

# Logical Constructions and the External World

Seminar 6

PHIL2120 Topics in Analytic Philosophy

26 October 2012

# Admin

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

Information about formatting essays and bibliography: See

<http://owl.english.purdue.edu/owl/resource/747/01/>

Required reading for this seminar:

Soames, Ch 7

Optional reading: Russell, *Our Knowledge of the External World*, Ch 3

# Admin (cont)

Next week: No seminar (Reading week)

Next seminar: 9 Nov

Required reading for next seminar: Soames Ch 8

First part of next seminar will discuss the first essay and material from the seminars 1-6

# 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

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

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

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

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

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.

# Puzzle: How do we know about the external world?

External objects: Objects that i) can be perceived by multiple people, and ii) can exist without being perceived

Moore and Russell's sense data theory of perception: The objects we immediately perceive are sense data (eg mental images/objects), rather than external objects

Puzzle: So how do we know about external objects?

Russell's solution (1914): "Material objects are logical constructions out of sense data". But what does this mean?

What does it mean to say "the Xs are logical constructions out of the Ys"?

# The average child

Consider (1).

(1) The average child between 6 and 8 has had 4.7 cavities

The grammatical structure of (1) suggests that (1) is about a certain entity, namely the average child between 6 and 8. But this is wrong, since there is no such entity!

(1) expresses the same proposition as (2).

(2) The number of children between 6 and 8 has had 4.7 cavities

# The average child (cont)

The proposition expressed by (2) is not about the average child between 6 and 8. Instead, it is about individual children.

Russell would express this by saying: “The average child is a logical construction out of individual children”.

Note: (2) is compatible with there being only individual children, and there being nothing extra which is the average child between 6 and 8

# Russell 1914 view about material objects

Russell thought expressions like 'the chair' and 'The White House' which seem to refer to material objects are like 'the average child between 6 and 8'.

- i) Material objects are logical constructions out of sense data
- ii) All there is are individual sense data. There are no additional entities that are material objects



# What is Russell's analysis of (5)?

(5) I see a table

First attempt: (5) expresses the same proposition as (5a).

(5a) I see a certain sort of table-like a sense datum (with such and such shape and structure)

Problem 1: (5a) is vague – What is 'table-like' etc

Problem 2: (5) can be false when (5a) is true, since I might hallucinate that there is a table

# Russell's better analysis of (5)

(5) expresses the conjunction of the propositions expressed by (5a), (5b), (5c) and infinitely others.

(5b) If I were to have the sensations that are called “walking toward the table” then ultimately I would experience tactile sensations of pressure and hardness

(5c) If I were to have the sensations called “walking around the table” then my visual sense data would gradually change in a certain continuous way ...

## Russell's better analysis of (5) (cont)

Def: I have the sensations called "walking toward the table" iff I have the "muscular" sensations that are called "walking" at the same time that I have a sequence of gradually changing and steadily larger visual "table-like" sense data

Note: This second attempt is still vague and complete. But Russell thought some completed precise version exists, even if we can't state it.

# How do we know that the counterfactual clauses (5b), (5c) etc

Russell: We know these by induction.

Example: I know (5c) is true because in the past when ever I have had “walking around the table” sensations then my visual sense data has gradually changed in such-and-such a continuous way

General principle of induction: In the past all Fs have been Gs, so in the future all Fs will be Gs

# Russell's view on the above interpretation

- (5) in ordinary English expresses the proposition that is the conjunction of the propositions expressed by (5a), (5b), (5c)...
- The proposition expressed by (5) in English is extremely complicated
- (5) is true in ordinary English even though there is no entity that is the table that I see

Call this view '**descriptive logical constructionism**'

# Another interpretation of Russell mentioned by Soames

- We **should** use (5) to express the conjunction of the propositions expressed by (5a), (5b), (5c)...
- Otherwise (5) will express a proposition we don't know the truth of

Call this view '**normative logical constructionism**'

# Russell's argument for logical constructionism about external objects

Russell's epistemic claim (REC): If (5) doesn't express the conjunction of the propositions expressed by (5a), (5b), (5c)..., then we won't know whether (5) is true.

Argument for descriptive logical constructionism: We do know whether (5) is true. So, by (REC), descriptive logical constructionism must be true.

Argument for normative logical constructionism: We should use (5) so that we know whether it is true. So, by (REC), normative logical constructionism is true.

# Soames against (REC)

Soames discusses Russell's reasons for endorsing (REC) on pp. 171-176

Soames thinks that Russell's reasons for endorsing (REC) are unconvincing because they rely on a too restrictive view about the kinds of justification we have for our beliefs