## Philosophical Logic

## Lecture 7: Deeper into 'the'

- 1. The problem of non-existence Consider the following sentence:
- S. The present king of France is bald.
- (S) is about something while being about nothing! Parmenides of Elea (5th C. BCE): "It is necessary to say and to think that what is is; for what is is and nothing is not. These things I bid you ponder." (*Poem*, Fr. 6) Bertrand Russell (1872-1970): "if a word can be used significantly it must mean something, not nothing, and therefore what the word means must in some sense exist" (*A History of Western Philosophy*, 1945:50). The (ancient) puzzle here is that (S) seems meaningful, but there seems to be nothing the sentence is about.
- **2.** Two possible solutions *Metaphysical solution*. Alexius Meinong (1853-1920): there is some *non-existing* object that the phrase 'the present king of France' refers to. (Problem: this solution allows us to prove contradictions (e.g. 'the existent present King of France does not exist').)

Meta-semantic solution. Gottlob Frege (1848-1925): we need a two-fold theory of meaning. Once we distinguish the sense of an expression and its reference, we can see that (S) is meaningful in virtue of having a sense, even though it lacks a reference. (Problem: this would make (S) nonsense, i.e. neither true nor false. Yet it is clearly false!)

**3.** Russell's 'On Denoting' Semantic solution. Russell argues that 'the present King of France' is a denoting expression, not a referring expression—it doesn't introduce some object as constituent (value) of the proposition.

By a 'denoting phrase' I mean a phrase such as any one of the following: a man, some man, any man, every man, all men, the present King of England, the present King of France, the centre of the mass of the Solar System at the first instant of the twentieth century, the revolution of the earth round the sun, the revolution of the sun round the earth. Thus a phrase is denoting solely in virtue of its form. ('On Denoting' 479)

Why think denoting expressions work differently? Argument from contradiction: 'I met a friend, but it was not Jane' may be false (imagine it was Jane) without being self-contradictory. It would be contradictory if 'a friend' referred to Jane. So 'a friend' does not refer, even though it grammatically functions as a name.

What do denoting phrases contribute to complete statements? Their contribution can only be understood in light of what the entire statement means. Simple case: 'some'. In itself 'some' is not meaningful. Russell thinks that 'some are red' means that RED(x) is not always false. Instead of saying something about red things (there might be none!), the statement 'some are red' says something about the *propositional function* 'RED(x)'. Denoting phrases like 'a person' or 'the present King of France' follow this pattern.

- **4.** The logical form of 'the' Denoting phrases function *grammatically* in the same way as proper names. But sentences containing denoting phrases have an entirely different *logical form* from sentences using only proper names and predicates.
  - Indefinite description: (T) 'A person is in the room.' = (T') 'There exists a person that is in the room.' = (T'') ' $\exists x(dog(x) \land in the room(x))$ '
  - **Definite description**: (S) 'The present king of France is bald.' = (S') 'At least one person currently is the king of France and at most one person currently is the king of France and whoever currently is the king of France is bald.' = (S'') ' $\exists x(pkoF(x) \land bald(x) \land \forall y(pkoF(y) \supset y = x))$ '
- **5.** Puzzle-proof Russell suggests his theory is superior because it can deal with puzzles rival theories cannot deal with.
  - Substitution Failure: It explains why you cannot always substitute 'Jane' for 'the friend I saw yesterday' even if the friend I saw yesterday was Jane.
  - Excluded Middle: It explains how 'the present king of France is bald' can be false instead of nonsense.
  - Negative existentials: It explains how 'the round square does not exist' can be true without committing you to there being a round square.
- **6. Work to do?** Consider whether Russell's theory of descriptions can make sense of the following descriptive statements. If not, then what prevents the theory from doing so? Can the theory be amended to capture the descriptive content?
  - 1. The dogs are sleeping.
  - 2. The dog was domesticated more than 15000 years ago.
  - 3. The dog food is spoilt.