Russell’s Theory of Descriptions 1

Seminar 3
PHIL2120 Topics in Analytic Philosophy
5 October 2012
Reading

Required reading:
Soames, Ch 5, Sec 5.1-5.3

Optional reading:
Russell, ‘On Denoting’
‘Non-Existential Objects’ Stanford Encyclopaedia of philosophy
(http://plato.stanford.edu/entries/nonexistent-objects/)
Essay topics (so far)

1. Moore’s response to scepticism about the external world
2. Moore’s sense data theory of perception
3. Are there any things that don’t exist?
Russell’s early intellectual history

• Born 1872
• Began as an undergraduate in mathematics, and was initially drawn to philosophy by an interest in the foundations of mathematics
• His goal was to bring the rigour he found in mathematics to philosophy
• After initially being influenced by the absolutist idealist views of his teachers, he rebelled and endorsed an extreme version of philosophical realism
The early realism of Russell (and Moore)

i) Everyday objects exist (such as persons, chairs, and tables)

ii) Abstract objects exist (such as numbers, sets, properties and propositions)

iii) There are things that do not exist (such as Santa Claus, Pegasus, and the present King of France)

Russell later rejected much of (i-iii)
Negative existentials

Russell originally endorsed (iii) because he thought endorsing it was the best response to a paradox concerning negative existentials.

Def: An negative existential is a sentence of the form (a) or (b).
(a) x doesn’t exist
(b) x’s don’t exist
Examples of negative existentials

(1) Carnivorous cows don’t exist
(2) The creature from the black lagoon doesn’t exist
(3) Santa Claus doesn’t exist
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.
Russell’s 1903 solution

The culprit is P3: There are things that don’t exist!

Examples: carnivorous cows, Santa Claus, the creature from the black lagoon
Problems with this solution

Prob 1: The solution is unparsimonious

Prob 2: Seems to lead to contradictions. According to this solution, `the round square’ refers to something, and hence there is something that is round and square. But nothing can be both round and square!
Problems with this solution (cont)

Prob 3: The solution seems to conflict with what experience tells us.

According to this solution, `the visible monster under my bed’ refers to something, and hence there is a monster under my bed. But there is no visible monster under my bed!
Towards Russell’s 1905 response to the paradox

Russell’s response appeals to:
i) his theory of descriptions, and
ii) his distinction between logical form and 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 \( S \)

The logical form of a sentence plays an important role in determining the conditions under which it is true.
Logical form vs. grammatical form

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

Example: Suppose a sentence S has a subject predicate grammatical form (e.g., it has the form ‘Fa’), and it’s logical form matches this grammatical form. Then S expresses a proposition of the form: <property expressed by F, referent of a>
The paradox restated

P1) Meaningful negative existentials are **logically** of subject-predicate form

P2) 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
The paradox restated (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
Russell’s 1905 response to the paradox

P1a is false

Although negative existential is (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).

(2) 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, produced another sentence S* such that

i) S* is not grammatically of subject-form

ii) S*’s logical form matches its grammatical form, and

iii) S* expresses the same proposition as 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, x, y, z, x’, y’, z’,…

3. Operator expressions: ˜ (meaning ‘not’), ‘&’ (meaning ‘and’), ‘v’ (meaning ‘or’), }->{ (meaning ‘If…then’), ‘↔’ (meaning ‘if and only if’), ‘∀’ (meaning ‘for some’), ‘∃’ (meaning ‘for some’)}
Russell’s logically perfect language: Formulas

• If $\Phi$, and $\Psi$ are formulas, and so are $\neg\Phi$, $(\Phi \& \Psi)$, $(\Phi \lor \Psi)$, $(\Phi \rightarrow \Psi)$, and $(\Phi \leftrightarrow \Psi)$

• If $\Phi$ is a formula, and $v$ is a variable, then $\forall v \Phi$ and $\exists v \Phi$ are formulas
Russell’s logically perfect language: Sentences

A sentence is a formula that contains no free experiences of variables

Def: An occurrence of a variable is \textbf{free} iff it is not bound

Def: An occurrence of a variable in a formula is \textbf{bound} iff it is within the scope of a quantifier using that variable

Def: The \textbf{scope} of an occurrence of a quantifier in a formula is the quantifier together with the (smallest complete) formula immediately following it.
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)