Indirect Discourse and Quotation
Author(s): Michel Seymour
Source: *Philosophical Studies: An International Journal for Philosophy in the Analytic Tradition,* Vol. 74, No. 1 (Apr., 1994), pp. 1-38
Published by: Springer
Stable URL: http://www.jstor.org/stable/4320481
Accessed: 08/08/2011 15:22

MICHEL SEYMOUR

INDIRECT DISCOURSE AND QUOTATION*

Davidson's paratactic theory of indirect discourse constitutes a first attempt to account for the opacity of indirect discourse locutions while preserving at the same time semantic innocence, i.e. the intuition that expressions occurring in an intensional context very often behave as they ordinarily do in other non-intensional contexts. Its interest in this regard lies in part in the way it successfully avoids any recourse to intensional entities and paves the way for a vindication of sentential theories of propositional attitude sentences. It is also the first theory that is at the same time able to satisfy the constraints imposed by a semantic account that would meet the requirements of a finitely axiomatized, compositional, recursive theory of truth for the language.

I am convinced that these different features of the theory are important and that they should be met by any good semantic theory of indirect discourse sentences. I am less certain though that the paratactic account can overcome the difficulties with which it is confronted and this is the reason why I would rather seek for another solution and argue for a substantially different account of indirect discourse. In what follows, I will first rehearse the very long list of criticisms that have been raised against the paratactic theory. By doing so I do not mean to suggest that none of them can be answered and I do not intend to discuss any of them in detail. The interest of running them together is rather that they all raise questions concerning the Davidsonian hypothesis according to which an indirect discourse sentence can be paraphrased in terms of two extensional sentential components, one of which contains a demonstrative referring to the other.

These criticisms provide at the very least a motivation for looking once again at so-called "quotational theories". Some of them have quite justifiably been dismissed by Davidson but, given his own account of quotation, the paratactic theory itself is not very different from a

quotational theory. I shall however be concerned to show that the criticisms raised against the paratactic theory would reoccur in a new guise and would affect a revised Davidsonian quotational theory.

I shall therefore try to formulate an alternative account of quotation, understood as a functional device belonging to a substitutional language. I will briefly indicate how this new approach enables one to circumvent the difficulties of the paratactic theory while preserving its virtues. I should stress that my rejection of the paratactic theory is not meant to reveal the failure of the Davidsonian program as a whole. This is the reason why I shall particularly be interested in showing that the quotational theory that I favour does indeed meet the requirements of a finitely axiomatized theory of truth for the language.

I. DAVIDSON'S PARATACTIC THEORY OF INDIRECT SPEECH

Davidson's paratactic theory, it will be remembered, involves an hypothesis concerning the logical form of indirect discourse according to which a sentence like

(1)   Galileo said that the earth moves

is paraphrased as

(2)   Galileo said that. The earth moves. (Davidson 1968—69)

In such a paraphrase, the expression "that" is used as a demonstrative. The correct analysis of the analysandum is one in which an utterance of the first sentence in (2) involves an act of demonstrating an utterance of the second sentence. The first part of the analysis also represents Galileo's utterance as being in a relation of samesaying with the demonstratum. This, however, is not something that belongs to the logical form of (1). It is rather revealed by a conceptual analysis of the verb "says". The so called "intensionality" of indirect discourse is then accounted for as a phenomenon that has nothing to do with the failure of extensionality principles. This is so because the original sentence is broken up into purely extensional sentential components. The application of principles such as the substitution of identicals, existential generalization, and truth functionality is allowed in both of the sentential components. It is just that its application in the case of the second

sentence can lead to a variation in the truth value of the first sentence. But this has no longer anything to do with opacity.

I shall now enumerate some of the most important objections made to Davidson's theory:

(i) Davidson is committed to the view that we have been misled all along in supposing that an indirect discourse sentence is a single sentential unit. Against our intuitions in this regard, it is claimed that we should count a single indirect discourse sentence as an aggregate of two separate sentences, moreover logically independent of one another. They are only paratactically joined together. This is because the paratactic view sees "that" as a demonstrative in "Galileo says that . . .". Our intuition concerning how to divide among sentences tells against Davidson's hypothesis. (Burge 1986, 191)

(ii) Understanding the "that" as a demonstrative is also problematic for the following reason. It will be translated in french as "que" and it does not seem that there is a demonstrative use of "que" in French. (Schiffer 1987, 125) Even if we were to grant that there is a *use* in English sometimes justifying the demonstrative interpretation, and even if it were admitted that there once was a similar use made with "que", the fact remains that now we do not use "que" in a demonstrative way. Their intertranslatability must therefore mean that "que" and "that" share a certain feature in common that has nothing to do with a demonstrative function and that the word "that" does not literally behave as a demonstrative.

(iii) Our intuition suggests also that a sentence like (1) could be true even if it were not uttered. Its utterance is not a condition that it must satisfy in order to be true. But this is precisely what is required if Davidson's account is correct. A sentence containing a demonstrative can only be evaluated relative to a context in which it is uttered and where the demonstrative expression is completed by an act of demonstration. Once again the problem is related to the fact that a demonstrative component is postulated in the sentence.

Even if the appropriate framework for the semantics of natural languages containing demonstratives were one in which some sentences need to be uttered in order to be true, it would not follow that only sentences that have been uttered could become true or that truth should be understood in general as a property of utterances. But even if

we were to make such a drastic move, our objection could be reformu-
lated as saying that, in general, the utterance of a propositional attitude
or an indirect discourse sentence (not containing a demonstrative in the
subordinate clause) does not affect the truth value of the sentence,
while Davidson's paratactic paraphrase can have a different truth value
from one context of utterance to another.

(iv) It has often been claimed against the theory that the analysis of
(1) "implies" the existence of an English utterance while (1) itself does
not. (Baldwin 1982, 273) Of course one could answer, along with
Lepore and Loewer, that such an inference cannot be made if we rely
solely on the logical form of the sentence itself, e.g. (2). (Lepore and
Loewer 1989, 347) But this reply is clearly unsatisfactory. The problem
is that the literal utterance of the analysandum does not "imply", in the
sense of a conversational implicature, the existence of such an English
utterance while its *purported correct analysis*, which is the result of
combining a certain hypothesis concerning the logical form *with* a
particular use of the demonstrative, clearly does have such an conversa-
tional implication.

Even if the analysandum is not the sentence type (1) but rather an
utterance of a sentence type and that, as such, it also "implies" the
existence of an English utterance, there is still a discrepancy between
(1) and (2). The existence of an English utterance is implied by the
utterance of (1) only because (1) has been uttered, while the same
"implication" in the case of the analysans results from there being a de-
monstrative reference to an English utterance. Once again the problem
stems from assuming the presence of a demonstrative in the sentence.

(v) There seems to be a problem in claiming that occurrences of
"that" are to be understood as demonstratives in the context of iterated
indirect discourse locutions. (Brian Loar, as reported by Schiffer 1987,
131—132; see also Burge 1986, 193—197) As a demonstrative expres-
sion, "that" should behave as a purely referential term. If so it should be
used only to refer to a particular individual. This should be the case for
all its occurrences in the context of a sentence like

(3)   Laplace said that Galileo said that the earth moves

which, when properly paraphrased, amounts to

(4)   Laplace said that. Galileo said that. The earth moves.

Now if, as Davidson suggests, the utterance made by the reporter is only meant to samesay what has already been said, it follows that the demonstrative should refer to the same thing as what is referred to by Laplace. If the report is accurate, and if the demonstrative is purely referential, Laplace should have referred to the same thing. According to Davidson, the second occurrence of "that" refers to an English utterance. If it is purely referential, Laplace also should have referred to that English utterance. But this is clearly false.

There is indeed a way out of the difficulty. (Burge 1986, 195—196) We could argue along with Burge that the demonstrative is not purely referential and goes hand in hand with a self-referential claim. Instead of (4), we would have

(5)   Laplace said that, taken in the context of this very utterance. Galileo said that, taken in the context of this very utterance. The earth moves.

The idea is that when we are ascribing a certain content, we are in a way achieving a translation of that content into our own dialect. The correctness of our indirect discourse ascriptions will then intimately be connected with our translation practices. Now there are clear cases where our translations practices require the preservation of self-reference instead of reference. (Burge 1978) And cases like (5) are precisely of that sort.

This is surely a legitimate answer but one that also reveals the fact that the demonstrative is not purely referential. Burge's solution reveals that the expression is at best a demonstrative expression referring to an utterance under a certain description. It is interesting to notice that under such circumstances, the demonstrative would not be interchangeable with a purely referential demonstrative expression referring to the same utterance. In the case where, in (5), the demonstrative is used as a purely referential expression, our translation practices require that it refers to the thing referred to by Laplace. Since in the Davidsonian analysis, the demonstrative refers to an English utterance, the result of substitution would yield a false sentence since Laplace never referred to this English utterance. This reveals the failure of the substitution of identicals and, therefore, the intensionality of the context "Galileo said . . .".

(vi) According to Davidson, (1) and (2) are semantically equivalent under an interpretation where the demonstrative refers to an utterance of "the earth moves". Now there is nothing to prevent us from reporting, for instance, Galileo's utterance by saying: Galileo said that. La terre bouge. If the paratactic reading is equivalent to a "said that" locution, it follows that we should allow a sentence like "Galileo said that la terre bouge", but we don't. (Baldwin 1982, 274) There is clearly a violation of grammatical rules here and the restriction cannot be explained on the basis of convenience alone, or other pragmatic considerations. But dismissing these mixed sentences by invoking pragmatic considerations seems to be the only available option left to the Davidsonian.

It is tempting to use once again Burge's solution in order to explain why the demonstratum has to be in the language to which the sentence containing the demonstrative belongs. (Recall that the self-referential condition associated with the use of such a demonstrative requires that the utterance that follows be in the language of the very utterance containing the demonstrative.) Instead of (2), we would have

(6)   Galileo said that, taken in the context of this very utterance. The earth moves.

Burge alludes to such a move, but he also correctly points out that this solution threatens the so called logical independence of the two component sentences in (2), which is at the heart of the paratactic theory. (Burge 1986, footnote 4)

It cannot be replied that the self-referential condition is something involved only in the conceptual analysis of "said", and that it should not be spelled out explicitly in the logical form, because this only transfers the source of the intensionality and does not remove it. The self-referential condition is perhaps indeed imposed by the word "said" understood in its indirect sense and we can accept in general a distinction between a direct and an indirect sense of the word. But in the second reading, indirect discourse remains intensional because it does not allow for the substitution of identicals. For instance, it does not allow for the substitution of a demonstrative construction involving a self-referential condition by a purely referential demonstrative.

(vii) It has been claimed that there is a rigid reference to content in

the subordinate clause of (1) while the reference to a particular content is at best contingent in (2). (See for instance Baldwin 1982, 275—277) The answer to this, as suggested by Peter Smith, is to treat the demonstrative as involving a reference to an utterance, taken as an utterance having the content that it has in the actual world. (Smith 1976) (2) would then be paraphrased as something like

(7)   Galileo said that, taken in the context of expressing the content that it actually expresses. The earth moves.

I shall take for granted, for the sake of argument, that contrary to what is argued by Baldwin (1982), the adverb "actually" rigidly refers to the world of utterance. Still, the remarks that were made concerning Burge's solution seem to apply once again. The demonstrative, used as involving a reference to an utterance under a certain description, could not be interchangeable with a purely referential demonstrative referring to the same utterance, although such a substitution should be allowed if the context were extensional. Suppose for instance, that in the actual world but on Twin Earth, the sounds "the earth moves" do not mean anything. In that case (2), when interpreted as (7), is true on Twin Earth, since the sentence rigidly means there what it means for us in English, while it can be meaningless when the demonstrative is purely referential, since it can refer to the meaningless sounds of Twin Earth. This is at least the conclusion that we should draw when the word "said" is understood in its indirect sense. And so the substitution of a coreferential expression does not guarantee the preservation of the truth value.

Of course one could want to stipulate that all demonstrative expressions referring to utterances refer to them as expressing the content that they actually express, but this seems to be an ad hoc stipulation. It is certainly possible to refer demonstratively to the inscription of a certain verbal form as such, without referring at the same time to the content that it actually expresses. Inscriptions are not individuated in terms of the content they actually express. This is, in essence, a variant of Ferdinand de Saussure's "arbitraire du signe".

(viii) The paratactic analysis is too weak. Certain valid inferences made on the basis of (1) are no longer valid when it is paraphrased as (2). This point has been made by numerous philosophers. (See for

instance Platts 1979; Burge 1986, 200—206; Schiffer 1987, 134—135; and even Lepore and Loewer 1989, 350, who defend the paratactic account but acknowledge this disparity between (1) and (2).) Some of the problematic inferences are:

(A) Galileo said that A and B are wrong.
Therefore, Galileo said that B and A are wrong.

(B) Galileo said that the earth moves.
Therefore, Galileo said that the earth moves.

(C) Galileo said that the earth moves.
The earth moves.
Therefore, Galileo said something true.

(D) Galileo said that the earth moves.
Everything said by Galileo is true.
Therefore, the earth moves.

The paratactic paraphrases of these sentences turn (A), (B), (C) and (D) into non-valid inferences, if validity is understood as formal validity, i.e. validity in virtue of logical form. It is not formally valid because formal validity is only a function from the context of interpretation in which the meanings of logical connectives are fixed and it is unsufficient to determine the validity of formulas containing demonstratives. These can only be valid relative to a context of application in which demonstrative expressions acquire their reference. (A) and (B) are not semantically valid either, where an inference from α and β is semantically valid only if, in all possible worlds in which α is true, β is also true. It is easy to stipulate a possible world in which the intended demonstrata in the first formulas of (A) and (B) exist, while the demonstrata in the second formulas do not.

An argument to the effect that (A), (B), (C) and (D) themselves are not either formally or semantically valid is not satisfactory. (This is especially so in the case of (B). See Burge 1986 for a discussion) It is true that in logic we are very often misled by our intuitions. But our intuitions also serve as a parameter for the evaluation of a particular proposal in logical form. It is certainly not a *tribunal ultime* but it plays a role in the overall evaluation of a particular theory.

(ix) The extension of the theory to propositional attitude sentences is problematic. A first approximation is to interpret the paratactic theory as implying only the existence of a relation of samesaying between inscriptions in general and not necessarily between utterances. (See for instance Lepore and Loewer 1989, 353) In the ascription of a particular belief, we would be committing ourselves only to the existence of belief states, inscriptions in the head, and not necessarily utterances, as in the case of indirect discourse. (Davidson 1975, 167) But this has the unfortunate consequence that one cannot believe sentences that one has never heard or that we postulate the existence of tokens in the head that are isomorphic with sentences that were never heard. These would somehow already be registered in the brain although they have never been produced before.

Even if, instead, we only wanted to commit ourselves to the existence of a belief relation between the agent and a quoted sentence-type in a certain language that samesays a particular utterance, we would in any case be confronted with the same difficulty, given Davidson's paratactic theory of quotation according to which quotes implicitly involve a demonstrative reference to a token. But it seems that believers can believe sentences they never "parsed" before.

(x) The paratactic account cannot be right because, according to it, we could all at once be semantically competent in the use of (1) and know what Galileo said, but also fail to understand what was said. This is indeed a feature of Davidson's paratactic analysis. According to it, the logical form of (1) is given by (2). A semantically competent speaker that uses (2) in a semantically competent way could understand what the words "Galileo said that" means, utter "the earth moves", know that this utterance is the demonstratum of the demonstrative, although he did not understand what the words "the earth moves" mean. This is at least a consequence that one draws if the demonstrative is behaving as a purely referential expression. Its purpose is to refer to an utterance, a particular event, and not an event under a description, i.e. an utterance described as expressing a particular content (Schiffer 1987, 133—134; Lepore and Loewer 1989, 351).

Of course, the paratactic account also involves the claim that the speaker utters the sentence in order to express a certain content and therefore understands what is expressed by the demonstratum. But this

is an additional (pragmatic) feature that could have disappeared without affecting the semantic competence of the speaker in his use of (2). The understanding of what was said depends upon there being, in addition to the semantic competence required for an understanding of the sentence, certain pragmatic features that accompany accidentally our utterance. It seems however obvious that if someone is semantically competent in his use of (1), he has access to the content of the subordinate clause and that his access to the content does not stem from pragmatic features that accidentally accompany his use of the sentence.

The criticism we are now making is not the trivial claim that one could fail to grasp the full content of the subordinate clause, as when we report in indirect speech, someone as saying that he conducted three experiments with Bell inequalities, not knowing what Bell inequalities are. (See Lepore and Loewer 1989, 352) It is rather that even if one has a complete understanding of the semantic content of the paratactic paraphrase, he can fail to grasp the content expressed by the demonstratum. If the demonstrative is purely referential, a competent user of (2) needs to be able only to utter the sounds "the earth moves" and refer to those sounds. The rest belongs to additional accidental features of his use, for instance being able to understand what those sounds mean. By contrast, a semantically competent speaker of (1) will have complete access to the semantic content of the subordinate clause. In short, where the demonstrative is understood as purely referential and refers to the utterance that follows it, a complete access to the semantic content literally expressed by (2) does not provide access to the content one would have access to if one were to have full access to the semantic content expressed in (1).

(xi) It is also a feature of the paratactic account that one can competently use (1) without referring at all to the subordinate clause contained in it. (Lepore and Loewer 1989, 347) This is because the reference to an utterance of the subordinate clause is only an accidental feature of some uses made with the demonstrative "that" in (2). According to the paratactic account, it seems to be logically possible to utter (1) without referring to (the content of) the subordinate clause. Once again there seems to be good reasons for believing that a semantically competent speaker using (1) must be referring to (the content of) the subordinate clause.

(xii) The previous criticisms seem to indicate that the word "that" cannot be understood as a purely referential demonstrative expression. If it works as a purely referential term, then it only refers to a mere utterance, and not to an utterance described as expressing a certain content. There are ways out of the difficulty, but they immediately create other important problems that the theory sought to resolve.

We could be inclined for instance to treat the demonstrative as an abbreviation for a description (instead of a demonstrative construction such as "this so and so" similar to the ones that were introduced in formulating Burge's and Smith's solutions to criticisms (v) and (vii) respectively). This moves is motivated by the requirement to incorporate first the self-referential condition, but also the condition according to which the demonstrative refers to an utterance as something that expresses what it *actually* expresses, and finally the condition of referring to *what* is expressed by the utterance.

But as soon as we do this, we create an intensional context within the scope of "Galileo said . . .". We seem also vulnerable to Church's translation argument and we lose the appeal that the paratactic theory initially seemed to have when it was suggested that, according to it, the two sentences in (2) are paratactically joined and are logically independent of one another.

Another option would be to treat these additional conditions as belonging to what is *shown* and not to what is *said* in our use of (2). It could be argued, for instance, that the use of the demonstrative "that" in (2) is completed by an act of demonstration expressing a certain mode of presentation rendered by those conditions. But this move would not achieve much. The initial criticism raised against the demonstrative use of "that" in indirect discourse sentences would still remain (Criticisms (i)—(iv)). In addition, since the self-referential condition, required in order to answer Criticism (v), now appears to be part of the non-literal content of the use of (2), the demonstrative would behave as a purely referential expression at the semantic level and we would be asserting something which is literally false. We are also forced to exclude sentences belonging to another language from occurring as subordinate clauses in English by relying solely on convenience or other pragmatic considerations (Criticism (vi)). We are in addition unable at the semantic level to account for the rigid reference to content involved in

(1). (Criticism (vii)) On top of this, the paratactic paraphrase remains semantically too weak and fails to account for some intuitively valid inferences. (Criticism (viii)) The extension of the analysis to propositional attitudes remains problematic. (Criticism (ix)) And by failing to make explicit the different conditions associated with the use of the demonstrative, we are still vulnerable to the criticisms that were raised in (x) and (xi). A discrepancy would remain between the *semantic* contents of (1) and (2).

So the only remaining option seems to be to maintain the purely referential character of the demonstrative and explicitly add the missing conditions while trying to formulate them as extensional sentences. The result would yield an analysis of (1) as

(8)   Galileo said that. That is in the context of this very utter-
        ance. That is with the content it actually expresses. (Ex) (x is
        a theory of truth for English meeting certain empirical
        constraints which stipulates this.) (That is true if and only if
        the earth moves.) The earth moves.

The analysis works only if "that" refers to the utterance of "The earth moves". Of course, there are many problems involved in choosing this paraphrase. One of them is the fact that another demonstrative has occurred (the term "this") which reintroduces all the previous difficulties. The other problem is the one raised by Schiffer. (Schiffer 1987, 137) According to the new proposal, an explicit reference is made to a truth theory for English. This creates a tension with the Davidsonian hypothesis according to which a knowledge of a theory of truth is only a sufficient condition for semantic competence and not a necessary condition. (Davidson 1976) The truth theory is interpretative in the sense of Foster and it is not claimed that the competent speaker has a propositional knowledge of the truth theory. But how could it be so if, in the appropriate paraphrase of indirect discourse sentences, there was a need for an *explicit* reference to such a theory?

It is hard to see how Davidson could answer all of these criticisms. Perhaps the solution lies in questioning an assumption that was pre-supposed all along concerning the delimitation between semantics and pragmatics. Maybe all the missing conditions I alluded to do belong to what is shown and not to what is explicitly said, but that they neverthe-

less must be understood as part of the literal meaning of what is said, since literal meaning is determined by speakers' intentions. Davidson has recently expressed his sympathies for Grice and this may indicate the line of answer he would favour. (Davidson 1990) According to this view, the literal meaning of (1) would depend not only upon the speaker's intention to use the word "that" as a demonstrative and his intention to refer with it to the subordinate clause, but also upon his intentions to refer to it in the context of the language of his utterance, with the meaning that it actually expresses, and with a particular intended meaning. I guess the idea would be that when speakers use indirect locutions, they all implicitly have these meaning intentions.

Apart from the intrinsic implausibility of the proposal, this solution seems to me to go against Davidson's idea that there is a fundamental interdependence between beliefs and meaning. (Davidson 1975) Choosing the Gricean approach suggests that meaning has to be ultimately explained in terms of speakers' beliefs and intentions and we would lose sight of Davidson's suggestion according to which we could not have beliefs unless we were not able to interpret others. In any case, all of this fails to evacuate intensionality. It is perhaps now located into what is shown and not into what is made explicit, but it is still there.

II. A DAVIDSONIAN QUOTATIONAL THEORY

The criticisms that have been raised suggest that it is problematic to treat "that" as a demonstrative in "Galileo said that . . .". It might then be useful to consider once again sentential theories which avoid this consequence. But before doing so, I shall consider a quotational theory in which quotation is accounted for paratactically. As Davidson suggests, a sentence like

"Alice swooned" is a sentence.

should be understood as

Alice swooned. The expression of which this is a token is a sentence.

Davidson's paratactic theory of quotation meets three important criteria that any good theory of quotation should be able to meet. First

it enables us to account for quotation marks in the context of a general theory of truth for the sentences of the language. This will be true as long as we are able to accommodate demonstratives within the language and provide an extensional theory for them. The expressions that are mentioned by quotes do not have to be interpreted in a way that differs from the way in which they behave in ordinary extensional context. We shall therefore be able to account for cases in which what is quoted is used and not only mentioned. Second, it is also a theory that treats quotations as semantically structured linguistic devices. Quotation marks are linguistic devices capable of endless applications and learning to use them involves a mastery of a general rule. It is only in this way that we will be in a position to account for quotations within the general framework of a finitely axiomatized theory. And third, quotations are descriptive devices, picturing what is being referred to and enabling one, for instance, to introduce novel pieces of notation and new alphabets. (Davidson 1979, 89—90)

As noted by Baldwin, the paratactic theory of indirect speech is a notational variant of a quotational theory incorporating a paratactic account of quotation. (Baldwin 1982, 273) The difficulties mentioned against the paratactic theory in the previous section should reoccur. And as expected they do.

An application of Davidson's theory of quotation to indirect speech would yield an analysis of (1) as

(9)   Said (Galileo, "The earth moves").

Applying the paratactic theory of quotation, we get

(10)   The earth moves. Galileo said a sentence of which this is a token.

which clearly seems to be false, since Galileo never said anything in English. Perhaps a more appropriate rendition would be

(10*)   The earth moves. Galileo uttered something which samesays a sentence of which that is a token.

But since Davidson precisely understands "said" as "uttered something which samesays", (10) would seem to be right after all.

In any case, the same sort of difficulties can be raised against this new account:

(i) It still goes against our intuition concerning the number of sentential components involved in an indirect discourse sentence.

(ii) Even if "that" now seems to be analysed in terms of quotation marks, they, in turn, are ultimately analysed in terms of a demonstrative expression and our intuition suggests that an expression like "que" which translates "that" does not involve any demonstrative component.

(iii) (10) could not have been true without being uttered. But (1) could have.

(iv) As a new analysis of (1), (10) still "implies", in the sense of conversational implicature and relative to a context in which an appropriate demonstrative reference is made, the existence of an English utterance. But the utterance of (1) does not.

(v) Since the referent, under such an account, still is an utterance, the demonstrative expression implicitly involved cannot be purely referential. For if it were in the context of iterated indirect discourse constructions such as (3), it would falsely imply that Laplace referred to an English utterance.

(vi) We are still forced to allow constructions like "Galileo said that la terre bouge" since, according to the Davidsonian quotational theory, it is equivalent with the following grammatically correct formula:

> La terre bouge. Galileo uttered something which samesays a sentence of which this is a token.

(vii) We still find ourselves with a disparity between a rigid reference to the content of the attitude in (1), since the subordinate clause comes fully equipped with the semantical rules that are generally associated to it, and an accidental reference to them in (10).

(viii) (10) is weaker than (1) for essentially the same reasons. The new paraphrases of the valid inferences (A), (B), (C), and (D) are still formally non-valid (in virtue of logical form) because the demonstrative refers only relatively to a context of application. And (A) and (B) are not semantically valid (in all possible worlds) essentially for the same reasons we alluded to.

(ix) The account is problematic in its application to propositional

attitudes. If belief, for example, is understood as a relation between an agent and a quoted sentence type, it implies the existence of a sentence-token of which it is a type, and therefore implies either that one cannot believe sentences that she has never heard (read), or that there are somehow already in her brains tokens that are isomorphic with sentences that she has never heard.

(x) In the subordinate clause of (1), the expressions are used and not only mentioned. This is a semantic feature of the sentence. But in the purported correct analysis, a speaker that competently uses (10) need not do anything but utter the demonstratum. If she expresses a certain content while uttering the sentence "the earth moves" (as is required in the correct analysis of (1)), it is because of a feature that accidentally accompanies her utterance and it is not in virtue of a semantic feature of the sentence uttered.

(xi) It is also in virtue of a semantic feature of (1) that a reference is made to (the content of) the subordinate clause. This contrasts with (10), where we could have failed to refer to the demonstratum. It is always because of referring intentions that accidentally accompany our utterance of (10) that a reference is made to an utterance of "the earth moves".

(xii) Schiffer's criticism will also apply if we choose to render the missing informations explicit in order to make them part of the semantic information contained in the sentence.

However, the source of the problem is not the quotational theory of indirect discourse, but rather the paratactic account of quotation. Let me just mention a few of the problems associated with such a theory:

(i) We are willing to admit that many sentences have never been uttered. For any such true sentence "p", it is also obvious that a meta-linguistic sentence of the form " "p" is true" has also never been uttered. But it follows from the paratactic theory of quotation that quoted sentences cannot be true unless they have been uttered.

(ii) A related problem is that, according to the paratactic account, an utterance of a sentence like " "The earth moves" is a sentence" seems to imply pragmatically the existence of an English utterance of the sentence "The earth moves" because of a pragmatic reference made to it. As a matter of fact, any statement containing an English quotation pragmatically implies the existence of an English utterance.

(iii) One of the *raison d'être* of the paratactic theory of quotation is to allow for the possibility of quotations that involve simultaneously a use and mention of the sentence quoted. This is certainly one of the highlights of Davidson's theory. However, when we look closely, it appears that an occurrence of a sentence within quotation marks can be used and not only mentioned only if appropriate intentions accidentally accompany the utterance made by the speaker. At the semantic level the speaker only needs to utter the sounds of the sentence quoted in order to be speaking literally. It is only if, in addition to this, he intends to utter those sounds with the appropriate intention to express a certain meaning that the quoted sentence appears to be used and not only mentioned. According to the paratactic account of quotation, a quoted sentence *can* be used in perfect accordance with the literal meaning of the whole sentence. But the fact that it is used and not only mentioned is not something that can be explained at the semantic level. It is rather something that is explained by appealing to certain pragmatic factors accompanying the utterance.

(iv) Another problem concerns the fact that the paratactic theory treats references to sentence types as a function of the references to their sentence tokens. As a justification, it could be argued that types are nothing but sets of tokens. Now of course many sentences have never been uttered, but this is not a problem since we can analyse sentences (or perhaps only those that have never been uttered) as sequences of classes each containing tokens of the constituent expressions. But if we proceed in such a fashion, quoting a sentence will be nothing but an act of describing such a sequence of classes of tokens. This account does not seem to be compatible with the view that quoted expressions are, in certain sentential contexts, literally being used and not only mentioned.

(v) Finally, if we grant that at least some of our beliefs and other propositional attitudes take sentences as objects and so are represented as relations between an agent and a quoted sentence, then all the problems that were raised in relation with a Davidsonian quotational theory of indirect discourse and propositional attitudes can also count against the paratactic view of quotation itself.

III. A SUBSTITUTIONAL THEORY OF INDIRECT SPEECH

It is now appropriate to look for an alternative account of indirect speech. In order to do so, we must start from scratch and remind ourselves that indirect discourse sentences are adequately understood as involving a relational predicate, an agent and a content. There are all sorts of reasons for interpreting them in this way and compositionality, as it was emphasized by Stephen Schiffer, is surely one of them. But the main reason lies in the intuitive character of such a parsing. According to this reading, (1) should be understood as representing a relation between Galileo and something else denoted by a that-clause:

(11)   Galileo . . . said . . . that the earth moves.

Like all traditional accounts, it is important to understand the clause "that the earth moves" as a complex name for the thing that was said by Galileo and this is what our intuitive reading minimally achieves. Our initial sentence then becomes available for existential generalization and this is a welcome result. Indeed, an account that would not allow us to infer that Galileo said something would surely be in deep trouble.

But what does the that-clause refer to? What do we mean when we say that *it* was said by Galileo? What does the "it" refer to? One very simple answer would be that it refers to a sentence, namely the sentence "The earth moves". So (1) becomes

(12)   Galileo said "The earth moves".

At this point, it is crucial to stick to our intuitions as English speakers and not to put on our philosophical eye glasses. In such a sentential context, a normal English speaker will not necessarily inter-pret quotation marks as forming, along with the quoted sentence, a particular name for a verbal form. Reading the quotation in (12) may involve also an act of reading the sentence inside the quotes. It is as though we were all at once performing a use and a mention of the sentence quoted. It is true that there is a use of the verb "said" according to which the quotation is just the name of a verbal form and, according to that reading, the paraphrase is not acceptable as a rendition of what is going on in (1). But far from showing the failure of a sentential analysis, this remark attracts our attention towards an

ambiguity present in the word "said". And here we can simply appeal to a well established distinction between the direct and indirect sense of the word. It is only in the direct sense of the word that we would have to read the quotation marks in (12) as forming the name for a verbal form. When the word "said" is understood in its indirect sense, (12) now becomes an acceptable rendition of (1). It now reads as follows:

(13)   Galileo said$_{ind}$ "The earth moves".

If in its direct sense, the word serves to designate a relation to a verbal form, in the indirect sense, it serves to relate the agent to the content of what was said. And since there is a perfectly accepted use of quotation marks in natural language in which the quoted expression is all at once used and mentioned, it seems to be perfectly acceptable to read (1) as involving both an indirect sense occurrence of the word "said" and a quoted expression.

One should not take for granted that expressions occurring within quotation marks in natural language are only mentioned. In order to reveal the fact that the expression is both used and mentioned, we need not remove the expression from the quotational context in which it occurs. This would presuppose that quotation marks only serve the purpose of mentioning and nothing else. But there are many examples of quotations in natural languages in which quoting intuitively involves both a use and a mention. And I submit that if the verb "said" is understood in its indirect sense as suggested in (13), the formula is already an illustration of a case where mentioning and using occur all at once. Those who feel dissatisfied with this representation can only do so because they presuppose that quotations can only function as a device for mention. But treating quotation as a device always designed to refer to purely verbal forms rests on a philosophical conception that has nothing to do with our ordinary language practice.

There are many cases where, by quoting a sentence, we do not wish to refer merely to its verbal form, but also to its meaning. We might want to distance ourselves from the truth claim involved in asserting the sentence, or might want to distance ourselves from a particular formulation, or might want to report as accurately as possible the content of what was said, or might want to deliver the content of what was said in way that revealed to the hearer who was responsible for the claim in

question. In all these cases, nowhere does quotation merely serve to refer to a purely verbal form. The papers of Burge and Davidson have already proven this point and in the remaining part of this paper, I shall take it for granted. (Burge 1978, 147; Davidson 1979, 81) So I am not simply "claiming" that (13) may be accepted as a plausible representation of a relation between an agent and a content. It is perfectly justified by numerous examples in ordinary parlance and by philosophers who have attracted our attention to these facts.

One should not confuse a paraphrase like (13) which is made within natural language and a logical form, understood as a paraphrase in a perspicuous language. I appeal to ordinarily language quotation in order to elucidate (1) within the object-language and we should not feel compelled to do anything more since there are perfectly accepted cases where quotations involve a specification of the content of the sentence. I agree that an explanation of the phenomenon of quotation in natural language is required and I think that a perspicuous logical language may be helpful. But if we are asked to provide another paraphrase within natural language in which the quotation marks would be explained away, I feel justified in resisting to this demand since quotations play an essential role in the language. Again, as far as I can see, those who express dissatisfaction towards (13) as an attempt to explain in what sense indirect discourse relates an agent to a content, rest their protest on a the false assumption that there are no cases of quotations in which the quoted expression is both used and mentioned. It is true that Davidson does provide a further explanation of quotation within natural language. But it is just that for Davidson, quotation marks are not primitive symbols in the language. For him, quoting is just like referring with a demonstrative to an utterance of the quoted expression. But I have shown that his theory was defective and this is why I will now try to pursue another line of argument and treat these symbols as primitive. The fact that quotation marks may sometimes involve both use and mention may require explanation even if it is an essential and unique device in natural language (in addition to that-clause, of course). We must find out if the resources of perspicuous logical languages can illuminate that phenomenon.

It might be wondered whether it is still necessary to adopt a sentential account at this point. If "said" is understood in its indirect sense, it

relates Galileo to a content and it does not seem to be necessary to make use of a quoted sentence in order to describe the content of the act of saying. But we must refrain to make such hasty judgements. We are looking for a logical form that is general enough to allow for all sorts of uses performed with indirect discourse sentences and it is interesting to note that a sentential account may be able to capture uses in which the agent is described as being related to certain contents and not simply to bits of language. It is especially interesting since a sentential theory is also simultaneously able to account for cases where language plays a crucial role in determining the content of what was said.

Is (13) the only acceptable characterization of (1)? In (13), Galileo is represented as being in relation to a particular content expressed by the sentence "The earth moves". The quoted sentence is a translation of that content. Indeed it is appropriate to view indirect speech ascriptions as always implicitly involving a translation of the contents expressed by the acts. Now according to Davidson and to many others, translation involves the application of a fundamental principle of charity. But the principle might be understood in many different ways. It can mean that we maximize agreement over our primitive vocabulary or over our whole conceptual scheme (conceptual architecture, principles of rationality and set of beliefs). Of course, the distinction between primitive vocabulary and conceptual scheme is perhaps not available to all holist philosophers, but it is not tied to atomism either. It is closer to a molecularist theory of meaning, one in which the sentence becomes the basic semantic unit. A molecularist account is compatible with a view according to which certain sentences in the language play the role of semantic rules and these rules may serve to fix the primitive vocabulary of the language.

The application of a principle of charity might therefore simply mean that we try to translate the contents either by maximizing agreement only over our primitive vocabulary, or over our whole conceptual scheme. It is only the first kind of charity that is implicitly involved in all translation practices. Since it is an *a priori* condition on translation, it need not be expressed explicitly and (13) could be used to represent such a situation. But when translation involves the application of a stronger principle of charity, then this should be made explicit. We

could use (1) to express the idea that Galileo said something (in the direct sense of "said") which could be translated in our conceptual scheme as "The earth moves".

(1) could therefore be used to express something like:

(14)   Galileo said$_{dir}$ something and it is translated as "The earth moves".

I shall later return to the distinction between the two readings of (1) represented in (13) and (14). For the moment, I want to ask how to represent these sentences in logical form. There are also many other distinctions one could make that would be helpful for a complete characterization of the different uses of indirect discourse sentences, but I shall restrict my attention to (13) and (14).

The next step in the argument is the most difficult one. We have to provide a representation of (13) and (14) that will illuminate their logical structure. I submit that the appropriate account is one in which quotation marks are understood as functional devices belonging to a substitutional language. The interest of adopting a substitutional language in general is that substitutional formulas very often presuppose as a precondition for their meaningfulness the existence of expressions belonging to particular languages. This is particularly evident in the case of a substitutional formula like

(15)   (Σp) (Snow is white & p)

where the particular quantifier is substitutional and the substitutional variable is propositional, i.e. replaceable in particular substitutional instances only by closed formulas. It is clear that (15) can only be meaningful if at least some of its substitutional instances are meaningful and that substitutional instances can only be meaningful if the substitutes themselves are meaningful. It is also clear that in the substitutional instances of a formula like (15), the substitutes occur in use, i.e. they bring with them their associated semantical rules.

I do not claim that a substitutional quantifier must always be attached to a substitutional class of meaningful expressions of the language. I claim that such a constraint has to be satisfied in certain cases. There are cases where no such constraint need to be satisfied. (For instance, (Σp) ("p" is a sentence)) And it is not that we arbitrarily

decide to impose such a constraint on this or that particular occurrence of a substitutional quantifier. It is rather that there are cases where the substitutional quantifier occurs in a sentential context that can only be meaningful if the substitute is itself meaningful. The constraint is therefore a constraint that conditions the very meaningfulness of some substitutional formulas. Let's suppose that no substitute satisfies such a constraint in the substitutional class. My claim is just that some substitutional formulas are going to turn meaningless because of that.

It can be maintained that a meaningless substitute turns (15) into a meaningless expression (viz. "Snow is white and green ideas fly furiously"). So there has to be at least one meaningful substitute in the substitutional class if (15) is going to be meaningful at all. And it has to be a true one if (15) is to be true at all. If a condition of meaningfulness for (15) is that it must express truth conditions, how could we have any idea of its truth conditions if we did not have any idea about the truth conditions of some of its substitutional instances?

The interesting point is that when a substitutional formula requires for its very meaningfulness that some substitutes in the substitutional class be meaningful, it is not met by imposing an explicit condition in the formula itself. It is rather that the substitutes must already satisfy the requirement as members of the substitutional class. It is an implicit requirement in the formula itself and it is presupposed as a condition for its meaningfulness. Now the fact that the expression need not be explicitly relativized to a language in order to be meaningful is one the two conditions that have to be met in order to turn an indirect discourse sentence into a report that relates Galileo to the content of the sentence. Of course, the constraint of meaningfulness is not sufficient to ensure that Galileo is represented in (13) or (14) as related to a content, but it is a necessary condition. It shows only that in order to be treated as meaningful, the quoted sentence need not be associated explicitly with a system of semantical rules. The second condition is that they must occur in use even in the context of quotation marks. However, a full understanding of this second fact will require that we fully understand the behavior of quotation marks.

Belonging to a system of semantical rules is not always a necessary condition for becoming a member of a substitutional class, but it

remains true that at least some of the elements belonging to a substitu-
tional class against which a formula like (15) is evaluated must them-
selves be meaningful if (15) is to count as meaningful for the reason
that I just gave.

But now, notice that the same kind of remarks apply in the case of a
substitutional formula like

(16)   (Σp) (Galileo said "p")

where the substitutional variable occurs within quotation marks and is
being quantified from the outside. The expressions occurring inside
quotes are very often not occurring *qua* expressions (either as concrete
marks or sounds or as abstract verbal forms) but rather as expressions
in "use". This is at least what would happen if the word "said" in (16)
were understood in its indirect sense.

The substitutional variable occurs in a quotational context, but it is
natural to allow substitutional quantification in these contexts. And the
result of putting a substitutional variable into quotes does not yield a
name for the variable. It is rather more like a quotation function
occurring all by itself. Quantifying substitutionally into a quotation
context is simply binding the variable of the quotation function. Quotes
are like descriptive functions that take linguistic objects as arguments
and have also linguistic objects for values, unlike propositional func-
tions whose values are truth values. One other feature is that the quota-
tion function does not have an independent interpretation and it
behaves like the functors and predicates of a substitutional language. It
will indeed be remembered that, in a substitutional language, proposi-
tional functions containing a free substitutional variable do not denote a
function that, when applied to the value of its arguments, yields a
certain truth value, therefore denoting a certain intensional entity which
is a function of denotation into truth value. Nor are they satisfied by
sequences. As Kripke puts it, they have no satisfaction only truth.
(Kripke 1976, 330) Now quotation marks similarly, as substitutional
functors or "descriptive functions", have no semantic values indepen-
dently of an application to particular bits of language, when the
substitutional variable implicitly contained in them is replaced by a
particular substitute.

When we look at the behaviour of quotation marks in a substitutional language, we realize that they do not serve to form primitive names along with the expressions quoted. They sometimes behave as descriptive functions and the quoted sentence in (13) or (14) are similar to the numeral "3" in "3^2". Even if "3^2" forms a complex name, its meaning is still compositional and one cannot understand the meaning of the whole without understanding the meaning of the numeral "3". The situation is just the same in the case of indirect discourse sentences. The quotation is all at once the second term of an instance of a two-place relation and a complex denoting term whose meaning depends upon the meanings of the quoted expression.

Since quotes are functional expressions, "(Σp) ("p" is T)" is in a way similar to "(Σa) (the a is G)". The functional character of quotation marks is precisely what "reveals" the possibility for quotation to involve both use and mention.

Their meaningful character and their occurrence in use are two constraints that must very often be satisfied by the substitutes and it is so even when they occur within the context of quotation marks as in (13) or (14). This peculiar feature is present not only when a substitutional variable occurs within quotes, but also whenever a particular lexical item does. Reports like "Galileo said "the earth moves" " must be seen in a substitutional language as substitutional instances of the formula "(Σp) (said (Galileo, "p"))" and so whatever I have to say about the behavior of quotes in a general substitutional formula also applies to quotes in particular substitutional instances. A particular quotation is to the quotational function what 2^2 is to x^2.

I said that whenever a sentence occurs within quotes in a substitutional instance, it is very often as though it were simultaneously used and mentioned. We have already seen that the substituenda very often enter the substitutional instances in use. We must also see that they behave a bit like "values" for the quotation function. When a quotation occurs in a substitutional formula, the only way to decode it is very often first to understand the quoted expression as used, and then take it as a "value" of the quotation function.

I submit that the appropriate logical form for (1) is either

(17)   Said$_{ind}$ (Galileo, "the earth moves")

in which the word "that" behaves as a quotation function and the verb "said" is used in its indirect sense, or

(18)   (Σp) [(said$_{dir}$ (Galileo, "p")) $\wedge$ ("p" is translated by "the earth moves")]

in which the expression "that the earth moves" behaves as a pseudo proper name and is contextually eliminated in terms of a quantified formula. The verb "said" occurs here in its direct sense. We would choose (17) or (18) as a correct paraphrase of (1) depending on whether the reporter chooses to represent the saying in the subjective perspective of the agent or from his own objective perspective. (Seymour 1992) In (17), the reporter describes an act of saying in the indirect sense while, in (18), she describes an act of saying in the direct sense, but translates it according to the conceptual scheme in her own translation manual.

The account differs from Carnap's own analysis in many different ways. The "existential" quantifier is substitutional and not objectual. I do not quantify over linguistic expressions *qua* expressions and, for this reason, do not need to make an explicit reference to languages. In this new approach, expressions presuppose their associated semantic rules and therefore presuppose the existence of a language to which they belong. Moreover, contrary to Carnap, I need not construe the belief predicate univocally in terms of a disposition to assent. Finally, I do not appeal to a relation of intensional isomorphism but rather to a weaker relation of translation.

The formulas are substitutional and I have chosen to introduce a new notation (Kripke's) to represent this kind of quantifier. The informal reading of (18) is that the result of replacing "p" is true for at least one substitutional instance. It is equivalent to the disjunction of formulas that result from replacing the variable by a sentence in the substitutional class. (A universal substitutional formula is equivalent to the conjunction of the same atomic formulas.)

This account of indirect discourse is not confronted with the difficulties that plagued the paratactic account:

(i) It is not committed to break a sentence like (1) into two logically independent sentential components.

(ii) The expression "that" does not behave as a demonstrative but rather, at least in part, as a primitive quotational function and we are in

this way able to capture the information conveyed literally by "that" and "que".

(iii) We are also in a position to explain why (1) could be true without being uttered. It is clear that (17) or (18) could be true without being uttered.

(iv) We are no longer committed to the existence of an English utterance. But are we committed to the existence of an English sentence type? Perhaps we are, but the reference to the sentence "the earth moves" takes place in the context of a self-referential function performed by quotation marks. If we understand Galileo's own saying as a relation between him and a quoted sentence type self-referentially implying the existence of an Italian sentence, the disparity between Galileo's utterance and our report of his utterance is explained by what is going on in some translations of self-referential sentences.

(v) The quotation function is, in a substitutional language, a "self-referential" device since the value of the function applied to a certain sentence in use is that very sentence itself. This explains why, in certain cases, a good translation need not preserve reference but rather self-reference, and why more specifically, in the context of iterated indirect discourse like (5), we are not committed to the view that Laplace uttered an English sentence.

(vi) We are also in a position to explain why 'saying that' locutions do not allow subordinate clauses in a foreign language. Since the subordinate clauses are substitutes already belonging to languages and the grammatical constraints applying to those languages prevent the formation of expressions belonging to different languages, the same constraints should apply to sentences containing expressions occurring in the context of quotation marks, if the broader sentential context requires that they be used and not only mentioned. In a substitutional language, quoted expressions are in certain sentential contexts not only mentioned but also used and have in these contexts an occurrence similar to the one that they have in other contexts. If these expressions are used, then they are part of the whole sentence in which the quotation occurs and the grammatical constraints that apply to the language as a whole will also apply to these particular instances.

Therefore, we cannot allow foreign expressions to be used and mentioned in quotations occurring in our own language if they are not at the same time expressions of our language. When an expression is being

used and mentioned in our language, it cannot belong only to a foreign language because it would then violate the grammatical constraints of our language. Now since, in the case of an indirect discourse sentence such as (1), the subordinate clause is used, the appropriate analysis is one in which the quoted expression must be used and not only mentioned. This is what happens in sentential contexts like (17) and (18) and this is the reason why the quoted expression must be in the language in which it occurs.

We must not, from the preceding remarks, conclude that the only possible quotations in a substitutional language are those of expressions belonging to the language in which the quotation occurs. Quotations can serve lots of different purposes, among which the introduction of a new notation or the presentation of a foreign alphabet. It shows only that the sentential context is very often what determines the grammaticality of an expression. If the sentential context requires that the quoted expression be used and not only mentioned, then the quoted expression must be in the language in which the quotation occurs. But there are cases where the quotation function can take foreign expressions as arguments. The most important case, if we leave aside the ones that were just invoked, are those in which an explicit reference is made to a translation. If the result of the translation, since it is used and mentioned, must be in the language in which the translation is taking place, the expression translated, by contrast, since it is very often only mentioned, can be in a foreign language even if it is the argument of a quotation function.

Nothing prevents us from allowing sentences of a translation manual within a single language even if they involve the quotation of expressions belonging to different languages. The foreign expressions need not be treated as expressions belonging to our own language and the reason is that they are not being used. A necessary condition for belonging to a language is to be used and not only mentioned and quotation marks, understood as a quotation function, do not automatically require that the quoted expression be used and mentioned. It all depends upon the general sentential context in which the quotation occurs. It is true that they very often help to explain why an expression can in a certain sentential context be used as well as mentioned. But there are contexts in which this constraint does not hold.

The preceding remarks enable us to explain why, in a substitutional language, the quotation function, applied to a foreign expression, does not force us to treat it as an expression belonging to our own language. If an expression is to belong to our language, there must be at least one instance in which it is used. In (17), the quoted expression is in a sentential context in which it is used, since the verb "said" occurs in its indirect sense. It is also the case in (18) since the quoted expression plays the role of a translation. But it is very often not the case for the expressions that are the object of the translation and this is the reason why we can, without violating the grammatical constraints of the language, allow that the substitutional variable be associated with a substitutional class containing expressions that belong to different languages. These foreign expressions do not run the risk of becoming expressions of our language since they occur in a sentential context in which they are the objects of translation. The same remarks apply to the quoted sentence in "Galileo said "Eppur si muove" when the verb "said" is understood in its direct sense, in which case it serves to report a truth concerning the exact phonemes that were uttered by Galileo.

(vii) Since in the context of quotation marks, substitutes can occur as they ordinarily do in other contexts, we can claim that a rigid reference to content takes place in (17) or (18) as in the case of (1). The reference to the content of the sentence is not mediated by a reference to the verbal form of a sentence-type, as it was the case in traditional theories similar to the one held by Carnap, nor is it mediated by a reference to an inscription, as it is the case for Davidson. Semantic properties are accidentally attached to abstract verbal forms or concrete inscriptions. Our solution is to exploit the fact that, in a substitutional language, the quoted expression may behave as it ordinarily behaves in other contexts.

(viii) We can now explain the validities in the inferences (A), (B), (C) and (D). We no longer are dealing with sentences containing demonstrative expressions. The inferences can now be evaluated relatively to the context of interpretation only. If we represent them according to a logical form such as (17), we get the following result:

(A*) $\dfrac{\text{Said}_{ind} \text{ (Galileo, "A and B are wrong")}}{\text{Said}_{ind} \text{ (Galileo, "B and A are wrong")}}$

(B*) $Said_{ind}$ (Galileo, "The earth moves")
_____
         $Said_{ind}$ (Galileo, "The earth moves")

(C*)   ($Said_{ind}$ (Galileo, "The earth moves")
         The earth moves
_____
         ($\exists$x) (($Said_{ind}$ (Galileo, x)) $\wedge$ (x is true))

(D*)   ($Said_{ind}$ (Galileo, "The earth moves")
         ($\forall$x) (($Said_{ind}$ (Galileo, x)) $\supset$ (x is true))
_____
         The earth moves

If we exploit a reading in which the verb "said" is partially trans-
parent, the four inferences become valid. (Seymour 1992) According to
such a reading, the report purports to capture what was in fact said by
Galileo. It establishes, in Galileo's subjective perspective, a relationship
between him and the propositional content (i.e. the truth conditions) of
the quoted sentence and not only with its lexical meaning. (A*) is valid
because the two subordinate clauses express the same truth conditions.
(B*) is obviously a similar case. (C*) is valid by a successive application
of existential generalization and Tarski's Convention-T. Finally, (D*) is
valid by universal instantiation and Tarski's Convention-T.

(ix) We are no longer committed to the view that belief contents
must involve tokens of sentences instead of sentence types and we are
therefore able to explain why speakers can believe sentences that were
never uttered.

(x) Since in (17) and (18), the quoted sentence is a sentence in use
that also behaves as an argument for the quotation function, and there-
fore enters the quotation function with its semantic rules, these are part
of the semantic content of the sentence. It follows that a perfectly
competent speaker who utters (17) or (18) has access to the content
expressed by the quoted sentence.

(xi) The reference to the particular content expressed by the sub-
ordinate sentence in (1) is not accidental. There is no way to refer to
anything but to its content. The reason is that the word "that", as a
quotation function, has no meaning in isolation and must therefore be
understood as quoting the subordinate clause if the sentence as a whole
is to be treated as meaningful.

(xii) It is not necessary to state explicitly the self-referential char-

acter involved in (1), nor it is required to state explicitly the rigidity of the reference to the content, or even less to refer explicitly to the content itself. The reasons for this are threefold: self-reference is already explicitly made by putting the sentence in quotation marks; second, the quotation refers to a sentence in use and not to something (a pure verbal form or an inscription) that contingently has the semantic properties that it has; third, as a sentence in use, the quoted sentence already expresses a certain content.

IV. INDIRECT DISCOURSE, QUOTATION AND TRUTH

I will end this paper by showing very briefly how the approach that I favour for the semantics of indirect discourse sentences can satisfy the constraints of a finitely axiomatized theory of truth. As it was suggested above, there are at least two ways of representing the logical form of (1) and therefore two different ways of characterizing its truth conditions (vz. (17) and (18)). In order to have full access to the truth conditions of (1), we have to know in addition what the truth conditions are for the subordinate clause, i.e. know that

(19)   «the earth moves» is true if and only if the earth moves,

as a theorem entailed by a theory of truth for English. (I use a new style of quotation marks in order to represent a structural description of the sentence.)

It is possible to determine the truth conditions of (1), granted that we know, along the lines of (17), and in addition to (19), that (1) is true if and only if Galileo said in the indirect sense "the earth moves", where quotation marks are understood as the quotation function in a substitutional language and the quoted sentence behaves as a substitute. This reading involves the idea that the speaker shares the same minimal vocabulary with Galileo, or at least that Galileo's belief can be expressed by making use of a minimal vocabulary. It is one in which the speaker applies an acceptance principle according to which she "surrenders", as it were, to what is said by the agent.

The truth conditions of (1) along the lines of (18), together with (19), enables one to determine that (1) is true if and only if there is a substitute such that Galileo said "p" in the direct sense and "p" is translated as "the earth moves". This reading is one in which the speaker is trying

to maximize agreement with the agent and imposes her own conceptual scheme.

The two sets of truth conditions are partly determined by different analyses of the word "that" in "Galileo said that the earth moves". In the first case, it behaves as quotation marks surrounding the subordinate clause. In the second case, the expression "That the earth moves" is understood as a pseudo proper name and is eliminated *à la Russell* in terms of a quantified substitutional formula.

The difference between the two sets of truth conditions represented by (17) and (18) lies in the fact that, in the first case the report tries to capture Galileo's subjective perspective while, in the second case, the report is an attempt to maximize agreement with Galileo. (17) is an application of a general acceptance principle concerning what was said by the agent, while (18) is an application of a general principle of charity. In a subjective report such as (17), the speaker imposes only a minimal vocabulary (expressions with a primitive linguistic meaning) on his characterization of what was said by the agent. She is in a position to give room to the subjective perspective of the agent and ascribe a belief while conforming to the conceptual scheme of the agent. By "conceptual scheme", I mean a complete conceptual architecture, a theory of truth and a theory of rationality. In the case of an objective report such as (18), the speaker now tries to maximize agreement and therefore tries to impose her own concepts, truth theory, or rationality principles.

These two kinds of report are possible whether or not the agent shares the same language. Even if Galileo, for instance, expressed himself in Italian, it does not follow that the only adequate representation of (1) is (18). I just pointed out that the main difference between (17) and (18) is that, in (17), the reporter puts her own conceptual scheme into brackets, while she imposes it when she uses (1) to express (18). An English speaker could use (1) as (17) in order to report an assertion made in English, because two English speakers may have two quite distinct conceptual schemes. Conversely, one could use (1) as (17) in order to report what was asserted in a different language, using a sentence in her own language. This is because the reporter is bracketing her own conceptual scheme and is assuming only the possibility of making use of her own minimal vocabulary. Of course, one could not make sense of an assertion made by someone else if it were

not possible to express it with the aid of a certain minimal vocabulary. In such a report, one is assuming either that the agent shares that minimal vocabulary or that she would if she had known the language in which the report is being made.

It is true that by distinguishing as I do two different kinds of reports for (1), (viz. (17) and (18)), I am significantly departing from Davidson's program. For Davidson, the principle of charity is an *a priori* condition on radical interpretation. It occurs as a presupposition in the practice of ascribing propositional attitudes or indirect discourse to others and it would not occur explicitly in our reports. In that sense, Davidson would not want to represent (1) as (17). On the other hand, since the principle of charity is behind all of these kinds of reports, he would not want to distinguish between subjective and objective reports. For him, it is as though all indirect discourse reports are objective. In that sense, he would reject the interpretation of (1) as (17), or at least an interpretation of (17) as "subjective".

Distinguishing those two different sets of truth conditions for (1) rests on an assumption concerning the translatability into one's own language and within the confines of one's own conceptual scheme. The principle of charity is not, according to me, an *a priori* condition that constrains the meaningfulness of indirect discourse. There are certainly cases where it is an explicit assumption involved in the very content of 'saying that' locutions. But it is only in circumstances such as (18) that we make a claim to the effect that Galileo's assertion can be translated into our own conceptual scheme. We allow for a distinction between two readings only because we allow for the logical possibility of a language that cannot be translated into our own conceptual scheme. I agree with Baldwin that even if the limits of my language are the limits of my world, there is no reason why the limits of my language should fix the limits of the worlds of others. (Baldwin 1982, 279)

In any case, Davidson does not invoke the principle of charity in order to justify his own analysis of (1). His own analysis is meant to show how a statement like (1) can be incorporated into a recursive, compositional, finitely axiomatized theory of truth for the language. Now this is precisely what is made possible if we represent (1) into a substitutional language, use a quotation function and allow for a quasi transparent sense of the verb "said". And in the particular case where

the statement as a whole is used to report objectively what was said by making use of a principle of charity (viz. (18)), we arrive at a stance which is similar to the one reached by the Davidsonian radical interpreter.

The two sets of truth conditions are adequate as long as the verb "said" is used in the material sense or, if one prefers, in a quasi transparent sense. There is a material as well as an intentional use of the verbs in indirect discourse. (Seymour 1992) The material use serves to report the functional behaviour of the agents, whether or not she is ready to acknowledge the truth of those reports. This is a perfectly legitimate use since it serves to report what she *in fact* said. When an act of saying is given a functional characterization, the only thing that matters are the truth conditions of the sentence she uttered and the content of what was said may be appropriately characterized by any sentence expressing the same truth conditions. The intentional use, by contrast, serves to report the intentional behaviour of the agent and this entails that she would have a disposition to assent to the subordinate clause if she knew the language in which the report is being made.

The distinction between the intentional and material uses of the verb "said" is made possible by the fact that the object of the saying relation are sentences and because they ramify their sense into linguistic meaning (dictionary senses) and propositional content (e.g. truth conditions). An indirect discourse report can serve to describe a relation between an agent and a linguistic meaning or between an agent and a propositional content.

When the verb "said" is used in a quasi transparent sense, it is possible to show that the truth conditions of the subordinate clause play a role in the determination of the truth conditions of the sentence as a whole, in accordance with the requirements of a Tarskian truth theory. This is made possible because quotation marks are represented as a quotation function and because the language involves substitutional quantification. This is what partly explains why, under a particular use of the verb "said", quoted expressions may behave as they ordinarily do in an extensional context. Those who wish to argue that the propositional content of sentences is nothing over and above truth conditions should therefore be satisfied with the solution that is now being offered.

Whether the report is interpreted as an attempt to capture the subjective perspective of the agent as in (17), or as an attempt to

describe the assertion "objectively" as in (18), we will be in a position to provide truth conditions for (1) as long as the verb "said" is given a quasi transparent reading. The only problematic cases are those in which the verb receives an intentional reading instead. If, for instance, we tried to capture Galileo's own subjective perspective in our use of (1) with an intentional sense attached to the verb "said" and that we did not even take it for granted that Galileo has a complete understanding of the words he used, then the only way to report correctly what was said would be to use an Italian sentence. For as we all know, what Galileo really said is: Eppur si muove.

In order to complete our account of the truth conditions for (1) when it is understood as (18), we only need to determine the circumstances under which "p" can be translated as "the earth moves" and these are given by the translation manual of the speaker. As far as the first half of (18) is concerned, it will be true iff

(20)   «Galileo said "La terra trema" or Galileo said "Eppur si muove" or . . .» is true

And (20) will be true if and only if

(21)   «Galileo said "La terra trema"» is true or «Galileo said "Eppur si muove"» is true or . . .

which, in turn will be true if and only if

(22)   Galileo said "La terra trema" or Galileo said "Eppur si muove" . . .

And finally (22) will be true if and only if

(23)   (Σp) (Galileo said "p")

which is our desired homophonic truth conditions for the first part of (18). It will be noted that (23), as a substitutional formula, is equivalent with the (possibly) infinite disjunction of substitutional instances. It will be observed also that the substitutes need not belong to a single language since the substitutional formula is an existential generalization from substitutional instances occurring in a context where an explicit claim is made concerning the translation of a sentence as "the earth moves". As it was mentioned above, substitutional classes need not be restricted to classes of expressions belonging to a single language when

they are used to evaluate formulas that belong to a manual of trans-
lation.

I conclude that our account of quotation and indirect discourse can
be incorporated within the larger framework of an axiomatized truth
theory for the language. The application of the theory was made
possible by a partially transparent reading of the verb "said". I am
however also committed to the view that the verb has an intentional,
and therefore intensional or opaque reading as well. Our approach does
not involve, like Davidson, an attempt to make use only of extensional
resources in the analysis of indirect discourse. We did not try to replace
intensional locutions by extensional ones. Quite the contrary, indirect
discourse statements are intensional when the verb "said" receives an
intentional reading. Moreover their intensionality seems to be irre-
ducible. The intentional sense of indirect discourse or attitudinal verbs
is what explains the failure of extensionality principles. Intensionality
is a property of sentential contexts governed by verbs used in an
intentional sense.

As in Davidson's theory, the solution here offered is one in which
intensionality is not explained by the loss of semantic innocence of the
expressions occurring in the intensional context. We do not appeal to
intensional entities and do not adopt a Quinean view of quotation
according to which it is the opaque context *par excellence*. Inten-
sionality is explained by the presence of a psychological verb under-
stood in the intentional sense. Where a material or quasi transparent
reading is made of the psychological verb, some of the inferences that
were not permitted are now available to us. Among other things, we can
then apply under certain restrictions the different extensionality prin-
ciples. Once a material reading is made of the verb "said", we can then
show how the truth conditions of the whole sentence are a function of
the truth conditions of the sentential components. A semantically
competent speaker who makes a material use of the verb "said", who
understands the truth conditions of the subordinate clause and under-
stands the truth conditions of (13) or (14) will have access to the truth
conditions of (1). The only major difference with Davidson is that it no
longer involves an attempt to remove intensionality from the language.

It is true that there are inevitable complications in trying to account
for the truth conditions of indirect discourse formulas in the intentional
sense. Those truth conditions will vary depending on whether we

presuppose that the agent has full access to the linguistic meanings of the sentence asserted, and whether we presuppose that there is a one to one mapping between our vocabularies. These truth conditions will also depend on whether we presuppose that the agent has a minimal rationality, and finally whether this rationality is subjective or objective. (Seymour 1992) Moreover, there are cases where the truth conditions of the indirect discourse sentence can only be represented by making use of the actual statement made by the agent and where it does not seem that the truth conditions of the whole indirect report is a function from the truth conditional contributions of the sentential components. For a Davidsonian, the failure to account for the truth conditions of a particular statement is certainly a failure to make sense of it, since the meaning of a sentence is according to him given by its truth conditions. And if we take for granted that the only appropriate semantical framework is the one provided by truth conditional semantics, then chances are intensional sentences will turn out to be meaningless. But the general framework that I would favour is rather the one provided by a semantics of assertability conditions. A statement which is deprived of determinate truth conditions can still be meaningful if it is associated with appropriate assertability conditions.

This is certainly a major difference with Davidson, but the answer given above remains appropriate. To the question concerning the possibility of formulating a semantic account within the framework a finitely axiomatized truth theory, we can still provide an affirmative answer. It is just that we also recognize that indirect discourse is meaningful independently of that fact. Indirect discourse reports have different assertability conditions and their expressing determinate truth conditions is only one among a wide variety of available uses. In order to account for all of those uses, we need a more flexible framework like the semantics of assertability conditions and allow both for cases in which they are irreducibly intensional as well as those in which they are available for a Tarskian truth theory.

NOTE

REFERENCES

Anderson, C. Anthony and Owens, Joseph (eds) (1990) *Propositional Attitudes. The Role of Content in Logic, Language and Mind*, CSLI, no. 20.
Baldwin, Thomas (1982) "Prior and Davidson on Indirect Speech", *Philosophical Studies* 42, 255—282.
Burge, Tyler (1978) "Self-Reference and Translation", in F. Guenthner and M. Guenthner-Reutter (eds) (1978), 137—153.
Burge, Tyler (1986) "On Davidson's 'Saying That' ", in Ernest Lepore (ed) (1986), 190—208.
Davidson, Donald (1968—69) "On Saying That", *Synthese* 19, 130—146; reprinted in Donald Davidson (1984), 93—108.
Davidson, Donald (1975) "Thought and Talk", in Samuel Guttenplan (ed) (1975), 7—23; reprinted in Donald Davidson (1984), 155—170.
Davidson, Donald (1976) "Reply to Foster", in Gareth Evans and John McDowell (eds) (1975), 33—41; reprinted in Donald Davidson (1984), 171—179.
Davidson, Donald (1979) "Quotation", *Theory and Decision* 11, 27—40; reprinted in Donald Davidson (1984), 79—92.
Davidson, Donald (1984) *Inquiries into Truth and Interpretation*, Oxford, Clarendon Press.
Davidson, Donald (1990) "The Content and Structure of Truth", *Journal of Philosophy* 87, 279—328.
Evans, Gareth and McDowell, John (eds) (1975) *Truth and Meaning. Essays in Semantics*, Oxford, Oxford University Press.
French, Peter et al. (eds) (1989) *Midwest Studies in Philosophy, Vol. 14, Contemporary Perspectives in the Philosophy of Language*, Notre Dame, University of Notre Dame Press.
Guenthner, F. and Guenthner-Reutter, M. (eds) (1978) *Meaning and Translation*, London, Duckworth.
Guttenplan, Samuel (ed) (1975) *Mind and Language*, Oxford, Clarendon Press.
Kripke, Saul (1975) "Is There a Problem With Substitutional Quantification?", in Gareth Evans and John McDowell (eds) (1975), 325—419.
Lepore, Ernest (ed) (1986) *Truth and Interpretation*, Oxford, Basil Blackwell.
Lepore, Ernest and Loewer, Barry (1989) "You Can Say That Again", in Peter French et al. (eds) (1989), 338—356.
Platts, Mark (1979) *Ways of Meaning. An Introduction to a Philosophy of Language*, Londres, Routledge & Kegan Paul.
Schiffer, Stephen (1987) *Remnants of Meaning*, Cambridge, MA, MIT Press, a Bradford Book.
Seymour, Michel (1992) "A Sentential Theory of Propositional Attitudes", *Journal of Philosophy*, Volume LXXXIX, 4, 181—201.
Smith, Peter (1976) "Blackburn on Saying That", *Philosophical Studies*, 30, 423—426.

Département de philosophie
Faculté des arts et sciences
Université de Montréal
Montréal (Québec) H3C 3J7
Canada