Russell, “On Denoting” (cont’d)

1. Puzzles

Frege’s Puzzle

Substitutivity (salva veritate): Co-referring expressions (i.e., expressions that have the same reference) can be substituted for one another without changing the truth-value of the sentence in which the substitution is made.

A counterexample: Consider the sentence:
‘George IV wanted to know if Scott was the author of Waverley’.
Suppose that the sentence is true.
As we know, Scott = the author of Waverley
But the following sentence is false:
‘George IV wanted to know if Scott was Scott’.
He already knows that!

We can analyze the sentence ‘George I wanted to know if Scott was the author of Waverley’ in two ways

(1) “George IV wished to know whether one and only one man wrote Waverley and Scott was that man.”
George IV wished to know whether (∃x)[Ax & (y)(Ay → y=x) & x=s]
In order for this to be true, George IV must know that there is a written work known as Waverley, and he must want to know whether Scott wrote that work.

(2) “One and only one man wrote Waverley, and George IV wished to know whether Scott was that man.” Or, equivalently, “George IV wished to know, concerning the man who in fact wrote Waverley, whether he was Scott.
(∃x)[Ax & (y)(Ay → y=x) & George IV wished to know whether x=s]
This could be true even if George IV never heard of Waverley. George IV wonders of the author of Waverley, of that guy, whether it is Scott. He does not wonder this about that guy under the description ‘the author of Waverley’.

At the level of logical form, there is no expression ‘the author of Waverley for us to substitute ‘Scott’ for. Accurate translations remove the threat of failure of substitutivity.

The Law of the Excluded Middle

LEM: By the law of the excluded middle, either ‘A is B’ or ‘A is not B’ must be true.

By the law of excluded middle, then, either (S1) ‘The King of France is bald’ or (S2) ‘The King of France is not bald’ had better be true.

Frege said that sentences containing apparent reference to non-existents have no truth-value.

Russell thought that Frege was wrong about this.

Suppose a sentence containing apparent reference to a non-existent is false because there is no such thing.

If so, then both sentences above are false.

But, this defies the LEM.

Russell’s solution: Not all sentences containing ‘the King of France’ assert his existence.

‘The King of France is not bald’ is ambiguous, on Russell’s account, because, at the level of logical form, there are two places you could put the ‘not’.

Option 1: At least one person reigns over France, at most one person reigns over France, and that person is not [bald].
(∃x)(Kx & (y)(Ky → y = x) & ~Bx)
Option 2: It’s not the case that [At least one person reigns over France, at most one personal reigns over France, and that person is bald].

\[ \neg(\exists x)(Kx \land (y)(Ky \rightarrow y = x) \land Bx) \]

(S2) says does not say that the King of France is non-bald (as in option 1). Rather it says that there is no such thing that is the King of France and is bald (as in option 2).
Problem solved: (S1) is false and (S2) is true.

**Negative Existentials**

How can a non-existent be the subject of a proposition of the form:

**[NON-ENTITY]** doesn’t exist. (Fill in the brackets with the name of your favorite non-existent.

I have chosen:

(1) Unicorns don’t exist.
(2) The Fountain of Youth doesn’t exist.
(3) Pegasus doesn’t exist.

(1) \( \neg(\exists x)(Ux) \)

‘is a unicorn’ is a predicate
What the sentence says at the level of logical form: “there’s nothing of which that predicate is true” or that there’s nothing that has the property of being a unicorn

(2) \( \neg(\exists x)(Fx \land (y)(Fy \rightarrow y = x)) \)
‘The Fountain of Youth’ is a definite description.
What the sentence says at the level of logical form: “It’s false that there’s a unique thing that’s a fountain of youth.”

(3) \( \neg(\exists x)(Wx \land (y)(Wy \rightarrow y = x)) \)
Russell’s claim: Proper names are disguised definite descriptions.
Let W be the description ‘the winged horse…’ that we associate with Pegasus.
What the sentence says at the level of logical form: “It’s false that there’s a unique thing that’s the winged horse...”.