

## What Is a Singular Term?

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Frege made two contributions, at least, which mark him as the father of Analytic Philosophy. First, and most famously, he gave a coherent analysis of the structure of sentences containing more than one expression of generality. To do so, he introduced quantifier-variable notation and, with it, a method of analysis which has come to dominate the study of language. In terms of this analysis, Frege was able clearly to formulate an Ontology grounded in his philosophy of language, and it is this reorientation of these subjects which is his second great contribution. For Frege, the logical type of an expression determines the logical type of its referent (if it has one): An Object is the sort of thing to which name may refer; a (first level) Concept is the sort of thing to which a predicate may refer; and so on. We are not to determine the type of an expression—whether it is a name, a predicate, or a quantifier—by first determining the sort of thing to which it refers, but in some other way. But how?

Philosophers of an earlier era—or, indeed, of Frege’s own—may actually have proceeded in the way he suggested we should: That is, they may actually have attempted to *find out* to what sort of entity an expression referred by investigating properties of the expression itself. What marks Frege’s approach as distinctive is, thus, not that, as a practical matter, he proceeded in this way nor even that his analysis was ultimately of an entirely different sort from that offered by other philosophers. What marks his approach as distinctive is that he claims that the most general ontological categories—the logical types of the ‘hierarchy of levels’—can *only* be explained in terms of the logical types of expressions. For Frege, we can not even explain to what sort of thing an expression refers except by explaining what sort of expression is in question: We must come to understand how the expression functions in the language of which it is a part in order to come to understand the sort of thing to which it might refer.

If it is to be possible to found ontology upon what Frege called ‘logic’,<sup>1</sup> it must be possible to characterize the logical type of an expression without appeal to such notions as those of an Object or of

reference. The logical type of an expression must be characterized “in wholly linguistic terms”, in terms, that is, of the way in which it functions in the language of which it is a part.<sup>2</sup> If the notion of a singular term were to require, for its explanation, appeal, for example, to the notion of an Object, then Frege’s foundational thesis would fail miserably: The notion of an Object could not then be explained in terms of the logical type of expression which may refer to an Object, in terms of the notion of a singular term. Rather, the notion of an Object would be required to explain the notion of a singular term itself.

That the notion of an Object is to be explained in terms of the notion of a singular term does not mean that the category of singular terms is itself of immediate semantic significance. For example, it does not follow from Frege’s foundational thesis that *every* singular term that occurs in a true, simple sentence refers to an Object. This view has been defended by Crispin Wright, on the ground that there is no non-arbitrary way to distinguish ‘real’ from merely ‘stylistic’ singular terms (at least, not without appeal to foresworn semantic notions).<sup>3</sup> However, Wright may or may not be correct that no such distinction can be drawn; we are thus, in principle, in a position to draw such a distinction and recognize that the *syntactic* category of singular terms plays a crucial role in it, but does not itself constitute, the characterization of that type of expression in terms of which the notion of an Object is ultimately to be explained.

It is, then, with the explanation of the requisite notion of a singular term that I intend to concern myself in this paper.

In the first two sections, I shall discuss the criteria by means of which I propose to characterize singular terms. These criteria are based upon those first presented by Dummett. Unlike those he considers, however, mine make no reference to quantification; nor is any reference be made to statements of identity. This is important for two reasons. First, it is all but common wisdom among analytic philosophers that singular terms cannot be distinguished from other sorts of expressions except by reference to quantification<sup>4</sup> or to what Quine calls ‘the apparatus of individuation’.<sup>5</sup> And, secondly, Wright has argued that Dummett’s reference to quantification endangers his characterization’s applicability to languages other

than that in which it is formulated (in the original case, of course, English), since the identification of the words for ‘some’ and ‘all’, in other languages, might depend upon a prior identification of the singular terms in that language or be subject to severe indeterminacy, *a la* Quine.<sup>6</sup> Elimination of reference to quantification would, thus, be a step towards answering this objection.

We shall discuss Wright’s arguments further in the third section.

In the last section, we shall return to the question what the point of this sort of account of singular terms is. For we shall find that we need to appeal to rather more than *just* matters of syntax to give the characterization. The idea that the account should be “linguistic” indicates only roughly to what we may and may not appeal: We shall need to consider whether, in appealing to the sorts of facts it does, or in leaving open certain questions, such as that of ontological relativity, this account in fact serves the purpose for which, in the context of a Fregean approach to ontology, it is wanted.

### **1. Dummett’s Inferential Criteria**

In *Frege: Philosophy of Language*, Dummett outlines a characterization of singular terms that makes reference to three simple conditions. Each of these requires that any sentence that contains a singular term must admit a particular inference. (The validity of these inferences is not itself to be characterized in semantic terms: To say, for our purposes, that an inference is valid is to say that it is routinely accepted as valid by speakers of the language in question.)

Suppose, then, that we have an expression *t* of a language—English, say, for the moment—that occurs in a variety of different sentences, ‘F*t*’, ‘G*t*’, and so forth. Then, Dummett’s suggestion is that *t* is a singular term only if the following conditions are satisfied:<sup>7</sup>

1. For each sentence ‘F*t*’ in which *t* occurs, the inference from ‘F*t*’ to ‘There is something such that F(it)’ is valid;

2. For any sentences 'Ft' and 'Gt', the inference from 'Ft' and 'Gt' to 'There is something such that F(it) and G(it)' is valid.
3. For any sentences 'Ft' and 'Gt', the inference from 't is such that F(it) or G(it)' to 'Ft or Gt' is valid.

Other conditions will be added to these shortly.

Now, assuming for the moment that these conditions are workable, or that they can be so emended that they are, what reason is there to assume that they will pick out the category of singular terms? We might well go through them, as Dummett does, and note, for example, that (2) excludes expressions like 'someone'; (3), 'everyone'; and so forth. But it is not clear that the fact that these conditions pick out what we *intuitively* regard as singular terms is sufficient. The question of most relevance is rather: What reason have we to think that these conditions pick out a *philosophically interesting* class of expressions at all? If one is to be able to claim, on Frege's behalf, as it were, that the category of singular terms is a fundamental one, capable of grounding an explanation of the general notion of an Object, then some intuitive characterization of that category is needed. Already, the criteria may easily seem rather subtle and complex; further emendation is unlikely to change that fact for the better.<sup>8</sup>

This objection is neither uncommon nor misdirected. Its proponents do, however, overlook the fact that the conditions have a clear intuitive motivation, though that has not always been made clear by those attracted to accounts like Dummett's. The fundamental idea is just that singular terms are *scopeless* with respect to the propositional connectives. Of these conditions, (2) and (3) plainly reflect that idea. That (3) does so is obvious. That (2) does so is perhaps not so immediately apparent. But Dummett could well have had, in place of (2):

- 2'. For any sentences 'Ft' and 'Gt', the inference from 'Ft' and 'Gt' to 't is such that F(it) and G(it)' is valid.

Since any sentence containing a given singular term must satisfy (1), the inference from ‘a is such that F(it) and G(it)’ to ‘There is something such that [it is such that] F(it) and G(it)’ must also be valid; hence, any singular term must also satisfy (2), on this version. It is, furthermore, unlikely that (2') would exclude anything not excluded by (2), since the truth of the conclusion of the inference described in (2) will require the truth of some sentence of the form of the conclusion of (2'); in general, it can be only the conclusion of (2') whose truth grounds that of the conclusion of (2).

Together, these two conditions exclude most types of quantifiers, as a little experimentation will show. Neither rules out quantifiers like ‘Nothing’ or ‘No-one’. Condition (1) is intended to do so, on the ground that any sentence containing a singular term must allow existential generalization at the argument place occupied by the singular term. This condition, however, presents an immediate difficulty. Any singular term is going to be able to occur in a sentence like ‘t does not exist’. And, of course, the inference from ‘t does not exist’ to ‘There is something such that it does not exist’ is not valid. Some sort of emendation of Dummett's conditions is, therefore, required.<sup>9</sup>

Conditions (2) and (3), however, reflect only part of the idea that singular terms are scopeless with respect to conjunction and disjunction.<sup>10</sup> On the same ground that we introduce (2') and (3) , then, we may require that every singular term satisfy the following two conditions:

2\*. For any sentences ‘Ft’ and ‘Gt’, the inference from ‘t is such that F(it) and G(it)’ to ‘Ft and Gt’ is valid.

3\*. For any sentences ‘Ft’ and ‘Gt’, the inference from ‘Ft or Gt’ to ‘t is such that F(it) or B(it)’ is valid.

Expressions like ‘Nothing’, ‘No-one’, and ‘No dog’ will fail to satisfy either of these conditions. Condition (1) is therefore redundant, since it serves only to exclude such expressions.

Similar difficulties, one might wish to suggest, arise from a different quarter. We have, in these conditions as they now stand, no means for distinguishing extensional from intensional contexts.<sup>11</sup> We must

thus consider, as candidate sentences in which a singular term may occur, ones like ‘N believes that t is F’.

These sentences may create difficulties for reasons closely connected to that just discussed. Namely, ‘N believes that t is F’ does not entail that *t* exists. Our having eliminated condition (1) does not free us from this difficulty: The inference from ‘N believes that t is F’ and itself to ‘t is such that N believes that it is F and that it is F’ may not be valid; it will not be if the latter is, as it may well be, taken to entail the existence of *t*. Moreover, it is not obvious that ‘t is such that N believes that it is F’ to ‘N believes that t is F’ is valid, either: For the former might well be taken to be a *de re* attribution, while the latter is *de dicto*. Is there not then another problem for Dummett’s conditions here?

I do not intend to argue with these two claims here. I am inclined to think neither is correct, but I am not going to ground the acceptability of the characterization I am proposing upon such debatable claims. (It would be entirely out of the spirit of the project to do so.)

We must, in any event, make some remarks about which sentences are to be admitted into the domain of the quantifiers ‘For any two sentences...’, which appear in the above conditions. For, surely, we must recognize that the same *typographical* expression may occur with a different meaning (and even a different logical type) in different sentences. We thus need to stipulate, initially, that these conditions be applied to a determinate class of sentences. They therefore serve, for the moment, to characterize what it is for an expression to be a singular term *with respect to* a given class of sentences.

Some conditions regarding the admissibility of such classes of sentences need to be stipulated, however. The class of sentences in question cannot be such that whether the sentences in it satisfy the conditions does not depend upon the particular expression in question. For example, the unit class or the class containing only the sentences ‘Everyone is over 5 inches tall’ and ‘Everyone is over 6 inches tall’ will trivially satisfy the conditions (where ‘everyone’ is the expression in question). We shall thus require that the class in question not be trivial in this way. Moreover, it seems best to require that the class be closed

with respect to the inferences described in the conditions themselves: So we shall also make this requirement on any admissible class.

Having restricted ourselves to the characterization of classes with respect to which a given expression is a singular term, we can now reconsider the difficulty posed by intensional contexts. If either of the two points raised in objection are correct, then it follows that no sentence in which a given expression occurs in an intensional context is a member of a class with respect to which the expression is a singular term. It might be said that this consequence is fatal to the characterization, but it is not so bad as it might seem.<sup>12</sup> However we handle such contexts, in a semantic theory, we shall have at our disposal an explanation why these inferences are not valid: Perhaps it is illusory that there are such sentences as these problematic ones;<sup>13</sup> perhaps the problem is that singular terms in intensional contexts do not have their ordinary referents, as Frege would have it.

Suppose, for the moment, that we adopt Frege's sort of account. It is then open to us to hold that, while these 'special' contexts constitute an exception to the conditions laid out, it is perfectly explicable why they should do so. We shall want to recognize a class of singular terms which refer to the Senses of names, and, in an intensional context, an expression refers to its 'indirect referent', its Sense. The inference would be valid were the name, when it occurs with wide scope, taken to refer to its Sense, rather than to its ordinary referent. Thus, while singular terms do also occur as singular terms in intensional contexts, they do not have the same reference as they have when they occur outside such contexts: It is thus not surprising that the conditions laid out should not apply there.

That is not so severe a difficulty, if one holds in mind the project before us. Our task is to explain the general notion of an Object in terms of the notion of a singular term. The fact that we exclude some sentences in which an expression functions as a singular term does not threaten our ability to give this explanation. We are not, that is, unable to characterize successfully the class of singular terms themselves

and the sentences in which they paradigmatically function as singular terms. To do so would be sufficient for our purposes.

Having thus set aside the problems posed by intensional contexts, we can restate the conditions we have yet laid out as follows:

An expression  $t$  functions as a singular term with respect to a class  $C$  only if:

I.  $C$  is a class of sentences, each of which contains the expression  $t$ , which is closed under the inferences described in (II) and (III), and which is non-trivial; that is, there is an expression  $t^*$ , which can meaningfully be substituted for  $t$ , such that the class  $C^*$ , which contains all sentences in  $C$  with  $t^*$  substituted for  $t$ , does not satisfy conditions (II) and (III).

II. For all sentences 'Ft' and 'Gt' in  $C$ , the inferences:

(a) from 't is such that F(it) and G(it)' to 'Ft' and 'Gt'

and

(b) from 't is such that F(it) or G(it)' to 'Ft or Gt'

are valid.

III. For all sentences 'Ft' and 'Gt' in  $C$ , the inferences

(a) from 'Ft and Gt' to 't is such that F(it) and G(it)'

and

(b) from 'Ft or Gt' to 't is such that F(it) or G(it)'

are valid.

Obviously, these are much in the spirit of Dummett's conditions. I regard them, in fact, as expressing better what he himself probably intended.

## 2. Problems Posed by Predicates

These conditions remain only necessary ones. They exclude quantifiers and expressions like ‘A policeman’, when such expressions function as quantifiers in sentences which contain ordinary first-level predicates—e.g., ‘A policeman is a hero’. But they do not exclude such expressions as ‘undetected murders’ (or, for that matter, ‘a policeman’) when they function as *ordinary predicates* either in otherwise simple sentences—e.g., ‘Harry is a policeman’—or in sentences in which they are the subjects of second-level predicates—e.g., ‘Undetected murders are rare’. Dummett notes both of these difficulties with the initial three conditions,<sup>14</sup> and the latter has attracted some additional attention. We shall discuss both of them here.

Let us first consider the latter problem. As Wright puts the point, the conditions so far enunciated at best characterize when an expression can rightly be seen as the *subject* of a sentence. That is, they characterize a class of sentences as one in which a given expression occurs as an expression of level  $n$ , with predicates of level  $n+1$ .<sup>15</sup> What the conditions so far do not do is distinguish a class of sentences in which an expression of, say, level 2 (a quantifier) is predicated of an expression of level 1 (an ordinary predicate) from one in which an ordinary predicate is predicated of a singular term (an expression of level 0).

To resolve this problem, Dummett proposed a test which purported to distinguish first-order from second- and higher-order- quantification. This test, however, proved not to give the right results in all cases, though it does serve when the quantifier in question has the widest possible scope. As Hale noticed, however, that is all Dummett’s conditions in fact require.<sup>16</sup> These conditions contain an initial occurrence of an existential quantifier, being of the form ‘There is something such that  $F(it)$  [and  $G(it)$ ]’. This constraint then reads:<sup>17</sup>

These conclusions can never be such that requests for further specification (‘What is it that is  $F$  and  $G$ ?’) can lead to a situation in which further requests for specification are grammatically well-formulated but nevertheless evidence misunderstanding.

The idea is quite simple: Any existentially quantified sentence allows requests for further specification to be made. And, in fact, in English, there are sentences which are ambiguous between a first-order and a second-order reading. For example, from ‘A policeman is a hero’,<sup>18</sup> we may infer ‘There is something such that it is a hero’. The latter sentence then inherits the ambiguity of the former. If one asks, ‘What is it that is a hero?’ one may receive the answer ‘A policeman is a hero’. If one further asks, ‘Which policeman is a hero?’ one may be told, say, ‘Inspector Clouseau’; if so, the quantifier was first-order. But one may be told, ‘No, I meant policemen in general’; it is this reaction which, according to Dummett’s test, marks the quantification as second-order. A series of requests for further specification has led to a situation in which a further request, while grammatically in good order, nevertheless evidences misunderstanding.

We do not have such existentially quantified sentences as conclusions of the inferences required by our conditions. It would be possible to reformulate the above constraint in such a way as effectively to reintroduce them. But we need not do so. In fact, though it was natural for Dummett to formulate his constraint as he did, the reference to quantification is unnecessary. For it must be required that answers to requests for further specification bear some strict relationship to the sentences from which the existentially-quantified conclusions were originally inferred, if the constraint is to be workable.

Suppose that the (quantified) sentence in question is, ‘There is something such that it is a hero’. The ‘request’ is then: What is it that is a hero? Since the sentence could have been inferred either from ‘The greatest policeman in all of France is a hero’ or from ‘A policeman (in general) is a hero’, and since either would constitute an answer, the application of the constraint requires that the answer to the ‘request’ be suitably related to the premise of the original inference. Otherwise, the application of the condition would suffer from just the ambiguity which we are trying to resolve. However ‘suitably related’ might have been spelled out, it is rather simpler to require (and so far as I can tell, it has all along implicitly been required) that the initial answer should be precisely the instantiation of the existentially-quantified sentence by the expression whose status as a singular term is in question: I.e., in this case, ‘The greatest policeman in

France is a hero' or 'A policeman is a hero'. To present the constraint as one on levels of quantifiers is thus to make an unnecessary detour.

We can therefore reformulate the constraint so as to apply directly to the conclusions of the inferences described in conditions (II) and (III) above:<sup>19</sup>

CONSTRAINT: The conclusions of the inferences described in conditions (II) and (III) can never be such that requests for further specification (e.g., 'Which t is it that is F and G?') can lead to a situation in which such a request is grammatically well-formulated but nevertheless evidences misunderstanding.

Our constraint is thus the same as Hale's emended version of Dummett's, but makes, again, no unnecessary detour through the quantifiers: As argued, even if the constraint is formulated in terms of quantification, it must be applied to, e.g., 't is such that F(it) and G(it)' at the next stage, for this sentence must be the first 'answer' to the 'request'.

We have thus managed to exclude expressions like 'undetected murders' and other predicative expressions like 'a policeman' from the category of singular terms, when those expressions function as grammatical subjects, that is, when some second-level predicate like 'rare' is predicated of them. We have not, however, yet found a criterion which will distinguish such expressions, when they function as ordinary predicates, from singular terms. For consider the sentence, as harsh as it may sound, 'A policeman is such that Tom is it' (i.e., 'A policeman is what Tom is'). We may sensibly ask, 'Which policeman is Tom?' And, in principle, an answer is possible: E.g., 'The one who walks the beat [is Tom]'. (Whether we can always, in principle, reach a stage when an answer is not possible is unclear. But one hardly wishes to rest the characterization on such a claim.) Other predicates, like 'white', are not excluded either, as is easily seen. We thus need some additional condition which will distinguish predicates, in their most basic use, from singular terms.

Dummett's proposal is that we should appeal to a version of Aristotle's dictum that a substance has no contrary: An Object has no contrary; a Concept does.<sup>20</sup> The rationale behind this proposal is, again, not just that it serves the purpose for which we want it. There is, as earlier, independent motivation. Given any sentence at all, we may form an expression, a so-called complex predicate, by omission of any number of occurrences of any expression in that sentence. Expressions of this sort are analogous to open sentences and may justifiably be called, as Frege called them, 'incomplete', as they are actually formed by omission of an expression from a complete sentence.<sup>21</sup>

What is supposed to mark an expression as a predicate is, then, that, given any sentence 'Ft' from which it may be extracted, it is always possible to extract, from the sentence 'It is not the case that Ft', a predicate which is its contrary, i.e., 'not-F'.

This explanation of the rationale for the Aristotelian condition has proceeded by appeal to our pre-existing notion of a predicate: We must now remove that appeal and may do so as follows. It is of course true that we may form a new expression by omission of any expression from a given sentence in which it occurs; and, we may form an expression which is the contrary of the omitted expression by making a similar extraction from the negation of the original sentence. For some of the expressions which pass the earlier tests, however, this process of construction of a contrary leads to construction of another expression which *also* passes those tests. That is, some of these expressions have contraries which are expressions of the same kind. We may therefore justifiably conceive of both the original expression and its contrary as 'incomplete', even though only one may arise essentially from this process of extraction. The expressions in which we are interested here, though their 'contraries' may be introduced, do not have contraries that pass the earlier tests, which are expressions of the same kind. Such an expression is one which can not justifiably be conceived of as incomplete, as arrived at by a process of extraction, nor be said to be analogous to an expression so constructed. Rather, it is these expressions that we call 'singular terms', occurrences of which must be extracted to form the simplest expressions that may be conceived of as incomplete.

A single example should be sufficient to show that this principle does what is asked of it. It should be clear that if a predicate, say 'white', passes the earlier tests, then its contrary, say 'not white', will also do so. Now, we may introduce an expression '#Socrates' by means of the following sort of definition:<sup>22</sup>

'F(#Socrates)' is true if, and only if, 'F(Socrates)' is false.

But '#Socrates' fails, for example, to satisfy condition (Iia): '#Socrates is such that it is tall and thin' is true if, and only if, Socrates is not tall-and-thin; '#Socrates is tall and #Socrates is thin' is, on the other hand, true just in case Socrates is not tall and Socrates is not thin. The former does not, therefore, imply the latter.

Wright objects to the Aristotelian Principle on the ground that, unless we have some way of excluding sentences involving second-level predicates, then first-level predicates will have no contraries either. A simple example of such a sentence is 'Everything is white'. If we substitute 'not white' for 'white', we will not get a sentence that is true if the original is false. It is natural to respond to Wright that we already have, at our disposal, a means for distinguishing such sentences; and Dummett would seem to have just such a response in mind. When he frames the Principle in its final form, he explicitly restricts the question whether an expression has a contrary to whether it has a contrary with respect to expressions that pass the initial, inferential criteria. But the way he does so does not solve the problem. His criterion reads essentially:<sup>23</sup>

An expression  $t$  is not a singular term if, for each sentence 'F( $t,s$ )' in  $C$ , also containing an expression  $s$  that passes the earlier tests for being a singular term, we may justifiably assert that there is something such that F(anything, it) if, and only if, it is not the case that F(that thing,  $t$ ).

However, sentences like 'Everything Tom owns is white' contain expressions which pass the earlier tests, namely 'Tom' and 'white', and 'not white' is not a contrary of 'white' with respect to such sentences. Our schema 'F( $t,s$ )' is: Everything  $s$  owns is  $t$ . Where  $t$  is 'white', we cannot assert that there is something such

that: Everything anyone owns is that thing if, and only if, it is not the case that everything she owns is white. 'Not-white' is the only plausible candidate; and it will not do.

What we should like to do is to restrict consideration to sentences which contain *no* expression which fails to pass the earlier tests for being a singular term (i.e., no quantifiers). This strategy faces both practical and theoretical difficulties. On the practical side, a sentence like 'Tom is tall' contains the copula, which is unlikely to meet the earlier tests; and many other expressions, like prepositions, will pose similar problems. On the theoretical side, we have, so far, no motivation, once again, for such a restriction of our attention. We can solve the former problem by means of the following sort of proposal. We are to consider, in applying the Aristotelian Principle, no sentence containing an expression that does not pass the earlier tests *but can meaningfully be replaced by an expression which does*. Such a restriction would essentially limit attention to quantifier-free sentences, as needed. But it remains unclear with what right we make such a restriction.

Fortunately, a solution to the difficulty lies close to hand. If an expression *t* is a singular term with respect to some class *C* of sentences, then there will in general be many other classes with respect to which it is not a singular term. In general, it may be possible to enlarge the class *C* to a class with respect to which *t* is not a singular term, by adding sentences in which the same (typographical) expression has a different use. What should *not* be possible, however, is for us to take a class *C* with respect to which *t* is a singular term and, by *removing* sentences from it, create a nontrivial class *C\** (i.e., one passing condition (I)) with respect to which *t* is not a singular term. That is, if *t* is a singular term with respect to some class *C*, it should also be a singular term with respect to each nontrivial subclass *C\** of *C*.

Conversely, if there is a nontrivial class *C\** with respect to which an expression *t* is not a singular term, it should not be possible to enlarge to a class *C* with respect to which it is. The reason is simple. We require relativization to a class of sentences to distinguish different uses of the same expression. But we still want to be able to say that an expression *t* is a singular term as it functions in some limited range of

sentences in the class C without the need explicitly to relativize: It is a singular term with respect to the largest class containing these sentences that satisfies the conditions.

It would be possible to apply this idea directly, in the form of a requirement that there be no subclass  $C^*$ , of a class C with respect to which t is a singular term, with respect to which it is not.<sup>24</sup> But rather than consider such a roundabout principle, we instead focus our consideration upon a particular class of sentences  $C^*$ , constructed, in each case, from a class C not yet excluded. If, in particular, an expression t is not a singular term with respect to a class  $C^*$  formed in this way, then it is not a singular term with respect to any larger class C, containing  $C^*$ . We thus lay down our version of the Aristotelian Principle as the condition:<sup>25</sup>

- IV. (a) Let  $C^*$  be the class of sentences formed from C as follows: Let C' be the largest class containing C with respect to which t passes conditions (II) and (III). Delete from C' any sentence containing an expression that does not pass conditions (II) and (III) but can meaningfully be replaced by an expression which does (i.e., delete any sentence containing a quantifier).

Effectively, this half of condition (IV) requires that the class  $C^*$  contain all quantifier-free sentences in which t occurs.<sup>26</sup>

- IV. (b) The expression #t defined as the contrary of t fails to satisfy at least one of condition (II) and condition (III), with respect to the class  $D^*$  arrived at by substituting, in any sentence 'Ft' in  $C^*$ , #t for t.

If we define a *simple* sentence as one in which no quantifier occurs, condition (IV) reads:

The expression t is a singular term only if the expression #t, defined as its contrary, fails to satisfy at least one of condition (II) and condition (III) with respect to some (otherwise) simple sentences; with respect, that is, to sentences 'F(#t)' and 'G(#t)' where 'F(t)' and 'G(t)' are simple sentences.

At least, that is the idea.

Having thus excluded predicates from the class of singular terms, we can now say that an expression  $t$  is a singular term with respect to a class  $C$  if and only if conditions (I), (II), and (III), subject to the constraint, and condition (IV) are satisfied. There is, I suggest, good reason to suppose that this account does in fact suffice to categorize a philosophically interesting class of expressions, which, at least, is sufficient to explain the hierarchy of levels necessary for the application of Frege's symbolic notation to English. For the expressions so picked out have both syntactic properties characteristic of singular terms in Frege's formalism. First, they are scopeless with respect to the propositional connectives 'and' and 'or'; and secondly, extraction of an expression from a quantifier-free sentence by removal of a singular term always gives rise to an expression which is scopeless; i.e., which is a first-level predicate; whereas extraction of a predicate from a sentence (may not give rise to -An expression which is scopeless. Singular terms do not and can not arise by this process of extraction., For they are the complete (sub-sentential) expressions.

### **3. The Prospects of International Platonism**

The characterization of singular terms just given is, of course, framed in English and, as written, applies only to English expressions. It is, however, like Dummett's original characterization, intended as a contribution to a characterization of a *general*, language-neutral notion of a singular term. It is essential that we be able to defend such a notion: If the notion of a singular term is to ground an explanation of the general notion of an Object, then, if we have no language-neutral account of the category of singular terms, we have no means by which to explain a language-neutral notion of an Object. At best, we shall be able to explain the notions of an English-object, a Hindi-object, and so forth. We should thus be faced with the possibility that Number-theoretic Platonism—the view that numbers are Objects—should be true with

respect to, say, English, but not with respect to, say, Hindi. What Wright calls 'International Platonism' would thus be left to be defended by the investigation of one language at a time.

Wright argues, with respect to Dummett's original conditions, that, if applied generally, to any language at all, they are, quite simply, circular.<sup>27</sup> The argument goes as follows. Consider, for example, Dummett's first condition, that it must be possible to infer, from any sentence 'Ft', to 'There is something such that F(it)'. Now, in order to frame this condition in such a way as to apply to another language, we need to frame a corresponding condition mentioning appropriate sentences of that language. To do so, we must identify the expression that functions as the existential quantifier in that language. But it is utterly implausible that we should be able to do so without already having some insight, as yet unexplained, into the syntactic structure of the language. Indeed, it is implausible that we should be able to do so without already knowing which expressions of the language are singular terms, and it is precisely a characterization of the singular terms that we seek.

It does not matter if there is a standard translation for the existential quantifier, as there is for German. As Wright emphasizes, the issue concerns not our practical capacity to identify the existential quantifier, but our ability to recognize the adequacy of any proposed translation. The issue is thus whether we could possibly justify a particular such translation without appeal to some antecedent understanding of the nature of existential quantification, which surely rests upon our understanding of the category of singular terms.

Whatever the merits of this sort of argument as an objection to Dummett's original conditions, it is, I suggest, no objection to the view advanced here. Where in conditions (I)-(IV), laid out above, is there any appeal to quantification? The only expressions we must be able antecedently to identify in order to apply these conditions are the symbols for conjunction and disjunction, a device for altering the scope of an expression, and the means for requesting further specification. We also must be able to identify a means for

the definition of the 'contrary' of an expression. There is no particular difficulty in the identification of conjunction and disjunction. Application of the standard introduction and elimination rules should suffice.

It may be suggested, however, that an appeal to quantification is hidden in one of two remaining places in these conditions:<sup>28</sup> The identification of the devices for handling scope or the means for defining the contrary of an expression may require some appeal to quantification.

The first difficulty concerns whether the identification of the device for handling scope will require the identification of the quantifiers. Quantifiers, after all, are precisely the expressions that introduce a need for scope-distinctions into the language. Now, while it is entirely correct that, if the language contains no quantifiers (or other such operators), there will be no particular need to have a means in the language for distinguishing the scope of an expression, the fact that, so far as the validity of inferences is concerned, there is no need for there to be a device in the language for handling scope does not entail that, if there are no quantifiers, there could be no such device. Were such a device only possible in a language containing quantifiers, it would yet not follow that we should need to identify quantifiers to identify this device. But if, on the other hand, such a device *can* exist in a language not containing quantifiers, and if we can identify it in such a language, it *does* follow that we do not need to identify quantification to identify it.

While it is a means for altering the scope of an expression we have said we wish to identify, what is actually required for the application of conditions (II) and (III) is the identification of a device for forming a new predicate out of (two) other predicates: For example, '...is tall and thin', or '...is tall or thin' from '...is tall' and '...is thin'. As in languages that do contain quantifiers, we may explain predicate-formation in terms of the extraction of a complex predicate. Whether or not it is correct to say, as Dummett does, that we need not recognize complex predicates, for the purposes of semantic analysis, unless the language contains quantifiers, it again does not follow that, unless the language contains quantifiers, such predicates can not be formed.

Consider a language not containing quantifiers, but which does contain a number of expressions ‘a’, ‘b’, ‘c’, and so forth, and other expressions ‘F’, ‘G’, ‘H’, and so forth, and the symbols (we identify as) ‘&’, and ‘∨’. Each sentence of this language consists of one or more ‘basic’ sentences—consisting of one of the expressions ‘a’, ‘b’, etc., preceded by one of the expressions ‘F’, ‘G’, etc.—conjoined, if there is more than one basic sentence in the sentence, by the expressions ‘&’ and ‘∨’.

Masters of first-order logic that we are, we can introduce into this language a new expression ‘R’ by means of a definition like: For all x, Rx if, and only if, Fx & Gx. Such a means of definition is not open to the speakers of this simple language; but even if they cannot *define* an expression in this way, this does not prevent them from introducing such an expression. That is to say, they may introduce an expression into their language in a way which effectively defines it as having the same meaning. For example, if they use the expression ‘F’ to mean ‘tall’ and ‘G’ to mean ‘thin’, they can *so use* the expression ‘R’ that any sentence ‘Rt’ is true if, and only if, ‘Ft & Gt’ is true. Furthermore, when an utterance of a sentence ‘Rt’ is met with a look of consternation, our creative speaker can repeat, ‘Rt ... Ft & Gt’, as it were, *explaining* what ‘R’ means.

There is thus no bar, so far as I can see, to the introduction of such a predicate into a language that lacks quantifiers. If not, there can hardly be any bar to this expression’s being symbolized ‘F&G’, so that the sentence in question is simply ‘(F&G)t’. That this *is* the predicate we might symbolize as ‘F&G’ is suggested by the fact that our speakers infer ‘Ft’ and ‘Gt’ from ‘(F&G)t’; and *vice versa*. Our ability to identify this process of predicate formation thus does not depend upon our ability to identify quantifiers in the language in question, for it need not contain any.

Similar remarks apply to the definition of contraries: It is, of course, possible to define the contrary of an expression by means of quantifiers. But it is by no means necessary to do so. Just as we imagined that an expression ‘F&G’ could be introduced into the language, so we can tell a story about how an expression ‘#F’ could be introduced into the language. A sentence of the form ‘#Ft’ will similarly be ‘explained’ as

equivalent to 'not-(Ft)'. This process too can therefore be carried out in a language which contains no quantifiers. It is worth noting, however, that, in such a language, it may be carried out *only* on predicates. For the definition of the contrary of a singular term will introduce an expression with scope, i.e., a quantifier (if, that is, predicates of the form 'F&G' have been introduced, as above). If the contraries of singular terms can intelligibly be introduced into a language, then, at that point, anyway, the language is no longer quantifier-free.

The point should not be misunderstood. It does not entail that we shall be unable to apply condition (IV) in a language which is quantifier-free. What it shows is just this: That, if there really are no quantifiers in the language, no expressions that have significant scope, then the contraries of *singular terms* either cannot intelligibly be introduced into the language or their introduction will *ipso facto* introduce quantification. Should we attempt to define, for the speakers of such a language, the contrary of what is, in fact, a singular term, we should find consternation or simple misunderstanding (unless we should be fortunate enough to teach them, in the process, about scope). A singular term in a language that is quantifier-free is *truly* one that has no contrary.

This account of how the conditions may be applied to a language that contains no quantifiers shows that the application of these conditions does not require that we identify any quantifiers. It serves, also, to explain how, in a language that contains no quantifiers, singular terms are distinguished from predicates. In such a language, that is, there is a natural distinction to be drawn between two sorts of expressions (and the things to which they refer): There are names of things and names for properties of those things. The properties are the things which, as it were, come in pairs; the things themselves do not. Following Dummett, I am suggesting that it is from this simple distinction in this simple use of language that our notion of an object is born.

But we should not celebrate too soon. This argument may suggest it, but it does not show that, in a language that does not contain quantifiers, the conditions can also be applied without our antecedently

identifying those quantifiers. That a problem looms here is shown by the fact that the most natural accounts of this process of defining new predicates we might suggest all flounder on *just* this distinction. We cannot say, for example, that new predicates may be defined by the simple, substitutional principle we considered above, that 'Rt' is true if, and only if, 'Ft & Gt' is true. The reason is precisely that certain expressions in this language have scope. (The definition would not work for example, if 't' were the existential quantifier.) Nor, on the other hand, can we say that the definition is to be limited to expressions that do not have significant scope, since it is precisely the difference between expressions which do and expressions which do not have scope that we are trying to explain. (We can not, that is, say that 'R' is the predicate 'F&G', if 'Rt' is true if, and only if, 'Ft & Gt' is true, whenever 't' is an expression that does not have significant scope. Not only is that what we are trying to explain, it is, for us, explained by the failure of such an equivalence.)

The situation is not, however, desperate. That we should have no difficulty applying our conditions if we *did* know which expressions have scope quite plainly does not mean that we cannot apply them unless we *do* know. Imagining ourselves as field linguists, for the moment, we might observe just the same sort of process of the introduction of new predicates in this language that we observed in the quantifier-free language. Of course, its applicability would be limited to certain expressions—namely, to the singular terms—but, in order to get some grip on the process itself, and what it is intended to accomplish, we need not have any complete, antecedent account of *just which* expressions are intended to be included and which are not. Having settled upon some characterization of this process, and so of the complex predicates introduced by means of it, we shall then be able to apply the conditions to characterize, in this language, the difference between singular terms, predicates, and quantifiers. This characterization could then itself be checked against the inferences the speakers of the language are prepared to accept.

The issue here does not, of course, concern our practical ability to make such an identification should we ever be faced with a need to do so: It concerns our ability to satisfy ourselves that any particular such characterization is correct. But does not Wright's argument resurface, then? If there are competing

such characterizations and the decision between them can only be made on the basis of the identification of quantifiers, then in order to determine which such characterization is *correct*, we should need to identify the quantifiers. But such an argument should not be confused with the sort of view against which I argued above—that the conditions can not be applied *at all* without reference to the quantifiers. Wright does not emphasize it, and I do not know that he would agree, but I suggest that it is *one* question whether the conditions can be applied determinately without reference to the quantifiers, without some prior characterization of them; it is a *different* question whether they can be applied *at all* without such reference.

Perhaps we should pause to restate this point. Wright's argument, as initially interpreted, was that Dummett's conditions could not be applied to any language, other than the language in which they are framed, without some antecedent understanding of the syntactic structure of that other language. I have argued here that a similar objection simply does not apply to the characterization I have proposed. But Wright's argument does not end there: In the end, he leaves his problem in 'the philosophical minefields concerning translation',<sup>29</sup> indicating, it seems to me, a concern with some indeterminacy. He is suggesting, it seems to me, that, whether or not circularity is a problem, any such account is likely affected by some indeterminacy—that we will not be able to get, as it were, a determinate class of singular terms out of the conditions, but rather will have competing such classes. For the moment, I have suggested that this point may well be correct; the 'holistic' account I gave of how we might in fact apply the conditions would seem likely to be vulnerable to such indeterminacy. But the important point, which I wish now to emphasize, is simply that this problem, if it is a problem, is quite a different one from the initial problem. It is one thing to suggest that the conditions are utterly inapplicable to languages other than that in which they are framed; it is another entirely to suggest that they might not be *determinately* so applicable.

Let us consider this sort of problem in the abstract. Suppose that we have alternative characterizations of the means of predicate-formation. The application of the conditions in terms of one of these characterizations may give rise either to a wider or to a more narrow class of singular terms than that in terms

of the other (or, of course, one that cuts across the original). Suppose the former class is narrower than the latter, and that neither is contradicted by immediately available evidence. By hypothesis, therefore, there is a whole class of sentences of the form 'Rt' which the speakers of this language treat (as a practical matter) as equivalent to sentences of the form 'Ft & Gt', where t is some expression classified as a singular term by the latter but not by the former account. That is to say, on the former account, there are expressions, of which, say, t is one, such that, for a wide class of predicates (namely, just those which the latter account classifies as means of altering scope), such an equivalence holds. The latter account, that is, explains this equivalence by classifying t as a singular term and classifying the predicate 'R' as equivalent to 'F&G'. Conversely, the former account identifies certain predicates 'Q', which, with respect to the more narrow class of terms it identifies, are treated as equivalent to (what we would write) 'F&G'. And certain of the terms so classed by the latter account fail to meet one of the conditions with respect to these equivalent predicates.

It is not at all obvious that such a situation might really obtain. Even if such a situation did obtain, the two accounts may not actually conflict: Perhaps there are in fact *two* means of forming complex predicates in this language, and the two accounts can it were, be conjoined to yield a single class of terms.

But suppose that they did conflict. How are the alternative theories to explain the validity of the inferences whose very validity makes the alternatives possible? How, for example, is the former theory to explain the validity of the inference from 'Rt' to '(F&G)t', if it does not class t as a singular-term? There are a variety of possibilities here. It might be possible to explain the validity of such inferences in terms of some aspect of the meaning of the expression in question. Or, perhaps, there is not actually an inference being made at all: Perhaps the apparent inference is actually a result of the application of some generally available but nonetheless collateral information.

Now, of course, the disagreement between the two accounts *could* be resolved in terms of some antecedent characterization of the quantifiers. But what seems required to decide between them is not an

‘account of the distinctive features of existential quantification’; nor is it some principle for identifying the quantifiers. What must be settled here are, rather, questions concerning whether, if an expression is classified as of a particular logical type, a workable theory of meaning for the language can still be constructed. More specifically, the disagreement between these two theories would seem to come down, in the end, to a question about how the theories account the validity of certain inferences; or, how they are to account for the readiness of speakers the language in question to *make* certain inferences. The question in the case at hand, is whether ‘Rt’ really does entail ‘Ft & Gt’ (and vice versa); or whether this inference really relies upon hidden premises; or, if it does not, whether its validity is formal or dependent on the specific meanings of these expressions.

Thus, while arbitration of the claims of competing characterizations of the means of predicate-formation (and so of the singular terms) in a language could be carried out if we had some insight into the syntactic structure of the language, a charge of circularity would be misplaced. Such decisions can yet be made in terms of the viability of theories of meaning constructed in terms of the syntactic categories to which these competing characterizations give rise. It seems plausible that a decision between the characterizations could be made if we had some account of the notion of *inference*. Plainly, the characterization given above, the conditions as initially framed, assumes that there is some such account to be had. What we have now seen, though, is that the notion of inference may well have yet another role to play. However that may be, it may just not be possible to settle all disputes over the characterization of the means available for alteration of scope. There is, of course, a well-known argument that the notion of inference (or, rather, the corresponding notion of analyticity) upon which I have relied above suffers an essential indeterminacy. Thus, it may well be that, without reference to some prior characterization of the quantifiers in a given language (and, hence, to some prior characterization of the singular terms), the application of the conditions I have laid out above is indeterminate. If so, however, we need not abandon the thesis that the notion of an Object is to be explained in terms of the notion of a singular term. Rather, we shall have shown that the

notion of an Object *also* suffers an essential indeterminacy. So far as I can tell, this view is much like Quine's." The casualty of this sort of indeterminacy is not Frege's foundational thesis but ontological absolutism.

I am not going to pursue any further the suggestion that such problems could be resolved by settling questions about indeterminacy, specifically, the indeterminacy of that linguistic knowledge which informs speakers' judgments about the validity of inferences. Nor shall I argue at this point about the determinacy or otherwise of linguistic knowledge. But perhaps it is worth remarking that, even if linguistic knowledge, in so far as it informs judgments of validity, is indeterminate, that does not on its own entail that the classification of singular terms is itself indeterminate: the indeterminacy must be of a certain kind if that conclusion is to follow. It is possible, that is, that what counts as *linguistic* knowledge should be indeterminate—that, for example, the *meanings* of the quantifiers should be indeterminate—but that the logical type of an expression should *not* be.<sup>30</sup>

In any event, the problem of ontological relativity does not threaten, but rests upon, Frege's foundational thesis.

#### **4. Syntax, Semantics, Meaning, and Singular Terms: Or, What is the Point?**

The characterization I have given of singular terms is intended to be a 'broadly syntactic' one: That is, the category of singular terms is intended, broadly speaking, to be a syntactic category. Have we not, however, seen that it is not a syntactic category at all? For the determinate application of the conditions to other languages, at least, requires us to resolve certain semantic issues in order to decide between different characterizations of the means of predicate-formation (and so of the mechanisms available in the language for altering scope). The determinate application of these conditions is going to require the resolution of issues in the theory of meaning: Is it not, then, simply false that the characterization is a syntactic one at all, however broadly 'broadly' is taken?

Furthermore, we assumed, even in our characterization of singular terms in English, that we knew how to pick out the devices, in English, for altering scope. We thus would seem to have assumed that the issue, admittedly a meaning-theoretic one, how these devices are to be picked out in English is resolved by the understanding of English we already have. That is, our understanding of these devices rests upon our inchoate grasp of the same sorts of semantic facts to which we should have to appeal to characterize, for example, the means of predicate-formation in some other language.

The characterization is, indeed, intended to provide a syntactic characterization of singular terms. But it is *not* intended to be a *purely* syntactic characterization. We are not, as should have been clear, trying to provide a categorization of singular terms that can be applied without any reference to other aspects of the language in question. (As was mentioned earlier, for example, the notion of an *inference* occurs essentially in our conditions.) We are, rather, trying to explain how one can acquire an understanding of the notion of a singular term, of an expression of a certain sort, without a prior understanding of such semantic notions as that of an Object. It should now be clear that, if we suppose that someone understands how, within a certain language, to define new predicative expressions, and if we also assume that she understands the general use of the sentences of the language—what, in relatively simple cases, follows from what—we shall have no trouble giving such an explanation; similarly, if we assume that we can identify the means of predicate-formation (scope-alteration) and the valid inferences, we shall have no trouble applying the conditions.

The fact that issues in the theory of meaning arise when we attempt to apply these conditions to languages other than English shows, as was said, precisely that we have assumed a general understanding of English in framing our conditions. To say that the characterization is ‘broadly syntactic’ can thus amount to no more than that, if we assume that someone has a general and practical mastery of a given language, but no prior, explicit understanding of such semantic notions as that of an Object, the notion of a singular term can be explained to her by reference only to the validity of certain inferences that can be char-

acterized in terms of their syntactic properties. In particular, she may acquire an understanding of the Fregean hierarchy of levels—of the categories of singular terms, predicates, quantifiers, and so forth—by reflection upon how different expressions behave in inferences and how they function in ‘definitions’ of new expressions.

The notion of the acquisition of an understanding of the Fregean hierarchy of levels is itself ambiguous. We may be speaking, as in the last paragraph, of how one may acquire an *explicit* understanding of the hierarchy, or we may be speaking of how one may acquire an *implicit* understanding of it. The former is connected to a remark which Dummett makes in this connection, that the goal is to explain the Fregean hierarchy of levels so that it may be applied, by theorists, in order to reconstruct natural languages on the model of Frege’s conceptual notation.<sup>31</sup> Put in a way that is less likely to mislead, this characterization is to serve the general project of the theory of meaning: If we are going to classify expressions as being of different logical types, we need to have some explanation not only of the general notion of the type of an expression (which this account is not intended to provide), but also of the various types themselves. It is with an account which will serve this sort of purpose that we have largely been concerned. The properties in terms of which singular terms have been characterized are, as was said earlier, just those characteristic of singular terms in Frege’s conceptual notation, that is (with minor alterations), predicate logic as we now have it.

Such an account serves another purpose. The understanding of language is to be modeled, for a Fregean, in terms of a speaker’s knowledge of a theory of meaning for a given language. Part of the knowledge such a speaker has is knowledge of the logical types of the expressions of the language. It is incumbent upon semantic theory, at least on one respectable conception of it, to explain how the knowledge attributed to the speaker is manifested in her linguistic and other behavior. In particular, some account must be given of what features of the speaker’s behavior correspond to her alleged grasp of the logical types of the expressions of the language. It is here being suggested that this knowledge consists of essentially two

parts: First, a mastery of distinctions of scope, singular terms being scopeless; and, second, a mastery of the process of the formation of contraries (and, more generally, a mastery of the process of formation of complex predicates), singular terms being those expressions which do not have contraries.

The second sense, then, in which we may speak of the acquisition of an understanding of the hierarchy of levels relates to this understanding that all knowledgeable speakers of a language have. We wish to offer an explanation of how a speaker may acquire, in this sense, a grasp of the hierarchy of levels without having some prior grasp of the logical types of the entities to which various expressions in the language refer.

I suggest that, if one keeps the purpose of this sort of characterization of singular terms clearly in mind, the fact that some appeal to meaning-theoretic notions is required is not at all surprising; nor, on the other hand, is it at all threatening to the ability of the account to serve its purpose. Since, for example, we are claiming that a speaker's understanding of the distinction between a singular term and a predicate is constituted by her understanding of the validity of certain sorts of inferences, it is natural that we should assume that she knows, by and large, which inferences are valid and which are not. It is only once one has learned to infer 'A' from 'A & B', but not from 'A v B', and to infer 'A v B', but not 'A & B', from 'A', and so on and so forth, that one understands conjunction and disjunction. It is only once one has some understanding of conjunction and disjunction, of their logic, that one can come to understand the formation of such predicates as '...is tall and thin'. Similarly, it is only once one has some grasp of the logic of negation that one can come to understand the formation of such expressions as 'not-white'. It is only once one has understood all of this that one can acquire an understanding of the difference between singular terms and predicates.

The point of this discussion is just this: It is, plausibly, the notion of inference that we really need to explain finally to demonstrate that this explanation of the notion of a singular term does not appeal to foresworn semantic notions. If so, then what has to be shown is that the requisite notion of inference can

*itself* be explained without appeal to such notions as that of an Object. One worry one might have is just whether, in this characterization appeal is made, in some important way, to inferences whose validity can only be explained in terms of the notion of an *interpretation* of (or of an assignment of an Object to) a name (or free variable).

The inferences which, up to the point at which we left our story, we require our hypothetical speaker to be able to make are inferences in propositional logic. Once we look to a less impoverished language, one containing quantifiers, the situation is not nearly so neat: In order to be able to apply the conditions, we need to be able to distinguish valid inferences, involving the quantifiers, from invalid ones. That would seem merely to re-emphasize the importance of the notion of a singular term for an understanding of quantification, properly emphasized by Wright. If so, then we are again led to just the worries about indeterminacy, and so ontological relativity, discussed earlier.

But I want to suggest, in closing, that that is yet *all* to which we are led. The possibility of acquiring an understanding of a distinction between terms and predicates *in advance* of an introduction to quantification serves vividly to display that one simply does *not* require an understanding of predicate logic, of quantification, domains of quantification, and so on, to grasp the notion of a singular term (and so of an Object). Quine, and others, have rightly seen that the notion of a singular term is closely related to that of quantification; but only because it is so closely related to the notion of *scope*, and it is with quantification that scope becomes (logically) significant. That is not, again, to say that further problems do not arise, once we try to apply conditions relating to scope in a language that does not contain quantifiers: It is only to say that these further problems are *different* problems that no longer threaten Frege's foundational thesis.<sup>32</sup>

## Notes

1. For the meaning of which, see Frege's various efforts to compose a treatise on the subject, in his *Posthumous Writings*, ed. by H. Hermes, *et al.*, tr. by P. Long and R. White (Oxford: Blackwell, 1979), pp. 1-8, 126-51, and 185-96. The distinction between what we are inclined to call 'logic' and what Frege called by that name is, of course, crucial to the interpretation of his logicism.
2. Dummett, *Frege: Philosophy of Language*, 2d ed. (London: Duckworth, 1981), pp. 57-8. Further references will be made to *FPL*.
3. Crispin Wright, *Frege's Conception of Numbers as Objects* (Aberdeen: Aberdeen University Press, 1983), esp. sections v and vii.
4. See Dummett, *FPL*, pp. 59-60.
5. Willard van Orman Quine, *Word and Object* (Cambridge MA: MIT Press, 1960), pp. 51-4, 90-100; and *Ontological Relativity and Other Essays* (New York: Columbia University Press, 1969), pp. 6-11.
6. Wright, section x.
7. Dummett, *FPL*, pp. 59-60. I'll be sloppy about corners.
8. I seem to remember having read such a remark in a review of Bob Hale's book *Abstract Objects*, but can not now locate it. In any event, my own familiarity with this sort of objection derives from discussion. (The question would, of course, need raising even if it had not been raised before.)
9. It seems surprising that this difficulty has not, so far as I can tell, been discussed previously.  
It is possible to exclude *sentences* of this sort, by restricting ourselves to characterizing classes of sentences in which an expression occurs as a singular term, as we do below, in the case of intensional contexts. It is interesting, however, that this problem can be straightforwardly resolved; moreover, it helps to motivate the elimination of quantifiers from the conditions. (Note that their elimination from all three conditions is *required* to resolve this problem.)
10. The idea that singular terms should be scopeless with respect to sentential negation may provide another reason not to regard descriptions as singular terms, if any more such reasons were needed.  
The question whether singular terms have scope with respect to other sorts of operators, e.g., modal ones, is controversial. It is clear, though, that one's views on this issue can not pull much intuitive weight here.
11. Even if it were possible, I should not wish to distinguish such contexts in terms of identity, since I wish to avoid appeal to identity, for the same reasons I am avoiding appeal to quantification. On why it is not possible, see Dummett, *FPL*, pp. 199-203; and Michael Dummett, *The Interpretation of Frege's Philosophy* (London: Duckworth, 1981), Ch. 7. Note also that the difficulties to be mentioned below arise *only* in intensional contexts: Relational readings of statements ascribing propositional attitudes do not present such difficulties, but, again, this fact should not be taken as carrying any intuitive weight.
12. Indeed, Dummett feels free to set aside such contexts in his discussion of his conditions: See *FPL*, pp. 71-2.

13. As on Donald Davidson's theory, presented in "On Saying That", in his *Essays on Truth and Interpretation* (Oxford: Clarendon Press, 1984), pp. 93-108. Similar consequences arise for hybrid views, according to which propositional attitudes are always relational, notional readings being accounted for as sentential attitudes, i.e., by a Davidsonian account.
14. Dummett, *FPL*, pp. 60-1.
15. Wright, pp. 58-9.
16. Dummett, *FPL*, pp. 67-9; Bob Hale, "Strawson, Geach, and Dummett on Singular Terms and Predicates", *Synthese* 42 (1979).
17. Adapted from Wright, p. 62.
18. The constraint itself is, again, not required to exclude sentences like 'A policeman is a hero' in its quantificational reading. That is already excluded by (II) and (III). The ambiguity which motivates the constraint does not, however, arise for sentences like 'Undetected murders are rare'.
19. Recall that this will have the effect of requiring that, for any sentence 'Ft' in C, the sentence 't is such that F(t)' must satisfy the constraint. That is, we will yet be applying the condition only to expressions which occur with the widest possible scope.
20. Dummett, *FPL*, pp. 61-7.
21. It would, as Dummett argues, be a mistake to try to explain the incompleteness of *all* predicates in this way. In particular, the incompleteness of simple predicates cannot be so explained. See Dummett, *FPL*, pp. 293-4; *IFP*, pp. 249-53; 265-71.
22. The actual definition we should require here would have to be somewhat more complicated, in order to handle multiple occurrences of the expression in question.  
One could also handle this problem, for our purposes, by simply rewriting the conditions (IIa) and (IIIa) to make reference not to the conjunction of two sentences but to those two sentences, as in Dummett's original condition (2): E.g., the inferences from 't is such that F(it) and G(it)' both to 'Ft' and to 'Gt' must be valid.—These sorts of complications, which do not really affect the issue, will henceforth be confined to the footnotes.
23. Dummett, *FPL*, p. 64. It is not in fact clear whether Dummett means 'each sentence' or 'a sentence': The former seems the more natural reading, but the latter does not pose the practical problem to be mentioned next. It does, however, raise the same theoretical difficulties, and may pose practical problems of its own.
24. We actually require something a bit more complicated. Namely, that there be no larger class C' with respect to which t is a singular term such that there is a subclass C\* of C' with respect to which it is not. This is required because the class may consist only of sentences containing occurrences of quantifiers within whose scope a given predicate falls. See below also.
25. I see no reason to think there is no such largest class as that referred to in the condition. If one's doubts trouble one (as mine occasionally do), reformulate the condition to make reference to all such maximal

classes. They definitely exist.

One could also get the same effect by means of this other definition: For each sentence ‘F(t,s)’, add to the class C each sentence ‘F(t,u)’ containing an expression u that itself satisfies those conditions and can meaningfully replace s. Remove any sentence ‘F(t,s)’ which contains an expression s that does not itself satisfy conditions (II) and (III) but which can meaningfully be replaced by an expression which does so (i.e., a quantifier).—Again, we get all quantifier-free sentences in which t occurs.

This definition, however, has a marked appearance of concealing quantification by use of what is, essentially, substitutional quantification. Its equivalence with the account in fact given should *relieve* that suspicion rather than reinforce it.

26. Note that it does not require that the class contain *only* those quantifier-free sentences in C. This is important: it might be suggested that the conditions so far give us no reason to suppose that a predicate, say, ‘white’, is not a singular term as it occurs only within the scope of a quantifier. Condition (IVa), as framed, requires that quantifier-free sentences in which ‘white’ occurs be included.

Effectively, we are requiring that if an expression is a singular term, there must be simple sentences in which it occurs as a singular term. The motivation for this restriction is that it is utterly obscure why an expression should change its logical type due to inferences to whose validity its meaning is irrelevant—due, for example, to universal or existential generalization at some other argument place.

27. Wright, pp. 61-4.

28. Wright, p. 64.

29. Wright, p. 64.

30. It is not, for example, clear to what extent Davidson believes that logical form can be indeterminate, despite his belief in other forms of indeterminacy. He carefully distinguishes different senses of the thesis of the inscrutability of reference and remarks that the indeterminacy of logical form, of logical type, ‘is automatically put under greater control if one insists... on a Tarski-style theory of truth as the basis of an acceptable translation manual’ or, presumably, Theory of Meaning. See his “The Inscrutability of Reference”, in *Truth and Interpretation*, p. 228. As said at the end of section 2, giving such a theory rests upon there being a class of expressions with just the syntactic properties here required of singular terms.

31. Dummett, *FPL*, p. 58.

32. This paper dates from approximately 1989, at which time it formed part of an early draft of what became my Ph.D. dissertation. Thanks to Thomas Kuhn for discussions, at that time, of earlier drafts of the paper, and to Bob Hale and Crispin Wright for discussions of the issues themselves.