"I wish I had said that", said Oscar Wilde in applauding one of Whistler's witticisms. Whistler, who took a dim view of Wilde's originality, retorted, "You will, Oscar; you will". The function of this tale (from Holbrook Jackson's *The Eighteen-Nineties*) is to remind us that an expression like "Whistler said that" may on occasion serve as a grammatically complete sentence. Here we have, I suggest, the key to a correct analysis of indirect discourse, an analysis that opens a lead to an analysis of psychological sentences generally (sentences about propositional attitudes, so-called), and even, though this looks beyond anything to be discussed in the present paper, a clue to what distinguishes psychological concepts from others.

But let us begin with sentences usually deemed more representative of *oratio obliqua*, for example "Galileo said that the earth moves" or "Scott said that Venus is an inferior planet". One trouble with such sentences is that we do not know their logical form. And to admit this is to admit that, whatever else we may know about them, we do not know the first thing. If we accept surface grammar as guide to logical form, we will see "Galileo said that the earth moves" as containing the sentence "the earth moves", and this sentence in turn as consisting of the singular term 'the earth', and a predicate, 'moves'. But if 'the earth' is, in this context, a singular term, it can be replaced, so far as the truth or falsity of the containing sentence is concerned, by any other singular term that refers to the same thing.

The notorious apparent invalidity of this rule can only be apparent, for the rule no more than spells out what is involved in the idea of a (logically) singular term. Only two lines of explanation, then, are open: we are wrong about the logical form, or we are wrong about the reference of the singular term.

What seems anomalous behavior on the part of what seem singular terms dramatizes the problem of giving an orderly account of indirect discourse, but the problem is more pervasive. For what touches singular terms touches what they touch, and that is everything: quantifiers,

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variables, predicates, connectives. Singular terms refer, or pretend to refer, to the entities over which the variables of quantification range, and it is these entities of which the predicates are or are not true. So it should not surprise us that if we can make trouble for the sentence "Scott said that Venus is an inferior planet" by substituting 'the Evening Star' for 'Venus', we can equally make trouble by substituting "is identical with Venus or with Mercury" for the coextensive "is an inferior planet". The difficulties with indirect discourse cannot be solved simply by abolishing singular terms.

What should we ask of an adequate account of the logical form of a sentence? Above all, I would say, such an account must lead us to see the semantic character of the sentence - its truth or falsity - as owed to how it is composed, by a finite number of applications of some of a finite number of devices that suffice for the language as a whole, out of elements drawn from a finite stock (the vocabulary) that suffices for the language as a whole. To see a sentence in this light is to see it in the light of a theory for its language, a theory that gives the form of every sentence in that language. A way to provide such a theory is by recursively characterizing a truth-predicate, along the lines suggested by Tarski, that satisfies this criterion: the theory entails, for each sentence s (when described in a standardized way), that the truth-predicate holds of s if and only if ... - Here the blank is to be filled by a sentence in the metalanguage that is true if and only if s is true in the object language.<sup>1</sup> If we accept Tarski's further requirement that no undefined semantical notions be used in characterizing a truth-predicate, then no theory can satisfy the criterion except by describing every sentence in terms of a semantically

A satisfactory theory of meaning for a language must, then, give an explicit account of the truth-conditions of every sentence, and this can be done by giving a theory that satisfies Tarski's criteria; nothing less should count as showing how the meaning of every sentence depends on its structure.<sup>2</sup> Two closely linked considerations support the idea that the structure with which a sentence is endowed by a theory of truth in Tarski's style deserves to be called the logical form of the sentence. By giving such a theory, we demonstrate in a persuasive way that the language, though it consists in an indefinitely large number of sentences, can be comprehended by a creature with finite powers. A theory of truth may be

significant structure.

said to supply an effective explanation of the semantic role of each significant expression in any of its appearances. Armed with the theory, we can always answer the question, "What are these familiar words doing here?" by saying how they contribute to the truth conditions of the sentence. (This is not to assign a 'meaning', much less a reference, to every significant expression.)

The study of the logical form of sentences is often seen in the light of another interest, that of expediting inference. From this point of view, to give the logical form of a sentence is to catalogue the features relevant to its place on the logical scene, the features that determine what sentences it is a logical consequence of, and what sentences it has as logical consequences. A canonical notation graphically encodes the relevant information, making theory of inference simple, and practice mechanical where possible.

Obviously the two approaches to logical form cannot yield wholly independent results, for logical consequence is defined in terms of truth. To say a second sentence is a logical consequence of a first is to say, roughly, that the second is true if the first is no matter how the non-logical constants are interpreted. Since what we count as a logical constant can vary independently of the set of truths, it is clear that the two versions of logical form, though related, need not be identical. The relation, in brief, seems this. Any theory of truth that satisfies Tarski's criteria must take account of all truth-affecting iterative devices in the language. In the familiar languages for which we know how to define truth the basic iterative devices are reducible to the sentential connectives, the apparatus of quantification, and the description operator if it is primitive. Where one sentence is a logical consequence of another on the basis of quantificational structure alone, a theory of truth will therefore entail that if the first sentence is true, the second is. There is no point, then, in not including the expressions that determine quantificational structure among the logical constants, for when we have characterized truth, on which any account of logical consequence depends, we have already committed ourselves to all that calling such expressions logical constants could commit us. Adding to this list of logical constants will increase the inventory of logical truths and consequence-relations beyond anything a truth definition demands, and will therefore yield richer versions of logical form. For the purposes of the present paper, however, we can cleave to the most austere inter-

pretations of logical consequence and logical form, those that are forced on us when we give a theory of truth.

We are now in a position to explain our aporia over indirect discourse: what happens is that the relation between truth and consequence just sketched appears to break down. In a sentence like "Galileo said that the earth moves" the eye and mind perceive familiar structure in the words "the earth moves". And structure there must be if we are to have a theory of truth at all, for an infinite number of sentences (all sentences in the indicative, apart from some trouble over tense) yield sense when plugged into the slot in "Galileo said that \_\_\_\_\_". So if we are to give conditions of truth for all the sentences so generated, we cannot do it sentence by sentence, but only by discovering an articulate structure that permits us to treat each sentence as composed of a finite number of devices that make a stated contribution to its truth conditions. As soon as we assign familiar structure, however, we must allow the consequences of that assignment to flow, and these, as we know, are in the case of indirect discourse consequences we refuse to buy. In a way, the case is even stranger than that. Not only do familiar consequences fail to flow from what looks to be familiar structure, but our common sense of language feels little assurance in any inferences based on the words that follow the 'said that' of indirect discourse (there are exceptions).

So the paradox is this: on the one hand, intuition suggests, and theory demands, that we discover semantically significant structure in the 'content-sentences' of indirect discourse (as I shall call sentences following 'said that'). On the other hand, the failure of consequence-relations invites us to treat contained sentences as semantically inert. Yet logical form and consequence relations cannot be divorced in this way.

One proposal at this point is to view the words that succeed the 'said that' as operating within concealed quotation marks, their sole function being to help refer to a sentence, and their semantic inertness explained by the usual account of quotation. One drawback of this proposal is that no usual account of quotation is acceptable, even by the minimal standards we have set for an account of logical form. For according to most stories, quotations are singular terms without significant semantic structure, and since there must be an infinite number of different quotations, no language that contains them can have a recursively defined truth-predicate. This may be taken to show that the received accounts of quotation must

be mistaken – I think it does. But then we can hardly pretend that we have solved the problem of indirect discourse by appeal to quotation.<sup>3</sup>

Perhaps it is not hard to invent a theory of quotation that will serve: the following theory is all but explicit in Quine. Simply view quotations as abbreviations for what you get if you follow these instructions: to the right of the first letter that has opening quotation-marks on its left write right-hand quotation marks, then the sign for concatenation, and then left-hand quotation marks, in that order; do this after each letter (treating punctuation signs as letters) until you reach the terminating right-hand quotation marks. What you now have is a complex singular term that gives what Tarski calls a structural description of an expression. There is a modest addition to vocabulary: names of letters and of punctuation signs, and the sign for concatenation. There is a corresponding addition to ontology: letters and punctuation signs. And finally, if we carry out the application to sentences in indirect discourse, there will be the logical consequences that the new structure dictates. For two examples, each of the following will be entailed by "Galileo said that the earth moves":

 $(\exists x)$  (Galileo said that "the ea"  $x \cap$  "th moves")

and (with the premise "r = the 18th letter in the alphabet"):

Galileo said that "the ea" the 18th letter in the alphabet "th moves"

(I have clung to abbreviations as far as possible.) These inferences are not meant in themselves as criticism of the theory of quotation; they merely illuminate it.

Quine discusses the quotational approach to indirect discourse in *Word* and Object,<sup>4</sup> and abandons it for what seems, to me, a wrong reason. Not that there is not a good reason; but to appreciate *it* is to be next door to a solution, as I shall try to show.

Let us follow Quine through the steps that lead him to reject the quotational approach. The version of the theory he considers is not the one once proposed by Carnap to the effect that 'said that' is a two-place predicate true of ordered pairs of people and sentences.<sup>5</sup> The trouble with this idea is not that it forces us to assimilate indirect discourse to direct, for it does not. The 'said that' of indirect discourse, like the 'said' of direct, may relate persons and sentences, but be a different relation; the former, unlike the latter, may be true of a person, and a sentence he never spoke

in a language he never knew. The trouble lies rather in the chance that the same sentence may have different meanings in different languages – not too long a chance either if we count ideolects as languages.

Not that it is impossible to find words (as written or sounded) which express quite different ideas in different languages. For example, the sounds "Empedokles liebt" do fairly well as a German or an English sentence, in one case saying that Empedokles loved and in the other telling us what he did from the top of Etna. 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>6</sup>

Calling the relativity to English an assumption may be misleading; perhaps the reference to English is explicit, as follows. A long-winded version of our favorite sentence might be "Galileo spoke a sentence that meant in his language what 'The earth moves' means in English'. Since in this version it takes everything save 'Galileo' and 'The earth moves' to do the work of 'said that', we must count the reference to English as explicit in the 'said that'. To see how odd this is, however, it is only necessary to reflect that the English words 'said that', with their built-in reference to English, would no longer translate (by even the roughest extensional standards) the French 'dit que'.

We can shift the difficulty over translation away from the 'said that' or 'dit que' by taking these expressions as three-place predicates relating a speaker, a sentence and a language, the reference to a language to be supplied either by our (in practice nearly infallible) knowledge of the language to which the quoted material is to be taken as belonging, or by a demonstrative reference to the language of the entire sentence. Each of these suggestions has its own appeal, but neither leads to an analysis that will pass the translation test. To take the demonstrative proposal, translation into French will carry 'said that' into 'dit que', the demonstrative reference will automatically, and hence perhaps still within the bounds of strict translation, shift from English to French. But when we translate the final singular term, which names an English sentence, we produce a palpably false result.

These exercises help bring out important features of the quotational

approach. But now it is time to remark that there would be an anomaly in a position, like the one under consideration, that abjured reference to propositions in favor of reference to languages. For languages (as Quine remarks in a similar context in *Word and Object*) are at least as badly individuated, and for much the same reasons, as propositions. Indeed, an obvious proposal linking them is this: languages are identical when identical sentences express identical propositions. We see, then, that quotational theories of indirect discourse, those we have discussed anyway, cannot claim an advantage over theories that frankly introduce intensional entities from the start; so let us briefly consider theories of the latter sort.

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 languages described by Church are amenable to theory in the sense of a truth-definition meeting Tarski's standards.<sup>7</sup> What stands in the way in Frege's case is that every referring expression has an infinite number of entities it may refer to, depending on the context, and there is no rule that gives the reference in more complex contexts on the basis of the reference in simpler ones. In Church's languages, there is an infinite number of primitive expressions; this directly blocks the possibility of recursively characterizing a truthpredicate satisfying Tarski's requirements.

Things might be patched up by following a leading idea of Carnap's *Meaning and Necessity* and limiting the semantic levels to two: extensions and (first-level) intensions.<sup>8</sup> An attractive strategy might then be to turn Frege, thus simplified, upside down by letting each singular term refer to its sense or intension, and providing a reality function (similar to Church's delta function) to map intensions onto extensions. Under such treatment our sample sentence would emerge like this: "The reality of Galileo said that the earth moves". Here we must suppose that 'the earth' names an individual concept which the function referred to by 'moves' maps onto the proposition that the earth moves; the function referred to by 'said that' in turn maps Galileo and the proposition that the earth moves onto a truth value. Finally, the name, 'Galileo' refers to

an individual concept which is mapped, by the function referred to by 'the reality of' onto Galileo. With ingenuity, this theory can accommodate quantifiers that bind variables both inside and outside contexts created by verbs like 'said' and 'believes'. There is no special problem about defining truth for such a language: everything is on the up and up, purely extensional save in ontology. This seems to be a theory that might do all we have asked. Apart from nominalistic qualms, why not accept it?

My reasons against this course are essentially Quine's. Finding right words of my own to communicate another's saying is a problem in translation (216–217). The words I use in the particular case may be viewed as products of my total theory (however vague and subject to correction) of what the originating speaker means by anything he says: such a theory is indistinguishable from a characterization of a truthpredicate, with his language as object-language and mine as metalanguage. The crucial point is that within limits there is no choosing between alternative theories which differ in assigning clearly non-synonymous sentences of mine as translations of his same utterance. This is Quine's thesis of the indeterminacy of translation (218–221).<sup>9</sup> An example will help bring out the fact that the thesis applies not only to translation between speakers of conspicuously different languages, but also to cases nearer home.

Let someone say (and now discourse is direct), "There's a hippopotamus in the refrigerator"; am I necessarily right in reporting him as having said that there is a hippopotamus in the refrigerator? Perhaps; but under questioning he goes on, "It's roundish, has a wrinkled skin, does not mind being touched. It has a pleasant taste, at least the juice, and it costs a dime. I squeeze two or three for breakfast." After some finite amount of such talk we slip over the line where it is plausible or even possible to say correctly that he said there was a hippopotamus in the refrigerator, for it becomes clear he means something else by at least some of his words than I do. The simplest hypothesis so far is that my word 'hippopotamus' no longer translates his word 'hippopotamus'; my word 'orange' might do better. But in any case, long before we reach the point where homophonic translation must be abandoned, charity invites departures. Hesitation over whether to translate a saying of another by one or another of various non-synonymous sentences of mine does not necessarily reflect a lack of information: it is just that beyond a point

there is no deciding, even in principle, between the view that the Other has used words as we do but has more or less weird beliefs, and the view that we have translated him wrong. Torn between the need to make sense of a speaker's words and the need to make sense of the pattern of his beliefs, the best we can do is choose a theory of translation that maximizes agreement. Surely there is no future in supposing that in earnestly uttering the words "There's a hippopotamus in the refrigerator" the Other has disagreed with us about what can be in the refrigerator if we also must then find ourselves disagreeing with him about the size, shape, color, manufacturer, horsepower, and wheelbase of hippopotami.

None of this shows there is no such thing as correct reporting, through indirect discourse, what another said. All that the indeterminacy shows is that if there is one way of getting it right there are other ways that differ substantially in that non-synonymous sentences are used after 'said that'. And this is enough to justify our feeling that there is something bogus about the sharpness questions of meaning must in principle have if meanings are entities.

The lesson was implicit in a discussion started some years ago by Benson Mates. Mates claimed that the sentence "Nobody doubts that whoever believes that the seventh consulate of Marius lasted less than a fortnight believes that the seventh consulate of Marius lasted less than a fortnight" is true and yet might well become false if the last word were replaced by the (supposed synonymous) words 'period of fourteen days', and that this could happen no matter what standards of synonomy we adopt short of the question-begging "substitutable everywhere *salva veritate*".<sup>10</sup> Church and Sellars responded by saying the difficulty could be resolved by firmly distinguishing between substitutions based on the speaker's use of language and substitutions colored by the use attributed to others.<sup>11</sup> But this is a solution only if we think there is some way of telling, in what another says, what is owed to the meanings he gives his words and what to his beliefs about the world. According to Quine, this is a distinction not there to be drawn.

The detour has been lengthy; I return now to Quine's discussion of the quotational approach in *Word and Object*. As reported above, Quine rejects relativization to a language on the grounds that the principle of the individuation of languages is obscure, and the issue when languages are identical irrelevant to indirect discourse (214). He now suggests that

instead of interpreting the content-sentence of indirect discourse as occurring in a language, we interpret it as voiced by a speaker at a time. The speaker and time relative to which the content-sentence needs understanding is, of course, the speaker of that sentence, who is thereby indirectly attributing a saying to another. So now "Galileo said that the earth moves" comes to mean something like "Galileo spoke a sentence that in his mouth meant what 'The earth moves' now means in mine". Quine makes no objection to this proposal because he thinks he has something simpler and at least as good in reserve. But in my opinion the present proposal deserves more serious consideration, for I think it is nearly right, while Quine's preferred alternatives are seriously defective.

The first of these alternatives is Scheffler's inscriptional theory.<sup>12</sup> Scheffler suggests that sentences in indirect discourse relate a speaker and an utterance: the role of the content-sentence is to help convey what sort of utterance it was. What we get this way is, "Galileo spoke a that-theearth-moves utterance". The predicate "x is-a-that-the-earth-movesutterance" has, so far as theory of truth and of inference are concerned, the form of an unstructured one-place predicate. Quine does not put the matter quite this way, and he may resist my appropriation of the terms 'logical form' and 'structure' for purposes that exclude application to Scheffler's predicate. Quine calls the predicate "compound" and describes it as composed of an operator and a sentence (214, 215). These are matters of terminology; the substance, about which there may be no disagreement, is that on Scheffler's theory sentences in oratio obligua have no logical relations that depend on structure in the predicate, and a truth-predicate that applies to all such sentences cannot be characterized in Tarski's style. The reason is plain: there is an infinite number of predicates with the syntax "x is-a-\_\_\_\_-utterance" each of which is, in the eyes of semantic theory, unrelated to the rest.

Quine has seized one horn of the dilemma. Since attributing semantic structure to content-sentences in indirect discourse apparently forces us to endorse logical relations we do not want, Quine gives up the structure. The result is that another desideratum of theory is neglected, that truth be defined.

Consistent with his policy of renouncing structure that supports no inferences worth their keep, Quine contemplates one further step; he says, "...a final alternative that I find as appealing as any is simply to

dispense with the objects of the propositional attitudes" (216). Where Scheffler still saw 'said that' as a two-place predicate relating speakers and utterances, though welding content-sentences into one-piece oneplace predicates true of utterances, Quine now envisions contentsentence and 'said that' welded directly to form the one-place predicate "x said-that-the-earth-moves", true of persons. Of course some inferences inherent in Scheffler's scheme now fall away: we can no longer infer "Galileo said something" from our sample sentence, nor can we infer from it and "Someone denied that the earth moves" the sentence "Someone denied what Galileo said". Yet as Quine reminds us, inferences like these may fail on Scheffler's analysis too when the analysis is extended along the obvious line to belief and other propositional attitudes, since needed utterances may fail to materialize (215). The advantages of Scheffler's theory over Quine's 'final alternative' are therefore few and uncertain; this is why Quine concludes that the view that invites the fewest inferences is 'as appealing as any'.

This way of eliminating unwanted inferences unfortunately abolishes most of the structure needed by the theory of truth. So it is worth returning for another look at the earlier proposal to analyze indirect discourse in terms of a predicate relating an originating speaker, a sentence, and the present speaker of the sentence in indirect discourse. For that proposal did not cut off any of the simple entailments we have been discussing, and it alone of recent suggestions promised, when coupled with a workable theory of quotation, to yield to standard semantic methods. But there is a subtle flaw.

We tried to bring out the flavor of the analysis to which we have returned by rewording our favorite sentence as "Galileo uttered a sentence that meant in his mouth what 'The earth moves' means now in mine." We should not think ill of this verbose version of "Galileo said that the earth moves" because of apparent reference to a meaning ("what 'The earth moves' means"); this expression is not treated as a singular term in the theory. We are indeed asked to make sense of a judgment of synonomy between utterances, but not as the foundation of a theory of language, merely as an unanalyzed part of the content of the familiar idiom of indirect discourse. The idea that underlies our awkward paraphrase is that of *samesaying*: when I say that Galileo said that the earth moves, I represent Galileo and myself as samesayers.

And now the flaw is this. If I merely say we are samesayers, Galileo and I, I have yet to make us so; and how am I to do this? Obviously, by saying what he said; not by using his words (necessarily), but by using words the same in import here and now as his then and there. Yet this is just what, on the theory, I cannot do. For 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. In uttering the words "The earth moves" I do not, according to this account, say anything remotely like what Galileo is claimed to have said; I do not, in fact, say anything. My words in the frame provided by "Galileo said that\_\_\_\_\_\_" merely help refer to a sentence. There will be no missing the point if we expand quotation in the style we recently considered. Any intimation that Galileo and I are samesayers vanishes in this version:

We seem to have been taken in by a notational accident, a way of referring to expressions that when abbreviated produces framed pictures of the very words referred to. The difficulty is odd; let's see if we can circumvent it. Imagine an altered case. Galileo utters his words "Eppur si muove", I utter my words, "The earth moves." There is no problem yet in recognizing that we are samesayers; an utterance of mine matches an utterance of his in purport. I am not now using my words to help refer to a sentence: I speak for myself, and my words refer in their usual way to the earth and to its movement. If Galileo's utterance "Eppur si muove" made us samesayers, then some utterance or other of Galileo's made us samesayers. The form " $(\exists x)$  (Galileo's utterance x and my utterance y make us samesayers)" is thus a way of attributing any saying I please to Galileo provided I find a way of replacing 'y' by a word or phrase that refers to an appropriate utterance of mine. And surely there is a way I can do this: I need only produce the required utterance and replace 'y' by a reference to it. Here goes:

The earth moves.

 $(\exists x)$  (Galileo's utterance x and my last utterance make us samesayers).

Definitional abbreviation is all that is needed to bring this little skit down to:

The earth moves. Galileo said that.

Here the 'that' is a demonstrative singular term referring to an utterance (not a sentence).

This form has a small drawback in that it leaves the hearer up in the air about the purpose served by saying "The earth moves" until the act has been performed. As if, say, I were first to tell a story and then add, "That's how it was once upon a time". There's some fun to be had this way, and in any case no amount of telling what the illocutionary force of our utterances is is going to insure that they have that force. But in the present case nothing stands in the way of reversing the order of things, thus:

> Galileo said that. The earth moves.

Perhaps it is now safe to allow a tiny orthographic change, a change without semantic significance, but suggesting to the eye the relation of introducer and introduced: we may suppress the stop after 'that' and the consequent capitalization:

Galileo said that the earth moves.

Perhaps it should come as no surprise to learn that the form of psychological sentences in English apparently evolved through about the stages our ruminations have just carried us. According to the Oxford English Dictionary,

The use of *that* is generally held to have arisen out of the demonstrative pronoun pointing to the clause which it introduces. Cf. (1) He once lived here: we all know *that*; (2) *That* (now *this*) we all know: he once lived here; (3) We all know *that* (or *this*): he once lived here; (4) We all know *that* he once lived here...<sup>13</sup>

The proposal then is this: sentences in indirect discourse, as it happens, wear their logical form on their sleeves (except for one small point). They consist of an expression referring to a speaker, the two-place predicate 'said', and a demonstrative referring to an utterance. Period. What follows gives the content of the subject's saying, but has no logical or semantic connection with the original attribution of a saying. This last

point is no doubt the novel one, and upon it everything depends: from a semantic point of view the content-sentence in indirect discourse is not contained in the sentence whose truth counts.

We would do better, in coping with this subject, to talk of inscriptions and utterances and speech acts, and avoid reference to sentences.<sup>14</sup> For what an utterance of "Galileo said that" does is announce a further utterance. Like any utterance, this first may be serious or silly, assertive or playful; but if it is true, it must be followed by an utterance synonymous with some other. The second utterance, the introduced act, may also be true or false, done in the mode of assertion or of play. But if it is as announced, it must serve at least the purpose of conveying the content of what someone said. The role of the introducing utterance is not unfamiliar: we do the same with words like "This is a joke", "This is an order", "He commanded that", "Now hear this". Such expressions might be called performatives, for they are used to usher in performances on the part of the speaker. A certain interesting reflexive effect sets in when performatives occur in the first-person present tense, for then the speaker utters words which if true are made so exclusively by the content and mode of the performance that follows, and the mode of this performance may well be in part determined by that same performative introduction. Here is an example that will also provide the occasion for a final comment on indirect discourse.

"Jones asserted that Entebbe is equatorial" would, if we parallel the analysis of indirect discourse, come to mean something like, "An utterance of Jones' in the assertive mode had the content of this utterance of mine. Entebbe is equatorial". The analysis does not founder because the modes of utterance of the two speakers may differ; all that the truth of the performative requires is that my second utterance, in whatever mode (assertive or not) match in content an assertive utterance of Jones. Whether such an asymmetry is appropriate in indirect discourse depends on how much of assertion we read into saying. Now suppose I try: "I assert that Entebbe is equatorial". Of course by saying this I may not assert anything; mood of words cannot guarantee mode of utterance. But if my utterance of the performative is true, then I do say something in the assertive mode that has the content of my second utterance – I do, that is, assert that Entebbe is equatorial. If I do assert it, an element in my success is no doubt my utterance of the performative, which an-

nounces an assertion; thus performatives tend to be self-fulfilling. Perhaps it is this feature of performatives that has misled some philosophers into thinking that performatives, or their utterances, are neither true nor false.

On the analysis of indirect discourse just proposed, standard problems seem to find a just solution. The appearance of failure of the laws of extensional substitution is explained as due to our mistaking what are really two sentences for one: we make substitutions in one sentence, but it is the other (the utterance of) which changes in truth. Since an utterance of "Galileo said that" and any utterance following it are semantically independent, there is no reason to predict, on grounds of form alone, any *particular* effect on the truth of the first from a change in the second. On the other hand, if the second utterance had been different in any way at all, the first utterance *might* have had a different truth value, for the reference of the 'that' would have changed.

The paradox, that sentences (utterances) in *oratio obliqua* do not have the logical consequences they should if truth is to be defined, is resolved. What follows the verb 'said' has only the structure of a singular term, usually the demonstrative 'that'. Assuming the 'that' refers, we can infer that Galileo said something from "Galileo said that"; but this is welcome. The familiar words coming in the train of the performative of indirect discourse do, on my account, have structure, but it is familiar structure and poses no problem for theory of truth not there before indirect discourse was the theme.

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. No doubt their role in *oratio obliqua* is in some sense special; but that is another story. Language is the instrument it is because the same expression, with

semantic features (meaning) unchanged, can serve countless purposes. I have tried to show how our understanding of indirect discourse does not strain this basic insight.

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#### REFERENCES

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<sup>1</sup> Alfred Tarski, 'The Concept of Truth in Formalized Languages', in *Logic, Semantics, Metamathematics*, Oxford 1956, pp. 152–278. The criterion is roughly Tarski's Convention T that defines the concept of a truth-predicate.

<sup>2</sup> The view that a characterization of a truth-predicate meeting Tarski's criteria is the core of a theory of meaning is defended in my 'Truth and Meaning', *Synthese* **17** (1967) 304–323.

<sup>3</sup> For documentation and details see my 'Theories of Meaning and Learnable Languages' in *Logic, Methodology and Philosophy of Science, Proceedings of the* 1964 International Congress (ed. by Yehoshua Bar-Hillel), Amsterdam 1965, pp. 388–390.

<sup>4</sup> Word and Object, Cambridge, Mass., 1960, Chapt. VI. Hereafter numerals in parentheses refer to pages of this book.

<sup>5</sup> R. Carnap, *The Logical Syntax of Language*, London 1937, p. 248. The same was in effect proposed by P. T. Geach, *Mental Acts*, London 1957.

<sup>6</sup> The point is due to A. Church, 'On Carnap's Analysis of Statements of Assertion and Belief', *Analysis* **10** (1950) 97–99.

<sup>7</sup> G. Frege, 'On Sense and Reference' in *Philosophical Writings* (ed. by P. Geach and M. Black) Oxford 1952, and A. Church, 'A Formulation of the Logic of Sense and Denotation', in *Structure, Method, and Meaning: Essays in Honor of H. M. Sheffer* (ed. by Henle, Kallen and Langer) New York 1951.

<sup>8</sup> R. Carnap, *Meaning and Necessity*, Chicago 1947. The idea of an essentially Fregean approach limited to two semantic levels has also been suggested by Michael Dummett (in an unpublished manuscript). Neither of these proposals is in detail entirely satisfactory in the light of present concerns, for neither leads to a language for which a truth-predicate can be characterized.

<sup>9</sup> My assimilation of a translation manual to a theory of truth is not in Quine. For more on this, see the article in reference 2.

<sup>10</sup> B. Mates, 'Synonymity', in *Meaning and Interpretation*, Berkeley 1950, pp. 201–226. The example is Church's.

<sup>11</sup> A. Church, 'Intensional Isomorphism and Identity of Belief', *Philosophical Studies* 5 (1954) 65–73; W. Sellars, 'Putnam on Synonymity and Belief', *Analysis* 15 (1955) 117–20.

<sup>12</sup> I. Scheffler, 'An Inscriptional Approach to Indirect Quotation', *Analysis* 14 (1954) 83–90.

<sup>13</sup> J. A. H. Murray *et al.* (eds.), *The Oxford English Dictionary*, Oxford 1933, vol. XI, p. 253. Cf. C. T. Onions, *An Advanced English Syntax*, New York 1929, pp. 154–156. I first learned that 'that' in such contexts evolved from an explicit demonstrative in J. Hintikka, *Knowledge and Belief*, Ithaca 1962, p. 13. Hintikka remarks that a similar

development has taken place in German and Finnish. I owe the reference to the O.E.D. to Eric Stiezel.

<sup>14</sup> I assume that a theory of truth for a language containing demonstratives must strictly apply to utterances and not to sentences, or will treat truth as a relation between sentences, speakers, and times. The point is discussed in 'Truth and Meaning', pp. 319, 20 (see reference 2).

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