Russell: The Theory of Descriptions

1. Bertrand Russell (1872-1970): mathematician, logician, and philosopher. He's one of the founders of *analytic philosophy*.

"On Denoting" is a founding document of analytic philosophy. It is a paradigm of *philosophical analysis*.

An *analysis* of a concept/phenomenon c: a recipe for eliminating c-vocabulary from our theories which still captures all of the facts the c-vocabulary targets.

FOR EXAMPLE: "The Name View Analysis of Identity."

2. Russell's target: Denoting Phrases

By a "denoting phrase" I mean a phrase such as any one of the following: a man, some man, any man, every man, all men, the present King of England, the present King of France, the centre of mass of the Solar System at the first instant of the twentieth century, the revolution of the earth round the sun, the revolution of the sun round the earth. (479)

Includes:

- universals: "all F's" ("each"/"every")
- existentials: "some F" ("at least one")
- \bullet indefinite descriptions: "an F"
- definite descriptions: "the F"

Later additions:

- negative existentials: "no F's" (480)
- **Genitives**: "my F" ("your"/"their"/"Joe's"/etc.) (484)
- Empty Proper Names: "Apollo", "Hamlet", etc. (491)

Russell proposes to analyze denoting phrases.

3. Why Analyze Denoting Phrases?

Russell's Project:

The distinction between acquaintance and knowledge about is the distinction between the things we have presentation of, and the things we only reach by means of denoting phrases. [...] In perception we have acquaintance with the objects of perception, and in thought we have acquaintance with objects of a more abstract logical character; but we do not necessarily have acquaintance with the objects denoted by phrases composed of words with whose meanings we are acquainted. [...] All thinking has to start from acquaintance; but it succeeds in thinking about many things with which we have no acquaintance. (480)

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Russell: The problem of intentionality bifurcates:

- (a) **unproblematic**: thinking about things you're acquainted with.
- (b) **problematic**: thinking about things your expressions denote.

An analysis of denoting explains denoting in other terms.

The value of Analysis: Analyses permit descriptions of the world that *do not use* the analyzed notions.

EXS.:

- "for A's sake"
- "The average American"
- 4. Epistemologically driven semantics:

Epistemological Distinction	Semantic Distinction
acquaintance	naming
knowledge about	denoting

The connections:

- (a) We have knowledge about x by denoting. **EX.**: The center of mass of the solar system.
- (b) We can *name* all and only those things we are *acquainted with*. **EX.**: You can *name* yourself, but not Russell.
- 5. Three Contrasts with Frege:

[Recall:

]

- (a) **The referential bond** (aka the problem of intentionality): In virtue of what does a particular word or phrase refer to a particular thing?
- (b) *Information value*: In virtue of what does a particular word or phrase carry the information that it does?

Frege	Russell
two fundamental semantic rels.:	one fundamental semantic rel.:
expressing & determining	naming
Uniform answer to Q of ref. bond	Two-tone answer to Q of ref.
	bond
info. value NOT explained in	info value explained in terms of
terms of ref. bond	ref. bond

6. Russell's Thesis:

This is the principle of the theory of denoting I wish to advocate: that denoting phrases never have any meaning in themselves, but that every proposition in whose verbal expression they occur has a meaning. (480)

The idea: For Russell, "having a meaning in oneself" requires there to be a thing which is the meaning (e.g. the thing named). Denoting phrases don't name anything. Instead, they contribute systematically to the meanings of sentences in which they occur.

Denoting Phrases don't name anything:

'I see nobody on the road,' said Alice.

'I only wish I had such eyes,' the King remarked in a fretful tone. 'To be able to see Nobody! And at this distance too! Why, it's as much as I can do to see real people, by this light!' (From *Through the Looking Glass*)

'Who did you pass on the road?' the King went on, holding out his hand to the Messenger for some hay.

'Nobody,' said the Messenger.

'Quite right,' said the King: 'this young lady saw him too. So of course Nobody walks slower than you.'

'I do my best,' the Messenger said in a sullen tone. 'I'm sure nobody walks much faster than I do!'

'He ca'n't do that,' said the King, 'or else he'd have been here first. (From *Through the Looking Glass*)

Denoting Phrases contribute systematically to the meanings of sentences in which they occur.

Model: "works at the", as in

- (1) Jesse works at the library.
- (2) Jackie works at the farm.
- (3) Tanya works at the factory.

7. The Analysis I: Bare Universals, Existentials, Negative Existentials:

"Bare" means no restrictor.

QUIZ: Which of the following sentences are "bare":

- (4) Every student counts.
- (5) Everything is made of matter.
- (6) Something is rotten in the state of Denmark.
- (7) Some jerk stole my purse.

Then everything and nothing and something (which are the most primitive of denoting phrases) are to be interpreted as follows:

C(everything) means "C(x) is always true"

C(nothing) means "C(x) is false' is always true"

C(something) means "It is false that 'C(x) is false' is always true" (480)

Suppose we have a predicate 'F.' Then let 'being an individual x such that:/x

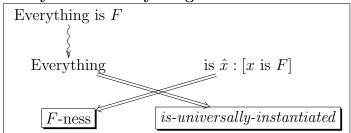
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is F]' name the corresponding property (when there is one). Abbreviation: $\hat{x} : [x \text{ is } F]$. Suppose our primitive notions are:

- Negation ("It is false that"/"is false", written '¬'), and
- being-universally-instantiated. (a property of properties)

Note: these are the objects "of a more abstract logical character" that Russell thinks we are acquainted with in thought. In many cases, properties are, too.

Analysis for 'Everything':

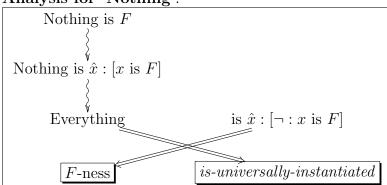


→'s: preliminary reformulation ⇒'s: analyzed as ...

For example:

- (8) Everything is made of matter. gets analyzed as:
- (9) being made of matter is universally instantiated.

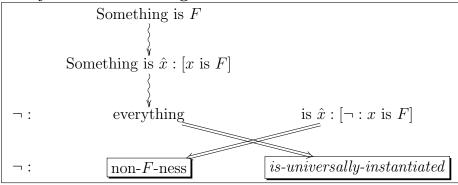
Analysis for 'Nothing':



For example:

- (10) Nothing is made of matter. get reformulated as:
- (11) Everything is **NOT**: made of matter. and then gets analyzed as:
 - (12) being **NOT** made of matter is universally instantiated.

Analysis for 'Something':



For example:

(13) Something is made of matter.

gets reformulated as:

(14) **NOT**: nothing is made of matter.

gets further reformulated as:

(15) **NOT**: Everything is **NOT**: made of matter.

and then gets analyzed as:

(16) **NOT**: being **NOT** made of matter is universally instantiated.

NOTE: The same thing works when the denoting phrase is not at the front:

- (17) I did something.
- (18) I heard nothing.
- (19) I saw everything.

8. The Analysis II: Retricted Universals, Existentials, and Negative Existentials; Indefinite descriptions:

"C(all men)" means "if x is human, then C(x) is true' is always true."

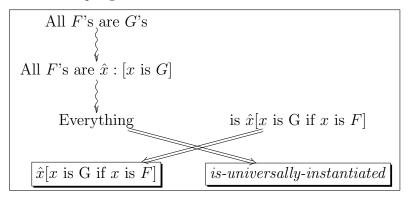
Similarly

"C(no men)" means "if x is human, then C(x) is false' is always true."

"C(some men)" will mean the same as "C(a man)," and "C(a man)" means "'It is false that 'C(x) and x is human' is always false."

Analysis for 'All F's':

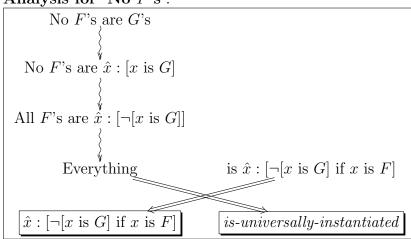
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For example:

- (20) All humans are mortal. get reformulated as:
- (21) Everything is mortal if it is human. and then gets analyzed as:
 - (22) being mortal if human is universally instantiated.

Analysis for 'No F's':



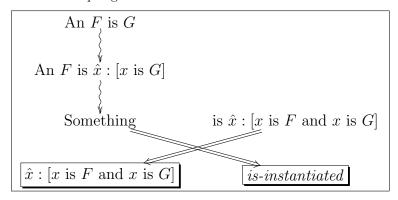
For example:

- (23) No humans are perfect.
- get reformulated as:
- (24) Everything is **NOT** perfect if it is human. and then gets analyzed as:
- (25) being **NOT** perfect if human is universally instantiated.

Analysis for 'an/some F':

I simplify some for the sake of sanity.

DEFINITION: a property F is instantiated iff $\neg(\hat{x} : [\neg[x \text{ is } F] \text{ is universally instantiated})$



For example:

- (26) A tiger is approaching. get reformulated as:
- (27) Something is **BOTH** tiger-ish **and** approaching. and then gets analyzed as:
 - (28) being **BOTH** tiger-ish and approaching is instantiated.

NOTE: The same thing works when the denoting phrase is not at the front:

- (29) I completed every task.
- (30) I heard no instructions.
- (31) I witnessed a crime.

Russell's Thesis again: Note that no component of the ultimate analysis corresponds to "every/some/no tiger". Its contribution is "spread out" all over the place. Thus: no meaning in isolation.

9. The Analysis III: Definite Descriptions:

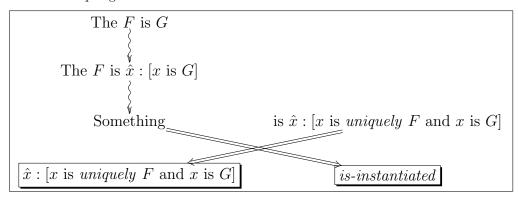
[F]or our purposes we take *the* as involving uniqueness. Thus when we say "x was *the* father of Charles II," we not only assert that x had a certain relation to Charles II, but also that nothing else had this relation. . . . Thus, "the father of Charles II was executed" becomes:—

"It is not always false of x that x begat Charles II, and that x was executed and that 'if y begat Charles II, then y is identical with x' is always true of y. (481-2)

Analysis for 'the F':

I simplify for the sake of sanity.

DEFINITION: an individual x is uniquely F iff x is F and every F is identical to x.



For example:

- (32) The U.S. president is 72. gets reformulated as:
- (33) Something is **BOTH** uniquely U.S. president and 72. and then gets analyzed as:
- (34) **BOTH** uniquely U.S. president and 72 is instantiated.

NOTE: The same thing works when the definite description is not at the front:

(35) Biden is the U.S. president.

Russell's Thesis yet again: Note that no component of the ultimate analysis corresponds to "the U.S. president". Its contribution is "spread out" all over the place. Thus: no meaning in isolation.

This may seem a somewhat incredible interpretation; but I am not at present giving reasons, I am merely *stating* the theory. (482)

What are the reasons in favor of this "somewhat incredible interpretation?"

- 10. Russell's Reasons I: All of the alternatives stink.
 - (a) **Meinong's theory**: The meaning of a definite description is the object it stands for.

PROBLEM: Is the following true or false:

(36) The existent King of France exists.

Must be false: France has no king.

Must be true: the object (if there is one) that 'the existent F' stands for is existent.

- (b) **Frege's Theory**: definite descriptions have a sense and a nominatum. **PROBLEM**: Frege allows definite descriptions without denotations. But sentences containing them turn out to be **neither true nor false**. But now consider:
 - (37) If Ferdinand is not drowned, then Ferdinand is my only son. This sentence is **true**, not **neither true nor false**.

11. Russell's Reasons II: Three Puzzles

The Puzzles:

(a) What George IV wondered (485)

A bad inference:

- i. George IV wished to know whether Scott is the author of Waverley.
- ii. Scott = the author of Waverley.

iii. George IV wished to know whether Scott is Scott.

The Puzzle: How can this inference fail?

(b) Is the present king of France bald? (485)

By the law of the excluded middle, ... either "the present King of France is bald" or "the present Kind of France is not bald" must be true. Yet if we enumerated the things that are bald, and then the things that are not bald, we should not find the present King of France in either list. Hegelians, who love a synthesis, will probably conclude that he wears a wig.

- (38) The present King of France is bald.
- (39) The present King of France is not bald.

It seems that neither sentence is true.

vs. (38): the present King of France is not among the bald things.

vs. (39): the present King of France is not among the non-bald things.

But, by the law of the exluded middle, one of (38) or (39) is true.

The Puzzle: Which of (38) and (39) is true?

(c) How can a singular negative existential be true? (485)

[I]f it is false that A differs from B, then there is no difference between A and B, which fact may be expressed in the form "the difference between A and B does not subsist. But how can a non-entity be the subject of a proposition? ... Hence, it would appear, it must always be self-contradictory to deny the being of anything.

The idea: Consider

- (40) The present King of France does not exist.
- (40), it seems, is true only if the entity it is about ("its subject") has a certain feature: nonexistence. But that means the truth of (40) requires the existence of its subject, which would be the entity denoted by "the present King of France"; and, by hypothesis, there is no such thing.

The puzzle: How can any claim like (40) be true?

12. **Interlude on Scope**: The *scope* of an occurrence of a DP is the sentence to which it is attached. Elements of that sentence are *in the scope* of the DP.

QUIZ: Say what is in the scope of the italicized DP's in the following:

- (41) Something is such that it was not spilled.
- (42) The following is not the case: *something* was spilled.
- (43) Something was spilled, and I grabbed a mop.
- (44) Something was both spilled and spread all over the floor.

An occurrence of a DP has wide scope if every other expression in the sentence is in its scope. (RUSSELL: It has a "primary occurrence" (489).)

A DP has *narrow scope* if some other expression in the sentence is not in its scope. (**RUSSELL**: It has a "secondary occurrence" (489).)

Scope ambiguities in natural language:

(45) Someday soon, the president of the U.S. will be a woman.

QUIZ: There are two readings of (45). Can you say what they are? (HINT: one of them is very unlikely, and involves gender reassignment surgery. The other is very likely.)

Can you hear two readings of the following:

- (46) There is one seat for every child.
- (47) The president of the U.S. might not have won the election.
- (48) All that glitters is not gold.
- 13. Russell's Reasons III: His view solves the puzzles.

(a) What George IV wondered (485)

(49) George IV wished to know whether Scott is the author of Waverley.

is ambiguous, depending on whether "the author of Waverley" has wide scope or narrow scope. The intended reading is the narrow scope reading: George IV was wondering (in part) about the novel Waverly:

(50) George IV wished to know whether: something is both uniquely author of *Waverley* and identical to Scott.

But (46) does not even seem to impute "an interest in the first law of identity to the first gentleman of Europe".

The Puzzle: How can this inference fail?

There's no expression in (46) for which we could sub in 'Scott' to impute such an interest. On analysis, "the author of Waverley" melts away.

Substitution of "Scott" for "the author of *Waverley*" only preserves truth when the definite description has wide scope.

(b) Is the present king of France bald?

There are two readings of (39):

Narrow Scope:

- (51) The following is not the case: the present King of France is bald. **Wide Scope**:
- (52) The present King of France is s.t.: he is not bald.

Apply the Russell analysis to each. You'll find that (51) turns out to be true, given that France has no king.

The Puzzle: Which of (38) and (39) is true?

Russell: (39) is true, on one reading.

The law of excluded middle says that exactly one of a sentence and its negation is true. This must be understood so that the negation has wide scope (and so any DP's have narrow scope), so that what is negated in one claim is exactly what is asserted by the other.

(c) How can a singular negative existential be true?

Recall that (40)'s truth seems to require that the denotation of "the present King of France" denotes something, and that thing lacks existence. But (40) is ambiguous between a wide scope and a narrow scope reading. What's obviously intended is the narrow scope reading:

(53) The following is not the case: the present King of France exists.

The puzzle: How can any claim like (40) be true?

Apply the Russell analysis to (53). You'll see that it turns out to be true in any situation in which France has no King.

14. Assessing Russell's Solutions:

NOTE: the three puzzles arise using sentences that do not contain denoting phrases:

(a) What Hammurabi wondered

(54) Hammurabi wondered whether Hesperus is Phosphorus.

(b) Is Vulcan hot?

- (55) Vulcan is hot.
- (56) Vulcan is not hot.

(c) How can a singular negative existential be true?

(57) Vulcan does not exist.

Russell offers no response to the first two puzzles. But his response to the third is suggestive:

A proposition about Apollo means what we get by substituting what the classical dictionary tell us is meant by Apollo, say "the sun-god". All propositions in which Apollo occurs are to be interpreted by the above rules for denoting phrases. If "Apollo" has a primary occurrence, the proposition containing the occurrence is false; if the occurrence is secondary, the proposition may be true. (491)

Russell's suggestion: $Empty\ names\ (i.e.\ names\ that\ have\ no\ bearer)$ are really denoting phrases in disguise.

The suggestion obviously applies to the second puzzle, about whether Vulcan is hot. The suggestion must be extended to all proper names to handle all of the instances of the first puzzle, regarding what Hammurabi wondered. (Notice that this is just Frege's Belief Puzzle.)

Descriptivism: proper names in natural language are disguised definite descriptions.