Russell's theory of descriptions

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1 Denoting phrases and names

Russell defines the class of denoting phrases as follows:

> "By '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 centre of mass of the Solar System at the first instant of the twentieth
> century, the revolution of the earth around the sun, the revolution of the sun
> around the earth. Thus a phrase is denoting solely in virtue of its *form*." ('On
> Denoting', 479)

Why this already departs from Frege's categorization of expressions, which put phrases like 'the present king of England' in the class of proper names, but phrases like 'some man' in the class of devices of generality.

A natural first thought in the construction of a theory of denoting phrases: what goes for names like 'Bob' should also go for descriptions — both indefinite descriptions (which Russell sometimes calls 'ambiguous descriptions'), like 'a man', and definite descriptions, like 'the tallest man in this room.' After all, they seem to play the same grammatical role as proper names; just as we can say

> Bob is happy.

we can say

> A man is happy.

> The tallest man in this room is happy.

On this view, we should let the significance of such expressions be exhausted by the objects which they pick out.

2   Puzzles raised by denoting phrases

In both 'On Denoting' and 'Descriptions', Russell discusses a number of logical puzzles which any theory of denoting phrases should solve. He describes the role he thinks that these puzzles should play in the construction of a theory of denoting phrases when he writes,

> "A logical theory may be tested by its capacity for dealing with puzzles, and it is a wholesome plan, in thinking about logic, to stock the mind with as many puzzles as possible, since these serve much the same purpose as is served by experiments in physical science." ('On Denoting', 484-5)

Russell raises on puzzle to do with indefinite descriptions, and three important puzzles about the functioning of definite descriptions. One way of viewing these puzzles is as raising a difficulty, in the first instance, for the conjunction of the view that denoting phrases are to be grouped with names with the view that the significance of a name is exhausted by its reference. We can then, after discussing the puzzles, ask to what extent they can be extended to other theories of denoting phrases.

2.1   Indefinite descriptions do not stand for particular objects

The first problem Russell notes is that there is a clear sense in which neither indefinite nor definite descriptions do not stand for objects at all:

'Our question is: What do I really assert when I assert "I met a man"? Let us assume, for the moment, that my assertion is true, and that in fact I met Jones. It is clear that what I assert is *not* "I met Jones." I may say "I met a man, but it was not Jones"; in that case, though I lie, I do not contradict myself, as I should do if when I say I met a man I really mean that I met Jones. . . . not only Jones, but no actual man, enters into my statement.' (167-8)

Russell expresses the same point later in the article:

". . . when we have enumerated all the men in the world, there is nothing left of which we can say, 'This is a man, and not only so, but it is *the* 'a man', the quintessential entity that is just an indefinite man without being anybody in particular." ('Descriptions,' 173)

This is puzzling; if the value assigned to 'a man' is not an object, what could it be?

2.2 The three puzzles of 'On Denoting'

Different and less obvious problems arise from assimilating definite descriptions to names.

2.2.1 The substitution of identicals

Russell presents the first puzzle as follows:

"If a is identical with b, whatever is true of the one is true of the other, and either may be substituted for the other without altering the truth or falsehood of that proposition. Now George IV wished to know whether Scott was the author of *Waverley*; and in fact Scott *was* the author of *Waverley*. Hence we may substitute *Scott* for *the author of "Waverley,"* and thereby prove that George IV wished to know whether Scott was Scott. Yet an interest in the law of identity can hardly be attributed to the first gentleman of Europe." ('On Denoting', 485)

A presentation of the puzzle in terms of Leibniz's Law, which says that for any x, y, if $x = y$, then for any property F, $Fx \iff Fy$. (This is sometimes called the principle of the indiscernibility of identicals, and should be sharply distinguished from the much more controversial principle in metaphysics which is sometimes called the principle of the identity of indiscernibles.)

2.2.2 The law of the excluded middle

Russell discusses a third puzzle in his 1905 article, 'On Denoting':

> "By the law of the excluded middle, either 'A is B' or 'A is not B' must be
> true. Hence either 'The present King of France is bald' or 'The present King
> of France is not bald' must be true. Yet if we enumerated the things that are
> bald, and then the things that are not bald, we should not find the present
> King of France in either list. Hegelians, who love a synthesis, will probably
> conclude that he wears a wig." ('On Denoting,' 485)

Why this poses a problem for the view that the sole linguistic function of a denoting
phrase is to stand for the object to which it refers.

2.2.3   The problem of negative existentials

Russell asks us to consider sentences like:

> The round square is unreal.

> The round square is nonexistent.

These sentences are called 'negative existentials' because they can be understood as the
negation of an existence claim.

If it were the case that definite descriptions were to be understood as a kind of name,
and names were understood as mere proxies for their bearers, then it may seem that we
could give an account of these sentences using the elementary theory of reference sketched
above: that is, the sentences would be true just in case there was some object referred to
by 'the round square' which was, respectively, among the unreal things or the nonexistent
things.

Russell does not think that this is plausible; there is, after all, no object — the round
square — which could be the referent of the 'the round square.' He says:

> "It is argued ... that we can speak about 'the golden mountain,' 'the round
> square,' and so on; we can make true propositions of which these are the
> subjects; hence they must have some kind of logical being, since otherwise the
> propositions in which they occur would be meaningless. In such theories, it
> seems to me, there is a failure of that feeling for reality which ought to be
> preserved in even the most abstract studies. Logic, I should maintain, must
> no more admit a unicorn than zoology can; for logic is concerned with the
> real world just as truly as zoology, though with its more abstract and general
> features. To say that unicorns have an existence in heraldry, or in literature,
> or in imagination, is a most pitiful and paltry evasion. What exists in heraldry
> is not an animal, made of flesh and blood, moving and breathing of its own
> initiative. What exists is a picture, or description in words. Similarly, to
> maintain that Hamlet, for example, exists in his own world, namely in the
> world of Shakespeare's imagination, just as truly as (say) Napoleon existed in
> the ordinary world, is to say something deliberately confusing, or else confused

to a degree which is scarcely credible. There is only one world, the "real" world: Shakespeare's imagination is part of it ...If no one had thought about Hamlet, there would be nothing left of him; if no one had thought about Napoleon, he would have soon seen to it that someone did." ('Descriptions,' 169-170)

Russell's point here is that there are no nonexistent things; there are no round squares, and there is no golden mountain. What we need is an account of how definite descriptions work which can explain the truth of some negative existentials without the 'pitiful and paltry evasion' of claiming that such things do exist, or at least are around to serve as the referents of definite descriptions.

3 Competing theories of denoting phrases

We have already seen that the simple view of denoting phrases (which has some resemblance to the view of the Frege of the *Begrisffsschrift*) cannot handle the three puzzles Russell raises in 'On Denoting.' Russell discusses two other theories in the article: one of Meinong, one of Frege.

3.1 Meinong on denotation and negative existentials

Russell presents Meinong's theory as follows:

"Of the possible theories which admit such constituents the simplest is that of Meinong. This theory regards any grammatically correct denoting phrase as standing for an *object.* Thus "the present King of France," "the round square," etc. are supposed to be genuine objects. It is admitted that such objects do not *subsist*, but nevertheless they are supposed to be objects." ('On Denoting,' 482)

Russell then immediately gives the following objection:

"... the chief objection is that such objects, admittedly, are apt to infringe the law of contradiction. It is contended, for example, that the present King of France exists, and also does not exist; that the round square is round, and also not round; etc. But this is intolerable ..."

Why does Russell think that Meinong's view is committed to there being objects with contradictory properties?

A second objection: the 'feeling for reality.'

Russell gives two arguments against Frege's theory, which he summarizes as "the view that denoting phrases *express* a meaning and *denote* a denotation" ('On Denoting,' 483):

1. Frege cannot avoid treating sentences which include non-referring denoting phrases as nonsensical. (483-4)

2. The 'Gray's elegy' argument. (485-7)

4 Russell's theory of denoting phrases

4.1 Propositions and propositional functions

Russell (unlike contemporary theorists) means by 'proposition', as he puts it, "primarily a form of words which expresses what is either true or false." Roughly, then, 'propositions' in Russell refers to 'declarative sentences.'

Propositional functions are something else:

> "A 'propositional function,' in fact, is an expression containing one or more undetermined constituents, such that, when values are assigned to these constituents, the expression becomes a proposition. ... Examples of propositional functions are easy to give: "x is human" is a propositional function; so long as x remains undetermined, it is neither true nor false, but when a value is assigned to x it becomes a true or false proposition." ('Descriptions,' 155-156)

What does it mean for 'x' to 'remain undetermined', or to have a 'value'? It is, in the terminology which is now familiar from our study of Frege, to say that 'x' lacks a reference. Accordingly, to say that a propositional function is an expression containing one or more *undetermined constituents* is to say that it is an expression containing one or more expressions which *have not been assigned a reference*. This is the case with Russell's example:

> x is human.

Here, 'x' has no reference; we might as well have written

> ___ is human.

Once those undetermined constituents are 'filled in' by assigning them a reference (or by replacing them with words which have a reference), we will have a proposition: a form of words which expresses something which can be either true or false.

Russell thinks that the key to giving an adequate analysis of descriptions is the distinction between propositions and propositional functions.

4.2 Indefinite descriptions

Russell gives his analysis of indefinite descriptions on p. 171:

> "The definition is as follows:
>
>> The statement that 'an object having the property ϕ has the property has the property ψ'
>
> means
>
>> 'The joint assertion of ϕx and ψx is not always false."

How this relates to propositional functions; how it relates to normal existential quantification. A tension in the view.

4.3 Definite descriptions

Later in the article, Russell gives his analysis of sentences containing definite descriptions:

> "We are now in a position to define propositions in which a definite description occurs. The only thing that distinguishes 'the so-and-so' from 'a s-and-so' is the implication of uniqueness. We cannot speak of '*the* inhabitant of London', because inhabiting London is an attribute which is not unique."

Later he gives the following analysis of 'the author of *Waverly* was Scotch':

(1) "x" wrote *Waverly*" is not always false;

(2) "if x and y wrote *Waverly*, x and y are identical" is always true;

(3) "if x wrote *Waverly*, x was Scotch" is always true. (p. 177)

You can think of Russell as giving three conditions for 'the F is G' to be true: there must exist at least one thing which is F, there must exist at most one thing which is F, and whatever is F must be G.

4.4 'Everyone', 'someone'

We have seen that Russell resists the assimilation of descriptions to the paradigm of names; what maybe less obvious is that he is assimilating descriptions to another paradigm, that of *quantifier phrases*. Consider the following sentences:

Everyone is happy.

Someone is happy.

Most people are happy.

What are the logical forms of these sentences? How, i.e., would you construct a theory of reference for them?

4.5   Strengths of Russell's theory

Russell's theory as an alternative theory of reference: an explanation of what descriptions contribute to determining the truth value of sentences in which they occur.

His solution to the problem that indefinite expressions do not, in one good sense, have a particular object as their referent.

His solution to the problem of negative existentials.

His explanation of why descriptions are not interchangeable with names.

His explanation of the ambiguity in 'The King of France is not bald." Comparison with 'Everyone is not bald.'

5   Objections to Russell's theory

5.1   Incomplete definite descriptions

Consider what Russell's view says about the truth conditions for:

> The book is on the table.

5.2   Other uses of 'the': generics

How would you apply Russell's theory to 'The whale is a mammal.'?

5.3   The view that sentences containing descriptions say something about propositional functions

6   Russell's view of names

Russell gives the following view of names:

> "A name is a simple symbol whose meaning is something that can only occur as subject, *i.e.*, something of the kind that ... we defined as an 'individual' or a 'particular."' ('Descriptions,' 173)

And later:

> "*a name* . . . is a simple symbol, directly designating and individual which is its meaning, and having this meaning in its own right, independently of the meanings of all other words" ('Descriptions,' 174)

This has been implicit all along in the contrast between names and descriptions.

Genuine names vs. disguised descriptions; why some names must be regarded as disguised descriptions. Russell's claim that "We may inquire significantly whether Homer existed, which we could not do if 'Homer' were a name" ('Descriptions,' 178).

The characteristics of genuine, or 'logically proper' names.

7   The importance of Russell's theory

Russell's theory as a way of eliminating entities from one's metaphysics. The case of Plato's beard.

Importance for epistemology: Russell's claim that "It is possible to have much knowledge concerning a term described, *i.e.* to know many propositions concerning 'the so-and-so', without actually knowing what the so-and-so is . . . " ('Descriptions,' 178). The distinction between 'knowledge by acquaintance and knowledge by description.'

Application of these ideas to the case of our knowledge about material objects.