

Russell's Theory of Descriptions 2

Seminar 4

PHIL2120 Topics in Analytic Philosophy

12 October 2012

Admin

Essay 1 due: Thursday 15 November (Questions given out in class next week)

Required reading:

Soames, Ch 5, pp 93-114

Optional reading: i) Russell, 'On Denoting', ii) 'Non-Existent Objects' Stanford Encyclopaedia of philosophy (<http://plato.stanford.edu/entries/nonexistent-objects/>)

Required reading for next week: Rest of Soames Ch 5

The paradox

P1) Meaningful negative existentials are subject predicate sentences

P2) A meaningful subject-predicate sentence is true iff its subject refers to a thing (some things) that has (have) the property expressed by its predicate

C1) A meaningful negative existential is true iff there is an object (are objects) to which it subject refers which has (have) the property of not existing

The paradox (cont)

C1) A meaningful negative existential is true iff there is an object (are objects) to which it subject refers which has (have) the property of not existing

P3) No objects have the property of not existing

C2) Meaningful negative existentials cannot be true

C3) There are no true meaningful negative existentials

C4) True meaningful negative existentials do not exist

Contradiction!

The conclusion of the argument is C4, which says that true negative existentials do not exist. But C4 is a negative existential. Hence, if the argument is sound, there is a true negative existential! So we have a contradiction.

Result: Either P1, P2 or P3 must be false.

Logical form vs. grammatical form

The grammatical form of S = the syntactical structure of the sentence S

The logical form of S = the structure of the proposition expressed by S

Sometimes the logical form of a sentence matches its grammatical form, while sometimes it doesn't

Logical form vs. grammatical form (cont)

Example: Suppose a sentence S has a subject predicate grammatical form (e.g., it has the form 'Fa'), and its logical form matches this grammatical form.

Then S expresses a proposition of the form:
<property expressed by F , referent of a >

Def: If S and S^* expressed the same proposition, and the logical form of S^* matches its grammatical form, then S^* gives the logical form of S

The paradox restated

P1a) Meaningful negative existentials are **logically** of subject-predicate form

P2a) A sentence that is **logically** of subject-predicate form is true iff its subject refers to a thing (some things) that has (have) the property expressed by its predicate

C1) A meaningful negative existential is true iff there is an object (are objects) to which it subject refers which has (have) the property of not existing

Russell's 1905 response to the paradox

P1a is false

Although negative existentials (such as (1-3)) are grammatically of subject-predicate form, they aren't logically of this form

An example

(1) does not have a subject-predicate logical form, but instead has the same logical form as (4).

(1) Carnivorous cows don't exist

(4) Everything is such that either it isn't a cow or it isn't carnivorous

The truth of (4) doesn't require there to be some objects that are carnivorous cows and are such that they don't exist.

Since (1) expresses the same proposition as (4), according to Russell 1905, (1) doesn't require this either.

Russell's general strategy for responding to the paradox

For each problematic negative existential S , produce another sentence S^* such that

- i) S^* is not grammatically of subject-form, and
- ii) S^* gives the logical form of S .

In order to do this, we need a logically perfect language, all of whose sentences are such that their logical form matches their grammatical form.

Russell's logically perfect language: Vocabulary

1. Predicates: $=$, A , B , C ,...
2. Terms
 - a) variables: x , y , z , x' , y' , z' ,...
 - b) Names, \underline{x} , \underline{y} , \underline{z} , $\underline{x'}$, $\underline{y'}$, $\underline{z'}$,...
3. Operator expressions: \sim (meaning 'not'), $\&$ (meaning 'and'), \vee (meaning 'or'), \rightarrow (meaning 'If...then'), \leftrightarrow (meaning 'if and only if'), \forall (meaning 'for some'), \exists (meaning 'for some')

Russell's logically perfect language: Formulas

- If Φ , and Ψ are formulas, and so are $\sim\Phi$, $(\Phi\&\Psi)$, $(\Phi\vee\Psi)$, $(\Phi\rightarrow\Psi)$, and $(\Phi\leftrightarrow\Psi)$
- If Φ is a formula, and v is a variable, then $\forall v\Phi$ and $\exists v\Phi$ are formulas

Russell's language interpreted

- Sentences express propositions
- Formulas that are not sentences express propositional functions (functions that map objects to propositions)
- Russell recursively defines the truth conditions of sentences in his language and what propositions that they express (see Soames, pp 103-106)

Russell's 1905 solution applied to (1)

(1) Carnivorous cows don't exist

Russell: The logical form of (1) is given by

$$(a) \forall x(\sim Cx \vee \sim Mx)$$

where 'C' expresses the property of being a cow,
and 'M' expresses the property of being
carnivorous

Russell's 1905 solution applied to (2)

(2) The creature from the black lagoon doesn't exist

Russell: The logical form of (1) is given by

$$(a) \sim \exists x \forall y [(Cy \ \& \ By) \leftrightarrow x=y]$$

where 'C' expresses the property of being a creature, and 'B' expresses the property of being from the black lagoon

A generalisation

More generally, Russell held that the logical form of

(*) The so-and-so doesn't exist

is

(**) $\sim\exists x\forall y[y \text{ is so-and-so} \leftrightarrow x=y]$.

Russell's 1905 solution applied to (3)

(3) Santa Claus does not exist

Russell: Whenever we use a name like 'Santa Claus', we had a description in mind such as 'The old man who lives at the North Pole and...'.
'The old man who lives at the North Pole and...'

As a result, we use (3) to mean something like (3a).

(3a) The old man who lives at the North Pole and... does not exist

Russell's 1905 solution applied to (3) (cont)

Since (3) has the form

3b) The so-and-so doesn't exist

Russell claimed that the logical form of (3) is (3c).

(3c) $\sim \exists x \forall y [y \text{ is so-and-so} \leftrightarrow x=y]$

Other names

Russell gives the same kind of account for ordinary referring names like 'Aristotle' and 'Napoleon'.

According to Russell: The meaning of 'Aristotle' isn't its referent Aristotle. Instead, its meaning, for a particular person, is given by the description that person associates it with.

Example: For some people, the meaning of 'Aristotle' might be 'The ancient Greek philosopher who was the student of Plato and the teacher of Alexander the Great'.

Are there any expressions in English that are logically proper names?

Def: A logically proper name is a term the meaning of which is its referent

Russell: Relative to a particular use, 'this' is a logically proper name.

This is why 'This does not exist' is absurd.

Test for determining whether a referring expression α is a logical proper name

T1. Can you understand the meaning of ' α is F' without knowing which thing α refers to?

T2. Would ' α is F' be meaningful even if α had no referent?

If the answer is yes to either T1 or T2, then α is not a logically proper name, but must be analysed as a description.

What sorts of things can be the referents of logically proper names?

Russell ended up holding that:

Only sense-data can be referred to by logically proper names