

### FREGE AND RUSSELL LECTURE 3

1. For complicated reasons that we needn't discuss in this course (but if you are interested see the notoriously difficult 'Gray's Elegy' passage in his article 'On denoting', *Mind* 1905) Russell altogether rejected Frege's notion of sense. Meaning for R. was a matter of the reference of its referring expressions: and what was meant by a sentence – the proposition – literally contained within itself the very things that its referring expressions were about.

2. One obvious problem for this view arises from the existence of indefinite or definite descriptions ('a ghost', 'the talking statue'), since these might not refer to *anything*, and yet they still manage to be meaningful. Russell's insight, which made essential use of Frege's quantifier-variable notation, was that these descriptions did not mean anything by themselves; but we can analyze *sentences* containing them in a way that eliminates them ('contextual definition').

3. For instance, 'I met a ghost' is analyzed roughly as: ['I met x and x was (then) a ghost' is true of some x]. In modern notation:  $\exists x(Gx \wedge Mix)$ . And 'The talking statue was not very hungry last night' gets analyzed as saying three things:

- (i) At least one thing is a talking statue
- (ii) No more than one thing is a statue
- (iii) Anything that is a talking statue wasn't very hungry

In modern notation:  $\exists x (Sx \wedge \forall y (Sy \rightarrow y=x) \wedge Ny)$ . This is Russell's **Theory of Descriptions**.

4. Notice that it is not a *direct* analysis of a direct description. It does not analyze 'The talking statue'; rather it analyses the *sentence* containing that definite description. And it gives us a method for extending this analysis to any sentence – or rather, to any sentence that takes a definite description as its grammatical subject. On the other hand explaining any sentence containing it is surely enough to explain a word or phrase: what more would be needed? And how else could we do it for a word like (say) 'of'? This is implicitly an application of Frege's context principle.

5. Russell thought that his theory could solve three problems, two to do with empty descriptions and one to do with identity statements. First was the issue that sentences containing empty definite descriptions seem not to be about anything, because the definite description doesn't refer to anything. But 'The talking statue does not exist' seems not only to be saying something but to be saying something *true*.

6. The answer was that definite descriptions are *never* the kind of thing to refer to anything: they are not to be confused with genuine names. Rather, sentences containing those descriptions are *quantifications*, and so in a sense they are about *everything*, not any one specific thing: (i), for instance, is really about everything. We can think of the contrast between names and definite descriptions as like the contrast between a spear and a net.

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7. The second problem was to do with the law of excluded middle. It seems to be a truth of logic that 'Either the king of France is bald or he is not'; but if you take a list of all the bald men in the world, and a list of all the non-bald men in the world, the King of France will appear on neither list. ('Hegelians, who love a synthesis, will probably conclude that he wears a wig.') Does this mean that the law of logic is false?

8. Russell's theory allows *two* analyses of 'The king of France is not bald'. We can read it as either of:

- (i)  $\exists x(Kx \wedge \forall y(Ky \rightarrow y = x) \wedge \sim Bx)$
- (ii)  $\sim \exists x(Kx \wedge \forall y(Ky \rightarrow y = x) \wedge Bx)$

In 8(i) the definite description is said to have wide scope ('primary occurrence') and in 8(ii) it has narrow scope ('secondary occurrence'). Notice that 8(i) and 8(ii) say different things. What would be a possible situation in which 8(i) was true and 8(ii) was false?

9. Now the logical law of excluded middle has as its instances every instance of  $p \vee \sim p$  and these are all clearly tautologies. But then that law of logic affirms the disjunction of 'The king of France is bald' with 8(ii); whereas Russell's point, that the king of France appears on neither list, denies the conjunction of that sentence with 8(i). So there is no difficulty.

10. Notice the contrast between Russell's treatment of the law of excluded middle and Frege's treatment, in the case of empty names, of the closely related principle of bivalence. For Frege, 'Spiderman saved New York city from a crime wave' is *neither true nor false*; and he would have said – and Strawson did say – the same about 'The King of France is bald'. But for Russell, the latter is straightforwardly false.

11. The final puzzle concerned informative identity statements. If we think of 'The author of *Waverley*' as a name, and if we think that names refer and nothing else (as Russell did), then 'Scott = the author of *Waverley*' and 'Scott = Scott' ought to mean the same (cf. Frege's argument); but then we are at a loss to explain why George IV was only concerned with one of them. ('An interest in identity can hardly be attributed to the first gentleman of Europe.')

12. Russell's answer was to eliminate the description via a quantificational analysis: names might be mere tags, but descriptions behave differently. Accordingly we can analyze 'Scott = the author of *Waverley*' as 'Scott and nobody else wrote *Waverley*', and this might easily matter to George IV. In this case there is some similarity with Frege's approach. The lacuna in Russell's story is the treatment of names: for nothing in the theory of descriptions as such accounts for the ancient Babylonians' interest in 'H = P', which appears to contain no descriptions. Russell's answer, discussion of which lies beyond the scope of these lectures, was that ordinary 'names' are really disguised definite descriptions. Be sure not to confuse this *description theory of names* with the *theory of descriptions*: here the focus is on the latter.