Russell’s Theory of Descriptions 3

Seminar 5

PHIL2120 Topics in Analytic Philosophy

19 October 2012

Admin

Essay 1: Due 5pm Thursday 15 November (Hand in to Philosophy Office)

Required reading for this seminar:

Soames, Ch 5, pp 113-131

Optional reading: Russell, 'On Denoting'

Required reading for next seminar: Soames Ch 7

Russell’s general theory of descriptions

R) ‘… Ψ(the so-and-so)…’ can be replaced by ‘$\exists x \forall y$[(y is so-and-so $\leftrightarrow$ x=y) & Ψx]’

R is a rule for translating a sentence into a sentence that gives its logical form

Example

i) The American president is happy

ii) H(the A)

iii) $\exists x \forall y[(Ay \leftrightarrow x=y) \ \& \ Hx]$

To find a sentence that gives the logical form of (i):

First symbolise (i) and (ii)

Then apply rule R to (ii) to get (iii), where H expresses the property of being happy, and A expresses the property of being an American president.

Negative existentials revisited

In order to apply R to (*), we first symbolise it as (**), and then apply R to (**).

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

(**) ~E(The so-and-so)

Problem: We get different answers depending on whether we regard $\sim\mathrm{E}$ as Ψ , or E *as* Ψ

Negative existentials revisited (cont)

If we regard $\sim\mathrm{E}$ as Ψ, we get

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

If we regard E as Ψ, we get

(**b) $\exists x \forall y[(y \text{ is so-and-so} \leftrightarrow x=y) \ \& \ \mathrm{E}x]$

Which (given the thesis that everything exists), is equivalent to

(**b’) $\exists x \forall y[(y \text{ is so-and-so} \leftrightarrow x=y)$

As a result of this, Russell claimed that sentences of the form (*) are ambiguous.

The scope of descriptions

Def: Under the reading of (*) in which it has analysis (**a), ‘the so-and-so’ is said to take **wide-scope** over negation

Def: Under the reading of (*) in which it has analysis (**b), ‘the so-and-so’ is said to take **narrow-scope** over negation

Note: (*) is false under the first ‘wide-scope’ interpretation, and true under the second more natural ‘narrow-scope’ interpretation.

The scope of descriptions (cont)

Consider (15), which may be symbolised as (15’), where F expresses the property of being famous.

(15) John believes that the person sitting over there is famous

(15’) John believes that F(the person sitting over there)

Russell’s theory predicts that there are two intepretations of (15), and hence that it is ambiguous.

The scope of descriptions (cont)

Narrow scope interpretation under 'John believes that' (Ψ taken to be F):

(If1) John believes that ∃x∀y[(y is so-and-so ↔ x=y) & Fx]

Wide scope interpretation under 'John believes that' (Ψ taken to be 'John believes that F'):

(If1) ∃x∀y[(y is so-and-so ↔ x=y) & John believes that Fx]

The explanatory power of Russell's theory of descriptions

Russell's theory of descriptions (and his distinction between grammatical and logical form) is able to provide powerful solutions to a number of philosophical problems.

Two examples:

i) A puzzle concerning the law of excluded middle

ii) A puzzle concerning belief

(I will only discuss the second. See Soames Ch5 for the first)

A puzzle about George IV and the author of Waverly

P1) George IV wondered whether Scott was the author of Waverly

P2) Scott = the author of Waverly

C) George IV wondered whether Scott was Scott

The puzzle: P1 and P2 are true, and C seems to follow from P1 and P2. But C is false!!

A puzzle about George IV and the author of Waverly (cont)

C seems to follow from P1 and P2 since C follows from P1 and P2 by the law of the substitutivity of identity (SI).

(SI) If ‘a’ and ‘b’ are singular referring expressions, then ‘Fb’ can be derived from ‘Fa’ and ‘a=b’.

Russell's solution

(SI), like any logical rule, only applies to sentences whose grammatical form matches its logical form.

To evaluate the argument, we therefore need to replace P1 and P2 with their logical forms.

Since P1 and has a wide scope and a narrow scope interpretation, we get two arguments corresponding to the two interpretations.

Argument 1

P1ws) $\exists x \forall y$[(y is an author of Waverly $\leftrightarrow$ x=y) & George IV wondered whether Scott = x]

P2) $\exists x \forall y$[(y is an author of Waverly $\leftrightarrow$ x=y) & Scott = x]

C) George IV wondered whether Scott was Scott

Argument 1 is valid, but (P1ws) is false.

Argument 2

P1ns) George IV wondered whether $\exists x \forall y[(y \text{ is an author of Waverly} \leftrightarrow x=y) \ \& \ \text{Scott} = x]$

P2) $\exists x \forall y[(y \text{ is an author of Waverly} \leftrightarrow x=y) \ \& \ \text{Scott} = x]$

C) George IV wondered whether Scott was Scott

Argument 2 is invalid, since C does not follow from (P1ns) and P2.

A clash between Russell's epistemology and his theory of descriptions

Suppose:

i) One and only one person wrote Waverly and Mary wondered whether that that person wrote Waverly;

ii) A speaker knows who the author of Waverly was, and having overheard Mary, says 'Did he write Waverly?', pointing out the man in question.

Then:

The speaker might truthfully assert

(16) Mary wondered whether the author of Waverly wrote Waverly

A clash between Russell's epistemology and his theory of descriptions (cont)

The problem: Given Russell's claim that logical names only refer to sense data, it seems that Russell cannot provide an interpretation of (16) on which it is true.

The narrow scope interpretation of (16)

(16ns) Mary wondered whether $\exists x \forall y[(y \text{ wrote Waverly} \leftrightarrow x=y) \,\&\, x \text{ wrote waverly}]$

(16) is false under this reading (in the imagined situation)

The wide scope interpretation of (16)

(16ws) $\exists x \forall y[(y \text{ wrote Waverly} \leftrightarrow x{=}y)$ & Mary wondered whether x wrote waverly]

If (16ws) is true, then ‘Mary wondered whether x wrote Waverly’ is true, where ‘x’ is a logical name referring to a certain man.

But logical names only refer to sense-date on Russell’s view. Hence, on Russell’s view, (16ws) is false.