

INDIRECT DISCOURSE

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ABSTRACT

This essay consists of a critical discussion of the main theories of indirect discourse. It is first argued that the theory put forward by Frege is fundamentally inadequate. Frege views expressions in indirect speech as standing for intensional entities. But application of the substitutivity rule in accordance with Frege's theory sometimes fails to preserve truth-value. There is the problem of quantifying simultaneously into a normal and an oblique context. It is shown that Frege's theory lends a spurious precision to the question of the conditions under which indirect quotation can be said to be successful.

A truth theory meeting Tarski's criterion of adequacy is given for a simple Fregean language. It is argued that complex Fregean languages, ie. those which match the expressive power of natural language, are not truth-theoretically tractable.

The conclusion is drawn that an adequate theory must abjure reference to intensional entities and meet the demands of truth theory. Quine's theory meets the first of these requirements: he counts expressions in indirect speech as without semantic significance. But it is shown that Quine dissolves the semantic structure needed by a theory of truth. Both of the requirements are met by the theories of Geach and Davidson. Geach argues that oratio obliqua is logically superfluous and can everywhere be replaced with oratio recta. The arguments advanced against quotational theories prove to be fallacious. But Davidson's theory is prima facie more attractive than Geach's; for it counts oratio obliqua sentences as overtly exhibiting their logical form. Expressions in indirect speech play a normal semantical role: but are semantically

insulated from that to which we ascribe a truth-value. But it is shown that Davidson's theory as given is unable to deal with oratio obliqua sentences on their relational reading. In the last resort, Geach's theory seems the more viable of the two.

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INTRODUCTION

It is notorious that there is an apparent failure of extensionality associated with oratio obliqua sentences. For such sentences appear to falsify the following rule: if an expression occurring in a sentence has a reference, then that expression can be replaced salva veritate by any other expression with the same reference. Thus we are unable to infer:

Dick said that Mary Ann Evans wrote Middlemarch

from

Dick said that George Eliot wrote Middlemarch

in spite of the fact that the names "Mary Ann Evans" and "George Eliot" refer to one and the same person. In addition, oratio obliqua sentences resist existential generalization, at least where a variable inside the scope of the indirect speech verb is bound by a quantifier outside of that scope. In view of the apparent failure of the substitutivity rule, the sentence:

$(\exists x)(\text{Dick said that } x \text{ wrote } \underline{\text{Middlemarch}})$

is of dubious significance. The difficulty lies in specifying a domain over which the bound variable can be said to range.

The apparent failure of the substitutivity rule and the difficulties which attend "quantifying in" are clearly different facets of the same problem: we do not know how the expressions which make up an oratio obliqua sentence contribute towards its truth-value. And it is to this problem that a theory of indirect discourse must primarily

be addressed.

One can attempt to solve the problem by following Frege and thus introducing intensional entities as the references of expressions in indirect speech. The fundamental inadequacy of this approach to the problem is the theme of Chapters I and II of this essay. The third and final chapter consists of an investigation of three theories of indirect discourse, each of which is designed to avoid the difficulties inherent in the Fregean approach. The three theories considered ( under the heading non-intensional ) are those put forward by Geach, Davidson and Quine.

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ground property of several thinkers.

### FREGE'S THEORY OF INDIRECT DISCOURSE

#### 1. The Theory.

Frege has an explanation for the apparent fallacy of substituting  
itly associated with arithmetical sentences. The substitutivity rule  
appears to break down when it is applied to the expressions occurring  
within the scope of an indirect speech verb, that is, in an indirect context.

#### CHAPTER ONE

### FREGE'S THEORY OF INDIRECT DISCOURSE

Frege argues that pairs of expressions which have the same reference in  
indirect contexts will not be substitutable for each other in indirect contexts. And  
this substitution of one for the other in an indirect context does not  
preserve the truth-value of the whole sentence.

Two principles are fundamental to Frege's theory:

(A) The reference of an expression is determined by its sense.

(B) The reference of an expression is determined by the reference  
of its components.

It follows immediately from these two principles that the semantic rule of  
substitution that allows us to substitute expressions for each other in  
direct contexts is not applicable in indirect contexts. In indirect contexts  
the reference of an expression is determined by its sense, and, in such  
contexts, the sense of an expression is not determined by its reference.  
Thus, the sense of an expression is not determined by its reference in  
indirect contexts. This is why the substitutivity rule does not apply in  
indirect contexts. The substitutivity rule only applies in direct contexts.  
In indirect contexts, the sense of an expression is what matters, not its  
reference. This is why the substitutivity rule does not apply in indirect  
contexts.



By a thought I understand not the subjective performance of thinking but its objective content, which is capable of being the common property of several thinkers.

FREGE

#### FREGE'S THEORY OF INDIRECT DISCOURSE

##### 1. The Theory.

Frege has an explanation for the apparent failure of extensionality associated with oratio obliqua sentences. The substitutivity rule appears to break down when it is applied to the expressions occurring within the scope of an indirect speech verb, that is, in an oblique context, precisely because the rule is being incorrectly applied. In other words, Frege argues that pairs of expressions which have the same reference in normal contexts need not have the same reference in oblique contexts. And thus substitution of one for the other in an oblique context need not preserve the truth-value of the whole sentence.

Two principles are of fundamental importance within Fregean theory:

(A) Truth-values are the references of sentences

and

(B) The reference of an expression is determined by the reference of its components

It follows immediately from these two principles that the semantic role of an expression, that is, the contribution it makes towards the truth-value of the sentences in which it figures, is its reference. Now, Dummett has made the point<sup>2</sup> that Frege models all relations of reference on the prototype of the relation between a name and its bearer. Thus, for Frege, to ask after the semantic role of an expression is to ask after the objective entity for which it stands. This leads to an excessively realistic conception of language whereby each expression is either a proper name or a



functional expression, standing in the former case for an object and in the latter for a function. Moreover, Frege's doctrine of reference moulds his view of indirect discourse. If, what is clearly the case, the semantic role played by an expression in oratio obliqua is different from normal, then this can only be interpreted by Frege as implying that the expression stands for something in oratio obliqua other than its normal reference.

What does an expression stand for in an oblique context? We can find out by asking after the reference of the whole content-sentence, that is, the complete sentence occurring within the scope of the indirect speech verb. Principle (A) above dictates that such a sentence stand for its truth-value in normal contexts. But replacement of the content-sentence by another with the same truth-value will not in general preserve the truth-value of the whole oratio obliqua sentence. However, the truth-value of the oratio obliqua sentence will be preserved (according to Frege) if the content-sentence being replaced and the sentence replacing it have the same sense ( ie. express the same thought ) in normal contexts. This leads Frege to conclude that the indirect reference of a sentence - its reference when it occurs in an oblique context - is nothing other than its ordinary sense.

The Fregean principle:

- (C) The sense of an expression is compounded out of the senses  
of its components

taken together with principle (B) above, suggests that the proper names and functional expressions which make up a content-sentence stand, in such a context, for their ordinary senses. The same conclusion can be reached from another direction: by considering that replacement of a proper name or functional expression occurring in indirect speech by another with the same ordinary sense will preserve the ordinary sense of the content-sentence and hence the truth-value of the whole oratio obliqua sentence. There is

one more detail. If an expression in indirect speech does not have its ordinary reference, then, in view of the Fregean principle:

(D) The sense of an expression determines its reference

it would appear not to have its ordinary sense in such a context either. Frege concludes that an expression in indirect speech has an indirect sense.<sup>3</sup>

Frege's theory of indirect discourse amounts, therefore, to this.

When I say:

Dick said that George Eliot wrote Middlemarch

I am talking about the thought expressed by Dick's words; for my content-sentence refers to that thought. Thus the expression "said" which occurs in oratio obliqua is interpreted by Frege as standing for a function which maps a person and a thought ( here, Dick and the thought that George Eliot wrote Middlemarch ) onto a truth-value.

Thoughts play a central role in the Fregean approach to indirect discourse. For an oratio obliqua sentence will have correctly reported someone's utterance just in case the content-sentence expresses ( in a normal context ) the same thought as that expressed by the original utterance. Frege conceives of the thought expressed by a sentence as a perfectly objective entity, in no way dependent for its existence upon the different sentences which may be used to give it expression. Just as the sense of a simple expression can be grasped by more than one speaker, so the thought expressed by a sentence can be apprehended by any number of different people. Thoughts are not, however, to be included among the transient entities which populate the material world. Frege argues<sup>4</sup> that we must recognize a third realm, distinct from the subjective, inner world of ideas and the outer world of perceptible things. It is to this third realm that thoughts must be regarded as belonging. For thoughts, unlike the ideas of

the inner world and the beer glasses and bottletops of the outer world, are timeless and unchangeable.

This notion of Frege's - that the sense expressed by a sentence is an eternal entity - derives from his conviction that the truth-value of a sentence cannot be relativized to features of the context in which it is uttered. Indeed, we have a tendency to speak of certain sentences, those containing token-reflexives, as if they were true under some circumstances and false under others. Thus, we would not look askance at someone who claimed that the sentence "It is raining" can be true at one time and false at another. Frege, however, cannot regard such a way of speaking as anything other than highly misleading. Sentences containing token-reflexives obviously cannot be left out of an account of language. So Frege argues as follows: that to which truth and falsity are primarily ascribed is not a transient piece of language, a sentence, but a thought. A complete sentence ( one which is used to make an assertion or to ask a sentential question ) expresses a thought as it stands. Other sentences express a thought by virtue of the senses of their component expressions and the linguistic context in which the sentence in question is uttered. Thus the sentence "She wrote Silas Marner" occurring in:

George Eliot wrote Middlemarch and she wrote Silas Marner

expresses a thought by virtue of being understood as elliptical for a sentence which could be used to express a thought independently of linguistic context, viz., the complete sentence "George Eliot wrote Silas Marner".

Sentences containing token-reflexives are different again: the thought expressed depends upon the non-linguistic context. Frege writes:

In all such cases the mere wording, as it is given in writing, is not the complete expression of the thought, but the knowledge of certain accompanying conditions of utterance, which are used as means of expressing the thought, are needed for its correct apprehension.

Thus the thought expressed at a certain time and in a certain place by the

sentence "It is raining" will be eternally true or false.

The success of oratio obliqua depends upon the content-sentence standing for the same thought as that expressed by the original utterance. But the thought for which the content-sentence stands may be determined by the context, linguistic or otherwise, in which the whole oratio obliqua sentence occurs. Thus the content-sentence may have to be understood as elliptical for a complete sentence, which stands ( in indirect speech ) for a thought independently of linguistic context. Then again, the content-sentence may contain a token-reflexive, as in

Dick said that it is raining

and thus the thought for which the content-sentence stands will be determined by the non-linguistic context ( in which the oratio obliqua sentence is uttered ). Problems of context obtrude upon indirect discourse, but one thing is clear: the thought for which the content-sentence stands is the pivot around which Frege's theory of indirect discourse revolves. For, taking all the features of context into account, it will be perfectly determinate whether or not the original utterance being reported and the content-sentence of the oratio obliqua sentence bring the same thought into the proceedings.

The account of the theory is not quite complete. Frege nowhere appears to have discussed explicitly the case where an expression lies within the scope of two indirect speech verbs. The suggestion is, however, that an expression occurring in a doubly oblique context stands for the sense it expresses in a singly oblique context. In other words, the doubly indirect reference of an expression is its indirect sense. And the trebly indirect reference of an expression is its doubly indirect sense. And so on. Put quite generally: an expression occurring in a context oblique to the  $n^{\text{th}}$  degree stands for the sense it expresses when it occurs in a context oblique to the  $n-1^{\text{th}}$  degree.



2. Indirect Sense.

Michael Dummett<sup>6</sup> has mounted an attack upon Frege's notion of indirect sense. We have no idea at all what the indirect sense of an expression is, he argues, and thus we are unable to say what the doubly indirect reference of an expression happens to be. For the doubly indirect reference of an expression is its indirect sense. But if we do not know what the reference of an expression is in double oratio obliqua, then there is no saying ( within Fregean theory ) how we judge the truth-value of sentences involving double oratio obliqua.

This is a powerful objection. Indeed, Dummett claims that it constitutes a reductio ad absurdum of the whole theory. However, he suggests that an emendation may be made to the theory, the objection thereby being dispelled. The emendation amounts to the replacement of principle (D) above by:

(D') The reference of an expression is determined by its sense  
and by the context in which it occurs.

With this emendation, there is no longer any need to argue that an expression must have an indirect sense in order to account for its indirect reference in oblique contexts. Each expression needs only one sense - its ordinary sense. This sense determines the expression to have its ordinary reference in normal contexts and its indirect reference in each and every oblique context. Thus the reference of an expression which occurs within the scope of one or more indirect speech verbs coincides with its ordinary sense.

Dummett's emendation effectively limits the Fregean approach to two semantic levels. For, according to the emended theory, an expression stands for its ordinary reference in normal contexts and for its ordinary sense in every oblique context. Consequently, expressions with the same ordinary sense will be everywhere intersubstitutable salva veritate ( and



not, as in the unemended theory, just in normal and singly oblique contexts ). Dummett writes:

This is intuitively reasonable: the replacements of an expression in double oratio obliqua which will leave the truth-value of the whole sentence unaltered are - just as in single oratio obliqua - those which have the same sense. The view that doubly indirect sense and reference must be distinguished from simply indirect sense and reference was a mechanical deduction from a slightly faulty theory.

It is not hard to show that Dummett's emendation of Frege's theory is far from being intuitively reasonable. Let us assume that the expressions "a Greek" and "a Hellene" have the same ordinary sense. According to both the emended and the unemended theory, these two oratio obliqua sentences will have the same truth-value:

(1) Dick said that a Greek is a Hellene

and

(2) Dick said that a Greek is a Greek.

( It is a fundamental objection to Fregean theory in general that the theory will not allow sentences (1) and (2) to have different truth-values. I defer consideration of this objection to the next section, however, since the present section is devoted to showing that Dummett's emended version of Fregean theory is open to difficulties which are not faced by the unemended theory. )

The Fregean principle (C) above forces Dummett to conclude that (1) and (2) not only have the same truth-value but also express the same sense. For, on the emended theory, the sense expressed by "a Greek" and "a Hellene" is the same in all contexts, viz., their ordinary sense. Thus, for Dummett, the replacement of an expression in an oblique context by another with the same reference will not only preserve the truth-value of the whole: it will also preserve the sense of the whole. Dummett must therefore accept the following equivalence:

(3) The thought that Dick said that a Greek is a Hellene =

The thought that Dick said that a Greek is a Greek.

The proponent of the unemended theory need not, of course, accept (3). He is not committed (as Dummett is committed) to the view that preservation of reference in oratio obliqua necessarily results in preservation of sense. Thus he can argue that substitution of "a Greek" for "a Hellene" in (1) to get (2) amounts to nothing more than preservation of reference (ie. truth-value). For the expressions in question, despite having the same indirect reference (ie. ordinary sense), need not have the same indirect sense.

It is thus perfectly compatible with the unemended theory to hold that the following sentences are both true:

(4) Anthony believes that Dick said that a Greek is a Hellene,  
and

(5) It is not the case that Anthony believes that Dick said that  
a Greek is a Greek.

Not so for Dummett's emended theory. The upholder of this simplified version of Frege's theory is compelled, by virtue of his commitment to (3), to hold that the conjunction of (4) and (5) is a contradiction. For he is forced to count the conjunction of (4) and (5) as expressing the same thought as:

(6) Anthony believes that Dick said that a Greek is a Greek and  
it is not the case that Anthony believes that Dick said that  
a Greek is a Greek.

(4) and (5), of course, do not appear to contradict one another even on the supposition that "a Greek" and "a Hellene" have the same ordinary sense; to this extent pure Fregean theory is much more plausible than the emended theory.

There is another point. Dummett's insistence that sense and reference coincide in oratio obliqua obliges him to embrace the view that it is impossible to make genuine mistakes about the identity of the senses

of expressions. For, within Fregean theory at large, identity-statements are only informative ( and thus one can only make genuine mistakes about whether they are true or false ) to the extent that the co-referring expressions which flank the identity-sign express different senses. Where the flanking expressions express the same sense, it will be impossible to understand the identity-statement without recognizing immediately that it is true. Thus Dummett must hold that expressions which stand for the same reference in an oblique context do so in a perfectly revealing way; for he has committed himself to the view that such expressions necessarily express the same sense. This is not a plausible view. One can imagine a situation in which a person knows what the indirect reference of each one of a pair of sentences is ( ie. he knows for each sentence what thought it expresses in normal contexts ) and yet he is genuinely perplexed as to whether the two sentences stand for the same indirect reference. Frege can, of course, account for such a situation by invoking the notion of indirect sense: two sentences may stand for the same indirect reference and yet express different indirect senses.

In conclusion: Dummett's emendation is not only out of harmony with Frege's other views but also gives rise to difficulties in its own right. However, Dummett's crushing objection to the original theory still stands: that we do not know what the indirect sense of an expression is and, as a consequence, the semantic role played by expressions in double oratio obliqua is wholly mysterious.

### 3. The Greek Counterexample.

One would expect an adequate theory of indirect discourse to accommodate the fact that (1) and (2) above can diverge in truth-value. For Dick may have said that a Greek is a Hellene: but it does not follow that Dick had thereby been boring enough to say that a Greek is a Greek. As pointed out in the previous section, Frege's theory of indirect discourse

conspicuously fails to accommodate this fact; since (2) is got from (1) by a legitimate application of the substitutivity rule, the theory predicts that truth-value must be preserved. This counterexample to Frege's theory is henceforth called the Greek counterexample.

One way out for the committed Fregean would be to declare that no two distinct expressions belonging to the same language could ever have the same sense. In that case, "a Greek" and "a Hellene" would no longer stand for the same indirect reference, and thus the substitution of the former for the latter in (1) to get (2) need not be regarded within Fregean theory as necessarily preserving truth-value.

The Greek counterexample would be avoided by such a move: but at much too high a price. For it could no longer be allowed within Fregean theory that distinct sentences ( ie. sentence-types ) in the same language could ever express the same thought, since the replacement of an expression within a sentence by a distinct expression would never preserve the sense of the whole. But if the same thought could never be given expression by two distinct sentences belonging to the same language, then the constraints laid by Fregean theory upon indirect quotation within a language ( ie. where the oratio obliqua sentence and the utterance being reported belonged to the same language ) would become, to say the very least, rather severe. Under such circumstances, the content-sentence of a true oratio obliqua sentence and the utterance being reported would have to be identical. In other words, one would only be able to report in English the words of another English speaker by repeating those words. Where the content-sentence and the utterance being reported were distinct sentences, there would be no question of the same thought being brought into the proceedings.

A theory of indirect discourse which placed constraints of this kind upon reporting within a language could not be correct. For we know that successful indirect quotation within a language need not depend upon the repetition of the utterance being reported. To think that indirect quotation does depend upon repetition is to confuse oratio obliqua with



oratio recta.

It might be argued that Frege's theory of indirect discourse could be emended so as to accommodate both the fact that reporting need not depend upon repetition and the doctrine that distinct sentences drawn from the same language can never be said to express exactly the same thought. Such an emendation would amount to giving up the principle that successful indirect quotation involves the expression of a common thought by the original utterance and the content-sentence. Frege's theory of indirect discourse would, as a consequence, say something like this: an oratio obliqua sentence will have correctly reported someone's utterance just in case the content-sentence of that oratio obliqua sentence and the utterance being reported express related thoughts.

Such a theory of indirect discourse would have little explanatory value. The task which any theory of indirect discourse must accomplish is that of explaining the relationship between the content-sentence and the original utterance. Now the theory put forward by Frege, whatever its other faults, says something very definite about this relationship; according to the theory, the content-sentence and the original utterance are related insofar as there exists an extralinguistic entity to which both give expression. To say, as the emended version of Frege's theory described above does say, that the content-sentence and the original utterance are related insofar as they express related extralinguistic entities, is not to say very much about the relationship between the two sentences: it is merely to shift the difficulty up to the level of thoughts.

Frege himself certainly did not subscribe to the doctrine that no two distinct sentences belonging to the same language can ever be said to express the same thought. He writes:

If all transformation of the expression were forbidden on the plea that this would alter the content as well, logic would simply be crippled; for the task of logic can hardly be performed without trying to recognize the thought in its manifold guises. Moreover, all definitions would then have to be rejected as false.



It is thus very much a part of Fregean theory that distinct sentences drawn from the same language can express exactly the same thought. Again, it is very much a part of the theory that distinct subsentential expressions can share the same sense: that is, they can make exactly the same contribution towards the determination of the truth-value of sentences in which they occur. Even if it were the case that no two distinct expressions happened to have the same sense, one could invent an expression and stipulate that it have the same sense as an existing expression. The Greek counterexample would then arise anew.

Another way to get around the Greek counterexample would be to accept that "a Greek" and "a Hellene" have the same ordinary sense, but to deny that the content-sentence of (1) and (2), viz. "a Greek is a Hellene" and "a Greek is a Greek", express the same thought ( in normal contexts ). There would then be no need for the Fregean to regard (1) and (2) as necessarily agreeing in truth-value: for their respective content-sentences would differ in indirect reference. However, some such principle as the following, suggested by Putnam<sup>9</sup>, would have to be adopted, in order to explain how it is that two sentences whose primitive constituents correspond pointwise in sense can express different thoughts.

- (P) The sense of a sentence is a function of the sense of its parts  
and of its logical structure.

Thus the content-sentences of (1) and (2) would have to be regarded as having a different logical structure. For, according to Putnam:

Two sentences are said to have the same logical structure, when occurrences of the same sign in one correspond to occurrences of the same sign in the other.<sup>10</sup>

It cannot be said that Frege ignored the connection between the structure of a sentence and the thought expressed by that sentence. Dummett argues most plausibly<sup>11</sup> that the Fregean principle (C) above suggests rather more than that the sense of a complex expression, including a

sentence, is determined by the senses of its components. The words "compounded out of" appear to suggest that the sense of a sentence can only be understood as the the sense of a complex which is constructed from its parts in exactly the same way as that sentence. In other words, sentences which express the same sense must have exactly the same structure. Now, the notion of structure appealed to must not be understood as applying too readily to the surface structure of the sentence; for distinct sentences drawn from different languages may have quite different surface structures and yet express exactly the same sense. Dummett suggests that we are concerned here with what Chomsky and his followers call "deep structure".

Putnam's notion of the "logical structure" of a sentence is clearly quite unlike the notion of semantic structure attributed to Frege. For Putnam's notion turns upon the surface features of the sentence. Thus the content-sentences of (1) and (2) are to be regarded as having a different logical structure precisely because the content-sentence of (2), unlike that of (1), has the same expression flanking the "is".

Now, there are reasons for thinking that a Fregean theory of indirect discourse incorporating Putnam's principle (P) would itself fall victim to a variant of the Greek counterexample. For it is fully in accordance with principle (P) to hold that the content-sentences of:

(7) Dick said explicitly that a Greek is a Greek

and

(8) Dick said explicitly that a Hellene is a Hellene

stand for the same indirect reference ( ie. express the same thought in normal contexts ). The two content-sentences agree pointwise in sense and ( in Putnam's books ) exhibit the same logical structure. The proponents of a Fregean theory incorporating principle (P) would

therefore be committed to the view that (7) and (8) necessarily have the same truth-value. However, one can imagine a situation in which (7) were true and (8) false: namely, that in which Dick utters the sentence "A Greek is a Greek".

It may be argued against this last claim that (7) and (8) are not genuine oratio obliqua sentences at all: they are disguised oratio recta sentences. Thus (7) is equivalent to:

(9) Dick said "A Greek is a Greek"

and (8) is equivalent to:

(10) Dick said "A Hellene is a Hellene"

Seen in this light, the divergence in truth-value of (7) and (8) under those circumstances in which Dick utters the sentence "A Greek is a Greek" in no way damages a Fregean theory of indirect discourse incorporating principle (P).

In answer to this objection: it seems to me that (7) and (8) are genuine oratio obliqua sentences and thus in no way equivalent to the oratio recta sentences, (9) and (10) respectively. It is easily seen that (7) and (9) are in no way equivalent. Let us imagine that Dick utters the French sentence "Un Grec, c'est un Grec". Under such circumstances, (7) would be true and (9) would be false. A similar argument shows (8) and (10) to be non-equivalent.

One is irresistibly drawn towards the conclusion that Frege's theory of indirect discourse ultimately falls prey to the Greek counter-example. What this points to is that the theory is unable to accommodate those examples of oratio obliqua, like (1), (2), (7) and (8), which bear a close resemblance to ( without being identical with ) oratio recta. There is a very strong presumption in such cases that the words uttered by the original speaker and the words which actually appear in the content-sentence are almost the same.

#### 4. Quantifying into Oblique Contexts

It was said earlier that quantified oratio obliqua sentences such as:

$(\exists x)$  ( Dick said that x wrote Middlemarch )

are of dubious significance. For it is seemingly impossible to specify the domain over which the bound variable ranges. Such difficulties are apparently dispelled within the framework of Frege's theory of indirect discourse: the bound variable can be regarded as ranging over the senses of proper names.

Serious problems arise, however, over sentences like "Dick called the author of Middlemarch a genius". The surface appearance of such a sentence belies its actual structure: for it must be analysed as "Dick said, of the author of Middlemarch, that she was a genius". And this comes out in quantificational notation as " $(\exists x)$  ( x is the author of Middlemarch and Dick said that x was a genius )". Here is the difficulty: the single bound variable occurs both within the normal part of the sentence and within the oblique part, but it is senseless to suppose that it ranges simultaneously over two distinct domains.

There are other sentences which pose the same problem. Frege's theory appears to dictate that we regard the proper name "George Eliot" in "Dick said rightly that George Eliot was a genius" as standing simultaneously for a person and a sense. For the sentence must be analysed as:

(11) George Eliot was a genius and Dick said that George

Eliot was a genius

in which the proper name "George Eliot" occurs twice: once in the normal part of the sentence and once in the oblique part. The existential generalization of (11), viz.,

(12)  $(\exists x)$  ( x was a genius and Dick said that x was a genius )



is hence impossible to interpret: for the bound variable, quite obviously, cannot have two different values at the same time.

Dummett attempts to overcome the problem - of having to quantify simultaneously into an oblique and a normal context - within the framework of Fregean theory. He suggests that the existential generalization of sentences like (11) involves quantifying consistently an oblique context; and thus the first conjunct is to be interpreted as standing for the thought it expresses in normal contexts. He writes:

... the effect of the disguised opacity of the context [is] undone ... by the tacit application to the whole of a single operation mapping sense on to reference. Such an operation might be expressed by "It is true that ..." ( without any presumption that this phrase is always to be thought of as inducing an opaque context ), construed as converting any expression standing for a thought into one standing for the corresponding truth-value.<sup>12</sup>

As a consequence of Dummett's suggestion, the bound variable in (12) can be taken as ranging uninterruptedly over the senses of proper names. For the proper name "George Eliot" occurring in Dummett's proposed analysis of (11), viz.,

(13) It is true that George Eliot was a genius and Dick said  
that George Eliot was a genius

stands in both of its occurrences for its sense.

Dummett's proposal looks very much like an ad hoc manoeuvre, designed merely to render compatible at all costs Frege's theory of indirect discourse and existential generalization. What justification is there, other than enabling quantification to proceed into a single context, for suddenly taking an apparently normal context to be oblique? There is a further problem: it is not exactly clear what Dummett's proposal amounts to.

At first glance, he appears to be recommending that we see the first conjunct of (11) as governed tacitly by the oblique context -



creating operator "It is true that ...". This interpretation is backed up by his comment ( quoted above ) that we must not presume that the operator is always to be thought of as inducing an oblique context. The implication is that in this case the operator does induce an oblique context.

Dummett's other comments, however, throw doubt upon this interpretation. In his discussion of the operator, Dummett adds the proviso that the scope of the first "that" in a sentence like (13) ( as analysis of (11) ) does not extend over the conjunction. This proviso superficially appears to be necessary. If the scope of the operator "It is true that ... " ( interpreted as inducing an oblique context ) were the whole of (11), then the content-sentence within the scope of "Dick said that" would be thrown into a doubly oblique context; but, in that case, the bound variable of (12) would have to be taken as ranging simultaneously over ordinary and indirect senses. However, such a proviso restricting the scope of the operator is superfluous in view of Dummett's insistence earlier that expressions stand for their ordinary senses in double oratio obliqua.

Why does Dummett make the proviso? The implication is that the operator has an effect on the first content-sentence which must not be transmitted to the second content-sentence ( within the scope of "Dick said that" ). And this reading is backed up by Dummett's comment ( also quoted above ) that the effect of the first conjunct of (11) being in a disguised oblique context is undone by the application of the operator. On this reading, "It is true that ...", far from inducing an oblique context, actually removes one. This is the point of Dummett's remark that the operation in question converts any expression standing for a thought into one standing for the corresponding truth-value. For this is an operation we do not want applied to the second content-sentence.

It is not hard to see why Dummett makes the operator "It is true that ..." play an ambiguous role. Were the operator to induce an oblique context, Frege's thesis that the references of our words are what we talk about would force us to regard someone who uttered (11) as having spoken of the sense of the name "George Eliot", rather than of George Eliot herself. On the other hand, removal of an antecedently existing oblique context would permit the problem of quantifying simultaneously into an oblique and a normal context to arise again. Dummett wants to have the best of both worlds: he wants sentence (11) to be about George Eliot and he wants the bound variable of sentence (12) to range consistently over senses.

#### 5. Indirect Discourse and The Preservation of Sense.

The introduction of intensional entities - ie. senses - into the realm of reference in order to preserve the extensionality of a language containing the oratio obliqua construction has proved not to be unproblematic. Any lingering doubts over the value of Frege's theory of indirect discourse ought to be dispelled by the following consideration: there is no saying in advance how far the content-sentence of an oratio obliqua sentence may be permitted to deviate from direct quotation. This contradicts the central tenet of Frege's theory: that the content-sentence can deviate from direct quotation only so long as it still express ( in a normal context ) the same thought as that expressed by the directly quoted sentence.

It is being claimed against Frege that the content-sentence and the sentence uttered by the speaker being reported need not have the same meaning. In other words, the content-sentence can often be

replaced by a sentence with a different meaning and yet the containing oratio obliqua sentence continue to report correctly what the original speaker said.

The proponents of Frege's theory may respond to this criticism by pointing out that Frege did not commit himself to the view that the content-sentence and the original utterance must be synonymous: only that they must express the same thought. For Frege regarded the meaning of a sentence as distinguishable into at least two elements - sense and tone.<sup>13</sup> The tone is that part of the meaning of a sentence which is quite irrelevant to the determination of its truth-value. Hence, Fregean theory allows that two sentences may express the same thought - ie. have the same truth-conditions - and yet fail to have the same meaning. To the extent to which the content-sentence and the original utterance may differ in tone, to that extent they may be permitted to differ in meaning.

Such a response from those who support Frege's theory would be to no avail. Frege himself regarded the sense of a sentence as by far the most important aspect of its meaning; and thus it is not a serious distortion of Frege's position to ascribe to him the view that the content-sentence and the original utterance must, if the oratio obliqua sentence is to report correctly what the original speaker said, be synonymous. Nonetheless, the case against Frege need not rest upon this point alone. His doctrine that the content-sentence and the original utterance must express the same thought severely restricts the scope of indirect quotation. For it is undoubtedly the case that the content-sentence of a true oratio obliqua sentence need not have the same truth-conditions as the utterance it serves to report.

Those who look kindly upon Frege's theory of indirect discourse

will find this last point implausible. One imagines them replying as follows. The content-sentence of a true oratio obliqua sentence must have the same truth-conditions as the utterance being reported, appearances to the contrary. Where the content-sentence and the original utterance do not appear to express the same thought, one can only conclude that either sentence is a context-sensitive sentence ( in Fregean terms ) which is being taken out of context. In other words, either the content-sentence or the original utterance must be read as elliptical for a complete sentence which expresses a thought independently of the surrounding linguistic context; or it must contain a token-reflexive, in which case the thought expressed will be determined by the non-linguistic context. The imaginary spokesman for Fregean theory will then point out that it is only by ignoring the context within which the content-sentence or the original utterance appears that one can seemingly substantiate the thesis that there need be no one thought to which both give expression. Once sufficient attention is paid to the (linguistic or non-linguistic) context within which the oratio obliqua sentence or the sentence being reported is uttered, one will discover that the same thought is being brought into the proceedings.

This reply from the Fregean is inadequate. For the thesis that the content-sentence and the original utterance need not have the same truth-conditions in no way depends for its credibility upon taking context-sensitive sentences out of context. The best way to bring this point out is to look at an example. James, a member of a small Philosophy department comprising only twenty people, says to a colleague ( and here discourse is direct ) "The only people at Geach's party will be the members of the Philosophy Department". Now, James' colleague,



upon uttering this oratio obliqua sentence:

(14) James said that no more than twenty people will be at  
Geach's party

will have said something true. Let us catalogue the interesting features of this piece of indirect discourse. First of all, the content-sentence of the oratio obliqua sentence (14) and James' original utterance do not have the same truth-conditions. In Fregean language: they express different thoughts. For one can imagine a situation in which the content-sentence "No more than twenty people will be at Geach's party" were true and in which James' utterance "The only people at Geach's party will be the members of the Philosophy Department" were false. Secondly, neither the content-sentence nor James' utterance are context-sensitive in Fregean terms. In other words, both sentences are complete: they express thoughts independently of linguistic context. Furthermore, the thoughts expressed cannot be said to be determined by the non-linguistic context, for neither sentence contains any token-reflexive expressions. Thus the Fregean cannot explain away this piece of indirect discourse by adopting the view that features of the surrounding linguistic or non-linguistic context determine the content-sentence and James' utterance to express the same thought.

Dummett is undismayed by this feature of indirect discourse: that the content-sentence of a true oratio obliqua sentence need not preserve the sense of the utterance being reported. He claims that a true oratio obliqua sentence which fails to preserve the sense of the original utterance succeeds in reporting what the original speaker said by virtue of being uttered within a certain type of context. This context - comprising background truths well known to all parties - contributes towards the accuracy of the report not by determining the content-

sentence and the original utterance to express the same thought; but by ensuring that the import of the content-sentence reflects that of the original utterance. Dummett writes:

The canon of strict preservation of sense is an ideal to which we often do not make the effort to conform, an ideal to which in the context we are not taken to be striving strictly to conform. It does not follow from this fact that there is no such ideal, that there is no standard by which we can judge indirect quotation as true or false au pied de la lettre.

According to Dummett, therefore,

(15) James said that the only people at Geach's party will be the members of the Philosophy Department

is, strictly speaking, a more accurate report of what James said than (14). For, (15), unlike (14), fulfils the ideal of the strict preservation of sense.

It seems to me that Dummett is quite wrong; that (14) is no less accurate a report of what James said than (15). To think otherwise is to regard (15) as commensurate with the oratio recta sentence:

(16) James said "The only people at Geach's party will be the members of the Philosophy Department"

Here the ideal to which we make the effort to conform is the reproduction within quotation marks of James' actual sentence. The standards of accuracy to which we seek to conform when reporting in oratio obliqua are by no means of such a fixed and clearcut character. What counts as a correct report may depend upon our reasons for quoting. Again, we may tailor our content-sentence so as to maximise the comprehension of our audience. The point is that Dummett's contention - that the preservation of the sense of the original speaker's utterance, while

not a sine qua non of correct reporting, constitutes a methodological ideal - flies in the face of our actual practise. We give no priority of place to oratio obliqua sentences which preserve through their content-sentences the sense of the original speaker's utterance. When challenged as to the accuracy of our indirect quotation, we revert, in the last resort, to oratio recta.

#### 6. Indirect Discourse and Translation

It has been argued by Quine<sup>15</sup> and echoed by Davidson<sup>16</sup> that there are evident affinities between indirect quotation and translation. This contention does not reflect any disinclination on their part to accept the thesis so heavily stressed in the previous section: that the content-sentence of indirect discourse and the utterance being reported need not be synonymous. Indeed it is to account for this latter feature of indirect quotation that Davidson draws parallels between the communication of what another has said through oratio obliqua and through translation. For Davidson cleaves to ( a version of ) Quine's thesis of the indeterminacy of translation. It then becomes possible for Davidson to hold both that the content-sentence is a translation of the original utterance and that the two sentences need not be synonymous.<sup>17</sup>

Quine describes his indeterminacy thesis thus:

... rival systems of analytical hypotheses can conform to all speech dispositions within each of the languages concerned and yet dictate, in countless cases, utterly disparate translations; not mere mutual paraphrases, but translations each of which would be excluded by the other system of translation. Two such translations might even be patently contrary in truth-value, provided there is no stimulation that would encourage assent to either.<sup>18</sup>

Thus Quine is saying more than that there is no unique, objective

criterion for the correctness of translation. He is arguing that two equally acceptable theories of translation - acceptable to the extent that they fit the behavioural data ( and, as Davidson would say, insofar as they enable the translator to ascribe to the speaker under scrutiny a coherent set of propositional attitudes about the world ) - may map one sentence onto two sentences with different truth-values.

Let us suppose for the moment that the content-sentence of a true oratio obliqua sentence ought to be viewed as a translation of the original utterance. Then it is clear that the thesis of the indeterminacy of translation, at least in the form in which Quine advances it, takes us much further than we want to go. The purpose of the previous section was to show that a single utterance can be reported correctly by two oratio obliqua sentences with non-synonymous content-sentences. This is not to countenance the possibility that those content-sentences can be incompatible to the extent of disagreeing in truth value outside of the oratio obliqua construction. And it is this latter possibility, not its more innocuous precursor, which hinges upon the truth of Quine's indeterminacy thesis.

One could adopt a weaker form of the indeterminacy thesis. But a far better course would be to give up the notion that the relationship between the content-sentence of a true oratio obliqua sentence and the utterance it serves to report can usefully be viewed as specifically akin to the relationship between sentences which translate one another. For the use ( in Davidsonian fashion ) of the indeterminacy thesis to prop up the doctrine that indirect quotation need not preserve meaning is an enterprise which promises little reward. Quine's indeterminacy thesis is relatively contentious and we would wish the doctrine that indirect quotation need not preserve meaning to survive its rejection.



The question as to whether the indeterminacy thesis is true or false assumes a much greater importance for those who support Frege's theory of indirect discourse. Within Fregean theory, one sentence translates another just in case both express the same thought, and thus translation and indirect quotation are kindred activities. In view of Frege's insistence that thoughts be viewed as objective and fully determinate, those who adhere to Fregean theory would appear to be committed to the view that there is a unique, objective criterion for the correctness of translation. And this is precisely what Quine denies. According to his indeterminacy thesis, there is no sense in asking which of a number of incompatible translations of a sentence is the correct one once it has been ascertained that the translation theories in question are supported by the available evidence. Indeed, Davidson argues explicitly from the indeterminacy of translation to the rejection of a theory of indirect discourse which introduces intensional entities into the realm of reference.

Dummett suggests, however, that Fregean theory can accommodate indeterminacy of translation.<sup>19</sup> What we have to do is relativize the sense expressed by a sentence to a system of analytical hypotheses. In order to support this contention, Dummett suggests that an account of sense is a theoretical model which must square with observable linguistic behaviour. If this is the case, then there is no good reason for supposing that more than one such model should not agree with all the linguistic evidence. Indeterminacy of translation is now safely in hand: for incompatible translations of a sentence, each one correct relative to an acceptable system of analytical hypotheses or translation theory, will correspond to different workable models. It will still be determinate whether or not two sentences

express the same thought and hence have the same truth-conditions, but in each case relative to a given system of analytical hypotheses.

The accommodation of the indeterminacy thesis within Fregean theory has, however, an enfeebling effect upon Frege's theory of indirect discourse. According to the theory of indirect discourse which emerges from the re-interpretation of Fregean theory outlined in the previous paragraph, there must be an acceptable system of analytical hypotheses relative to which the content-sentence of a true oratio obliqua sentence and the utterance being reported express the same thought. But that is to say no more than that the content-sentence must translate the original utterance relative to an acceptable translation theory. The notion of two sentences expressing a common thought has been made to depend upon the notion of their translating one another, rather than vice versa. In other words, the notion of an objective timeless and independent thought common to the content-sentence and the original utterance, and by virtue of which the one can be said to report the other, no longer does any work. It has become an idle cog in the machinery of the theory. One suspects that the theory of indirect discourse which remains, a Fregean theory dispossessed of its central feature and dependent upon the notion of translation, has little power to enlighten.

It might be thought, and perhaps often is, that if we are willing to witness intentional entities with what - properties, propositions, individual concepts, and whatever else - that in Frege's philosophy stand in the way of giving an account of the logical form of sentences in public language. This is not so. Neither the language Frege suggests as models for natural languages nor the language described by Church are amenable to theory in the manner of a truth-theory, the meaning of which is standard.

REVISION

FREGEAN LANGUAGES AND TRUTH THEORY

1. Fregean languages and the Fregean demand.

CHAPTER TWO

An infinite number of languages can be generated from the finite vocabulary of a natural language, a satisfactory theory of meaning for a language must give an account of the meaning of every sentence. In this sense I assume that Frege's theory of meaning is provided by recursively characterizing a truth-predicate in Frege's fashion for the language in question. The resulting theory of truth is adequate just in case it entails a truth-biconditional of the form:

FREGEAN LANGUAGES AND TRUTH THEORY

For each and every sentence of the object-language, where a structural description of the sentence in question replaces "x" and a sentence in the metalanguage replaces "y" subject to the restriction that it be true in the metalanguage if and only if x is true in the object-language, a theory of truth which meets the criteria of adequacy - Frege's Convention 2 - is an adequate theory of meaning. The biconditional (by 2-adequacy) entails that the theory give an account of the truth conditions of every sentence in the language. But in doing they also furnish a statement of what each sentence means.

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It might be thought, and perhaps often is, that if we are willing to welcome intensional entities without stint - properties, propositions, individual concepts, and whatever else - then no further difficulties stand in the way of giving an account of the logical form of sentences in oratio obliqua. This is not so. Neither the languages Frege suggests as models for natural languages nor the language described by Church are amenable to theory in the sense of a truth-definition meeting Tarski's standards.

DAVIDSON.

#### FREGEAN LANGUAGES AND TRUTH THEORY

##### 1. Fregean Languages and the Finiteness Demand.

An infinite number of sentences can be generated from the finite vocabulary of a natural language. A satisfactory theory of meaning for a language must yield an account of the meaning of every sentence. In this essay I assume the truth of the thesis<sup>2</sup> that such a theory of meaning is provided by recursively characterizing a truth-predicate in Tarski's fashion for the language in question. The resulting theory of truth is adequate just in case it entails a true biconditional of the form:

s is true iff p

for each and every sentence of the object-language, where a structural description of the sentence in question replaces "s"; and a sentence in the metalanguage replaces "p" subject to this condition: that it be true in the metalanguage if and only if s is true in the object-language. A theory of truth which meets this criterion of adequacy - Tarski's Convention T - is an adequate theory of meaning. The biconditionals ( or T-sentences ) entailed by the theory give an account of the truth conditions of every sentence in the language: but in so doing they also furnish a statement of what each sentence means.

The biconditionals themselves do not show how the meaning of each sentence in the language depends upon its structure. Rather, the semantic



structure of each sentence is revealed by the proof of the relevant T-sentence. In other words, the statement of the meaning of a sentence must be deduced from a finite number of axioms assigning semantical properties to its parts. The finiteness of a truth theory is not merely a technical requirement. A finite theory of truth is designed to uncover a structure in the language that mirrors the mysterious competence possessed by speakers of the language: that of being able to understand quite unfamiliar sentences through familiarity with their parts. If there is no way of giving for every sentence of the language a finite proof that its meaning is a function of the meaning of its parts, then we have a very compelling reason for supposing the language to be unlearnable in principle.<sup>3</sup>

It is thus a fundamental demand to make upon a language that it be amenable to the recursive characterization of a truth-predicate. And it is a demand which complex languages built on the Fregean model conspicuously fail to meet.

In his paper "On Sense and Reference"<sup>4</sup>, Frege suggests in effect that the expressions of a natural language are systematically ambiguous, each such expression standing for its direct reference in normal linguistic contexts and for its indirect reference in oblique contexts. The details of his theory of indirect discourse will be excessively familiar from Chapter I; suffice it to say that an expression occurring within an oblique context stands for its ordinary sense and expresses an indirect sense.

For Frege, each expression belonging to a language is either a proper name or a functional expression. Proper names are complete expressions which stand for complete entities, viz. objects. And functional expressions are incomplete expressions which stand for correspondingly incomplete entities, viz. functions. Thus a one-place functional expression stands for a function of one argument; a two-place functional expression stands for a function of two arguments; and so on. Now, a complex proper name must contain at least one functional expression into the argument-places of which have been inserted proper names ( where the functional expression

being completed is of first level ) or functional expressions of first level ( where the functional expression being completed is of second level ). And ( according to Frege ) the reference of the complex proper name so formed will be the value of the function referred to by the functional expression being completed - for the references of the proper names or functional expressions inserted into the argument-places of that functional expression as arguments. Frege maintains, moreover, that the value of a function is always an object, never a function. Consequently, incomplete expressions always yield, when their argument-places are filled, proper names, never expressions that remain incomplete.

Familiar parts of language are treated by Fregean theory in the following fashion. A predicate emerges as a one-place functional expression yielding, when its argument-place is filled, a special sort of complex proper name, viz. a sentence. The reference of a predicate is therefore a function which maps the reference of a proper name onto the reference of the sentence formed by inserting that proper name into the argument-place of the predicate. ( The reference of a relational expression is accordingly a function which maps the references of two or more proper names onto the reference of a sentence. ) Frege takes the reference of a sentence to be one of two objects, the True or the False. Hence, the reference of a predicate is a function whose value is always a truth-value.<sup>5</sup> For example, in the sentence:

Socrates sits

the predicate "ξ sits" stands for a function which maps the reference of the proper name "Socrates", viz. Socrates himself, onto the truth-value of the whole sentence. (A quantifier emerges as a predicate of second level, having a single argument-place to be filled by a predicate of first-level. Thus a quantifier stands for a second-level function which maps a first-level function onto the truth-value of a sentence. )

In his last published paper "Compound Thoughts"<sup>6</sup>, Frege insists that the sense of an incomplete expression is also incomplete. This suggests

that he regards the sense of a functional expression as a function, though not the same function as its reference. Thus, in the sentence displayed above, the sense of the predicate "ξ sits" would be a function which mapped the sense of the name "Socrates" onto the sense of the whole sentence: this being the thought that Socrates sits.

In view of Frege's doctrine that the reference of an expression in an oblique context is its ordinary sense, it would appear to be the case that the reference of a functional expression in an oblique context is that function which constitutes its sense in normal contexts.<sup>7</sup> Following this line of thought, the reference of "ξ sits" is:

Theaetetus says that Socrates sits

would be a function which mapped the indirect reference of "Socrates", viz. the ordinary sense of "Socrates", onto the indirect reference of the containing sentence "Socrates sits": this being the thought that Socrates sits. It is natural to suppose, moreover, that the indirect sense of a functional expression ( ie. its sense in oblique contexts ) is yet another function - a function which maps the indirect senses of proper names onto (indirect) thoughts.

It was pointed out in Chapter I that Frege nowhere appears to have discussed explicitly the semantical behaviour of expressions occurring within the scope of more than one indirect speech verb. However, it was supposed that the following rule constitutes a natural extension of the model of language outlined by Frege in "On Sense and Reference". An expression occurring in a context oblique to the  $n^{\text{th}}$  degree stands for the sense it expresses when it occurs in a context oblique to the  $n-1^{\text{th}}$  degree. In combination with Frege's views on functional expressions, the rule suggests that the reference of a functional expression in a context oblique to the  $n^{\text{th}}$  degree is that function which constitutes its sense in a context oblique to the  $n-1^{\text{th}}$  degree.

The model of language outlined by Frege in "On Sense and Reference"



appears to have been conceived as an informal model, designed to deal with the vagaries of natural language. That Frege had in mind a more formal theory for a logically more regimented language is suggested by the following extract from a letter he wrote to Russell:

Strictly speaking, to avoid ambiguity, in indirect speech one must use special signs, the connections of which with the corresponding signs of direct speech are transparent.  
( 28 December 1902 )<sup>8</sup>

In other words, we use new expressions in singly oblique contexts, expressions that stand for the senses of the proper names and functional expressions used in direct speech. Presumably, more new expressions are used in doubly oblique contexts to stand for the senses of the expressions used in singly oblique contexts. And so on. For each step up the semantic ladder an entire set of new semantically primitive expressions is introduced into the vocabulary of the language. ( Church adopts this more formal approach in his paper "A Formulation of the Logic of Sense and Denotation".<sup>9</sup> )

We can now return to the original claim: that complex languages built on the Fregean model are not accessible to a truth theory meeting Tarski's Convention T. The expressions of a natural language can be used within the scope of an arbitrarily long string of indirect speech verbs. In order to match the expressive power of natural language, a Fregean language must permit the formation of sentences containing oblique contexts of arbitrarily high degree. It follows that each one of the finitely many expressions belonging to the vocabulary of a Fregean language built on the informal model will have to be infinitely ambiguous. A Fregean language constructed on the formal model will obviate the need for a finite number of infinitely ambiguous expressions by containing infinitely many primitive expressions in its vocabulary. But in either case it will be impossible to state in a finite way the semantical behaviour of each and every expression in the vocabulary in any of its occurrences. And thus it will be impossible to deduce a statement of what each sentence in such a language



means.

One might think that a rule could be devised which would enable us to assign a semantical property to each one of the infinitely many expressions in the vocabulary of a Fregean language constructed on the formal model. It would have to be transparent for each expression to which semantic level it belonged: for example, each expression would have to carry a superscript. Hence "Socrates<sup>4</sup>" would properly occur in a context oblique to the fourth degree and refer to the sense of a third degree expression, viz. "Socrates<sup>3</sup>".

Suppose we adopt the following piece of notation.

Ref.t

is written instead of "the reference of the expression t". Then a rule of the kind envisaged would go something like this:

Ref. "Socrates<sup>0</sup>" = Socrates

Ref. "Socrates<sup>1</sup>" = the sense of "Socrates<sup>0</sup>"

Ref. "Socrates<sup>n</sup>" = the sense of "Socrates<sup>n-1</sup>"

It is clear that this is not a rule which can be incorporated into the machinery of a truth theory. If the superscript of each expression is not a distinct syntactical component - and thus the superscript "4" is as much a part of "Socrates<sup>4</sup>" as "rat" is - then each such expression is semantically primitive. In other words, its parts have no separate significance. But, in that case, the three stipulations above need to be supplemented by infinitely many more. If, on the other hand, "Socrates" and its superscript are treated as syntactically distinct, then we should be forced to treat the superscript as making a distinct semantical contribution. But this is absurd. Moreover, the policy which Frege seems to be suggesting in his letter to Russell - that of introducing new primitive expressions into the vocabulary for each step up the semantic ladder - would have been renounced.

Perhaps, though, that policy ought to be abandoned - in the manner of the informal model. On that model there are only finitely many primitive expressions in the vocabulary. But a rule is still required to give the reference of an expression in a more complex context on the basis of its reference in simpler ones. Writing

Ref.<sup>n</sup> t

instead of "the reference of the expression t in a context oblique to the n<sup>th</sup> degree", a first shot might go something like this:

Ref.<sup>0</sup> "Socrates" = Socrates

Ref.<sup>1</sup> "Socrates" = the sense of <sup>0</sup>"Socrates"

Ref.<sup>n</sup> "Socrates" = the sense of <sup>n-1</sup>"Socrates".

But this rule does not serve its purpose. It does not give the reference of an expression in a more complex context on the basis of its reference in simpler ones. Perhaps the connection ought to be made quite explicit. Then we should have:

Ref.<sup>0</sup> "Socrates" = Socrates

Ref.<sup>1</sup> "Socrates" = the sense referring to Ref.<sup>0</sup> "Socrates"

Ref.<sup>n</sup> "Socrates" = the sense referring to Ref.<sup>n-1</sup> "Socrates"

But now it is clear that the enterprise is destined to fail<sup>10</sup>. For the rule fails to specify uniquely what an expression refers to in a given context. An instance of the rule says that <sup>1</sup>"Socrates" refers to the sense referring to Ref.<sup>0</sup> "Socrates", that is, to Socrates himself. But more than one sense could pick out that philosopher. In attempting to state the reference of an expression on a certain semantic level on the basis of its reference on the level below, the rule tries to do what cannot be done - build a road from the reference of an expression back to its sense.

In the absence of a rule which stipulates the semantical behaviour in any of its occurrences of each expression in the vocabulary of a complex Fregean language, a truth theory for such a language would have to contain infinitely many semantical axioms. But that is tantamount to saying that complex Fregean languages are not truth-theoretically tractable.

## 2. A Truth Theory for a Simple Fregean Language.

This is not to say that all languages built on the Fregean model are impervious to truth theory - only those languages which permit the formation of sentences containing oblique contexts of arbitrarily high degree. In fact, we need to know precisely the constraints which must be placed on a Fregean language in order to render it susceptible to a finite truth-theoretic treatment. Here it is instructive to consider the simplest possible Fregean language for which a finite theory of truth can be written. Such a language will permit the formation of sentences containing oblique contexts, but no context can be oblique to more than the first degree. The difficulties which attach to extending the truth theory for the simple Fregean language to more complex Fregean languages ( ie. those which permit oblique contexts of higher degree ) underline the real problem of the Fregean approach.

Below, I first construct a language,  $L_0$ , containing no oblique contexts and write a truth theory,  $T_0$ , for  $L_0$  in the metalanguage  $ML_0$  ( where  $ML_0$  includes  $L_0$  ). Then a Fregean extension,  $L_1$ , of  $L_0$  is constructed. Finally, a truth theory,  $T_1$ , is written for  $L_1$  in  $ML_1$  ( where  $ML_1$  includes  $L_1$  ).

$L_0$

### Vocabulary

- (1) A finite number of n-place predicate constants  $P_1^n, P_2^n, \dots$  [eg. "loves", "flies", "sits"] ;

- (2) A finite number of individual constants  $a_1, a_2, \dots$  [eg. "Theaetetus", "Socrates"] ;
- (3) A finite number of variables  $x_1, x_2, \dots$  ;
- (4) The logical constants  $\sim, \&$  and  $\Rightarrow$  ;
- (5) The parentheses ( , ).

[ An expression is a term iff it is an individual constant or a variable.  
 We let " $t_1$ ", " $t_2$ ", ... be  $ML_0$  variables ranging over terms of  $L_0$ ,  
 and " $A$ ", " $B$ ", ... be  $ML_0$  variables ranging over strings of expressions  
 of  $L_0$ . ]

Formation Rules

- (1)  $\lceil P_j^n ( t_1, \dots, t_n ) \rceil$  is a wff of  $L_0$ ;
- (2) If  $A$  and  $B$  are wffs of  $L_0$  so are  $\lceil \sim A \rceil$ ,  $\lceil A \Rightarrow B \rceil$ ,  $\lceil A \& B \rceil$  and  $\lceil (x_i)A \rceil$  ;
- (3) Nothing else is a wff of  $L_0$ .

[ A wff is closed iff it has no free variables. ]

$ML_0$

$ML_0$  contains, in addition to  $L_0$  and the  $ML_0$  variables mentioned above, "True" - a one-place predicate applying to closed wffs, and "Sat" - a two-place relation between wffs and denumerable sequences of objects.  $ML_0$  has the resources for sequence theory and for constructing structural descriptive names of  $L_0$  expressions ( we adopt the convention of overlining the  $L_0$  expression in question ). We let " $s$ ", " $s'$ ", ... be  $ML_0$  variables ranging over sequences. We write " $s'_i \approx s$ " for " $s'$  differs from  $s$  in at most the  $i^{th}$  place". Finally, we write " $s^*(\overline{t})$ " for "the interpretation of the term  $t$  for the sequence  $s$ ".

Truth Theory  $T_0$  for  $L_0$

- (1) A finite number of axioms giving the interpretation of terms:



(A) Variables:  $s^*(x_i)$  is the  $i^{\text{th}}$  member of  $s$ ;

(B) Individual Constants: a stipulation of the form  $s^*(t)$  for each constant. Thus

$$s^*(\overline{\text{Theaetetus}}) = \text{Theaetetus}$$

$$s^*(\overline{\text{Socrates}}) = \text{Socrates.}$$

(2) Axioms for satisfaction:

(A) For each primitive predicate  $P_j^n$  an axiom of the form:

$$(s) \left[ \text{Sat} (s, \overline{P_j^n (t_1, \dots, t_n)}) \equiv Q (s^*(t_1), \dots, s^*(t_n)) \right]$$

where  $Q$  is replaced by the predicate  $P_j^n$ , itself.

(B)

$$(s) \left[ \text{Sat} (s, \overline{(\sim A)}) \equiv \text{not} (\text{Sat} (s, \overline{A})) \right]$$

$$(s) \left[ \text{Sat} (s, \overline{(A \& B)}) \equiv (\text{Sat} (s, \overline{A})) \text{ and } (\text{Sat} (s, \overline{B})) \right]$$

$$(s) \left[ \text{Sat} (s, \overline{(A \supset B)}) \equiv \text{either not } (\text{Sat} (s, \overline{A})) \text{ or } (\text{Sat} (s, \overline{B})) \right]$$

$$(s) \left[ \text{Sat} (s, \overline{(x_i)A}) \equiv (s')(s'_i \approx s \supset \text{Sat} (s', \overline{A})) \right]$$

(3) Definition of Truth:

A wff is True in  $L_0$  iff it is closed and satisfied by every sequence.

We proceed to construct the Fregean extension,  $L_1$ , of  $L_0$ .

$L_1$

Vocabulary

(1) The vocabulary of  $L_0$ ;

(2) The two-place predicate "says";

(3) The one-place functional expression "that";

(4) For each primitive  $L_0$  expression,  $e$  (ie. every member of the  $L_0$  vocabulary except the parentheses) there is an expression in the vocabulary

of  $L_1$  of the form:

#e

[eg. corresponding to "Theaetetus", "flies", "~" and " $x_4$ ", there are the  $L_1$  expressions "#Theaetetus", "#flies", "#~" and "# $x_4$ ".]

Formation Rules

- (1) If A is a wff of  $L_0$ , then A is a wff of  $L_1$ ;
- (2) If A is a closed wff of  $L_0$ , then says (t, that A) is a wff of  $L_1$ ;
- (3) Nothing else is a wff of  $L_1$ .

Next is a rule which tells us how to rewrite a sentence containing an oblique context in a revealing manner (cf. Frege's letter quoted above).

Rewrite Rule (R)

Given an  $L_1$  wff of the form:

says (t, that A)

rewrite the wff in question in the form:

says (t,  $\alpha$ )

where  $\alpha$  is the string of  $L_1$  expressions formed by writing "#" immediately before each primitive  $L_0$  expression occurring in A.

ML<sub>1</sub>

In  $ML_1$  the string of  $L_1$  expressions,  $\alpha$ , is called a thought name; and where the  $L_0$  wff, A, from which  $\alpha$  is formed, is primitive<sup>11</sup>,  $\alpha$  is called a primitive thought name.

Truth Theory  $T_1$  for  $L_1$

- (1) The axioms of  $T_0$ ;
- (2) An axiom for the satisfaction of wffs containing oblique contexts:

(s)  $[\text{Sat} (s, \overline{\text{says} (t, \alpha)}) \equiv \text{says} (s^*(t), s^*(\alpha))]$

(3) For the primitive thought names,  $s^*(\overline{\alpha})$  is stipulated by a separate axiom for each name (there are only finitely many). Thus

$s^*(\overline{\# \text{flies} (\# \text{Theaetetus})}) = \text{that} (\text{flies} (\text{Theaetetus}))$

$s^*(\overline{\# \text{sits} (\# x_4)}) = \text{that} (\text{sits} (x_4))$

and so on;

(4) A finite number of axioms giving the interpretation of complex thought names in terms of the interpretation of primitive thought names.

$s^*(\overline{\# \sim (\alpha)}) = s^*(\overline{\# \sim}) (s^*(\overline{\alpha}))$

$s^*(\overline{(\alpha) \# \& (\beta)}) = s^*(\overline{\# \&}) (s^*(\overline{\alpha}), s^*(\overline{\beta}))$

$s^*(\overline{(\alpha) \# \supset (\beta)}) = s^*(\overline{\# \supset}) (s^*(\overline{\alpha}), s^*(\overline{\beta}))$

$s^*(\overline{(\# x_i)(\alpha)}) = s^*(\overline{\# x_i}) (s^*(\overline{\alpha}))$

(5) A finite number of axioms giving the interpretation of those  $L_1$  expressions which operate on thoughts.

$s^*(\overline{\# \sim}) (\text{that } A) = \text{that } \sim A$

$s^*(\overline{\# \&}) (\text{that } A, \text{that } B) = \text{that } A \& B$

$s^*(\overline{\# \supset}) (\text{that } A, \text{that } B) = \text{that } A \supset B$

$s^*(\overline{\# x_i}) (\text{that } A) = \text{that } (x_i)A$

(6) Definition of Truth:

A wff  $\sigma$  is True in  $L_1$  iff:

(1)  $\sigma$  is closed; and

(2) either  $\sigma$  is satisfied by all sequences or the formula which results when  $\sigma$  is rewritten in accordance with rule (R) is itself satisfied by all sequences.

Let me forestall two objections which might be raised against the truth theory  $T_1$ . First, it may be said that there are certain expressions in the  $L_1$  vocabulary which are not assigned a semantical property by  $T_1$ . Secondly, it may be held that it is wrong to countenance "open thoughts": for example, the thought that  $x_4$  sits.

It is indeed the case that there are certain expressions in the  $L_1$  vocabulary which are not assigned a reference by  $T_1$ . These are the expressions which figure in primitive thought names: for example, "#Theaetetus" and "#flies". However,  $T_1$  certainly assigns a semantical property to each of these expressions. In giving the reference of each and every primitive thought name formable in  $L_1$ ,  $T_1$  states in a finite way the semantical behaviour in any of its occurrences of each one of the expressions which go to make up the primitive thought names. It is quite compatible with the theory as given to assign references to these constituent expressions - for example, "#Theaetetus" refers to the sense of "Theaetetus" - but it is unnecessary to do so for truth-theoretic purposes.

In answer to the second objection: unless the universally quantified content-sentences of  $L_1$  are interpreted by  $T_1$  as complex ( where a content-sentence is understood as complex by virtue of standing for a thought which is the value of a function taking one or more thoughts as its arguments )  $L_1$  would not be truth-theoretically tractable. For an infinite number of universally quantified content-sentences are formable in  $L_1$ ; and if the thought names formed from those content-sentences by application of the rewrite rule were primitive, then an infinite number of semantical axioms would be needed stating the reference of each and every one of those thought names. But if universally quantified content-sentences are complex, then it would appear to be the case that the universal quantifier must be interpreted as standing in an oblique context for a function



mapping so-called open thoughts onto thoughts. Thus  $T_1$  interprets the universal quantifier which occurs in "says (Theaetetus, that  $(x_4)$ sits  $(x_4)$ )" as standing for a function mapping the (open) thought that  $x_4$  sits onto the thought that  $(x_4)$ sits $(x_4)$ .

But what exactly is an open thought? The answer is simply that an open thought is the sense of a sentence containing a free variable. The problem lies in fitting the notion of an open thought into the framework of Fregean theory. For Frege does not allow as well-formed sentences containing free variables. Thus Frege would regard the universally quantified sentence:

$$(x_4)\text{sits}(x_4)$$

as formed not by joining the universal quantifier " $(x_4)$ " to the open sentence "sits $(x_4)$ "; but by attaching the quantifier, construed as a second-level predicate " $(x_4)\Phi(x_4)$ ", to the first-level predicate "sits $(\xi)$ ". Hence, the variable bound by a quantifier is understood as having been introduced with the quantifier itself. Now, the Fregean view of quantification in combination with the doctrine ascribed to Frege earlier in this chapter: that the indirect reference of a predicate is that function which constitutes its ordinary sense, would appear to dictate that the universal quantifier which occurs in "says (Theaetetus, that  $(x_4)$ sits $(x_4)$ )" stands for a (second-level) function mapping that function which constitutes the ordinary sense of "sits $(\xi)$ " onto the thought that  $(x_4)$ sits $(x_4)$ .

Thus  $T_1$  does not describe the universally quantified content-sentences of  $L_1$  in terms of the semantic structure with which these sentences are endowed by Fregean theory. Nevertheless, an easy method of resolving the difficulty suggests itself. We can identify the sense

of a sentence containing a free variable with the sense of the predicate formed from that sentence by omission of the variable. In other words, an open thought is to be regarded as nothing more than the sense of a predicate, ie. a function mapping the senses of proper names onto thoughts. In response to the objection that thoughts are objects, we need only point out that open thoughts are, strictly speaking, not thoughts at all; we treat them as if they were thoughts in order to render  $L_1$  accessible to a finite theory of truth.<sup>12</sup>

### 3. A Hierarchy of Fregean Languages

A Fregean language of scant expressive power has proved to be susceptible to a finite truth-theoretic treatment. This is not to say that Fregean languages of greater complexity than  $L_1$  are necessarily inaccessible to truth theory. Indeed, a finite theory of truth can be written for a Fregean extension,  $L_2$ , of  $L_1$ .

$L_2$ , a language which permits oblique contexts of the second degree and no higher, is constructed from  $L_1$  in much the same way as  $L_1$  was constructed from  $L_0$ . A new rewrite rule will be needed telling us how to rewrite sentences containing doubly oblique contexts in a revealing manner. New primitive expressions will be introduced into the vocabulary to stand in doubly oblique contexts for the senses of primitive  $L_1$  expressions. Thus "##Theaetetus" will refer to the sense of "#Theaetetus". And, of course, there will have to be a rule which allows for the formation of sentences containing contexts oblique to the second degree and no higher.

Construction of a truth theory,  $T_2$ , for  $L_2$  will parallel the construction of  $T_1$  for  $L_1$ . In other words, new semantic machinery

will be grafted onto an existing truth theory. An axiom giving the satisfaction conditions of sentences containing doubly oblique contexts will form an integral part of this additional machinery. There will also be a finite number of axioms stipulating the semantical behaviour of (indirect) thought names - formed by application of the rewrite rule for  $L_2$  upon content-sentences in double oratio obliqua.

We need not stop at  $L_2$ .  $L_2$  can itself be extended into a Fregean language,  $L_3$ , which permits the formation of sentences containing trebly oblique contexts. And  $L_3$  can be similarly extended - into  $L_4$ . And so on. The result is a whole hierarchy of increasingly complex Fregean languages, each language in the hierarchy being the extension of ( and thus permitting the formation of oblique contexts of one degree higher than those permitted by ) the language on the level below. Moreover, the finite truth theory for each one of these languages will consist of the finite truth theory for the language on the level below plus a significant amount of truth-theoretic machinery - at least as much machinery, in fact, as was needed in order to extend  $T_0$  into  $T_1$ .

A truth-predicate can be recursively characterized for each one of the languages  $L_1, L_2, \dots$  precisely because each such language places a restriction upon the length of the string of indirect speech verbs which may be permitted to appear in an oratio obliqua sentence of that language. In each case, the formation rules effectively prohibit oblique contexts of higher than a certain degree. The truth theory for a Fregean language which matched the expressive power of natural language and, hence, permitted the formation of sentences containing oblique contexts of arbitrarily high degree would have to contain an infinite amount of semantic machinery.<sup>13</sup> Thus, only those

Fregean languages of limited expressive power relative to natural language are truth-theoretically tractable. This suggests very strongly that the Fregean approach to indirect discourse in natural language is fundamentally inadequate.





Since Frege, philosophers have become hardened to the idea that content-sentences in talk about propositional attitudes may strangely refer to such entities as intensions, propositions, sentences, utterances and inscriptions. What is strange is not the entities, which are all right in their place ( if they have one ), but the notion that ordinary words for planets, people, tables and hippopotami in indirect discourse may give up these pedestrian references for the exotica. If we could recover our pre-Fregean semantic innocence, I think it would seem to us plainly incredible that the words "The earth moves", uttered after the words "Galileo said that", mean anything different, or refer to anything else, than is their wont when they come in other environments.

DAVIDSON

NON-INTENSIONAL THEORIES OF INDIRECT DISCOURSE

1. Quine's Theory.

Oratio obliqua sentences are problematic precisely because the ascription of familiar structure to the string of words following "said that" results in the failure of the very logical consequences which may be expected to flow under such circumstances. It is a familiar point that the conjunction of:

(1) Dick said that George Eliot was a genius

and

(2) George Eliot = Mary Ann Evans,

fails to imply:

(3) Dick said that Mary Ann Evans was a genius.

Now Quine has shown that sentences like (1) and (3) are open to at least two different readings.<sup>2</sup> The notional readings of (1) and

(3) are represented thus:

(1N) Dick said [ George Eliot was a genius ]

(3N) Dick said [ Mary Ann Evans was a genius ]

Each of the sentences (1N) and (3N) asserts that a relation holds between Dick and an intension of degree 0, or a proposition. The square brackets mark off the portion of the sentence which is to be taken as naming the intension in question. Quine is not adopting a Fregean position: for he regards intensions as "creatures of darkness" to be eliminated in the final reckoning; and, moreover, he prohibits quantifying into ( what we are to regard provisionally as ) the names of intensions. We are to see the name of an intension not as made up of a string of expressions, each one of which stands for an intension in its own right; but as a referentially inarticulate whole, ie. as a single long expression whose parts have no separate significance. Since there is no question of making substitutions of any kind within such an expression, we have an adequate account of the failure of (1) and (2) to imply (3).

Sentences (1) and (3) need not, however, be interpreted as asserting that a dyadic relation holds between a speaker and a proposition. They can be given relational readings, thus:

(1R) Dick said y [y was a genius] of George Eliot

(3R) Dick said y [y was a genius] of Mary Ann Evans

Both (1R) and (3R) assert that an irreducibly triadic relation holds among a speaker, an object and an intension of degree 1, or an attribute. In each case, the name of the person of whom Dick has said something

appears outside of the referentially inarticulate portion of the sentence ( viz. the name of the attribute ) and hence in a normal referential position. Thus the conjunction of (1R) and (2) is taken to imply (3R). Relational readings of this kind are not unknown in ordinary language. And, clearly, the ordinary language paraphrase of (1R):

Dick said of George Eliot that she was a genius  
implies ( in conjunction with (2) ) the ordinary language paraphrase  
of (3R):

Dick said of Mary Ann Evans that she was a genius

Moreover, we are now in the position to represent "There is someone whom Dick said to be a genius" without saddling ourselves with a variable inside of the scope of the indirect speech verb bound by a quantifier outside of that scope. We merely have to quantify into the triadic indirect speech construction, thus:

$(\exists x)(\text{Dick said } y [y \text{ was a genius}] \text{ of } x)$

Quine is undoubtedly correct in his claim that oratio obliqua sentences are open to at least two different readings. However, the theory of indirect discourse which emerges hand in hand with this wholly acceptable doctrine is itself rather less than satisfactory. A suspicious aroma is given off by Quine's contention that the exportation of a singular term from within the name of an intension to a normal referential position ought to be viewed in general as implicative.<sup>3</sup> The point which prompts this contention is not itself at issue: that the notional reading of an oratio obliqua sentence implies the relational reading. Rather, the trouble concerns the thesis that the name of an



intension is referentially inarticulate, or opaque. If the name of an intension is, as Quine appears to be suggesting, a single long expression whose parts have no separate significance, then the exportation of one of those parts from within the name of the intension to an external position would be meaningless. To put the point bluntly: there would be no singular term there in the first place to export.

It would be unfair to criticize Quine's theory of indirect discourse on another count: that it makes explicit reference to intensional entities. For Quine does fulfil his promise to exorcise intensions from his ontology. He writes:

... a final alternative that I find as appealing as any is simply to dispense with the objects of the propositional attitudes. We can continue to formulate the propositional attitudes with help of the notations of intensional abstraction ... but just cease to view these notations as singular terms referring to objects.<sup>4</sup>

Thus, (1N) is no longer to be seen as asserting that a dyadic relation holds between Dick and a proposition. Rather, it must be viewed as of the form:

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with "Dick" as the individual constant, a, and "said [George Eliot was a genius]" as F, a one-place predicate. Where we have the triadic indirect speech construction, the indirect speech verb accordingly becomes part of a two-place predicate true of ordered pairs of speakers and objects. (1R) is therefore to be viewed as of the form:

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with "said y [y was a genius] of" as F, a two-place predicate true of the ordered pair consisting of Dick and George Eliot. In each case, the indirect speech verb is absorbed into what Quine regards as the referentially opaque portion of the sentence.

Quine's rather radical strategy - that of welding the indirect

speech verb onto the content-sentence following and treating the whole as a semantically primitive predicate - has certain attractions. The apparent failure of extensionality associated with oratio obliqua sentences can be blamed upon our mistakenly supposing that the semantically inert expressions which occur in the content-sentences can be regarded as having a separate significance. According to the Quinean view, once it is realised that the expression "George Eliot" figuring in (1) is not really a name, but in actual fact an insignificant component of the semantically primitive predicate "said-that-George-Eliot-was-a-genius", then the temptation to replace that component with the genuine name "Mary Ann Evans", or to quantify into the content-sentence of (1), will disappear. And since the content-sentence itself is not to be viewed as a distinct syntactical component of the containing oratio obliqua sentence, there is no need to supply an intension as its semantical role.

One thing that transpired from the critique of the Fregean approach to indirect discourse undertaken in the first two chapters of this essay was that an adequate theory of indirect discourse must meet at least two requirements. First, it must abjure reference to intensional entities ( thoughts, meanings, propositions etc. ). And, secondly, it must permit the recursive characterization of a truth-predicate in Tarski's fashion for language containing the oratio obliqua construction. The great failing of Quine's theory of indirect discourse is that it does not meet the second of these two requirements.

As we have seen, the content-sentence of an oratio obliqua sentence is understood by Quine to be an insignificant component of the complex predicate formed by attaching that content-sentence to the words "said that". Quine's theory requires that we regard

predicates of the kind envisaged - eg. "said-that-Mary-Ann-Evans-was-a-genius" - as semantically primitive. In other words, they cannot be understood as owing their semantical properties to the contribution of the expressions of which they are structurally composed. Rather, each such predicate is to be seen as a primitive constituent of the vocabulary for the language of which it is a part. And thus the truth theory for such a language would have to contain a semantical axiom for each such predicate stipulating its semantical behaviour in any of its occurrences. The problem for Quine is that there are infinitely many such predicates formable in a natural language.<sup>5</sup> Hence, the truth theory for a natural language construed along Quinean lines would fail to meet Tarski's criterion of adequacy - infinitely many semantical axioms would be needed.

By treating oratio obliqua sentences as syntactically composed of the name of a speaker attached to a primitive one-place predicate ( or, in the case of the relational construction, as composed of the name of a speaker and the name of an object attached to a primitive two-place predicate ), Quine manages to sidestep the problems customarily associated with indirect discourse. But the avoidance of awkward problems by the dissolution of the semantic structure of the indirect speech verb and the content-sentence within its scope is paid for in the long run. The resulting theory of indirect discourse fails to do the very first thing we would want such a thing to do: it fails to describe oratio obliqua sentences in a semantically revealing way. There is no question of showing in a finite and systematic fashion how the truth-value of each oratio obliqua sentence formable in a natural language depends upon the contribution of its parts.

There is a further difficulty. Quine's theory of indirect discourse is incompatible with his contention that the problem of determining the extent to which the content-sentence can deviate from direct quotation is a problem in translation.<sup>6</sup> If the oratio obliqua sentence:

(4) Galileo said that the earth moves

is to be treated as composed of two semantically primitive expressions, the name "Galileo" and the one-place predicate "said-that-the-earth-moves", then there is simply no significant component of (4) which can plausibly be said to translate Galileo's actual utterance, viz, "Eppur si muove".

In rejecting Quine's theory of indirect discourse over its failure to accommodate the thesis that the content-sentence of a true oratio obliqua sentence must (in some sense) be a translation of the utterance being reported, it must not be thought that we are thereby accepting the translation point itself. It was suggested at an earlier stage in this essay<sup>7</sup> that the relationship between the content-sentence and the utterance being reported cannot usefully be viewed as specifically akin to the relationship which holds between sentences said to translate one another. The point is that Quine's theory of indirect discourse not only fails to make room for the translation point; it is also incompatible with any theory designed to explain the mechanism of indirect quotation on the basis of a relationship between the content-sentence and the original utterance. For, according to Quine, the content-sentence is not a genuine syntactical component of the containing oratio obliqua sentence. In other words, it is not, logically speaking, a sentence at all. In the absence of any other distinct syntactical component of an oratio obliqua sentence with which to



relate the original speaker's words, Quine's theory renders impossible the forging of a semantically revealing connection between those original words and the oratio obliqua sentence used to report them.

A theory of indirect discourse must explain the mechanism of indirect quotation or be compatible with such an explanation. It is plausible to hold that a theory can only meet this requirement by interpreting the content-sentence as a sentence and not as an insignificant portion of a single, semantically primitive expression. So let us leave Quine's manifestly unsatisfactory theory on one side ( remembering, at the same time, that we fully accept the distinction between the notional and the relational readings of an oratio obliqua sentence, the distinction to which Quine drew our attention ). We move on to consider a theory which appears to meet all of our requirements. This is Geach's quotational theory of indirect discourse.<sup>8</sup>

## 2. Geach's Theory.

Geach argues that oratio obliqua is logically superfluous and can everywhere be replaced with oratio recta. In other words, each sentence containing indirect speech must be viewed as logically equivalent to a sentence containing direct speech.

At first sight, this suggestion presents an implausible appearance. The oratio recta sentence:

(5) Galileo said "The earth moves"

implies that Galileo uttered an English sentence; whereas no such implication is carried by the related oratio obliqua sentence, (4). Geach points out, however, that there is a metaphorical use of oratio recta whereby thoughts are reported. He cites this Biblical example:

The fool hath said in his heart "There is no God"

This sentence need not be understood as asserting that the thinker had the quoted words in his mind. What we need is a version of (5) which contains the quoted sentence but which does not imply that Galileo uttered that sentence. Geach suggests that this sentence will do:

(6) Galileo said something tantamount to "The earth moves".

(6) asserts that Galileo stands in a certain relationship towards the sentence "The earth moves" - that relationship which holds between a speaker and a sentence just in case the former utters a sentence tantamount to the latter. Since Galileo's actual utterance, viz. "Eppur si muove", is tantamount to the quoted sentence "The earth moves", (6) constitutes a correct report of what Galileo said.

The following objection is usually directed against quotational theories of indirect discourse. The content-sentence of an oratio obliqua sentence must be understood as belonging to the very same language as the containing oratio obliqua sentence itself. The result of putting a foreign sentence into the slot in "Galileo said that \_\_\_\_\_" would be patently ill-formed. Thus we have no choice but to regard the sentence "The earth moves" in (4) as part of the home language. Not so for the sentence quoted in (6). For it is clearly the case that we can put a foreign sentence into the slot in "Galileo said something tantamount to '\_\_\_\_\_' " and end up with a perfectly well-formed English sentence. It is therefore well within the bounds of possibility that the sentence quoted in (6) be a sentence of some language other than English. But if the sentence quoted in (6) need not mean that the earth moves, then (4) and (6) cannot be viewed as

logically equivalent.

The objection derives from Church<sup>9</sup> and is readily taken up by Davidson:

We can scoff at the notion that if we analyze "Galileo said that the earth moves" as asserting a relation between Galileo and the sentence "The earth moves" we must assume Galileo spoke English, but we cannot afford to scoff at the assumption that on this analysis the words of the content-sentence are to be understood as an English sentence.<sup>10</sup>

For one who took this objection seriously, the obvious move would be to specify in the oratio recta version itself that the quoted sentence was an English sentence. But a version of (6) which made an explicit reference to English, thus:

(7) Galileo said something tantamount to the English sentence  
"The earth moves"

could not be counted as logically equivalent to (4). If (4) and (7) were logically equivalent, then the "said that" of an English oratio obliqua sentence would have to be viewed as making an implicit reference to English. But in that case the English words "said that" and the Italian words "diceva che" could no longer be said to translate one another.

There is, however, no need to adopt (7) in preference to (6) as the oratio recta version of (4). For the Church objection which prompts the replacement of (6) by the unacceptable (7) is founded upon a simple mistake. It is undeniably the case that the sentence quoted in the oratio recta sentence (6) may be equiform with a sentence of some foreign language ( some unknown jungle language, say ) and that this foreign sentence may not mean that the earth moves. What is overlooked by those who find the Church objection plausible is that the sentence "The earth moves" which is quoted in (6) and a non-

synonymous equiform sentence in an exotic foreign language would be different sentences ( and not the same sentence in different languages ). Consequently, the oratio recta sentence formed by inserting the English sentence "The earth moves" into the slot in "Galileo said something tantamount to ' \_\_\_\_\_ '" would be different from the oratio recta sentence formed by inserting the imagined foreign sentence "The earth moves" into the very same slot. The latter oratio recta sentence would not be logically equivalent to (4).

A practical difficulty suggests itself. How do we know whether the sentence quoted in (6) is the English sentence "The earth moves" or its equiform foreign counterpart? And thus how do we know whether (6) is logically equivalent to (4) or not? As Geach points out, help is not necessarily provided by saving-clauses and provisos inserted next to the quoted sentence; for the foreign language may contain expressions equiform to them also. Even if we succeeded in unambiguously picking out the right language ( the language spoken in 1976 by the majority of the inhabitants of those islands on the western seaboard of Europe ... ) the "said that" of oratio obliqua, as we noticed in our dealings with sentence (7), would have to bear the weight of the individuating information. But none of this is in any way necessary. The (linguistic or non-linguistic) context within which (6) is uttered will make it abundantly clear in practice whether the utterer in question intends the quoted sentence to be understood as the English sentence "The earth moves" or as a distinct, but equiform, sentence belonging to a foreign language. Of course, the overwhelming likelihood is that an utterer of an English oratio recta sentence like (6) will intend the quoted sentence to be understood as a familiar English sentence.

There is a second objection made against quotational theories of indirect discourse. This objection, once again originating from



Church<sup>11</sup> and echoed by Davidson<sup>12</sup>, concerns the behaviour under translation of an oratio obliqua sentence and its oratio recta Ersatz. The argument goes like this: sentences (4) and (6) cannot be logically equivalent because their respective translations into a foreign language are patently non-equivalent. Suppose we translate (4) and (6) into Italian. Then ( according to the Church view ) they go over respectively into:

(4I) Galileo diceva che la terra si muove

(6I) Galileo diceva quanto segue "The earth moves"

The quotation "'The earth moves'" in (6) appears in (6I) as "'The earth moves'" and not as "'La terra si muove'" precisely because (6) asserts that a relationship holds between Galileo and the sentence "The earth moves"; and one would expect (6I) to assert the very same thing. Of course, the content-sentence of (4), viz. "The earth moves", is mapped onto the Italian sentence "La terra si muove", the latter appearing as the content-sentence of (4I).

Here is the crux of the Church argument: (4) and (6) cannot be logically equivalent because an Italian, ignorant of English, would be unable to infer (6I) from (4I).

The following assumption lurks in the shadows: that the logical equivalence of two sentences belonging to the same language is reflected in the ability of a native speaker to infer the one from the other. Let us interpret this assumption as charitably as possible and not make the obvious rejoinder that a native speaker may not even be able to understand the sentence in question ( ie. they may relate to an excessively abstruse subject matter ). It must be possible in principle at least for a native speaker to make the required inference. And

( according to Church ) this is just what an Italian, ignorant of English, cannot do with (4I) and (6I). The reason is obvious: the Italian would be unable to know what (6I) meant on account of the fact that it contains the English quotation "'The earth moves'".

Church's argument is odd. We are being asked to accept two seemingly incompatible things: that sentence (6) has been translated into Italian and that an inability to speak English prevents an Italian from understanding the putative translation. A translation can hardly be counted as successful unless a native speaker of the language into which translation has proceeded has been put in the position ( in principle at least ) to understand the translated sentence. The obvious conclusion to draw from the fact that an Italian, ignorant of English, would be unable to understand (6I) is that (6I) is not an adequate Italian translation of (6). The Italian sentence:

(6I') Galileo diceva quanto segue "La terra si muove"

would be far more suitable. Here we have permitted the English quotation "'The earth moves'" in (6) to go over into the Italian quotation "'La terra si muove'".

But if a quotation names the expression quoted ( ie. the expression which stands between the quotes ), then the move from (6) to (6I') fails to preserve reference. For the quotation "'The earth moves'" in (6) must be taken as naming the English sentence "The earth moves"; and the quotation "'La terra si muove'" in (6I') must be taken as naming the Italian sentence "La terra si muove". It would be quite wrong, however, to conclude from this that acceptance of (6I') as the Italian translation of (6) involves turning a blind eye to the canons of precise translation. As Geach points out, a translator of a book who

left all the directly quoted dialogue in the original language would be regarded as perversely wrong, not pedantically correct.<sup>13</sup> Rather, the fact that the move from (6) to (6I') fails to preserve reference should be counted as showing that reference is not invariant under translation between languages.<sup>14</sup>

That there are circumstances under which translation need not preserve reference suggests in its turn that meaning need not be preserved either. Following this line of thought, the move from (6) to (6I') would have to be viewed as failing to preserve meaning. And this failure to preserve meaning would have to be blamed upon the quotations which appear respectively in (6) and (6I'). From one point of view, this looks perfectly reasonable; if the quotations "'The earth moves'" and "'La terra si muove'" are names with different references, then one would hardly expect them to be synonymous. And yet this conclusion grates on our intuitions. If the sentences:

The earth moves

La terra si muove

are synonymous, then it would seem hard to deny that the quotations formed by enclosing those sentences respectively in quotes, thus:

"The earth moves"

"La terra si muove"

would themselves be synonymous.

There is no need, however, to make the case against Church rest upon acceptance of the thesis that the quotations "'The earth moves'" and "'La terra si muove'" mean the same thing. For the sake of argument, let us concede that these quotations are not synonymous and hence that (6) and (6I') have different meanings. ( This concession

need not involve us in giving up the view that (6I') is an adequate translation of (6). ) It follows that the predicates:

x is tantamount to "The earth moves"

and

x is tantamount to "La terra si muove"

will themselves have different meanings. But the important point is that these predicates will be coextensive. For a sentence will be tantamount to the English sentence "The earth moves" just in case it is tantamount to the Italian sentence "La terra si muove".

The predicates in question are coextensive because the directly quoted sentences they contain - "The earth moves" and "La terra si muove" - mean the same thing. Indeed, given any two sentences which have the same meaning, it is plausible to hold that a sentence will be tantamount to the first just in case it is tantamount to the second. This is not to say that the relationship which holds between any two sentences where the first can be said to be tantamount to the second is necessarily that of synonymy. Galileo's original utterance, viz. "Eppur si muove", is tantamount to each of the directly quoted sentences "The earth moves" and "La terra si muove". It is in virtue of this fact that the oratio recta sentences (6) and (6I') ( and (6I) for that matter ) report correctly what Galileo said. But neither of the directly quoted sentences preserves the meaning of Galileo's original utterance.

It is important to point out that one can both concede that the quotations "'The earth moves'" and "'La terra si muove'" have different meanings and at the same time hold that the predicates "x is tantamount to 'The earth moves'" and "x is tantamount to 'La



terra si muove'" are coextensive. For this reason. If Church is right and, hence, the quotations in question genuinely have different meanings, then the respective oratio recta versions of (4) and (4I), viz. (6) and (6I'), would themselves have to be viewed as having different meanings. In view of the fact that the oratio obliqua sentences (4) and (4I) are ( to all intents and purposes ) synonymous, the conclusion would appear to be warranted that each oratio obliqua sentence differs in meaning from its oratio recta Ersatz. This conclusion need not, however, be seen as particularly damaging to Geach's theory of indirect discourse. For Geach's theory will still be in business if there is nothing more than a systematic agreement in truth-value between each oratio obliqua sentence and its oratio recta Ersatz. That there is such a systematic agreement in truth-value is suggested by the fact that the predicates in question are coextensive.

Quine ends his article "Quantifiers and Propositional Attitudes" on a rather pessimistic note concerning quotational theories:

The propositional attitudes are dim affairs to begin with, and it is a pity to have to add obscurity to obscurity by bringing in language variables too. Only let it not be supposed that any clarity is gained by restituting the intensions.<sup>15</sup>

Geach's theory makes such pessimism appear unwarranted: no recourse is made to intensions and the sentence quoted in the oratio recta version need not be relativized explicitly to a particular language. However, the quotation is itself a fresh source of problems. Quotations must be regarded as semantically complex expressions, ie. as built up in a finite number of steps from a finite number of semantically primitive elements; otherwise the language of which the quotations form a part would not be accessible to a truth theory meeting Tarski's criterion of adequacy. What this goes to show is that a quotational theory of indirect discourse like that of Geach needs to be backed up by an

acceptable account of quotation, an account which reads a recursive structure into quotations.

Davidson himself furnishes such an account. A quotation is to be viewed as giving an abbreviated structural description of the sentence quoted. The full structural description is provided by a complex singular term into which the quotation may be expanded. This complex singular term describes the quoted sentence in terms of the letters and punctuation signs it contains and their order. Thus the quotation:

"The earth moves"

may be expanded into:

"T"∘"h"∘"e"∘" "∘"e"∘"a"∘"r"∘"t"∘"h"∘" "∘"m"∘"o"∘  
"v"∘"e"∘"s"

The names of letters and of punctuation signs, and the sign for concatenation, will have to be introduced into the vocabulary for the language to which the quotation belongs. No problems arise here; for there are but finitely many such names. And the only entities which have to be added to our ontology are perfectly respectable, viz. punctuation signs and letters.

We have what appears to be an adequate account of quotation in hand. So why not accept Geach's quotational theory of indirect discourse? The ontology to which the theory commits us contains no disreputable elements. No particular difficulty seems to attach to the recursive characterization of a truth-predicate for languages containing the oratio obliqua construction. And room is left for a theoretical account of the relationship which holds between two sentences just in case the

one can be said to be tantamount to the other. Nonetheless, Davidson claims that there is yet another requirement on a theory of indirect discourse, a requirement which quotational theories cannot but fail to meet. A theory of indirect discourse must account for the fact that the content-sentence of an oratio obliqua sentence is used to say something.

Davidson introduces the notion of samesaying in order to bring out the full force of this additional requirement. Galileo and I are samesayers just in case an utterance of mine matches one of his in import. Consequently, when I utter the oratio recta sentence (6), viz.

Galileo said something tantamount to "The earth moves"

I say that Galileo and I are samesayers. For I mention a sentence of mine ( belonging to my language ) and assert that Galileo's original sentence matches mine in import. But ( according to Davidson ) I cannot be said thereby to have made Galileo and me samesayers. For I have failed to use my sentence "The earth moves" ( it has been merely mentioned ). And it is a necessary condition of my having made Galileo and me samesayers - and, hence, of my having said what Galileo said - that I use a sentence which matches Galileo's original sentence in import. Now, when I utter the oratio obliqua sentence (4), viz.

Galileo said that the earth moves

it is undeniable that I succeed in saying what Galileo said. But if my utterance of (4) makes Galileo and me samesayers, then it is hard to see how (4) can be equivalent to (6) my utterance of which fails to

do so.

Such is Davidson's objection to quotational theories of indirect discourse. He regards such theories as totally unable to accommodate the fact that the content-sentence of an oratio obliqua sentence like (4) is used to say what the original speaker said. Thus he writes:

... the theory brings the content-sentence into the act sealed in quotation marks, and on any standard theory of quotation this means the content-sentence is mentioned and not used.<sup>16</sup>

The account of quotation given above reinforces the point. Expansion of the quotation in (6) into a complex singular term of the kind considered ( ie. one which describes the sentence quoted in terms of the letters and punctuation signs it contains and their order ) makes it difficult to view the quoted sentence as being used to say something.

That Geach's theory of indirect discourse is proof against Davidson's objection will become clear as the discussion proceeds. First, however, let us consider the extremely powerful theory of indirect discourse erected by Davidson upon ( what he considers to be ) the ruins of the quotational theories. Our subsequent rebuttal of the Davidson "samesaying" objection will then gain in interest; for there are very strong similarities between Geach's theory of indirect discourse and the theory adopted by Davidson in preference to a quotational theory. Notwithstanding the fact that there is a marked kinship between their theories, however, the last stage of this essay will consist of an attempt to drive a wedge between the positions adopted respectively by Geach and Davidson.

### 3. Davidson's Theory.

The essence of Davidson's so-called paratactic theory of indirect discourse is that an oratio obliqua sentence is to be viewed as



syntactically composed of two distinct sentences, between which there holds no logical or semantic connection. One of these sentences is the content-sentence. The other is the sentence to which we ascribe a truth-value, and this consists of just that part of the oratio obliqua sentence which occurs outside of the content-sentence, for example:

Galileo said that.

Here we have a singular term referring to a speaker, the two-place predicate "said", and the demonstrative "that". The demonstrative refers to an utterance of the content-sentence following. Thus when I utter (4) above, the "that" refers to my utterance of the content-sentence:

The earth moves.

Juxtaposition of the sentence to which we ascribe a truth-value and the content-sentence produces a semantically revealing version of the whole oratio obliqua sentence, thus:

(8) Galileo said that.

The earth moves.

Davidson's claim is that his theory meets all the requirements on a theory of indirect discourse. First: no recourse is made to intensional entities. The singular term "The earth" in (8) stands for its customary reference, viz. the earth. At the same time, the apparent failure of extensionality associated with oratio obliqua is explained. For we make substitutions in the content-sentence but it is the other sentence which changes in truth-value. And ( speaking in terms of utterances as Davidson advises ) any change at all in the utterance of

the content-sentence, even where the replacing expression has the same reference as the one being replaced, might involve a change in truth-value for the introducing utterance, or performative. Secondly: the uttered content-sentence appearing after the performative has a perfectly familiar structure. It is therefore accessible to the standard truth-theoretic treatment. Thirdly: Davidson's theory is compatible with an account of the mechanism of indirect quotation. Indeed, he furnishes one. Thus, the utterance introduced by the performative must give the content of the sentence uttered by the speaker being reported. Finally: the theory accounts for the fact that my utterance of a true oratio obliqua sentence makes me and the speaker being reported samesayers. For the theory counts me as uttering the content-sentence; and this particular utterance matches the utterance of the original speaker in import.

We need not dwell upon the virtues of Davidson's theory. It is a powerful and compelling theory. And it is not the least of its attractions that it counts oratio obliqua sentences as wearing their logical form on their sleeves ( to use Davidson's own metaphor ). Geach clearly cannot say as much for his theory. What we must do at present, however, is rebut the "samesaying" objection, levelled by Davidson against quotational theories of indirect discourse. For it was the supposed failure of the quotational theories to account for the fact that my utterance of the oratio obliqua sentence (4) makes Galileo and me samesayers which prompted Davidson to urge the claims of his paratactic theory upon us. Once it is understood that Geach's theory no less than Davidson's accounts for the samesaying relation which holds between the utterer of a true oratio obliqua sentence and the person he reports, then we will be in a position to expatiate upon the relative

merits of the two theories.

Davidson's "samesaying" objection relies upon a rather dubious premise: that a sentence which is being mentioned ( ie. quoted ) is ipso facto not being used. This premise does not bear a close scrutiny. According to the standard account of quotation, we use a quotation like "'The earth moves'" to mention ( talk about ) the quoted sentence: in this case "The earth moves". But it is misleading to speak as if mention of a sentence precluded its use. Rather, what we should say is that the sentence "The earth moves" mentioned in the oratio recta sentence (6), viz.

Galileo said something tantamount to "The earth moves" is being used, but in a special way. And thus the utterer of (6) cannot be accused of failing to use a sentence which matches Galileo's "Eppur si muove" in import.

In other words: when one utters the quotation "'The earth moves'", one has thereby uttered the quoted sentence "The earth moves". Seen in one light this is even a truism: for ( as Geach indicates ) nothing in spoken language corresponds to the use of quotation marks. And thus an utterance of "'The earth moves'" and an utterance of "The earth moves" are phonetically quite alike. But if giving utterance to a quotation involves ( at least sometimes ) giving utterance to the sentence quoted, then it is not implausible to hold that one who utters the whole of the oratio recta sentence (6) ( including the quotation "'The earth moves'" ) has thereby uttered the sentence "The earth moves"; and this is enough to make him stand in the samesaying relation towards Galileo. This is not to ignore the role of the quotation marks. These signal that the utterer of the quoted sentence has used it nonassertively.

We have still to deal with the point that expansion of the quotation in (6) in the manner suggested by Davidson's account of quotation makes it supremely hard to view the utterer of (6) as having said what Galileo said. The only answer is to provide an alternative account of quotation: one which reads a recursive structure into quotations and, furthermore, which enables us to retain the insight that Galileo and the utterer of (6) are samesayers. Geach himself provides such an account. We are to read a quotation not in Davidson's fashion, ie. as a series of quoted letters and punctuation signs; but rather as a series of quoted words. Geach sums the account up perfectly with the following slogan:

A quoted series of expressions is always a series of quoted expressions.

In other words: a quotation is to be viewed as a complex singular term giving a description of the sentence quoted in terms of the words it contains and their order. The intimation that Galileo and I are samesayers is not lost in the version of (6) where the quotation has been expanded in accordance with Geach's account, thus:

Galileo said something tantamount to "The" "earth" "moves"

It has become increasingly clear that Geach anticipated Davidson's theory of indirect discourse in certain respects. Both theories count an oratio obliqua sentence as having correctly reported the original speaker just in case ( an utterance of ) the content-sentence is tantamount to, gives the content of, the sentence uttered by the original speaker. The purpose served on Davidson's theory by counting the content-sentence as semantically independent of the relevant attribution of a saying is served on Geach's theory by viewing the content-sentence as operating within concealed quotation



marks. In each case, an explanation is furnished for the fact that substitutions within the content-sentence need not have any particular effect upon the truth-value of the whole oratio obliqua sentence ( upon the truth-value of the performative in Davidson's case ).

And yet there are obvious differences. There is no need to take too much notice of Geach's failure to introduce a demonstrative element into his oratio recta paraphrase. For he comes very near to doing so in certain parts of his exposition. Of far more importance is the fact that Geach takes the component expressions of the content-sentence as standing for themselves. Davidson, on the other hand, cleaves to the rather winning thesis that singular terms in indirect speech have their customary references. But in order to reconcile this thesis with the apparent failure of extensionality associated with oratio obliqua, he is forced into construing the content-sentence as semantically insulated from what goes before. Geach is under no such compulsion; and thus he can treat the expressions in the content-sentence as making a semantical contribution towards the truth-value of the whole oratio obliqua sentence.

Davidson's theory is prima facie the more attractive of the two. For a theory which invites us to see oratio obliqua sentences as overtly exhibiting their logical form must have the first claim on our attention. However, there is no particular necessity why oratio obliqua sentences should wear their logical form on their sleeves, why their semantic structure should be open to our gaze. And thus one must count the cost of accepting Davidson's theory of indirect discourse in terms of the disadvantages which attach to the proposal that there holds no logical or semantic connection between the content-sentence and the preceding attribution of a saying. This final section is devoted to

showing that some of these disadvantages are great indeed. The problems discussed are touched upon lightly; but one ends by entertaining the suspicion that Geach's quotational theory of indirect discourse is in the last resort the more viable theory.

#### 4. Quantification and Pronouns.

For those who adhere to Davidson's paratactic theory of indirect discourse, the problem arises how to provide an adequate existential generalization of an oratio obliqua sentence. This is not to focus attention upon the fact that a Davidsonian treatment of the quantified sentence " $(\exists x)$ (Galileo said that  $x$  moves)", viz.

$(\exists x)$ (Galileo said that.  $x$  moves)

looks to be nonsensical. For it is a familiar point that the quantified sentence itself is of dubious significance. ( Some may even see it as a meritorious feature of Davidson's theory that it is unable to accommodate quantifying in. ) Rather, the problem for Davidson is to provide an existential generalization of an oratio obliqua sentence like (4), viz.

Galileo said that the earth moves

which is not open to the standard objections and which is satisfactory in terms of the paratactic theory.

One proposal at this point is to give (4) a Quinean existential generalization, thus:

$(\exists x)$ (Galileo said  $y$  [ $y$  moves] of  $x$ )

and then ( having reinstated the demonstrative ) subject the whole to a Davidsonian treatment, thus:

$(\exists x)(\text{Galileo said of } x \text{ that. } y [y \text{ moves}])$

The drawback of this proposal is not that an utterance of "y [y moves]" would fail to match Galileo's utterance of "Eppur si muove" in import. For the existential generalization of (4) has to say something like this: that there is something such that Galileo said that it moves. And thus we would not expect the exact content of Galileo's actual words to be given under such circumstances. The real objection to the proposal is that it is totally unclear what an utterance of "y [y moves]" amounts to.

A natural suggestion is that an utterance of "y [y moves]" amounts to an utterance of a sentence containing a pronoun, eg. "It moves". The existential generalization of (4) would then look like this:

(9)  $(\exists x)(\text{Galileo said of } x \text{ that. It moves})$

Before we proceed to discuss exactly what is wrong with (9) as the existential generalization of (4), it must be pointed out how Geach would handle the problem. According to Geach, we give an existential generalization of an oratio obliqua sentence by quantifying into oratio recta. Thus for (4) we would give:

(10)  $(\exists x)(\text{Galileo said something tantamount to } x \wedge \text{"moves"})$

Here the bound variable ranges over expressions. Another point in favour of the method is that no particular problem is posed by sentences which involve upon analysis the same expression occurring both inside and outside the scope of the indirect speech verb. The existential generalization of "Galileo said rightly that the earth moves" is given by:

$(\exists x)(x \wedge \text{"moves" is a true sentence and Galileo said something tantamount to } x \wedge \text{"moves"})$

To return to Davidson. The difficulty with (9) as the existential generalization of (4) is that it is unclear what semantical role is played by the pronoun occurring in the content-sentence. We are hinting at an underlying problem facing Davidson: that his theory of indirect discourse as given is unable to deal with oratio obliqua sentences on their relational reading. Consider one such sentence: "Galileo said that some planet moves". The relational reading is given by:

(11) Galileo said of some planet that it moves

And ( putting Davidson's theory on one side for the moment ) the question we have to answer is this: what semantical role is played by the pronoun which figures in the content-sentence of (11)?

One might think that the pronoun "it" in the content-sentence of (11) plays the same kind of semantical role as the "it" which figures in the second conjunct of:

The dog jumped over the wall, and it bit Socrates

In other words, one might think that the pronoun in (11) is used in lieu of a repetitious expression. Geach calls pronouns of this kind "pronouns of laziness".

It is a mark of a pronoun of laziness that it can be replaced salva veritate by the expression for which it goes proxy. This expression need not be the grammatical antecedent of the pronoun; but in the case of sentence (11) there is no expression other than the grammatical antecedent of the pronoun in the offing. But if the "it" in (11) is replaced by the antecedent phrase "some planet", the resulting sentence, viz.



Galileo said of some planet that some planet moves far from preserving truth-value, does not even seem to preserve significance. Consequently, the "it" in (11) cannot be a pronoun of laziness.

There is a second kind of semantical role played by pronouns. Thus the "it" in

(12) Socrates owned a dog, and it bit Socrates

is to be viewed not as going proxy for what would be repetitious language; but rather as being "bound" by the antecedent applicational phrase "a dog". Geach describes the doctrine ( which he accredits to Quine ) thus:

... the pronouns whose antecedents are applicational phrases correspond strictly in their syntax to variables bound by quantifiers.<sup>18</sup>

Applicational phrases are phrases like "some astronomer", "each man" etc., formed by attaching an applicative to a substantival general term.

Let us see how this doctrine applies to (12) in detail. According to Geach, (12) is the result of replacing the schematic letter "F" in "F(a dog)" by the predicate:

Socrates owned \_\_\_\_\_, and \_\_\_\_\_ bit Socrates

The same expression can be inserted into each gap of this predicate just in case that expression is a logical subject. Now Geach points out that we can render applicational phrases by quantifiers - using restricted quantification. Thus (12) becomes:

(13)  $(\exists x)\text{dog}((\text{Socrates owned } x) \ \& \ (x \text{ bit Socrates}))$

But here the temptation to regard the sentence "Socrates owned a dog"

as a genuine conjunct of (12) disappears. For the result of detaching that portion of (13) which appears before the "&":

$(\exists x)\text{dog}(\text{Socrates owned } x)$

is ill-formed, having an unpaired parenthesis. If "Socrates owned a dog" were a genuine conjunct of (12), then it would come out as " $(\exists x)\text{dog}(\text{Socrates owned } x)$ ".

It would seem reasonable to suppose that the pronoun which figures in the content-sentence of the oratio obliqua sentence (11) is bound by the antecedent applicational phrase "some planet". Let us draw out the consequences of interpreting the "it" of (11) in this way. Making our analysis of (11) parallel that given by Geach for (12): (11) is the result of replacing the schematic letter "F" in "F(some planet)" by the predicate:

Galileo said of \_\_\_\_ that \_\_\_\_ moves

Using restricted quantification, (11) becomes:

(14)  $(\exists x)\text{planet}(\text{Galileo said of } x \text{ that } x \text{ moves})$

We have here reached the denouement of our story. For the treatment of (11) along Davidsonian lines is incompatible with the view that (11) is adequately represented by (14). According to the paratactic theory, (11) must be viewed as consisting of two semantically independent sentences, thus:

(15) Galileo said of some planet that. It moves.

But if (14) is an adequate representation of (11), then the sentence "Galileo said of some planet that" cannot be a genuine constituent of

(11). For the result of slicing (14) after the "that":

( $\exists$ x)planet(Galileo said of x that

is ill-formed, having an unpaired parenthesis. Were the sentence "Galileo said of some planet that" to be a genuine constituent of (11), it would have to come out as "( $\exists$ x)planet(Galileo said of x that)".

And of course the argument works in the opposite direction. If (15) is a semantically revealing version of (11), then we cannot view (11) as the result of replacing the schematic letter "F" in "F(some planet)" by a single predicate. But in that case we cannot regard the pronoun in the content-sentence of (11) as bound by the antecedent applicational phrase "some planet".

The conclusion seems to be warranted that Davidson must give up at least one of the following two claims which he forwards as part of his theory:

- (A) The content-sentence ( of an oratio obliqua sentence ) has no logical or semantic connection with the attribution of a saying which goes before;
- (B) The content-sentence has a familiar semantic structure which "... poses no problem for theory of truth not there before indirect discourse was the theme".<sup>19</sup>

For the ascription of familiar structure to the content-sentence of (11) implies that the pronoun therein stands in a semantic relation towards its antecedent. But in that case there would be an explicit semantic connection between the content-sentence and the preceding attribution of a saying. On the other hand, espousal of claim (A) suggests that the pronoun-antecedent relation in (11) is not a semantic one; and thus that the pronoun which figures in the content-sentence

is playing an unfamiliar semantical role.

With a view to leaving intact as much of Davidson's theory as possible, (B) would appear to be the more dispensable of the two claims. For Davidson is quite right when he describes the point underlying claim (A) as that upon which everything depends.<sup>20</sup> It is not hard to see why he regards the semantic independence of performative and content-sentence as constituting the cornerstone of his theory. Davidson's explanation of the apparent failure of extensionality associated with oratio obliqua is radical precisely because it involves treating ( an utterance of ) the content-sentence as nothing more than an object of reference. Substitutions within the content-sentence amount to changes in the reference of the demonstrative which figures in the performative; and the semantical contribution made by the demonstrative towards the truth-value of the performative is altered thereby. The point is that this account of the apparent failure of extensionality would be vitiated were the expressions in the content-sentence to be viewed as making a direct semantical contribution towards the truth-value of the performative. The connection forged by Davidson between the performative and the content-sentence ( qua reference of the demonstrative ) would be made redundant.

Consequently, the pronoun-antecedent relation in (11) cannot be viewed as a semantic one by those who cleave to Davidson's theory. And thus work needs to be done to explain the semantical role played by the kind of pronoun which figures in the content-sentence of an oratio obliqua sentence on its relational reading. One possibility is that an explanation which meets the demands of the paratactic theory simply cannot be given, that the pronoun-antecedent relation in (11) must be viewed as a semantic one. There is, however, no need to be



unduly pessimistic. A proposal which might bear investigation is to count the pronouns in question as corresponding in their syntax to free variables. One thing, however, is clear: that much of the simplicity which seemed to attach to Davidson's theory has disappeared. Strictly speaking, oratio obliqua sentences can no longer be seen as wearing their logical form on their sleeves. And that, after all, was the selling point of Davidson's theory.

2. (p.8) See Journal of Philosophy (November, 1973) p.181.

3. (p.10) See ibid. p.53.

4. (p.10) "The Thoughts & Logical Density" reprinted in Philosophical Logic, ed. F.V. Van Marrewijk (Oxford University Press, 1987) p.23.

5. (p.11) ibid. p.24.

6. (p.13) ibid. p.267.

7. (p.14) ibid. p.259.

8. (p.18) "On Content and Object" in ibid. (see reference 1.) p.288.

9. (p.19) "Symmetry and the Analysis of Self-Ascriptions", Analysis 14, 1954/55 p.119.

10. (p.19) ibid. p.129.

11. (p.19) ibid. pp.178-179.

12. (p.23) ibid. p.271. Note that Dummett calls various contexts quines - a rather arbitrary choice of term in view of the fact that Quine uses it as a label for approximations without significant semantic structure.

13. (p.24) The term "quines" is Dummett's evocation of Frege's Erklärung.

14. (p.29) ibid. p.276.

15. (p.30) Word and Object (The Clarendon Press, Oxford, 1960) pp. 216-217.

16. (p.30) "On saying that" in ibid. (see reference 1.) ed. by F.V. Van Marrewijk and J. van Marrewijk (1987) pp.185-186.

17. (p.30) ibid. p.11.

18. (p.30) ibid. pp.73-74.

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2. (p.8) See Dummett, Frege: Philosophy of Language (Duckworth, 1973) p.181.
3. (p.10) See Frege, op. cit. p.59.
4. (p.10) "The Thought: A Logical Inquiry" reprinted in Philosophical Logic, ed. P.F. Strawson (Oxford University Press, 1967) p.29.
5. (p.11) Ibid. p.24.
6. (p.13) Op. cit. p.267.
7. (p.14) Ibid. p.269.
8. (p.18) "On Concept and Object" in Frege, Philosophical Writings (see reference 1.) p.46n.
9. (p.19) "Synonymity and the Analysis of Belief Sentences", Analysis 14, 1953/54 p.118.
- 10.(p.19) Ibid. p.122.
- 11.(p.19) Op. cit. pp.378-379.
- 12.(p.23) Ibid. p.277. Note that Dummett calls oblique contexts opaque, a rather unhappy choice of term in view of the fact that Quine uses it as a label for expressions without significant semantic structure.
- 13.(p.26) The term "tone" is Dummett's rendering of Frege's Beleuchtung.
- 14.(p.29) Op. cit. p.376.
- 15.(p.30) Word and Object (The M.I.T. Press, Cambridge, Mass., 1960) pp. 216-217.
- 16.(p.30) "On Saying That" in Words and Objections: Essays on the Work of W.V. Quine, ed. by D. Davidson and J. Hintikka (Reidel, 1969) pp.165-166.
- 17.(p.30) Loc. cit.
- 18.(p.30) Op. cit. pp.73-74.

19. (p.32) Op. cit. pp.380-381.

CHAPTER TWO

1. (p.35) "On Saying 'That'" in Words and Objections: Essays on the Work of W.V. Quine, ed. by D. Davidson and J. Hintikka (Reidel, 1969) p.164.
2. (p.35) See Davidson, "Semantics for Natural Languages" in Linguaggi nella societa e nella tecnica (Edizione di Comunita, Milano, 1970) pp.177-188.
3. (p.36) See Davidson, "Theories of Meaning and Learnable Languages" in Logic, Methodology and Philosophy of Science, ed. Y. Bar-Hillel (Amsterdam, North Holland, 1965) pp.383-394.
4. (p.36) In Translations from the Philosophical Writings of Gottlob Frege, ed. and trans. by P. Geach and M. Black (Blackwell, 2nd edn. 1960) pp.56-78
5. (p.37) See "Function and Concept" in Frege, Philosophical Writings (see reference 4.) pp.21-41.
6. (p.37) Reprinted in Essays on Frege, ed. E.D. Klemke (University of Illinois Press, 1968) Appendix B, pp.537-558.
7. (p.38) Frege's thesis that the senses of incomplete expressions are themselves incomplete is given a quite different interpretation by Dummett (see Frege: Philosophy of Language [Duckworth, 1973] p.291). Dummett maintains that the sense of a predicate is not a function, but an object, its incompleteness consisting merely in its being the sort of sense which is appropriate to an incomplete expression. This suggests that the indirect reference of a predicate is an object. Dummett prefers, however, to emend Frege's doctrine of indirect reference: he suggests that we give up the identification of indirect reference with sense in the case of predicates and that we treat the indirect reference as a function mapping the senses of names onto thoughts. In view of Dummett's refusal to countenance the notion of indirect sense, this function will constitute the reference of the predicate within the scope of arbitrarily many indirect speech verbs.
8. (p.39) This translation is taken from Philosophical Grammar, by J. Wallace (Stanford University, Ph.D., 1964) p.105n.
9. (p.39) In Structure, Method and Meaning, essays in honor of H.M.

Sheffer, ed. P. Henle, H.M. Kallen and S.K. Langer (New York, 1951) pp.3-24.

10.(p.41) Not because there is talk of senses having a reference. Strictly speaking, Frege's view is that it is primarily the sense of an expression which refers, the expression itself referring only derivatively.

11.(p.45) An  $L_0$  wff is primitive just in case it is of the form:

$$P_j^n ( t_1, \dots, t_n )$$

12.(p.49) There is another objection to the view that open thoughts are functions: namely, that  $T_1$  interprets some open thoughts as the values of functions, and yet it is a principle of Fregean theory that the value of a function is always an object, never another function. One can only point out in response to this objection that the principle seems to be violated by Fregean theory itself. For the theory requires that we view sentences involving multiple quantification as constructed in stages. Thus the sentence " $(x)(\exists y)\text{loves}(x,y)$ " is formed by attaching the quantifier " $(x)$ ", construed as a second-level predicate " $(x)\Phi(x)$ ", to the complex first-level predicate " $(\exists y)\text{loves}(\xi,y)$ ". And this is formed by attaching the quantifier " $(\exists y)$ ", construed as a second-level predicate " $(\exists y)\Phi(y)$ ", to the simple relational expression " $\text{loves}(\xi,\zeta)$ ". But here we have a function as the value of a function: viz. the reference of " $(\exists y)\text{loves}(\xi,y)$ " as the value of the function referred to by the quantifier " $(\exists y)$ ".

Dummett would argue that this account is quite wrong, that the complex first-level predicate " $(\exists y)\text{loves}(\xi,y)$ " must be thought of as having been formed from a sentence such as " $(\exists y)\text{loves}(\text{Dick},y)$ " by omission of the proper name "Dick". Indeed, Dummett would argue that this is how we determine the truth-conditions of the sentence " $(x)(\exists y)\text{loves}(x,y)$ ". This sentence is true just in case each of the sentences, " $(\exists y)\text{loves}(\text{Dick},y)$ ", " $(\exists y)\text{loves}(\text{Bill},y)$ ", ..., is true; and " $(\exists y)\text{loves}(\text{Dick},y)$ " is, in turn, true just in case at least one of the sentences, " $\text{loves}(\text{Dick},\text{Julia})$ ", " $\text{loves}(\text{Dick},\text{Mary})$ ", ..., is true.

In reply to Dummett: this account of the truth-conditions of a sentence involving multiple quantification simply does not lend itself to a truth-theoretic treatment. And thus if Frege is committed to such an account, so much the worse for him.



- 13.(p.50) There is no reason to suppose that the adoption of a Fregean approach limited to two semantic levels in accordance with Dummett's emendation would overcome this difficulty. An infinite amount of semantic machinery would still be needed, even though each expression drawn from the vocabulary would stand for its indirect sense in contexts oblique to any degree.

### CHAPTER THREE

1. (p.53) "On Saying That" in Words and Objections: Essays on the Work of W.V. Quine, ed. by D. Davidson and J. Hintikka (Reidel, 1969) p.172.
2. (p.53) See "Quantifiers and Propositional Attitudes", reprinted in Reference and Modality, ed. L. Linsky (Oxford University Press, 1971) pp.101-111.
3. (p.55) Ibid. p.106.
4. (p.56) Word and Object (The M.I.T. Press, Cambridge, Mass., 1960) p.216.
5. (p.58) To say they are "formable" is not simply to assert that they are semantically articulate, thus begging the question against Quine. For we could understand each such predicate as formed from an oratio obliqua sentence by omission of the name of the speaker.
6. (p.59) "Reply to Davidson" in Words and Objections (see reference 1.) p.334.
7. (p.59) See pp.30-31.
8. (p.60) See Mental Acts (R.K.P., London, reprinted 1971) pp.79-95.
9. (p.62) "On Carnap's Analysis of Statements of Assertion and Belief" in Reference and Modality (see reference 2.) pp.168-170.
- 10.(p.62) Op. cit. p.163.
- 11.(p.64) Loc. cit.
- 12.(p.64) Loc. cit.
- 13.(p.66) Op. cit. pp.91-92.
- 14.(p.66) See W.D. Hart, "On Self Reference" in Philosophical Review 1970, pp.523-528. Hart points out that a translation into German of his whole paper would carry this sentence (which appears in the course of the discussion):

This sentence is in English

over into:

Dieser Satz ist auf deutsch

Here an adequate translation has patently failed to preserve reference.

- 15.(p.68) Reference and Modality (see reference 2.) p.111.
- 16.(p.71) Op. cit. p.169.
- 17.(p.75) Op. cit. p.82.
- 18.(p.80) "Quine's Syntactical Insights", reprinted in Logic Matters ,  
by P. Geach (Blackwell, 1972) p.118.
- 19.(p.82) Op. cit. p.172.
- 20.(p.83) Ibid. pp.170-171.

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