

## Handout for Talk on 'Definite Descriptions, Reference and Ambiguity'

(To be given at the Department of Philosophy, University of Tokyo on 14 April 2005)

1. Purpose of talk. To look again at Russell's question: how should we understand definite descriptions – or at least those definite descriptions of the form 'the F', where F is a singular or plural count noun, or a mass noun. Examples: 'the white swan', 'the tigers in London zoo', and 'the water in Tokyo'. I wish to argue that definite descriptions are not essentially referring expressions, though it is an essential property of them that they can function literally as such in appropriate linguistic settings.

2. Definite Descriptions and Other Noun Phrases: Definite descriptions form part of a wider category of noun phrase. Examples are given in the table on the last page of the handout. A common view is that in logical form this syntactic category is semantically divided. Frege thought the dividing line lay between singular descriptions, names and singular demonstratives (which he took in effect to be referring expressions), on the one hand, and Quantified Noun Phrases (QNPs), on the other. Russell thought it lay between Logically Proper Names (LPNs) and the rest. (LPNs are the only genuine referring expressions.) Most philosophers take the division to lie somewhere in between.

3. Russellian Arguments: On the basis of certain paradigms, Russell thought that genuine referring expressions: (a) cannot be empty; and (b) are such that understanding them requires knowledge of which object they refer to. But definite descriptions need not satisfy (a) or (b): 'the present king of France' fails to satisfy (a); and 'the first prisoner in Lagos gaol' fails to satisfy (b). By 'parity of form', he concluded, no definite description is a referring expression.

4. The Burge-Sainsbury Reply: (a) Why should the paradigms be representative of the whole group? Why shouldn't there be expressions the point of which is to pick out objects, to refer to them, but which have built into them the very possibility of failure. Examples: 'Vulcan', 'the present king of France', 'the first prisoner in Lagos gaol'.

(b) Truth-theory: (i) Names: in standard truth theories, the meanings of names are given by axioms of form:

(R<sub>1</sub>) 'a' refers to a,

the truth of which requires a to exist. The Burge-Sainsbury account uses weaker axioms, those of the form:

(R<sub>2</sub>) For every object, x, 'a' refers to x ↔ x = a,

the biconditional in which is defined weakly. ('G<sub>ab</sub> ↔ H<sub>cd</sub>' means: a and b exist and are G-related iff c and d exist and are H-related. It follows that (R<sub>2</sub>) will not in general entail the existence of a (or indeed of 'a'). Hence, (R<sub>2</sub>) will not entail (R<sub>1</sub>).)

(ii) Singular Definite Descriptions: Their meanings will be given by theorems of the form:

(R<sub>3</sub>) For every object, x, 'The F' refers to x ↔ x = the F;

these theorems follow from axioms of the form:

(D<sub>s</sub>) For any object x, 'the F' refers to x ↔ x = the object that F is true of.

Plural definite descriptions can be dealt with similarly.

5. The Argument from Ambiguity: Consider

(1) The author of 'On Denoting' was an Englishman; and

(2) Bertrand Russell was the author of 'On Denoting'

In (1) the definite description seems to be a referring expression; whereas in (2) it seems to be functioning predicatively. But now the definite description is plainly not in itself ambiguous in (1) and (2), and so it cannot in itself have more than one semantic role in those two sentences. Hence it is either a referring expression in (2), or not a referring expression in (1). But it is certainly not a referring expression in (2). So it must have an alternative role in (1). Hence definite descriptions are not referring expressions. Notice that Russell's own account seems to provide the means for representing both (1) and (2) – e.g. as:

(3) There is exactly one author of 'On Denoting' and he was an Englishman; and

(4) There is exactly one author of 'On Denoting' and that person was Bertrand Russell.

6. The Argument from Form (This argument presupposes that, other things being equal, we should prefer semantic theories which are closer to surface grammar.)

(a) Sentences containing ‘the F(s)’, ‘all Fs’, ‘some F(s)’, ‘no F(s)’, ‘most Fs’ seem to share a common form. In particular, subject-predicate sentences containing such noun phrases all seem to be of the form ‘QF(s) is(are) G’.

(b) The Frege-Russell account of ‘All Fs are G’ and ‘Some Fs are G’ will not generalize. In particular, there is no truth functor \*, such that ‘Most Fs are G’ can be represented as ‘ $\text{Mx}(\text{Fx} * \text{Gx})$ ’.

(c) The Binary Quantifier Account (BQ) will generalize. This treats quantifiers as binary operators on pairs of predicates. ‘No F is G’ is represented as ‘No  $x[\text{Fx}, \text{Gx}]$ ’, ‘Most Fs are G’ as ‘Most  $x[\text{Fx}, \text{Gx}]$ ’, etc.

(d) There is no other account which respects surface structure as well.

So (e) BQ should be preferred; but

(f) No noun phrase of form ‘QF’ is treated as a semantic unit according to BQ.

So (g) Definite descriptions are not referring expressions.

Note: All responses to this argument considered here call (d) into question. In particular, they try to treat expressions of the form ‘QF’ as semantic units.

7. Unsuccessful Responses (a) Mediaevalism: Treat all noun phrases of the form ‘QF’ as referring expressions. Objection: Cannot deal with expressions of the form ‘No F’: the natural analogue of (D<sub>s</sub>) is false.

(b) Generalized Quantification Theory (GQT): This assigns a set of sets to each expression of the form ‘QF’. Objection: Psychologically implausible as theory of meaning for a language

(c) Relativized Quantification (RQ): ‘No F’ (say) is construed as a relativized quantifier ‘(No  $x: \text{Fx}$ )’, which operates syntactically as a unitary operator on a predicate to form a sentence. Objection: RQ does not treat ‘No F’ as a semantic unit.

8. ‘Means’-Based Theories; and a Further Response: Abandon proxy theories of meaning. Use the ‘means’ predicate itself to understand expressions of the form ‘QF’. Where underlining indicates substitutional quantification, the theory will look like this:

Names: (N<sub>1</sub>) ‘Mars’ means Mars, etc.

Count nouns: (C<sub>1</sub>) ‘swan’ means swan, etc.

Adjectives: (A<sub>1</sub>) ‘mortal’ means mortal, etc.

Expressions of the form ‘QF’:

(Q) for all count nouns  $\phi$ , and for any  $\Phi$ , if  $\phi$  means  $\Phi$ , then ‘(every  $\phi$ )’ means (every  $\Phi$ ), ‘(no  $\phi$ )’ means (no  $\Phi$ ), ‘(the  $\phi$ )’ means (the  $\Phi$ ), etc.,

Copula (‘is’):

(Com) for any term  $t$  and adjective  $A$ , and for any  $a$  and  $\Pi$ , if  $t$  means  $a$  and  $A$  means  $\Pi$ , then ‘ $t$  is  $A$ ’ means  $a$  is  $\Pi$ .

From these axioms we can then deduce such truths as: ‘Mars is mortal’ means Mars is mortal, ‘Every swan is mortal’ means every swan is mortal, ‘The swan is mortal’ means the swan is mortal, and so on. Evidently expressions of the form ‘QF’ are treated as semantic units.

9. Objections and Problems: (a) How do we extend the theory to cover e.g. sentential connectives, multiple quantification, relations, plurals, and mass terms?

(b) Problems with using ‘means’ as the basic notion in a meaning theory.

(c) Substitutional quantification.

10. Response to the Argument from Ambiguity: Definite descriptions are not ambiguous since they are not referring expressions essentially; rather their meanings enable them to function literally as referring expressions when placed in appropriate linguistic settings. Thus the (single) meaning of ‘the author of “On Denoting”’ is given by:

(5) ‘The author of “On Denoting”’ means the author of ‘On Denoting’.

But because (5) does not in itself provide an appropriate linguistic setting, the description is there functioning neither referentially nor predicatively. But when the setting is provided, its function will then be determined. Thus in

(1) The author of ‘On Denoting’ was an Englishman

it is functioning as referentially. For the meaning of (1) will be given by the theorem:

(6) ‘The author of “On Denoting” was an Englishman’ means the author of  
‘On Denoting’ was an Englishman

And by virtue of that meaning ‘the author of “On Denoting”’ has a referential function. Equally, in

(2) Bertrand Russell is the author of ‘On Denoting’,

it is not functioning as a referring expression. For the meaning of (2) will be given by the theorem:

(7) ‘Bertrand Russell is the author of “On Denoting”’ means Bertrand Russell  
is the author of ‘On Denoting’

And by virtue of that meaning ‘the author of “On Denoting”’ has a predicative function.

S. G. Williams  
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9 April 2005

Quantified  
Noun Phrases

‘every swan’  
‘several swans’  
  
‘no swan(s)’  
‘some swan(s)’

Context-Free  
Definite  
Descriptions

‘the author of “On  
Denoting”’  
‘the parents of  
SGW’  
  
‘the water in  
Tokyo’

Context-Sensitive  
Definite  
Descriptions

‘the swan on the  
lake’  
‘the men in the  
corner drinking  
champagne’  
  
‘the water on the  
table’

⇒

Proper Names  
(Descriptive or  
Not)

⇒ ‘Vulcan’  
  
‘Japan’  
  
‘Aristotle’

Complex  
Demonstratives

‘this swan’  
  
‘that swan’  
  
‘these/‘those’  
swans’

Simple  
Demonstratives;  
and Logically  
Proper Names

‘this’/‘that’  
(referring to a swan)  
‘this’/‘that’  
(referring to a sense  
datum)  
‘these’/‘those’