

Descriptions

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1. Introduction

When philosophers talk about descriptions, usually they have in mind singular *definite* descriptions such as ‘the finest Greek poet’ or ‘the positive square root of nine’, phrases formed with the definite article ‘the’. English also contains *indefinite* descriptions such as ‘a fine Greek poet’ or ‘a square root of nine’, phrases formed with the indefinite article ‘a’ (or ‘an’); and *demonstrative* descriptions (also known as *complex demonstratives*) such as ‘this Greek poet’ and ‘that tall woman’, formed with the demonstrative articles ‘this’ and ‘that’. Following the custom in philosophy, in this chapter often we use ‘description’ as short for ‘definite description’; and following the custom in linguistics, often we use ‘definite’, ‘indefinite’, and ‘demonstrative’ as shorthand nouns. For the most part we focus on definite and indefinites, although a few words about demonstratives are called for.

At the centre of debates about descriptions is the matter of whether they are devices of reference or of predication (simple or higher-order), and much discussion focuses on how various proposals are to be incorporated into broader theories of the semantics of natural language. But philosophical interest goes beyond the confines of linguistics, logic, and the philosophy of language because choices made about the semantics of descriptions have repercussions elsewhere, particularly in epistemology and metaphysics.

A simple match of form and meaning appears to fail.¹ First, many occurrences of expressions of both forms ‘the ϕ ’ and ‘a ϕ ’ appear to be used to talk about particular individuals. Consider (1):

- (1) the whale rammed the boat.

Here the subject expression would be used to talk about an individual whale; similarly if ‘the’ were replaced by ‘a’. So the first question concerns the precise difference in meaning between ‘the’ and ‘a’; and it is natural to say, with traditional grammars, that ‘the’ indicates some sort *familiarity*, *definiteness*, *specificity*, or *uniqueness* not indicated by ‘a’. Second, expressions of both forms may be used in other ways. Consider (2):

- (2) the whale is a mammal.

Here the subject expression might be used to talk about a *species*; similarly if ‘the’ were replaced by ‘a’. Third, in many cases where a description follows the copula, the resulting VP (verb phrase) seems to function as a simple predicate:

- (3) Keiko is a whale

¹ Evans (1982), Geach (1962), Mitchell (1962), Moore (1944), Neale (1990), Rundle (1965) Strawson (1950), Wiggins (1965).

(4) Keiko is the whale.

Fourth, there are expressions with surface forms distinct from ‘a ϕ ’ that seem to function as indefinite descriptions: many (but not all) occurrences of the indefinite article ‘a’ can be replaced without gain or loss by ‘some’. Fifth, possessives like ‘Paul’s mother’ seem to function just like definites (cf. ‘the mother of Paul’ and its French counterpart), whilst ‘Paul’s finger’ seems to function more like an indefinite. Sixth, many pronouns appear to be interpreted as if they are definites or indefinites. In (5), ‘it’ is naturally interpreted as ‘the song’ or ‘the song John wrote’:²

(5) John wrote a song, and Paul sang it.

And in (6), ‘one’ is naturally interpreted as ‘a song’:

(6) John wrote a song, and Paul sang one.

Seventh, it has been argued that some occurrences of ordinary proper names should be analysed as definite descriptions. Some occurrences of ‘Neptune’ for example, might be analysed as short for something like ‘the planet causing perturbations in the orbit of ‘Uranus’.³ Eighth, once we take into account languages other than English, we find complications: Russian does not have anything resembling English definite and indefinite articles; Greek routinely uses a definite article with proper names and demonstrative descriptions.

One might despair of finding much order here, but order there is, and understanding it has proved essential to clear-headed philosophy. Frege sketched a theory of descriptions before Russell, but it makes sense to discuss Fregean theories once we have Russell’s theory clear. Following philosophical custom, we use ‘Russell’s Theory of Descriptions’ and ‘The Theory of Descriptions’ as labels for Russell’s account of definites. And we use ‘Russell’s Theory of Indefinites’ and ‘The Theory of Indefinites’ for his theory of indefinites.

2. The Theory of Descriptions

2.1 Overview

On Russell’s account, an utterance of a referring expression (e.g. a proper name) the expression’s *referent* is its meaning. An utterance of a sentence ‘ β is G ’, where β is a referring expression that refers to b and ‘— is G ’ is a one-place predicate, expresses an *object-dependent* proposition, one whose identity depends upon the identity of b , one that simply would not exist if b did not exist.⁴ This proposition is *true* iff, b has the property expressed by ‘— is G ’. When someone utters (1), for example,

² See Chapter 000.

³ See Chapter 000.

⁴ Russell sometimes cashes out object-dependence in terms of propositions *containing* objects as constituents, an idea revived by Kaplan (1978).

- (1) Pierre Dupont has brown eyes.

the subject expression ‘Pierre Dupont’ is used to refer to a particular person, Pierre Dupont, and the predicate ‘has brown eyes’ to attribute some property to him. If Pierre Dupont has brown eyes, the proposition expressed by the utterance is true; if not, it is false. The proposition is *object-dependent*: if Pierre Dupont did not exist, the proposition that he has brown eyes would not exist either.

If a description ‘the ϕ ’ were a referring expression, it would be natural to take its reference to be whatever is uniquely ϕ . But according to Russell, ‘the ϕ ’ is *not* a referring expression; the proposition expressed by an utterance of ‘the ϕ is ψ ’ is *object-independent*; the identity of this proposition does not depend on the identity of whatever is uniquely ϕ , for the *same* proposition would be expressed by an utterance of the ‘the ϕ is ψ ’ if *something else* happened to be uniquely ϕ , indeed if nothing turned out to be uniquely ϕ ; ‘the ϕ ’ is no more a referring expression than ‘a ϕ ’, ‘some ϕ ’, ‘no ϕ ’, or ‘every ϕ ’; indeed, ‘the ϕ ’ amounts to a useful compound formed from ‘some ϕ ’ and ‘every ϕ ’: the proposition that the ϕ is ψ is just the proposition that there exists just one ϕ and every ϕ is ψ . Consider,

- (2) the richest person in France has brown eyes.

Suppose ‘the richest person in France’ is a referring expression that refers to whoever is richest amongst people in France. And suppose Pierre Dupont is the richest man in France. Then ‘the richest person in France’ refers to Pierre Dupont. One important Russellian observation is that the proposition expressed by an utterance of (2) is *not* object-dependent—of course it depends upon the existence of *France*, but that is not the point; when we talk of object-dependent propositions, we are focusing on propositions that are object-dependent with respect to the *subject* position of the sentences used to express them. If Pierre Dupont had never been born, somebody else would have been the richest person in France, and the proposition expressed by an utterance of (2) could still be true. Thus a major difference between (1) and (2). There is a particular individual (Pierre Dupont) upon whose existence the existence of the proposition expressed by an utterance of (1) depends; there is no such individual upon whose existence the existence of the proposition expressed by an utterance of (2) depends. The proposition expressed by an utterance of (2) appears to depend only upon the existence of certain *properties*: the property of being richer than any other person in France and the property of having brown eyes.

The object-independence of the proposition can be stressed, as it is by Russell, by considering an example containing a description to which nothing answers:

- (3) the French king has brown eyes.

What about the proposition expressed by an utterance made today of (3)? France is no longer a monarchy, it has no king or queen. Is the proposition expressed *false*? Or is it *neither true nor false*? Or is *no* proposition expressed at all? Russell’s answer is that the proposition expressed has determinate truth conditions, that those conditions are not satisfied if there is no French king, and that in such circumstances the proposition is therefore straightforwardly false. In effect, he claims that the proposition

expressed by an utterance of (3) shares crucial features of the proposition expressed by an utterance of (4):

(4) some French prince has brown eyes.

In a familiar idiom, we might represent the truth conditions of an utterance of (4) as follows:

(4') $\exists x((\text{French } x \wedge \text{prince } x) \wedge x \text{ has brown eyes})$.

The fact that there are no French princes appears to be no barrier to understanding how (4) works. It involves existential quantification, so an utterance of (4) is straightforwardly false.

According to Russell's Theory of Descriptions, (3) is also an existential quantification, albeit one of some complexity. We can lead up to the details via Russell's Theory of Indefinites, according to which the truth conditions of an utterance of (5) are given by (5'):

(5) a French prince I know has brown eyes

(5') $\exists x(((\text{French } x \wedge \text{prince } x) \wedge I \text{ know } x) \wedge x \text{ has brown eyes})$.

The proposition expressed by an utterance of (5) made today is false. We can make one last stop before getting to Russell's Theory of Descriptions. The truth conditions of (6) are given by (6'):

(6) exactly one French prince has brown eyes

(6') $\exists x(((\text{French } x \wedge \text{prince } x) \wedge x \text{ has brown eyes}) \wedge \forall y(((\text{French } y \wedge \text{prince } y) \wedge y \text{ has brown eyes}) \supset y=x))$.

We can now state Russell's analysis of (3):

(3) the French king has brown eyes.

(3') $\exists x(((\text{French } x \wedge \text{king } x) \wedge x \text{ has brown eyes}) \wedge \forall y((\text{French } y \wedge \text{king } y) \supset y=x))$

(3') amounts to the conjunction of the following:

(a) there is a French king with brown eyes

(b) there is exactly one French king.

Without the uniqueness given by (b) we would have an analysis of (7), which is not what we want:

(7) a French king has brown eyes.

We see here the precise relation between Russell's theories of definite and indefinite descriptions, which we may summarize for the moment as follows (where '=_{df}' is read as 'is definitionally equivalent to'):

(DEF) a ϕ is ψ =_{df} $\exists x(\phi x \wedge \psi x)$

(INDEF) the ϕ is ψ =_{df} $\exists x((\phi x \wedge \psi x) \wedge \forall y(\phi y \supset y=x))$.

There is a clear sense, then, in which definite descriptions are complex devices of existential quantification.

Just as clearly, they are complex devices of *universal* quantification, for (3') also amounts to the conjunction of (a') and (b):

(a') every French king has brown eyes.

Truth-conditionally, there is nothing to choose between conjoining (a) and (b), or (a') and (b); but a change in perspective can be illuminating, as we shall see later. For the moment, the important point is that Russell's account of indefinites involves an *existence* implication; and the his account of definites involves both *existence* and *uniqueness* implications.

Perhaps the most common way of informally setting out Russell's analysis of 'the ϕ is ψ ' is as the conjunction of the following:⁵

- (i) there is at least one ϕ
- (ii) there is at most one ϕ
- (iii) every ϕ is ψ .

The logician's favourite rendering of this is the one Russell uses, which is structured perfectly for proofs involving rules of instantiation and generalization.:

(8) $\exists x(\forall y(\phi y \supset y=x) \wedge \psi x)$.

The apparent complexity of the Theory of Descriptions may invite some skepticism. But the theory must be judged on the basis of its predictive power, and it is important not to be overly concerned with the particular formalism used to state it, for there turn out to be more general and more natural methods as we shall see.

2.2 Formal Statement

For Russell, descriptions are 'incomplete' symbols, they have 'no meaning in isolation', they do not stand for things. In *Principia Mathematica* (PM), a description is represented by a quasi-singular term of the form $(\iota x)\phi x$, which can be read as 'the unique x which is ϕ .' Superficially, the *iota*-operator, (ιx) , is a variable-binding device for forming a singular term from a formula ϕx . A predicate symbol ψ may be prefixed to a description $(\iota x)\phi x$ to form a formula $\psi(\iota x)\phi x$, which can be expanded in accordance with a suitable *contextual definition*. (To define an expression ζ contextually is to provide a procedure for converting any sentence containing occurrences of ζ into an equivalent sentence that is ζ -free. See below.)

(8) above does not constitute a final contextual definition of $\psi(\iota x)\phi x$ because of the possibility of scope ambiguities where a formula containing a description is itself a constituent of a larger formula.

⁵ Moore (1944), Strawson (1950), Neale (1990).

With respect to the formal theory, scope ambiguity is conveniently illustrated with descriptions in the context of negation. For a genuine singular term α , there is no difference between wide and narrow scope negation: α is not- ψ just in case it is not the case that α is ψ . For a description, however, there is a formal ambiguity. Let Kx represent ‘ x is a king of France’ and Bx represent ‘ x brown-eyed’. Then the formula $\sim B(\iota x)Kx$ (‘the king of France is not wise’) is ambiguous between (11) and (11’):

$$(11) \quad (\exists x)((\forall y)(Ky \equiv y=x) \wedge \sim Bx)$$

$$(11') \quad \sim(\exists x)((\forall y)(Ky \equiv y=x) \wedge Bx).$$

These are not equivalent: unlike (14), (15) can be true when there is no king of France. In *PM*, the scope of a description is specified by placing a copy of it within square brackets appended to the front of the formula that constitutes its scope. Thus (11) and (11’) are represented as (12) and (12’) respectively

$$(12) \quad [(\iota x)Kx]\sim B(\iota x)Kx$$

$$(12') \quad \sim[(\iota x)Kx]B(\iota x)Kx.$$

In (12) the description has what Russell calls a “primary occurrence” by virtue of having scope over the negation; in (12’) the description has a “secondary occurrence” by virtue of lying within the scope of the negation. Where a description has smallest possible scope, it is conventional to omit the scope marker; thus (12’) can be reduced to $\sim B(\iota x)Kx$.

With the matter of scope behind us, the Theory of Descriptions can be stated exactly:

$$*14.01 \quad [(\iota x)\phi]\psi(\iota x)\phi \text{ =}_{df} (\exists x)((\forall y)(\phi \equiv y=x) \wedge \psi x)$$

where ϕ is a formula. On Russell’s account, there is no possibility of a genuine referring expression failing to refer, so no predicate letter in the language of *PM* stands for ‘exists’. Russell introduces a symbol ‘E!’ that may be combined with a description to create a well-formed formula. Thus

$$*14.02 \quad E!(\iota x)\phi \text{ =}_{df} (\exists x)(\forall y)(\phi \equiv y=x).$$

‘E!’ allows a treatment of negative existentials: an utterance of ‘The king of France does not exist’ made today would be true precisely because there is no French king.

Successive applications of *14.01 and *14.02 will allow any well-formed formula containing a definite description to be replaced by an equivalent formula that is description-free.

It is sometimes objected that Russell’s theory, which substitutes complex quantificational structure for ‘the’, is unfaithful to surface syntax. But this objection seems to be engendered by an insufficiently keen appreciation of the distinction between a theory and its formal implementation. The extent of the mismatch between ‘the king is wise’ and its analysis

$$(13) \quad (\exists x)((\forall y)(king\ y \equiv y=x) \wedge brown\text{-}eyed\ x)$$

has nothing to do with descriptions *per se*. In order to characterize the logical forms of even ‘some philosophers are wise’ and ‘every philosopher is wise’ in the predicate calculus we have to use formulae containing sentence connectives, no counterparts of which occur in the surface forms of the sentences:

(14) $(\exists x)(\textit{philosophers } x \wedge \textit{brown-eyed } x)$

(15) $(\forall x)(\textit{philosopher } x \supset \textit{brown-eyed } x).$

The supposed problem about descriptions, then, is in fact a symptom of a larger problem involving the application of first-order logic to sentences of ordinary language.

Work on *generalized* quantification provides a solution to the larger problem (as well as treatments of quantifiers like ‘most’ that cannot be handled within standard first-order logic). Natural language quantification is normally *restricted*: we talk about all *philosophers* or most *poets*, (not about all or most entities). A simple modification of the predicate calculus yields a language—call it *RQ*—that captures this fact while retaining the precision of regular first-order logic. In *RQ*, a determiner such as ‘some’, ‘every’, or ‘no’ combines with a formula to create a restricted quantifier such as [*every* x : *philosopher* x]. And such a quantifier may combine with a formula like *wise* x to form a formula:

(16) [*every* x : *philosopher* x] *wise* x .

A semantic axiom for the quantifier *every* can be provided by adapting the usual Tarskian axiom for \forall :

[*every* x_k : ϕx_k] ψx_k is true of a sequence s (of objects) iff ψx_k is true of every sequence that ϕx_k is true of differing from s at most in the k -th position.

Since the word ‘the’ is a one-place quantificational determiner like ‘every’, ‘some’, ‘no’, etc., we can add to *RQ* a quantifier *the* that combines with a formula to form a restricted quantifier:

[*the* x_k : ϕx_k] ψx_k is true of a sequence s (of objects) iff ψx_k is true of every sequence that ϕx_k is true of differing from s at most in the k -th position and there is exactly one such sequence.

Thus (17) will be represented as (18):

(17) the king has brown eyes

(18) [*the* x : *king* x] x has brown eyes.

Different scope possibilities are easily captured. For instance, ‘the king is not wise’ is ambiguous between (19) and (19’):

(19) [*the* x : *king* x] \sim *wise* x

(19’) \sim [*the* x : *king* x] *wise* x .

The viability of such a language shows that the language of *PM* does not have an essential place in the Theory of Descriptions construed as a contribution to the semantics of natural language. That is, the semantic and syntactic aspects of Russell’s account are clearly separable.⁶

Using a formal language in which descriptions are treated as restricted quantifiers does not mean abandoning Russell’s view that descriptions are incomplete symbols. From the point of view of truth

⁶ Brown (1992), Neale (1990). There is an issue of how innocent an appeal to generalized quantifiers is, given Russell’s logical and epistemological motivations. For discussion, see Linsky (2002) and Neale (2001).

conditions, the account just given is Russell's theory stated in a way that displays the relationship between surface syntax and logical form more clearly. A description—or any other quantified DP—is still an incomplete symbol: for Russell a *complete* symbol stands for some entity and contributes that entity to the propositions expressed by utterances of sentences containing that symbol. Quantificational DPs do not do this, *even in RQ*. Thus treating descriptions as restricted quantifiers results not in a radical departure from Russell but in an explanation of where his Theory of Descriptions fits into a systematic account of natural language quantification, a theory in which 'every', 'some', 'most', 'a', 'the', and so on, are members of a unified syntactical and semantical category.

3. Motivating the Theory of Descriptions

Why was Russell so interested in the word 'the'? His motivations were ontological, semantical, and epistemological.⁷

3.1 Ontological Concerns

The general question of how to treat sentences containing so-called *empty* terms is an old one. The following sentences are interesting because each contains such a term yet is usable to express a truth:

- (1) The present king of France does not exist.
- (2) Smith thinks the present king of France is bald
- (3) Chomsky has never played chess with the present king of France
- (4) Smith thinks the largest prime number is smaller than 10^{99}

Russell thought it important to explain these facts. At one time he entertained the idea of a realm of non-existent entities containing a largest prime, a round square, a present king of France, etc. to serve as the referents of 'the largest prime number', 'the round square', 'the present King of France' etc.⁸ But by 1905 he felt this idea conflicted with a 'robust sense of reality', and his Theory of Descriptions came about, in part, as an attempt to purify his ontology. Utterances of (1)-(5) express determinate propositions with determinate truth conditions with no unsavoury metaphysical commitments.

Negative Existentials. As we saw earlier, Russell does not regard 'exists' as a genuine predicate, and the existence claim in (1) really flows from the meaning of 'the'. Since the verb phrase supplies no genuine predicate, there is no possibility of a genuine scope ambiguity here, and (1) is understood as (1')

- (1') $\sim(\exists x)(\forall y)(\textit{presently king of France } x \equiv y=x)$.

Empty Descriptions. If you utter (2), you are claiming that Smith believes an object-independent proposition to the effect that exactly one person is presently king of France and that whoever is king of

⁷ Russell himself said the discovery of the Theory of Descriptions played a key role in his development of the Theory of Types. Some scholars have disputed this. See (e.g.) Cartwright (1990, 2004), Ostertag (1998).

⁸ Russell (1904), Meinong (1904), Parsons (1980), Zalta (1983, 1988).

France is bald. That is, according to the Theory of Descriptions you report Smith's belief without referring to any particular individual or even supposing that some individual answers to the description used.

The possibility of accounting for *de re-de dicto* ambiguities in terms of scope permutations emerges naturally. For example, (4) may be analysed as either (4') or (4''), according as the description 'the largest prime number' is given large or small scope with respect to 'John thinks that':

(4') $(\exists x)((\forall y)(\textit{largest-prime } y \equiv y=x) \wedge \textit{John thinks that } x < 10^{99})$

(4'') $\textit{John thinks that } (\exists x)((\forall y)(\textit{largest-prime } y \equiv y=x) \wedge x < 10^{99}).$

(4') is false; but (4'') may be true. Thus Russell is able to explain the intuitive ambiguity in (4), avoid positing an ontology that includes a largest prime.

3.2 Logico-Semantical Concerns

Sir Walter Scott was the author of the *Waverley* novels. But someone who uttered (10) would not be expressing the proposition that a certain object is self-identical:

(5) Scott is the author of *Waverley*.

And someone uttering (5) would most likely not be saying that George IV was curious about an example of the law of identity:

(6) King George IV wondered whether Scott was the author of *Waverley*.

Russell appears to have an explanation. 'Scott is Sir Walter' is an identity statement of the form $s=t$, involving two names. But (10) is not: one of the expressions is a description, and when its logical form is spelled out in accordance with The Theory of Descriptions, all is revealed:

(6') $\exists x(\forall y(x \textit{ authored Waverley } \equiv y=x) \wedge x = \textit{Scott}).$

To wonder whether (6') is true is not to be curious about an instance of the law of identity. And someone uttering (7) would most be likely be saying the following:

(7) King George IV wondered whether $\exists x(\forall y(x \textit{ authored Waverley } \equiv y=x) \wedge x = \textit{Scott}).$

The fact that, on Russell's Theory of Descriptions, an expression of the form $\iota x\phi x$ is not a genuine singular term, and the fact that statements of the forms $\iota x\phi = \iota x\psi$ and $a = \iota x\phi$ are not therefore genuine identities (but abbreviations of quantified formulae) has profound repercussions. *The Principle of Substitutivity for Singular Terms* (PSST) is an inference principle that validates the following:

(8) Scott snored
 Scott = Sir Walter

 Sir Walter snored

The principle might be stated thus:

$$\text{PSST} \quad (\alpha=\beta) \supset \{\Sigma(\alpha) \equiv \Sigma(\beta)\}$$

This just says that if two singular terms α and β have the same extension (i.e. if ' $\alpha=\beta$ ' is a true identity statement) then $\Sigma(\beta)$ and $\Sigma(\alpha)$ have the same truth-value, where $\Sigma(\alpha)$ is an extensional sentence containing at least one occurrence of α , and $\Sigma(\beta)$ is the result of replacing at least one occurrence of α in $\Sigma(\alpha)$ by β .

If descriptions are not singular terms, then PSST cannot be used in logical deductions on the basis of statements of the forms $\iota x\phi x = \iota x\psi x$ and $a = \iota x\phi x$. So the following inference must be validated in some other way:

$$\begin{array}{l} (9) \quad \text{Scott snored} \\ \quad \text{Scott} = \text{the author of } \textit{Waverley} \\ \hline \quad \text{the author of } \textit{Waverley} \text{ snored.} \end{array}$$

Whitehead and Russell prove two 'derived' rules of inference for truth-functional contexts which yield what is needed:

$$*14.15 \quad (\iota x\phi = \alpha) \supset \{\Sigma(\iota x\phi) \equiv \Sigma(\alpha)\}$$

$$*14.16 \quad (\iota x\phi = \iota x\psi) \supset \{\Sigma(\iota x\phi) \equiv \Sigma(\iota x\psi)\}.$$

This enables them, for purposes of proof, to treat such definite descriptions as $s(x)$, $x+y$, etc. *as if* they were singular terms. These theorems about contextually defined definite descriptions occurring in truth-functional contexts should not obscure the quantificational character of the Theory of Descriptions, which comes through clearly in *14.01 and *14.02, and in Russell's talk of *object-independent* propositions.

Logicians have recognized the importance of distinguishing PSST from Whitehead and Russell's derived inference principles for descriptions occurring in truth-functional contexts. Smullyan (1948), for example, recognized that if descriptions are not singular terms then the following inference involving non-truth-functional contexts pose no threat to PSST:

$$\begin{array}{l} (10) \quad \text{necessarily } 9 \text{ is odd} \\ \quad \underline{9 = \text{the number of planets}} \\ \quad \text{necessarily the number of planets is odd} \end{array}$$

Quine (1943, 1947) had worried (10) in which we appear to move from two true premises to a false conclusion, putting the blame squarely on the vagaries of the non-truth-functional, modal operator 'necessarily' which, he claimed, does not permit the substitution of identicals within its scope. Quine (1953, 1960) went on to argue that since modal operators do not permit substitution, it makes no sense to quantify into their scopes. He claimed (i) was incoherent, for example:

$$(11) \quad \exists x \text{ necessarily } (x \text{ is odd}).$$

The truth of ‘necessarily 9 is odd’ suggests that 9 satisfies ‘necessarily x is odd’. But $9 =$ the number of planets, and ‘necessarily the number of planets is odd’ is false.

Smullyan (1948) recognized that on Russell’s Theory of Descriptions (10) cannot be viewed as a unique inference involving PSST. Indeed, it is ambiguous according as the description ‘the number of planets’ in the conclusion has small or large scope with respect to non-truth-functional material:

$$(11) \quad (\exists x)((\forall y)(y \text{ numbers the planets} \equiv y=x) \wedge \text{necessarily } (x \text{ is odd}))$$

$$(12) \quad \text{necessarily } (\exists x)((\forall y)(y \text{ numbers the planets} \equiv y=x) \wedge x \text{ is odd}).$$

(12) is false—there might have been, say, six planets—but (11) is true, on the assumption that nine is necessarily odd.⁹ When Quine read (10) as an invalid argument, he was implicitly taking the description to have small scope. But that reading is not derivable from the argument’s premises using standard rules of inference, so its existence poses no threat to the soundness of those rules. By contrast, the reading upon which the description has large scope (and hence occurs in a truth-functional context) is readily derived, as one would expect given Whitehead and Russell’s proof of *14.15.¹⁰

3.3 Epistemological motivations

Russell distinguishes objects that we are directly acquainted with from those that we only know under description. So, for example, you might know yourself by acquaintance, but very likely you know the richest man in France or the first person to recite the Lord’s Prayer whilst crossing the Atlantic only under a description.

Of course, there are a number of individuals to talk about besides yourself and the richest man in France, and that is where matters get interesting. It is at least conceivable that some person or thing you think exists does not, that “he” or “it” is the result of an elaborate hoax or a hologram or something created in our minds by an evil demon with the power to create collective hallucinations. But our own existence and our own individual experiences (or sense data) do not appear to be subject to such doubt, as

⁹ Neale (1990) argues that the threat to quantified modal logic vanishes once Smullyan’s Russellian points about descriptions, substitution and scope are appreciated. Neale (2000, 2005) argues that this is incorrect.

¹⁰ The following would suffice, for example:

1	[1]	$\exists x(\forall y(Py \equiv y=x) \wedge x=9)$	premiss
2	[2]	nec (9 is odd)	premiss
3	[3]	$(\forall y(Py \equiv y=\alpha) \wedge \alpha=9)$	assumption
3	[4]	$\alpha=9$	3, \wedge -ELIM
2,3	[5]	nec (α is odd)	2, 4, PSST
3	[6]	$\forall y(Py \equiv y=\alpha)$	3, \wedge -ELIM
2,3	[7]	$(\forall y(Py \equiv y=\alpha) \wedge \text{nec } (\alpha \text{ is odd}))$	5, 6, \wedge -INTR
2,3	[8]	$\exists x(\forall y(Py \equiv y=x) \wedge \text{nec } (x \text{ is odd}))$	7, EG
1,2	[9]	$\exists x(\forall y(Py \equiv y=x) \wedge \text{nec } (x \text{ is odd}))$	2, 3, 8, EI.

Such a proof does not yield an *interpretation* of ‘necessarily’ and so does not answer Quine’s principal worry. When Quine was first writing about these matters, ‘necessarily’ was understood as ‘it is logically necessary that’ or ‘it is analytically necessary that’. On such interpretations, it is of particular concern that the conclusion of the above proof involves quantifying into the scope of ‘necessarily’ and it is precisely the interpretation of such a quantification that Quine calls into question. For discussion, see Neale (2005).

Descartes argued. It might be tempting, then, to draw the acquaintance-description distinction along skeptical or Cartesian lines, the objects of knowledge by acquaintance restricted to those entities whose existence cannot be doubted. This was the position Russell had reached by the time of ‘Knowledge by Acquaintance and Knowledge by Description’ (1911), although this was not his original position in ‘On Denoting’ (1905), where there are, at most, hints of the road he would take. Under the spell of a Cartesian epistemology, the Theory of Descriptions now assumed a correspondingly broader role in characterizing the contents of thoughts that purported to be about entities with which we are not acquainted. A seemingly object-dependent thought about Cicero, for example, was analyzed as an object-dependent thought “about”, say, being the greatest roman orator. Thus the origins of the ideas that led to Russell sometimes expressing the view that ordinary proper names are, in fact, truncated definite descriptions.¹¹

4. Strawson’s Criticisms and Theories

The Theory of Descriptions has encountered its fair share of criticism. For expository purposes, criticisms may be put into one of two groups. Those in the first revolve around quite general points made by Strawson in a series of works published between 1950 and 1986. Those in the second group take off from one of Strawson’s specific points and aim not to undermine the theory but to show that it is at best only *half* of an acceptable theory because of a common and important use of descriptions that Russell’s theory misses.

5.1 Strawson’s Criticisms

Strawson (1950) argued that Russell’s theory (a) rode roughshod over important distinctions (such as the distinction between the meaning of a sentence X and the statement made on a particular occasion by a use of X), (b) failed to recognize that referring is something *speakers* (not expressions) do, and (c) failed to do justice to the way speakers ordinarily use sentences containing descriptions to make statements (speakers use descriptions to *refer*, not to quantify). It is a part of the meaning of ‘the ϕ ’, Strawson claimed, that such an expression is used correctly only if there is a ϕ . If this condition is not satisfied—if the *presupposition* that there is a ϕ is false, as he later put it—a use of ‘the ϕ is ψ ’ cannot be considered to express a proposition that is either true or false.¹² So the view, perhaps borrowed from classical logic, that every use of an indicative sentence involves the expression of a truth or a falsehood must be abandoned.

Strawson argues that Russell’s theory is thwarted by the fact that the same sentence, say, ‘the present king of France is wise’, can be used to say something true on one occasion and something false on another. It is certainly true that Russell paid little attention to the distinction between the linguistic meaning of a sentence-type and the proposition someone expresses on a particular occasion by uttering

¹¹ See Chapter 000 and Ludlow (forthcoming).

¹² Our wording here is neutral between (a) a proposition is expressed but it is neither true nor false, and (b) no proposition is expressed at all. Strawson is not consistent on this matter. See Neale (1990).

that sentence-type; but, upon reflection, it is clear that it was the latter that actually concerned him, and that Strawson can get no mileage out of Russell's inattention to the distinction. As Russell (1959) pointed in his reply to Strawson, the fact that a description (or any other quantificational phrase) may contain an indexical component ('the *present* king of France', 'my wife', 'every man *here*', etc.) illustrates that some descriptions are subject to the Theory of Descriptions *and* a theory of indexicality. (See Chapter 000). Thus contextual considerations must be invoked to identify what the speaker is saying. And this can be true also if the overt indexical element is missing in the sentence uttered, for example if it is 'the king of France is wise'.

This appreciation of context forms the basis of the Russellian response to a second worry. According to Strawson (1950), someone who uses a description 'the ϕ ' typically intends to *refer* to some object or other and say something about it; there is no question of the speaker saying that something is uniquely ϕ . Someone who says 'the table is covered with books', for instance, does not say something that entails the existence of exactly one table, as Russell's analysis appears to suggest.

This issue had, in fact, been addressed some years earlier by Quine (1940) and Reichenbach (1947); and the basic point was reiterated by Sellars (1954): an utterance of a description like 'the table' will be understood in the context as elliptical for an utterance of a fuller description such as 'the table over here', 'the table of which we are speaking'. Again the phenomenon is not confined to descriptions, but is found with 'no table', 'every table' and so on. This idea has not met with universal acceptance, however, and criticisms and implementations have raised issues at the heart of the matter of linguistic interpretation and, in consequence, spawned an impressive literature which we examine later.

Strawson also objects that Russell's theory makes faulty predictions when someone uses a description whose descriptive condition is true of nothing. On Russell's analysis, if you utter the sentence 'the present King of France is wise' right now, you say something false (the existence implication is false). According to Strawson, this does not conform to ordinary intuition. If there is no present King of France, then an utterance containing such an expression is somehow defective and surely what you say is neither true nor false (or, perhaps, you fail to say anything at all; Strawson vacillated between these two positions). In short, it is wrong that you said something false. It is a part of the meaning of 'the ϕ ', Strawson claimed, that such an expression is used correctly only if there is a ϕ . If this condition is not satisfied—if the presupposition that there is a ϕ is false—'the ϕ is ψ ' cannot be used to say anything true or false (or say anything at all, on the stronger Strawsonian position). A presupposition failure does not undermine the meaningfulness of the sentence-type itself, for that is something that is constant from occasion to occasion, whether or not there is a ϕ .

5.2 Strawson's Positive Proposals

Strawson's various statements of his own theory contains ambiguities that make it difficult to evaluate.¹³ He can be understood as claiming either that no proposition is expressed or that a proposition that is

¹³ See Sellars (1954), Evans (1982), Neale (1990).

neither true nor false is expressed by someone using a sentence containing an empty description. (In later work Strawson (1974), suggests that no proposition is expressed.) And the notion of “presupposition” can be viewed as an epistemological or pragmatic relation between a person and a statement, or as a logical relation between two statements. An epistemological or pragmatic notion of presupposition appears to have no bearing on the semantical issues Strawson wanted to address when he challenged Russell. (Strawson (1954) claims that a statement S presupposes a statement S' just in case the truth of S' is a precondition (logically speaking) for the truth or falsity of S .)

Despite its evident unclarity, the Strawsonian position does face some clear obstacles. If someone were to utter (29) right now, he would unquestionably say something false.

(29) The king of France shot my cat last night.

But on Strawson’s account, the speaker will have expressed no proposition because the presupposition that there is a unique king of France is false. Descriptions occurring in the contexts of psychological verbs create a similar problem; someone might utter a true statement using (30):

(30) Ponce de Leon thought the fountain of youth was in Florida.

So the presence of an empty description does not *always* result in a failed speech act. This is something Strawson (1964) came to concede. In order to reduce the number of incorrect predictions made by his earlier theory, he suggests that the presence of an empty description sometimes renders the proposition expressed false and at other times prevents a proposition from being expressed at all (sometimes ‘the ϕ is ψ ’ *entails* the existence of a unique ϕ , and at other times it (only) *presupposes* it).

For his part, Russell (1959) argued that, despite Strawson’s protestations, the sentence was in fact true. There is a worry here, as elsewhere in semantics and also in ethics, that the debate will come down to cases of intuition swapping.¹⁴ But a number of philosophers have argued that there are enough clear cases amongst those involving empty descriptions that Strawson’s position collapses under their weight.¹⁵ Utterances made by you now of the following sentences would be clearly false: ‘My mother lives with the king of France’, ‘The king of France calls every Sunday’, ‘the king of France shot himself last night’. A number of linguists have attempted to resuscitate Strawson’s position by appeals to such things as *topic*, *focus*, *cognitive dynamics*, *temporary truth-values*, *pragmatic fall-back strategies*, but such appeals do not appear to get to the heart of the matter and tend to be *ad hoc*, and of narrow application and limited theoretical utility.¹⁶ Suffice to say, Strawson’s objections to the Theory of Descriptions have hardly delivered a knock-out blow, but some linguists antecedently committed to theoretical talk of presupposition may yet find reasons for taking Strawson’s positive proposal more seriously than philosophers have.

¹⁴ Strawson (1964), Soames (1976), Thomason (1990).

¹⁵ Evans (1982), Mates (1973), Neale (1990, 2001), Sellars (1954).

¹⁶ Lasersohn (1993), von Stechow (2004).

6. Attributive and Referential

Consideration of the behavior of descriptions in non-extensional contexts and the possibility of misdescribing an individual, but successfully communicating something about it, have led some philosophers to suggest that definite descriptions are systematically ambiguous between Russellian and referential interpretations.¹⁷ When ‘the ϕ ’ is used in the Russellian way, the proposition expressed is object-independent; when it is used referentially the proposition expressed is object-dependent.

6.1 Donnellan’s Considerations

Drawing upon familiar facts about ordinary speech, Keith Donnellan (1966, 1968) argued there is a sense in which Russell and Strawson were both right because descriptions can be used in (at least) two different ways, which he calls *attributive* and *referential*. Donnellan considers examples like the following: (i) A detective discovers Smith’s mutilated body but has no idea who killed him. Looking at the body, he exclaims, ‘The murderer is insane’. (ii) Jones is on trial for Smith’s murder; we are convinced of his guilt; hearing Jones ranting in court, you say to us, ‘The murderer is insane.’ In case (i), says Donnellan, you are using the description *attributively*, and a Russellian treatment seems adequate. In case (ii), by contrast, you are using it *referentially*, and a Russellian interpretation seems quite inappropriate: a separate referential interpretation is required.

Although there is unclarity in Donnellan’s presentation, the position he advocates has been reconstructed as the position that the speaker expresses an object-independent proposition when ‘the ϕ ’ is used attributively and an object-dependent proposition when it is used referentially.¹⁸ The word ‘the’ has two distinct *uses*, Donnellan claims, a suggestion that appears to involve postulating a systematic ambiguity.¹⁹

6.2 Pragmatic Responses

A good number of philosophers have argued that (i) so-called referential uses of descriptions *can* be accommodated within Russell’s theory by invoking an antecedently motivated Gricean distinction between what a speaker *says* and what he *means*. One useful way of drawing such a distinction is in terms of the proposition the speaker *expresses* by (an utterance of) a sentence on a given occasion and the proposition he *primarily intends to communicate* on that occasion (the latter being of relevance to the theory of communication but not to the more limited discipline of semantics); (ii) that the phenomenon of

¹⁷ Barwise and Perry (1983), Devitt (1978, 2004), Donnellan (1966, 1977), Hornsby (1976), Kaplan (1972), Rundle (1965), Wettstein (1981).

¹⁸ See Barwise and Perry (1983), Hornsby (1976), Kaplan (1972), Peacocke (1975), Wettstein (1981), Schiffer (1995, 2005).

¹⁹ See also Mitchell (1962), Rundle (1965).

referential usage is not specific to definite descriptions (it arises with quantified DPs quite generally); (iii) that the referential-attributive distinction is neither exclusive nor exhaustive; and (iv) that no binary distinction of this sort can mimic the work done by Russell's notion of the scope of a description.²⁰

The assumption underlying this 'pragmatic' response to the suggestion of ambiguity is this: We know from Grice's work that we must distinguish what a speaker *says* and what he *means* by uttering a sentence on a given occasion.²¹ If a professor writes a letter of recommendation for a student which reads, 'Smith is very punctual and has excellent handwriting', he may not have *said* that Smith is no good, but he may well have *meant* just that, intending his addressee to recognize that this is his opinion. Similarly, Grice and those he has influenced have said that when you use the description 'the murderer' in Donnellan's courtroom case, you say that someone uniquely murdered Smith and that whoever murdered Smith is insane, but also, in the circumstances, *mean* that Jones is insane.²²

Several reasons have been given for favouring the pragmatic approach to the phenomenon of referential usage.²³ (1) A general methodological reason is summed up in what Grice calls Modified Occam's Razor: Do not multiply meanings beyond necessity. If some phenomenon can be explained without positing an ambiguity, other things being equal that explanation is to be preferred. (2) Since no natural language appears to make an explicit lexical distinction between attributive and referential descriptions, talk of a simple lexical ambiguity of the sort found in 'bank' cannot be right; if 'the' really is ambiguous, the type of ambiguity involved must be cross-linguistic, and this suggests strongly that the phenomenon of note is a *speech act* notion rather than a semantic one. (3) We could easily imagine a community that spoke a surface form of what Kripke calls 'Russell' English in which the word 'the' does not occur; when speakers wish to say what we say using 'the ϕ is ψ ', they use 'there is exactly one ϕ and every ϕ is ψ '; it is hard to believe that such sentences would not be used to communicate object-dependent propositions, thus replicating our referential uses of 'the ϕ '.²⁴

It is all well and good to say that a Gricean-pragmatic explanation of referential usage is preferable to the postulation of an ambiguity. But if such explanation is to be taken seriously it must be set out and justified in Gricean terms. It is surprising that most advocates of the pragmatic explanation have provided next to nothing here. One exception is Neale (1990), who attempts to explicate the way in which a genuine Gricean will need to appeal to the notion of (generalised) conversational implicature to explain

²⁰ Davies (1981), Grice (1968), Kripke (1977), Neale (1990), Sainsbury (1979), Searle (1979).

²¹ Grice (1961, 1989).

²² Davies (1981), Grice (1968), Kripke (1977), Neale (1990), Sainsbury (1977).

²³ Grice (1968, 1989), Kripke (1977), Neale (1990), Sennett (2002). For counterarguments, see Reimer (1998) and Devitt (1998, 2004).

²⁴ A more controversial consideration is sometimes invoked in support of the pragmatic approach. According to Kripke (1977), the distinction between attributive and referential uses of definite descriptions is a reflex of, or at least mirrors, a general distinction between *semantic reference* and *speaker's reference*.

how a speaker might mean an object-dependent proposition using ‘the ϕ ’.²⁵ On Grice’s account, an implicature, even if a generalised one of the sort attaching to uses of ‘an’, ‘or’, ‘a’, and ‘the’, must be *calculable* if some way if it is to be a *conversational* (rather than a *conventional*) implicature of the sort attaching to ‘but’, ‘yet’, ‘nonetheless’, and so on.²⁶ Suppose it is common knowledge between speaker, *S*, and hearer, *H*, that Harry Smith is the current chairman of the Flat Earth Society, *A* can use the definite description ‘the chairman of the Flat Earth Society’ to refer to Harry Smith. *H*’s reasoning is meant to be explicable as follows, according to Neale, a Gricean explanation should proceed as follows (mirroring Grice’s own discussion of conversational implicature): (a) *S* has expressed the proposition that [*the x*: ϕx](ψx); (b) There is no reason to suppose that *S* is not observing the CP and maxims. (c) *S* could not be doing this unless he thought that ψb (where ‘*b*’ is a name). (Gloss: On the assumption that *S* is observing the Maxim of Relation, he must be attempting to convey something beyond the general proposition that whoever is uniquely ϕ is ψ . On the assumption that *S* is adhering to the Maxim of Quality, he must have adequate evidence for thinking that the ϕ is ψ . I know *S* knows that I know that *b* is uniquely ϕ , therefore *S* thinks that ψb .) (d) *S* knows (and knows that I know that he knows) that I know that *b* is the ϕ , that I know that *S* knows that *b* is the ϕ , and that I can see that *S* thinks the supposition that he thinks that ψb is required. (e) *S* has done nothing to stop me thinking that ψb . (f) *S* intends me to think, or is at least willing to allow me to think, that ψb . (g) And so, *S* has implicated that ψb . (In cases where a demonstrative rather than a name might be used to the individual directly, (c) might be replaced by: (c’) *S* could not be doing this unless he thought that ψb (where ‘*b*’ is a name’). (Gloss: On the assumption that *S* is observing the Maxim of Relation, he must be attempting to convey something over and above the general proposition that whoever is uniquely ϕ is ψ . On the assumption that *S* is adhering to the Maxim of Quality, he must have adequate evidence for thinking that the ϕ is ψ . It is not plausible to suppose that he has object-independent grounds for this belief. I can see that there is someone, *b*, in the perceptual environment who could be taken to be uniquely ϕ , and I can see that *S* can see this. Therefore the grounds for his assertion that the ϕ is ψ are plausibly furnished by the object-dependent belief that ψb .)

As Neale notes, by virtue of being an instance of Grice’s own ‘working out’ schema, this derivation inherits a problem stressed by Sperber and Wilson (1986): it provides no explanation of how or why *H* infers that *S* is attempting to communicate that ψb ; at best it constitutes an *ex post facto* justification of the existence of a particular implicature.²⁷

²⁵ Neale’s explanation avoids appealing to Kripke’s distinction between *semantic reference* and *speaker’s reference* (it draws only upon the notion of speaker’s reference). Appealing to Kripke’s distinction in defending Russell’s theory would be somewhat self-defeating as Russell’s theory holds that a description does not have a semantic reference. See Neale (1997).

²⁶ Conventional implicatures are said not to affect truth conditions, thus the propositions expressed by ‘ ϕ but ψ ’ and ‘ ϕ and ψ ’ are said to be equivalent. Frege does further: a device like ‘but’ and ‘yet’ contribute ‘tone’ or ‘colouring’ without contributing sense. For discussion, see Neale (1999).

²⁷ All conversational implicatures must be calculable in Grice’s sense, even those he takes to be generalized. The conversational implicatures associated with uses of the words ‘and’, ‘or’, ‘if’, ‘every’, ‘a’, ‘the’ etc.—i.e. those words corresponding to formal devices in logical theory—are *generalized* implicatures for Grice, the ones of philosophical importance, the ones that really bothered him (unlike the particularized ones which have no real

7. Three Ambiguity Arguments

Having looked at the sorts of considerations that have been cited in support of a pragmatic explanation of referential usage, we turn now to six common arguments for a semantically referential interpretation.²⁸

7.1 The Argument from Opacity and Transparency

One of the earliest argument used for a semantic ambiguity in the definite article is one based on the ambiguity in sentences like the following:²⁹

- (1) necessarily the number of planets is odd
- (2) the president has always been a republican.

The thought is that the true readings of (1) and (2) (given that George W. Bush is currently president) are attributable to the fact that they contain *referential* descriptions. Support for this position is supposed to come from the fact that the readings are transparent (non-opaque): co-referential terms are intersubstitutable *salva veritate* on these readings. Replacing the purportedly referential term ‘the number of planets’ in (1) by a co-referential term such as ‘nine’, ‘the square of three’, or ‘the length in months of a typical human pregnancy’ preserves truth; similarly, replacing ‘the president’ in (2) by ‘George W. Bush’ or ‘the Governor of Texas in 1999’. By contrast, on the readings of (1) and (2) upon which the descriptions contain Russellian descriptions, analogous substitutions do not preserve truth. In short, the modally qualified (1) and the temporally qualified (2) appear to have opaque readings, explicable on assumption that their descriptions have Russellian readings; and they appear to have transparent readings, explicable on the assumption that descriptions have genuinely referential, name-like readings.

But the alleged ambiguities in (1) and (2) do not, in fact, support the existence of a non-Russellian reading of ‘the’, for the Russellian can already explain the transparent readings by appeal to *scope*, as noted earlier. Moreover, the Russellian can explain the existence of *more than two* readings of sentences containing two operators with which descriptions interact:

- (3) John thinks the president has always been a republican.

No binary distinction can supply what is needed here. And once the ambiguity theorist appeals to scope to capture the readings upon which the descriptions take intermediate scope, he has already availed himself of what is needed to explain the alleged referential readings in (1) and (2).

philosophical significance). It is equally clear that ‘generalized’ has no *theoretical* import for Grice in the context of his account of the properties an implicature must have if it is to count as conversational (hence the calculability requirement) and that generalized conversational implicatures are quite different from conventional implicatures.

²⁸ The labels for the arguments are taken from Neale (1990, 2004).

²⁹ Rundle (1965).

7.2 The Argument from Misdescription

Suppose you use ‘Smith’s murderer’ referentially in the courtroom, intending to refer to Jones, who is ranting in the dock. And suppose Smith was not murdered but died of natural causes. On Russell’s account, the proposition expressed will be false (it is not the case that there exists someone who murdered Smith). According to Donnellan (1966), if the man you *meant*, viz., Jones, is insane then you have said something true. In general, when using a description referentially, the speaker may say something true even though the description he uses to say it is not true of the individual the speaker is referring to, indeed even if the description itself is true of *nothing*. And the conclusion Donnellan urges upon us is that this is explicable if the proposition expressed is object-dependent: it is the individual the speaker is seeking to communicate information about rather than any descriptive condition that is of semantical relevance.

The main problem with this argument is that it relies on the presence of a clear judgment that the proposition expressed is still true despite the fact that neither Jones nor anyone else is Smith’s murderer. In fact, we find an uneasy tension in our phenomenology: we want to say the speaker did something right but *also* that he did something *wrong*. After all, the description he used *failed to fit* the person he wanted to ‘talk about’, and to that extent the speech act was defective. We are ambivalent about the truth of what was said, and the distinction between the proposition literally expressed and the proposition meant sheds light on this fact: the former is false, the latter true.³⁰

There is a residual issue here, dubbed the *residue of the problem of misdescription*.³¹ It does not actually involve misdescription and it is no part of any argument for a semantically referential reading of description, but it is convenient to mention it here because of a phenomenological similarity. Let us return to the detective looking down at Smith’s body. Suppose Smith has been murdered not by one person but by an insane gang of several people. When the detective says, ‘the murderer is insane,’ has he said something true or false? On Russell’s account, he has said something false, but we feel pulled in two directions here, much as we did in the case of misdescription, but this time no appeal to the distinction between the what is literally said and what is meant helps explain the phenomenology. We will return to this matter.

7.3 The Argument from Incompleteness

Strawson attempted to get some mileage out of the incomplete description ‘the table’ in his critique of Russell’s Theory of Descriptions. Incomplete descriptions are interesting because of a *question* they force the Russellian to answer: How are we to explain the incontrovertible fact that a speaker can use a description ‘the ϕ ’ in an utterance of the simple form ‘the ϕ is ψ ’ (e.g. ‘the table is brown’) and thereby perform a perfectly felicitous speech act, indeed *say something true*, even though he and his addressee both know that ϕ is true of more than one thing?

³⁰ Neale (1990).

³¹ Ludlow and Segal (2004).

The existence of incomplete descriptions has been taken by some philosophers to form the basis of an argument for a semantically referential reading. According to the ambiguity theorist, a speaker who uses the incomplete description ‘the table’ referentially in an utterance of ‘the table is brown’ is not expressing a Russellian object-independent proposition; he is, rather, expressing an object-dependent proposition referring to a particular object. Moreover, the ambiguity theorist argues that it is not possible for the Russellian to capture what is going on in such a case.

Russellians have tended to dismiss the Argument from Incompleteness as the product of a blinkered approach to the overall subject matter of natural language semantics, one doomed to failure because it makes no serious attempt to appreciate the location of particular semantic theses within an overall theory of utterance interpretation.³² Incompleteness, as the Russellian sees it, is far bigger than Russell’s Theory of Descriptions, it is indicative of the quite general phenomenon of the under-determination of the proposition expressed by the linguistic form of the sentence used to express it. An utterance of ‘the ϕ is ψ ’ may be *elliptical*, it is usually claimed, for an utterance of something along the lines of ‘the ϕ that ζ is ψ ’, where ‘that ζ ’ is something the speaker *could have* made explicit but didn’t.’ Alternatively, some Russellians have explored the idea that if ‘the’ is a quantifier, as Russell’s Theory of Descriptions claims, then there will always be an *implicit background restriction* on the domain over which an utterance of it ranges, as with an utterance of any other quantifier.³³ Call these the *explicit* and *implicit* replies, respectively.³⁴

The Russellian’s confidence in one or other of these replies has several sources. For one thing, incompleteness arises with descriptions used *attributively*, indeed with quantified DPs more generally. At the scene of a grisly crime, the detective, who has no idea who murdered Smith, says ‘the murderer is insane’. Here it is natural to say the detective wishes to be understood as saying that the murderer *of Smith* is insane (or, in case he does not know the dead man is Smith, that the murderer *of this man* is insane; or, in case he cannot discern the gender of the deceased, that the murderer *of this person* is insane). By hypothesis we have here a canonical example of an *attributive* use of a definite description. No appeal to the expression of an object-dependent proposition about whoever it is was that murdered Smith solves the incompleteness problem. This point is reinforced by the fact that the problem of specifying what the speaker said is still with us even if, in fact, Smith was not murdered but died of a disease that results in corpses looking as if they have been mutilated.

Furthermore, it is not just DPs of the form ‘the ϕ ’ that may be incomplete. Yogi Bera once quipped about a restaurant, ‘nobody goes there anymore, it’s too crowded’. The truth in Bera’s seemingly inconsistent claim emerges once the hearer realizes that ‘nobody’ is an incomplete DP understood, in this particular context, as something like ‘nobody in the know’ or ‘nobody cool’ or ‘nobody who likes

³² Bach (1987), Davies (1981), Evans (1982), Neale (1990), Quine (1940), Reichenbach (1947), Sainsbury (1979), Sellars (1954).

³³ Davies (1981), Neale (1990).

³⁴ These labels derive from Neale (1990). The concepts behind them are elaborated and clarified by Neale (2004).

crowded restaurants'. Part of the beauty of Bera's comment is the indeterminacy and range of possible completions, and this is very often the case when people use incomplete DPs, particularly where humour is involved. Occasionally, however, a single completion will stand out, although others could certainly be constructed. If you had a dinner last night for six guests and all six arrived late because of traffic, you might say 'everyone was late', intending your audience to understand your remark as 'everyone invited to my dinner last night'. Incompleteness is ubiquitous because hearer's can be expected to work out what we mean without us having to spell things out in a tedious and time-consuming manner. It would seem, then, what incompleteness forces us to accept is not the existence of a semantically referential reading of descriptions but the need for a general explanation of how speakers manage to get away with so much incompleteness and how hearers manage to deal with it apparently so effortlessly (and how, in certain cases, indeterminacy and effort interact to produce humour). That is, we want an explanation, as part of a cognitive account of utterance interpretation, of the fact that (roughly) for a range of determiners, *D*, a speaker can use '*D* ϕ ' in an utterance of the simple form '*D* ϕ is ψ ' and thereby perform a perfectly felicitous speech act, indeed *say something true*, even though speaker and hearer both know that ϕ is true of some things that are not relevant to the truth or falsity of what the speaker said?

The difference between the explicit and implicit replies corresponds to a difference in focus and in the attitude taken to the two major parts of 'the ϕ '. Where we have incompleteness we have *slippage* between language and the world. There are only two things we can do about this slippage: tinker with language, or tinker with the world. When we tinker with *language*: we do something about the *matrix* ϕ , availing ourselves of the *explicit* reply. When we tinker with the *world*, we do something about the *objects* that (potentially) satisfy the matrix, and hence restrict the range of either the unrestricted quantifier 'the' or the restricted quantifier 'the ϕ ', availing ourselves of the *implicit* reply.

Some philosophers have objected to the explicit approach on the grounds that there fails to be a *principled basis* for determining the content of completions.³⁵ Is it to be a completion that the speaker has in mind? Is the resulting description really sufficient to uniquely identify the object in question? Is it always clear that the speaker has a particular description in mind? If there is a genuine complaint here it is one that carries over to the interpretation of incomplete descriptions used attributively and, indeed, to quantified DPs quite generally, which suggests very strongly that the requirement of a principled basis is too strong a condition to impose on any account of interpretation.

On a related note, it is difficult to imagine anyone sympathetic to the explicit response seeing it as subject to the following strange and quite *ad hoc* constraint: two superficially identical descriptions occurring in a single sentence must be completed in precisely the same way. At the end of boxing match between a Russian and a Swede you might say, upon hearing that the panel of eleven international judges has declared the Swede the winner by ten votes to one, 'I know why it wasn't unanimous.' 'Why?' your companion asks, and you reply by uttering (4):

³⁵ Devitt (2004), Wettstein (1983).

(4) the Russian voted for the Russian'.³⁶

Obviously you would be saying that the Russian judge (in this contest) voted for the Russian boxer (in this contest), and this fact is easily statable on the explicit approach.

Notice that (4) creates a serious problem for the implicit account of incompleteness. There can be no domain of discourse containing exactly one Russian with respect to which (4) can be evaluated and come out true (unless the Russian boxer *is* the Russian judge, of course). If the implicit approach is to be saved, it will have to mirror what the explicit approach does by allowing different completions for superficially identical descriptions, and this means allowing the domain over which quantifiers range to shift *within* a sentence. This may seem ad hoc, but the sting of such a charge would, perhaps, be lessened if it could be shown in some independent way that every quantified DP contains a silent, indexical, domain variable in its syntax, an aphonic item of LF, construed as a level of syntactic representation.³⁷ This idea has been explored by Stanley and Szabó (2000). No direct evidence can be provided, of course, for the existence of such variables in syntactic structure: motivation will have to come from the work they do. Stanley and Szabó claim such variables help explain the interpretation of (5) and (6):

(5) in every match, the Russian voted for the Russian.

(6) the Russian always votes for the Russian.

The idea is that both occurrences of 'the Russian' in each of these examples contains a variable that is bound by the universally quantified expression, 'every match' in (5), 'always' in (6). But this does nothing yet to distinguish judges from boxers, which brings us back to where we started: something is still needed to do the work that 'judge' and 'boxer' do on the explicit approach. If the aphonic domain variables in (5) and (6) are simply the arguments of aphonic, indexical *predicates* interpreted as 'judge' and 'boxer' respectively, then this approach simply reduces to a syntactic implementation of the explicit approach. If, as Stanley and Szabó maintain, every object or property in the proposition expressed by the utterance of a sentence is the value of some element in the sentence's syntax (more precisely, some element of its LF) then we are owed an account of how the property of being a judge and the property of being a boxer get into the proposition expressed, as their account seems to require. Such properties will surely have to be supplied by aphonic, indexical, *predicates* that take the aphonic individual variables as arguments. But again, this is just a heavily syntactic implementation of the explicit approach. Within the propositional account of semantic content Stanley and Szabó assume there is really no difference between saying that the combination of the phonic predicate 'Russian' and an aphonic, indexical predicate jointly supply the property of being a Russian judge, and saying that the phonic predicate 'Russian' is understood as if it were an utterance of 'Russian judge' supplying it.³⁸ Of course, the matter of property individuation

³⁶ Lewis (1979), Ludlow and Segal (2004), Neale (2004, 2005), Soames (1986), Stanley and Szabó (2000).

³⁷ On LF and aphonic expressions, see Chapter 000.

³⁸ Neale (2000, 2005).

rears its head here. If properties are individuated more coarsely than predicates, the proposals could technically come apart, but questions would now loom about how Stanley and Szabó intend properties to be individuated—necessarily equivalence is certainly too coarse. This only serves to remind us that the straightforward explicit approach is not beholden to any particular picture of meanings or propositions, and that a worked out theory of incompleteness will have to flow from a general theory of interpretation.

8. Synthesis

Before looking at the next three arguments for an ambiguity, we want to outline a theory that is, in effect, a synthesis of the Russellian and ambiguity theories.³⁹ If the matrix of a description may contain a referential expression ('the king of *France*', 'the person who murdered *Smith*', '*Smith*'s murderer'), and if, as the explicit theorist maintains, an incomplete description may be understood as going proxy for some readily constructible, more complex description, then there is no reason in principle why an incomplete description (e.g. 'the king') may not go proxy for a fuller description ('the king of France') containing a referential expression ('France') not contained in the original matrix. And, at least in principle, there is no reason why the fuller description should not contain a referential device that stands for the individual the speaker intends the description to pick out. For example, an utterance of 'the table' might go proxy for 'the table that's *that*', understood as [*the x: table x* \wedge *x = that*].⁴⁰ In which case, an incomplete description used referentially is both Russellian and referential.⁴¹ This preserves the basic Russellian insight that the descriptive material in the matrix of a description contributes to the proposition expressed and at the same time preserves the intuition that the proposition expressed is object-dependent. If this is correct, then arguments for or against an ambiguity in the definite article lose much of their initial interest.⁴²

9. Three More Ambiguity Arguments

9.1 The Argument from Convention

Devitt (1997, 2004) and Reimer (1998*a*) have presented an intuitive argument for an ambiguity in definite descriptions: referential uses are common, standard, regular, systematic, and cross-linguistic; indeed so much so that it would be absurd to deny that such uses are *conventional*, a direct function of linguistic meaning in a way that referential uses of other quantified DPs are not. This point seems to demonstrate an inherent weakness in the simplest unitary Russellian analyses, such as those proposed by Grice (1969),

³⁹ For more detail, see Neale (2004).

⁴⁰ The use of such descriptions goes back at least to an argument reconstructible from Gödel's (1944) discussion of Russell's Theory of Facts which uses descriptions of the form $\iota x(Fx \wedge x=a)$.

⁴¹ It will be referential but not *directly* referential in Kaplan's (1989) sense, because the contribution to the proposition expressed made by the utterance of the description is not exhausted by the object referred to.

⁴² Neale (2004).

Kripke (1977), and Neale (1990), which amount to generalized conversational implicature stories. But the Synthesis sketched in the Section 8 is not really touched by the Argument from Convention; indeed, the Synthesis seems to *explain* the purported convention as a *systematic regularity* in referential usage.

9.2 The Argument from Anaphora

Consider the following argument, due in its essentials to Strawson (1952): (i) The occurrence of ‘he’ in (1) can be understood as anaphoric on the occurrence of ‘the man in the gabardine suit’:

(1) The man in the gabardine suit is a spy. He tried to bribe me.

(ii) If an occurrence of a pronoun β is anaphoric on an occurrence of another expression α , then β is either a variable bound by α or a device that inherits its reference from α . (iii) The occurrence of the pronoun ‘he’ in (1) is *not* a bound variable. (iv) Therefore, it inherits its reference from the occurrence of ‘the man in the gabardine suit’. (v) Therefore, this occurrence of ‘the man in the gabardine suit’ is a referring expression.

Before addressing the Argument from Anaphora directly, we should note the following: pronouns that do not refer may appear perfectly felicitously in negative existentials and belief reports:

(2) The present king of France doesn’t clean my pool. In fact, he doesn’t exist.

(3) Mary believes that the present king of France is wise and that he lives in Arles.

If the occurrences of ‘he’ in (2) and (3) are referring expressions, then the unwelcome metaphysical commitments that were defeated by treating the descriptive phrases in these sentences in accordance with Russell’s Theory of Descriptions would re-enter via the back door with the anaphoric pronouns. Thus the interpretation of anaphoric pronouns has implications for the Theory of Descriptions that extend well beyond the Argument from Anaphora for a semantically referential reading of descriptive devices: it threatens to pull the rug out from under the entire theory. But if we treat anaphors as standing proxy for descriptions, the back door is blocked as well.

But as it turns out, both the Argument from Anaphora and the more general worry are easily dealt with, for it is plausible to suppose that a pronoun lying outside the scope of a quantified DP upon which it is nonetheless anaphoric is basically an incomplete description.⁴³ The details are spelled out in Chapter 000 of the present volume; for immediate purposes it will suffice to note that on this independently motivated and fully general account of ‘unbound anaphora’, the occurrences of ‘he’ in (2) and (3) are treated as if they were occurrences of ‘the present king of France’ with small scope.⁴⁴ The belief

⁴³ Ludlow and Neale (1991), Neale (1990, 2004).

⁴⁴ This would make them equivalent to what are sometimes called ‘pronouns of laziness’, devices which go proxy for repetitions of their antecedents. But the theory of anaphora alluded to here is not a laziness theory in this strict sense because it applies equally to quantified DPs beginning with determiners other than ‘the’. In (i), for example, the pronoun ‘he’ goes proxy for something like ‘the man who drank rum last night at Mary’s party’:

(i) Just one man drank rum last night at Mary’s party. He was very ill afterwards.

attributed to Mary by someone uttering (2) may have little going for it, but it is object-independent for all that, so we can report it without being committed to the existence of a present king of France.

9.3 The Argument From Binding

A number of philosophers and linguists have argued that some occurrences of definite descriptions function as bound variables and hence as referential expressions.⁴⁵ Consider the following example, used by Wilson (1991):

- (1) [every scientist who was fired from the observatory at Sofia]¹ was consoled by [someone who knew *[the fired scientist]*₁ as a youth].
- (2) [every scientist who was fired from the observatory at Sofia]¹ was consoled by someone who knew *[him]*₁ as a youth.

The italicised description in (1), like the pronoun ‘him’ in (2) that could replace it, Wilson claims, is a variable bound by the subject expression. The truth conditions of what is said by utterances of (1) and (2) are both given by (3), the underlined variable \underline{x} inside the second quantifier doing the work of the italicised pronoun in (2) and the italicised description in (1):

- (3) [*every* _{x} : scientist x • x was fired from the observatory at Sofia]
[*some* _{y} : y knew \underline{x} as a youth] (x was consoled by y).

There are several things to note here.

(i) For some speakers, there is an important difference between (1) and (2): what someone says by uttering the latter, but not by uttering the former, can entail that every scientist fired from the observatory at Sofia was male..

(ii) Demonstrative descriptions (phrases of the form ‘that ϕ ’) can be used to signify an anaphoric link in much the same way as definite descriptions. In (1), for example, ‘the scientist’ could just as well have been ‘that scientist’.

(iii) A simple Russellian treatment of the description ‘the fired scientist’ in an utterance of (1) would yield (4), which fails to capture the intended interpretation of the utterance:

- (4) [*every* _{x} : scientist x • x was fired from the observatory at Sofia]
[*the* _{z} : fired scientist z] [*some* _{y} : y knew z as a youth] (x was consoled by y).

(4) fails to relativize values of z to values of x in the way the bound variable treatment (in effect) does by treating ‘the fired scientist’ as an occurrence of x .

(iv) On a more subtle Russellian treatment, ‘the fired scientist’ as it occurs in an utterance of (1) is an incomplete description that is meant to be interpreted as if it were an utterance of richer description that is bound-into, a Gödelian description containing variables on *both* sides of the identity sign:

⁴⁵ See (e.g.) Kempson (1986), Wilson (1991), Larson and Segal (1995).

- (1') [*every_x: scientist x • x was fired from the observatory at Sofia*]
 [*the_z: fired scientist z • z=x*] [*some_y: y knew z as a youth*]
 (*x was consoled by y*).

The matrix of [*the_z: fired scientist z • z=x*] is understood as uniquely satisfied relative to values of *x*. In short, the Russellian says that the incomplete description in (1) is not a bound variable, but just another incomplete description—one for which the speaker could provide a fuller description that is bound-into—a description *containing* a bound pronoun. It is an incomplete, relativized description whose natural completion contains an expression understood as a variable bound by the subject expression.

(v) The Russellian account explains the semantic difference between (1), which contains ‘the fired scientist’, and (10), which contains ‘the gifted astronomer’: the respective analyses (1') and (10') are not equivalent:

- (1') [*every_x: scientist x • x was fired from the observatory at Sofia*]
 [*the_z: fired scientist z • z=x*] [*some_y: y knew z as a youth*]
 (*x was consoled by y*).
- (10') [*every_x: scientist x • x was fired from the observatory at Sofia*]
 [*the_z: gifted astronomer z • z=x*] [*some_y: y knew z as a youth*]
 (*x was consoled by y*).

It would appear, then, that the Russellian has a perfectly good account of why sentences can contain descriptions that *appear* to be functioning as bound variables—they are bound-into. Far from presenting problems for a unitary Russellian theory of descriptions, the examples discussed serve only to emphasize the elegance and extraordinary range of Russell's Theory of Descriptions.

10. Indefinite Descriptions

10.1 Predication

To say that definite and indefinite descriptions are quantified DPs is to focus on their *predicational* powers in at least two senses. First, a DP such as [_{DP} a [_{NP} soldier]] is composed of a determiner and a nominal, the latter functioning as a first-level predicate. Second, as Frege made clear, a function-argument approach to composition that treats a name like ‘Napoleon’ as referring to an object and a first-level predicate like ‘snores’ as referring to a function from objects to truth-values, leads naturally to the idea that a quantifier is a second-level predicate that refers to a function from the referents of first-level predicates to truth values. Putting these two ideas together we have the basis of generalized quantifier theory. A DP like ‘every soldier’ or ‘a soldier’ is a second-level predicate (containing a first-level predicate ‘soldier’) that refers to a function from the referents of first-level predicates to truth values.⁴⁶

⁴⁶ Equivalently (if everything is done correctly), a determiner like ‘every’ or ‘a’ is a second-level predicate referring to a function from pairs of first-level predicate referents to truth values.

On a Russellian theory of indefinites, ‘a ϕ is ψ ’ is a quantified sentence whose logical form may be represented as $[an\ x: \phi x]\psi x$. But in some case this seems like overkill. Compare (1) and (2):

- (1) a soldier walked in
 (2) John is a soldier

Whilst there is something fairly natural about capturing the truth conditions of an utterance of (1) using (1'), the same cannot be said for (2') in connection with the truth conditions of (2):

- (1') $[an\ x: soldier\ x]\ x\ walked\ in$
 (2') $[an\ x: soldier\ x]\ John = x$.

There is nothing wrong with (2') *truth-conditionally*; the point is rather that (2) seems to predicate just *being a soldier* of John, not *being identical to something that is a soldier*, as (2') suggests. Indeed, when translating (2) into predicate logic we typically treat (2) on the model of ‘John is tall’, rendering ‘is tall’ and ‘is a soldier’ as simple one-place predicates $tall(x)$ and $soldier(x)$, the copula being the ‘is’ of *predication*, not the ‘is’ of *identity*.

Introducing negation appears to reinforce the point that where an indefinite appears inside a predicate ‘is a ϕ ’, a simple first-level predication provides a more natural interpretation than a second-level predication introduced by quantificational structure:⁴⁷

- (3) John is not a soldier

On Russell’s account, (3) is predicted to be ambiguous between (3') and (3''):

- (3') $\sim ([an\ x: soldier\ x]\ John = x)$
 (3'') $[an\ x: soldier\ x]\ \sim (John = x)$.

But there appears to be no reading of (3) upon which it is understood as (3''). It cannot be used to mean that there is a soldier that John is not identical to, only to mean that John possesses a certain simple property. However, we cannot conclude from this that there are no scope ambiguities involving indefinites:⁴⁸

- (4) John wants to marry a woman his mother loathes.
 (5) Next year, a man who lives in Tribeca will lead the parade.

At most, then, such ambiguities do not arise when indefinites combine with the copula, and this might suggest that an explanation of what is going on will emerge from an understanding of copula constructions *per se*, regardless of whether they involve adjectival or indefinite complements. In many languages no overt counterpart of the English copula appears in equivalent constructions, and it is arguable that where it does appear this is largely for purposes of indicating tense or conveying other

⁴⁷ Graff (2000), Heim (1982/1988), Williams (1983).

⁴⁸ King (1988), Kripke (1977), Ludlow and Neale (1991).

information typically indicated by inflection; this suggests the copula serves only to indicate a predication whose content is supplied by its complement. One question that will be taken up later is whether, on such an account, the presence of the indefinite article before a nominal in copula constructions is likewise semantically inert or whether we are dealing with a first-level predication involving indefinites that in such constructions derives from their standard role as second-level predicates (quantifiers) elsewhere

10.2 Referential Usage

Are indefinite descriptions ambiguous between quantificational and referential and quantificational interpretations, as a number of people have argued?⁴⁹ The issues here are virtually identical to those discussed earlier in connection with definites, although novel syntactic and interpretive considerations have been brought to bear in the realm of indefinites. The most interesting of these involve seemingly general syntactic constraints (so called *island* constraints) on quantifier scope, which apparently preclude straightforward scope-based explanations of ambiguity involving indefinites and apparently admit of explanation if a (systematic) lexical ambiguity is assumed.⁵⁰

Various syntactic phenomena have led linguists to the conclusion that the scope of a quantified DP α may be no larger than the smallest clause containing α .⁵¹ For example, (6) is not supposed to have the interpretation in (6'), in which the quantifier has largest possible scope:

- (6) someone believes that [_Severy man I know is angry]
 (6') [*every x: man x* \wedge *I know x*]([*some y: person y*](*y believes that x is angry*)).

As it is sometimes put, there is an *island constraint* in operation: smallest clause containing 'every man I know' is its *scope island* (from which there is no escape) Yet (7) appears to have the interpretation in (7') in which the indefinite has largest possible scope:

- (7) everyone believes that a man I know is angry
 (7') [*an x: man x* \wedge *I know x*]([*every y: person y*](*y believes that x is angry*))

That is, the indefinite 'a man I know' seems to violate the proposed island constraint. Rather than accept that indefinite descriptions are exceptional in this way, one might argue that the reading of (7) apparently captured by (7') is in fact a reading upon which the indefinite is semantically referential.⁵²

It has been claimed by some philosophers that there is a serious problem in this line of reasoning.⁵³ One of the most important morals of discussion of scope and referential usage in connection with

⁴⁹ Chastain (1975), Donnellan (1978), Fodor and Sag (1982), Wilson (1978).

⁵⁰ See Fodor and Sag (1982).

⁵¹ The notion of scope employed in syntactic theory is ultimately no different from the one employed in logic. See Chapter 000.

⁵² Fodor and Sag (1982).

⁵³ King (1988); Ludlow and Neale (1991).

definites was the Kripkean point that we must distinguish the claim that a particular occurrence of an expression in a sentence *X* is understood as semantically referential from the conceptually quite distinct claim that the expression has largest possible scope in *X*. Of particular importance here is the fact that (7') captures a reading of (7) that is simply not equivalent to the reading upon which the indefinite is semantically referential. Furthermore, there appear to be more quantifier scope possibilities than the alleged island constraint allows. Example (10) has three readings, according as the indefinite has small, intermediate, or large scope:⁵⁴

- (8) John thinks that Hoover claimed the Berrigans planned to kidnap a high American official.

In fact the intermediate reading was the one intended: Hoover claimed that the Berrigans had selected a particular high American official whom they planned to kidnap (not himself knowing who it was). The situation is similar with the following:⁵⁵

- (9) Each teacher overheard many exclamations that a student of mine cheated.

There is a reading of (11) upon which 'a student of mine' has smaller scope than 'every teacher' but larger scope than 'many exclamations'. On Fodor and Sag's account, only the small scope readings of (10) and (11) should be possible. Further embeddings produce further readings. And, as Kripke has stressed, no binary distinction between a quantificational and a referential reading of indefinites can replace Russell's notion of scope.

As is the case in discussions of definites used referentially, various distinct notions appear to have been run together in the literature purporting to demonstrate the existence of a referential semantics for indefinites, and again the major conflation involves using a description to communicate an object-dependent thought and merely using a description with a particular individual in mind. With a view to imposing some order on claims made by referentialists, we can distinguish at least *referential*, *specific*, *definite*, and *purely existential* uses (although they see the taxonomy as carrying no theoretical weight).⁵⁶

Referential use: A lone red-haired student is sitting in the front row of a class. The teacher, who believes this particular student cheated on yesterday's examination, announces to the class, 'I'm not going to name names, but I have good reason to believe that a red-haired student in the front row cheated on yesterday's exam.' We have a *referential* use iff the teacher is attempting to communicate to his audience an object-dependent proposition about the red-haired student sitting in the front row, identifying him as the cheat, this individual being the one about whom the teacher has the object-dependent belief that furnishes the grounds for his utterance.

Specific use: A teacher sees someone in his class cheating on an examination. The following day he makes an announcement to the class: 'I'm sorry to say that yesterday I witnessed a student in this class

⁵⁴ Kripke (1977), Ludlow and Neale (1991).

⁵⁵ Ludlow and Neale (1991).

⁵⁶ Ludlow and Neale (1991).

cheating on the examination.’ The grounds for the teacher’s utterance are furnished by an object-dependent belief about a particular student. If the teacher does not seek to communicate to the class an object-dependent proposition identifying the cheat, then he is not using the indefinite referentially. But since he wishes to communicate that the grounds for his utterance are nonetheless furnished by an object-dependent belief, we can say he is making a *specific* use of the indefinite.

Definite use: Suppose a teacher has deduced in some complex statistical way that exactly one person cheated on yesterday’s examination, and that he is utterly baffled as to who it was. He announces to the class, ‘I have deduced from statistical data that a student cheated on the exam. Fortunately there only appears to be one cheat, and I intend to find out who it is.’

Purely quantificational use: In this instance not only does the teacher fail to know the identity of the cheater, but also fails to know whether or not there was a unique cheater (perhaps there were several). ‘The fact that everyone scored 100 on yesterday’s examination suggests a student broke into my office and stole a copy the night before.’

It is implausible to think that all of these uses can be chalked up to semantic facts. In each case, the proposition expressed is that which would be expressed if the indefinite determiner were replaced by the existential quantifier. The different uses of descriptions then stem from the application of Gricean principles of conversational implicature to what was literally said.

11. Indefinites as Logically Basic?

Having laid bare a plausible semantic connection between definite and indefinite descriptions—a closer one will be examined in a moment—it is natural to ask how the demonstrative description ‘that ϕ ’ fits into the nexus.⁵⁷ Although many philosophers and linguists have assumed that demonstrative descriptions are referential, it is sometimes suggested they are *quantificational* by virtue of being definite descriptions with certain special properties.⁵⁸ But a demonstrative description might be seen as an indefinite description used referentially and involving an implicit Gödelian completion signaled by the use of the determiner ‘that’ rather than ‘a’.⁵⁹ On this account, an utterance of ‘that ϕ is ψ ’ is interpreted with the truth conditions of $[an\ x: \phi x \wedge x = that]$.⁶⁰

Having folded demonstrative descriptions into indefinites, and given that Gricean or other pragmatic principles can explain definite uses of indefinite descriptions, one might well wonder whether the distinction between definite and indefinite descriptions might be collapsed, at least truth-conditionally. It might be suggested, for example, that ‘the’ and ‘a’ have the same truth-conditional meaning—i.e. that they make the same contribution to the truth conditions of utterances containing them—and differ only in

⁵⁷ Demonstratives are discussed in detail in Chapter 000.

⁵⁸ King (2001), Neale (1993b).

⁵⁹ Neale (2001, 2004).

⁶⁰ Lepore and Ludwig (2000) arrive at virtually the same analysis by a different route.

their suggestive power, in much the same way that those influenced by Frege and Grice see the difference between ‘but’ and ‘and’.⁶¹ Very few natural languages have what we would recognize as definite and indefinite descriptions. In most Slavic languages, for example, ‘the man’ and ‘a man’ would both be expressed in the same way. Perhaps it is just an obsession with surface grammatical form that leads us to think that English or German or French have two different truth-conditional elements at LF corresponding to surface forms ‘the’ and ‘a’. Perhaps there is a single logical element whose surface forms are associated with different discourse conditions. That is, perhaps utterances of both ‘ $a \phi$ is ψ ’ and ‘the ϕ is ψ ’ have the truth-conditional content given by $[\exists x: \phi x](\psi x)$.

Obviously ‘the’ and ‘a’ do not have exactly the same meaning or use, but it does not follow that the difference in meaning and use affects the truth-conditions of what a speaker says when uttering one sentence rather than the other. We may well be dealing with what Grice (1989) calls conventional implicature. According to Grice, no truth-conditional difference results from switching ‘but’ and ‘and’ when they conjoin sentences, but the speaker conventionally implicates something by using ‘but’ over and ‘and’, something involving unexpectedness or contrast.⁶² Ludlow and Segal (2004) suggest a similar story about ‘the’ and ‘a’. Following a common assumption made in traditional grammars, they argue that ‘the’ signals that the object under discussion is *given* in the conversational context. DPs fronted by the determiner ‘a’ signal that they involve *new* information. The idea is that this slender bit of information, combined with Gricean principles, is sufficient to explain the presence of the uniqueness implication that attaches to the use of ‘the ϕ is ψ ’, even though what is strictly said is that $[\exists x: \phi x](\psi x)$. The choice of ‘the’ over ‘a’ signals *given* information, and often enough this will explain the presence of the suggestion there is unique ϕ .

Often definite descriptions occur without uniqueness implications. Consider the following.

- (12) John broke his leg.
- (13) The lawyer wanted to borrow Smith’s pencil.
- (13) Smith went to the theatre and then to the pub. (Brit.)
- (14) Then he drove the car into the ditch and had to go to the hospital. (Am.)

The unified semantical treatment of definite and indefinite descriptions may well allow one to avoid the uniqueness implications in these cases, while still accounting for the presence of uniqueness implications in other cases.

It might be thought that on the unified treatment the problem of incompleteness disappears and that talk of explicit and implicit approaches to incompleteness are now redundant. Someone who utters ‘the

⁶¹ Heim (1982), Kamp and Reyle (1993), Kempson (1975), Ludlow and Segal (2004), Szabo (2000), Zvolensky (1997). Unfortunately, the suggestion is sometimes put very incautiously, that ‘the’ and ‘a’ have the same *literal* meaning but differ *pragmatically*. This is a very bad way of putting things, for the whole point is that ‘the’ and ‘a’ do differ in meaning but not in a way that is truth-conditionally significant. (To claim that literal meaning just *is* truth-conditional meaning is either to say something counter-intuitive or else to make a pointless stipulation.)

⁶² See Neale (1999) for details.

table is dirty', for example, will be saying only that there is at least one table that is dirty, the conventions governing the use of 'the' leading the hearer to interpret the speaker as having a unique table in mind. But this would be too quick: incompleteness is a quite general phenomenon affecting quantified DPs, and with indefinites it shows up clearly in the if the indefinite is embedded within negation:

(15) the table is not dirty.

If incompleteness did not arise, then assuming the existence of at least one table that is not dirty, every utterance of (15) would be true, and this is clearly wrong. On a unified theory that assumes the explicit approach to incompleteness, someone who utters (15) will be saying something like 'a table over here is not dirty' or 'a table I have selected is not dirty', which seem perfectly fine.

The unified indefinite treatment may also make it possible to explain the phenomenology of the residue of the problem of misdescription noted earlier.⁶³ Recall we want to explain the phenomenology in the following sort of case: The detective says, 'the murderer is insane,' when he sees the state of Smith's body; but Smith was actually killed by several insane members of a gang. We feel pulled in both directions when asked if the detective said something true or false. On the unified indefinite treatment, we seem to have a possible explanation of this: what the detective literally says does not entail that there is a unique murderer of Smith. He literally expresses the proposition that there is at least one murderer of Smith who is insane, and this is true. But general Gricean reasoning leads us to believe that the detective means that there is a *unique* murderer of Smith and that he is insane, and this is false.

The unified theory also holds out the prospect of dealing with the following sort of problem case discussed by Heim (1990):

(16) If a bishop meets another bishop, the bishop blesses the other bishop.

On the unified account, an utterance of (16) is understood as expressing what (16') expresses, assuming a domain of two bishops:

(16') If a bishop meets another bishop,
a bishop that meets a bishop blesses another bishop that is met by a bishop.

In yielding this analysis, the unified account appears to appeal simultaneously to both the explicit and implicit approaches to incompleteness.

12. Predicational Theories of Description

A number of authors have treated indefinite descriptions as expressions introducing or at least containing free variables bound by quantifiers, which may include such things as adverbs of quantification (in the sense of Lewis (1975)) or implicit existential closure operators.⁶⁴ This idea would appear to go hand in

⁶³ Ludlow and Segal (2004).

⁶⁴ Diesing (1992), Kamp (1981), Heim (1982).

hand with the idea considered earlier that indefinite descriptions following the copula function as simple first-level predicates, the case for which might be made using an example like the following:

(1) John is a soldier

It is sometimes suggested that definite descriptions following the copula often do this too:⁶⁵

(2) John is the king of France.

Do we need to admit two different kinds of description, one first-level predicational, the other quantificational (and so second-level predicational)? Or can we somehow effect a unification?

There would appear to be two options if we want to unify the analysis of descriptions in subject and predicate position. The first is to say that, despite appearances, each type of occurrence is in fact quantificational, despite the absence of a scope ambiguity in (3), noted earlier:

(3) John is not a soldier.

For the possibility might be explored, as Ludlow (1991) suggests, that the absence of a reading upon which the indefinite has large scope results from negation creating a scope island.⁶⁶ That is, it could well be that ‘a lawyer’ cannot take wide scope over the negation in (3) for precisely the same reason that ‘always’ cannot take wide scope over negation in (4):

(4) John doesn’t always go to parties.

(4) cannot be used to say that it is always the case that John doesn’t go to parties. It might be that there are similar reasons for thinking (3) cannot be used to say that there is a soldier x , such that John is not x .⁶⁷ But a scope island created by negation ought to apply to definites as well as indefinites, and this would mean there is only one reading of (2’), the reading upon which the description has large scope being prohibited:

(2’) John is not the king of France.

Graff (2000) has argued that this is, in fact, the case, that a sentence in which a description combines with the copula to form a verb phrase is *always* equivalent to the reading the Russellian obtains by giving the description small scope. So (2’) contrasts (5), which is genuinely ambiguous:

(5) John has not met the king of France.

To those who would say that (2’) is ambiguous in the same way as (5), Graff replies that in (2’) there is only an *illusion* of a second reading, one due to the presence of a conversational implicature. A

⁶⁵ Geach (1962), Graff (2001), Higginbotham (1987), Smiley (1981), Wiggins (1965), Wilson (1978).

⁶⁶ Ludlow (1991).

⁶⁷ For criticism of this idea, see Mandelbaum (1994).

predicational analysis of the descriptions in (2) and (2') is possible by interpreting 'is the ϕ ' as a complex predicate $!\phi x$ contextually defined in the obvious way:

$$(9) \quad (!\phi x)\alpha =_{df} \phi\alpha \bullet \forall x(\phi x \supset x = \alpha).$$

Assuming existential generalisation, this yields analyses equivalent to Russell's for (2), for it declares an utterance of (2) true if, and only if, John is a king of France (assuming a predicational analysis of indefinites) and every king of France is John. But in connection with (2') that the analyses diverge, the Russellian analysis serving up two readings.

That the Russellian analysis is the better of the two is suggested by the fact that Graff's entails the rejection of the readings of both (6) and (7) upon which the descriptions have large scope:⁶⁸

- (6) George IV wonders whether Scott is the author of *Waverley*
 (7) necessarily nine is the number of planets.

There is a long and powerful tradition in logic and philosophy, from Russell to Smullyan to Prior to Kripke, of taking very seriously the readings that Graff's proposal prohibits. It is always possible, of course, that the tradition is wrong, that the purported large scope readings are illusions engendered by implicature. Clearly there is much work to be done here, some of it logical, but much of it requiring a general theory of utterance interpretation of the sort the Russellian himself needs in order to defend a unitary theory in the face of the Argument from Misdescription and the Argument from Incompleteness.

12. Conclusion

Debates about descriptions have been framed by the considerations Russell set out a century ago, and work on the theory of descriptions has demonstrated the tremendous insights that Russell had. Equally impressive is the fact that the theory has been extended in so many interesting and provocative ways—for example to pronominal anaphora, temporal and modal anaphora, plural descriptions, mass terms, and generics. The allure of the Theory of Descriptions remains its promise of metaphysical austerity, its ability to untangle numerous semantical puzzles in the theory of meaning, and its role in making sense of the epistemic status of our knowledge claims. Even where philosophers have departed from the stock Russellian theory (for example by rejecting his formalism or the uniqueness clause) they have usually done so with the goal of servicing the more central insight of the theory—that many English DPs, despite appearances, are not referring expressions but are in some way or other predicational.

⁶⁸ Neale (2001). Further difficulties arise for the predicational approach because of rather general issues about systematicity in the interpretation of copula structures and the general. Again, see Neale (2001).