporally located. One and the same sense can be grasped by more than one person: you and I, for instance, might associate the same sense with 'Cambridge', although it might be different from the sense that other Anglophones attach to it.

9. An idea on the other hand *is* a mental entity; it is e.g. a mental image, a feeling etc. that you associate with the word. Ideas are not objective in either of the two senses that I just mentioned: an idea does depend on the mind of the individual 'having' it; and an idea cannot be shared: you have your idea, I have mine. For instance, you and I might associate with the name *Messiah* the same *reference* – that oratorio – and the same *sense* ('The choral work that Handel premiered in Dublin on 13 April, 1742') but different auditory *ideas*. Since the idea associated with a word is not a part of its *meaning*, this difference in association, although possibly relevant e.g. in a literary context, will not affect the possibility of *understanding* between us when we are talking about *Messiah*.

10. In 'On sense and reference' Frege illustrates this distinction with a famous analogy with a telescope pointed at the moon. In this analogy, the moon is the reference; the real image is the sense; and the retinal image (in your eye) is the idea. For more discussion of this distinction see F's essay 'The thought', in P. F. Strawson, ed. *Philosophical Logic*. Oxford: OUP 1967.