

NATHAN SALMON

THE VERY POSSIBILITY OF LANGUAGE

A Sermon on the Consequences of Missing Church*

1.

An English speaker in uttering the words, (0) 'The earth is round', says, or asserts, the same thing as a French speaker uttering the words, (0') '*La terre est ronde*'.¹ The thing asserted is a proposition, the proposition that the earth is round. That there are propositions, as distinct from the sentences that express them, is a commitment of psychology and other human sciences, which ascribe beliefs and other propositional attitudes. The existence of propositions is an integral part of our ordinary conceptions of consciousness and cognition, and therewith of our ordinary conception of what it is to be a person.

The evidence for this commitment to propositions, qua extra-linguistic entities expressed by intra-linguistic entities, is compelling. No one has done more to bring that evidence to the attention of philosophers than Alonzo Church, and nowhere does he do so with more force than in his elegant and farsighted paper "On Carnap's Analysis of Statements of Assertion and Belief."² That deceptively brief note presents a sharp and telling criticism of one possible attempt to do away with propositions (in the sense that Church intends) in favor of the cognitive dispositions of speakers *vis a vis* particular sentences of a language ("semantical system"). The argument has

*As a student, I had the privilege and distinct good fortune to take numerous courses from Alonzo Church, one of the truly great analytical thinkers of this century. My own intellectual development has benefited enormously from the masterful tutelage of this extraordinary logician and philosopher, in whose honor this essay was written, shortly before his death. I am grateful to my audiences at UCLA in 1994 and at UC Berkeley in 1996 for their comments, and to C. Anthony Anderson and Saul Kripke for discussion.

¹These sentences are to be taken in the usual sense throughout, as expressing that the earth is spherical.

²*Analysis*, 10, 5 (1950), pp. 97–99; reprinted in L. Linsky, ed., *Reference and Modality* (Oxford University Press, 1971), pp. 168–170. See also Church's "A Formulation of the Logic of Sense and Denotation," in Henle, Kallen, and Langer, eds., *Structure, Method, and Meaning: Essays in Honor of Henry M. Sheffer* (New York: Liberal Arts Press, 1988), pp. 3–24 at 5–6n; "Intensional Isomorphism and Identity of Belief," *Philosophical Studies*, vol. 5 (1954), pp. 65–73, reprinted in N. Salmon and S. Soames, eds., *Propositions and Attitudes* (Oxford University Press, 1988), pp. 159–168; and *Introduction to Mathematical Logic I* (Princeton University Press, 1956), p. 62n.

a broad, generic sweep; it is equally applicable to any of a wide range of theories that posit a reference to sentences or other intra-linguistic items in the semantic content of a variety of constructions, especially attributions of propositional attitude, even including such theories as may be proposed that do this while simultaneously embracing propositions. (The particular theory Church criticizes, as Carnap intended it, arguably does just this.) The argument, which invokes the translation of various sentences between languages, has come to be called *the Church Translation Argument*.³

Some philosophers of language, many of them in pursuit of a propositionless world, have attempted to rebut the Translation Argument.⁴ Numerous writers today dismiss the argument as weak, fallacious, or otherwise underwhelming, or they simply ignore it. Where Church wasted few words, some of his critics have minced even fewer. Michael Dummett, who does not himself reject propositions, nevertheless said that “it is difficult to treat this objection very seriously.”⁵ Peter Geach labelled the argument “frivolously bad.”⁶ In the judgment of the present author, the current dismissive attitude toward the Church Translation Argument constitutes a quantum leap backward, and is, from the point of view of the formal study of semantics,

³In all of his writings on the subject, Church reminds the reader that the basic insight of employing translation as a test for determining whether an expression is being used or mentioned is due to C. H. Langford. See also footnote 12 below.

⁴The following is a partial list: Tyler Burge, “Self-Reference and Translation,” in F. Guenther and M. Guenther-Reutter, eds., *Translation and Meaning* (London: Duckworth, 1977), pp. 137–153, and “Belief and Synonymy,” *Journal of Philosophy*, vol. 75, no. 3 (March 1978), pp. 119–138; Rudolf Carnap, “On Belief-Sentences: Reply to Alonzo Church,” in Carnap’s *Meaning and Necessity* (University of Chicago Press, 1947, 1956), pp. 230–232; Donald Davidson, “The Method of Extension and Intension,” in P. A. Schilpp, ed., *The Philosophy of Rudolf Carnap* (La Salle, Ill., 1963), pp. 331–349, at 344–346; Michael Dummett, *Frege: Philosophy of Language* (Cambridge, Mass.: Harvard University Press, 1973, 1981), at pp. 372–373, and *The Interpretation of Frege’s Philosophy* (Cambridge, Mass.: Harvard University Press, 1981), at pp. 90–94; Peter Geach, *Mental Acts* (London: Routledge, 1957), at pp. 89–92, and “The Identity of Propositions,” in Geach’s *Logic Matters* (Oxford: Blackwell, 1972), pp. 166–174; Steven Leeds, “Church’s Translation Argument,” *Canadian Journal of Philosophy*, vol. 9, no. 1 (March 1979), pp. 43–51 (I thank Mark Richard for providing this reference); Brian Loar, *Mind and Meaning* (Cambridge University Press, 1981), pp. 29–30, 152; Hilary Putnam, “Synonymy, and the Analysis of Belief Sentences,” *Analysis*, vol. 14, no. 5 (April 1954), pp. 114–122, reprinted in N. Salmon and S. Soames, eds., *Propositions and Attitudes* (Oxford University Press, 1988), pp. 149–158; W. V. Quine, “Quantifiers and Propositional Attitudes,” reprinted in L. Linsky, ed., *Reference and Modality* (Oxford University Press, 1971), pp. 101–111, at 110; Mark Richard, *Propositional Attitudes* (Cambridge University Press, 1990), at p. 156ff; Israel Scheffler, “An Inscriptional Approach to Indirect Quotation,” *Analysis*, vol. 14, no. 4 (March 1954), pp. 83–90, and “On Synonymy and Indirect Discourse,” *Philosophy of Science*, vol. 22, no. 1 (January 1955), pp. 39–44, at 43–44n. While no attempt is made here to respond adequately to each of these critiques, much of what will be said here is applicable to a number of them.

⁵Frege, *Philosophy of Language*, p. 372.

⁶“The Identity of Propositions,” p. 167.

regrettable in the extreme.⁷ The point at issue is by no means narrowly confined to the question of whether attributions of propositional attitude involve a commitment to propositions. Those who reject the Translation Argument have typically failed to comprehend the more general point on which it is based, and have thereby failed to appreciate one of the most fundamental facts concerning the phenomenon of understanding. This failure is especially dramatic in the case of Dummett. As I shall argue, Dummett's failure to grasp the larger import of Church's argument has led him and his followers to defend a seriously distorted version of Frege's theory, one that has the consequence (clearly unintended) that language, as a mode of communication and a vehicle of cognition, is altogether impossible. I shall endeavor here to explain the main thrust of the Church Translation Argument, especially in regard to those aspects of the argument that are misunderstood by its detractors. I shall do so by reference to a particular lacuna in Frege's philosophy of semantics, showing how Church's valuable insights help to resolve a longstanding controversy concerning Frege's notion of indirect sense.

Generalizing slightly on Church's presentation, consider the theory that the first of the following two English sentences is analyzable (definable with full preservation of meaning) by means of the second:⁸

- (1) Chris believes that the earth is round.
- (2) Chris accepts 'The earth is round'.

The analysans (2) may be expanded if necessary to focus on a particular meaning for the sentence it mentions, perhaps by adding a phrase like 'as a sentence of English', 'as a sentence of the same language as this very sentence', or 'as I, the present speaker of this very sentence, would mean it'.⁹ It

⁷More generally, it is my considered view that the attempt to avoid an ontology of extra-linguistic abstract entities by an appeal to intra-linguistic substitutes is philosophically misguided. The reasons for this judgment are complex. As an excessively brief summary, I mention that the ontology of everyday discourse is replete with abstract entities other than propositions. The philosophical security that is supposed to be afforded by replacing propositions with sentences is largely an illusion, since sentences, no less than propositions, are abstract entities. Many sentences—indefinitely many, in fact—are too long to be written or uttered by any conceivable creature. Moreover, principles concerning the identification of sentences are not nearly as "extensional" as is sometimes supposed. This last difficulty often manifests itself in the need to resort not merely to sentences as such, but to *sentences as sentences of a particular language*, or to *sentences as meaning that such-and-such*, etc.

⁸For many applications, the requirement of full preservation of meaning (whereby, as a consequence, one believes what is expressed by the analysandum if and only if one also believes what is expressed by the analysans) may be weakened to mere logical equivalence, and in some applications, to such wider equivalence relations as modal equivalence or *a priori* equivalence, with little effect on the overall force of the argument.

⁹Church's conception of linguistic expressions and their semantics is such as to require that such semantic attributes as sense, denotation, and truth value always be relativized to a particular language. Others favor a conception according to which relativization to a language is unnecessary or even inappropriate. Cf. Peter Geach's protests in *Mental*

should be noted that any possible expansion of (2) that apparently mentions the proposition that the earth is round, or otherwise apparently logically entails the existence of a proposition, would not be suitable as part of an attempt to relieve the author of (1) of his or her apparent commitment to propositions, although it may be appropriate for other purposes.¹⁰ The particular word 'accepts' is used schematically; any of a variety of transitive verb phrases may be substituted. As an example, one may replace 'accepts' with a carefully formulated phrase like 'is disposed, on reflection, when sincere and nonreticent, to assent to some sufficiently understood translation or other of'. Alternatively, one may substitute Quine's word 'believes-true'¹¹ or even

Acts, pp. 88–89; and David Kaplan, "Words," *Proceedings of the Aristotelian Society*, vol. 64 (1990), pp. 93–116. Although Church's presentation of the Translation Argument assumes his view on this issue, the argument can also be presented with the opposite view presupposed, or with neutrality (as it is here).

¹⁰One addendum that would obviously be inadmissible for the purpose of eliminating commitment to propositions is the phrase 'as expressing the proposition that the earth is round', or more simply 'as meaning that the earth is round'. (Cf. footnote 7 above.) Church explicitly considers a possible expansion of (2) that logically entails this inadmissible one, admitting that such an expanded version may yield (1) as a logical consequence. He does not note that the expansion in question would not be suitable for the elimination of propositions. (It may even lead to circularity, if the proposed analysis is extended to such constructions as 'Sentence *S* means in language *L* that the earth is round' in addition to (1).) Instead he notes, correctly, that the particular expansion of (2) he considers does not preserve the meaning of (1). Again he utilizes translation to crystalize the point. In addition, he considers embedded constructions like 'Jones believes that Chris believes that the earth is round', arguing that alleged analyses of this and of its translation may even differ in truth value in their respective languages. (Cf. footnote 8 above.) Carnap says in response (*op. cit.*, p. 230, in a highly compressed paragraph) that he intended precisely such an expansion of (2), while conceding that Church's objection is correct.

Carnap's overall response to Church is unclear and puzzling. In *Meaning and Necessity*, pp. 63–64, scarcely a page after presenting his analysis of statements of belief, Carnap says of analysis in general that although analysandum and analysans must be logically equivalent, they need not be intensionally isomorphic—or as Carnap also puts it, the analysis must preserve intension but need not preserve intensional structure. Davidson (*op. cit.*) and Putnam (*op. cit.*) argue, in effect, that Carnap's analysis of statements of assertion and belief in particular, therefore, is not intended to capture their meaning but only something logically equivalent—thus making Church's objections inapplicable. In sharp contrast, Carnap concedes not only Church's objection, but furthermore that (1) is strictly not even a logical consequence of the intended version of (2) (pp. 230–231). Curiously, Carnap also endorses Putnam's response (p. 230), while proffering an alternative version of (2) as a scientific replacement (presumably now logically equivalent) for (1) (pp. 231–232). The textual evidence suggests, however, that Carnap confused Putnam's response on this point with Putnam's response to a separate objection by Benson Mates concerning embedded constructions. In "Intensional Isomorphism and Identity of Belief," Church extends the Translation Argument against Putnam's response to Mates. See also the introduction to N. Salmon and S. Soames, eds., *Propositions and Attitudes*, (Oxford University Press, 1988), pp. 13–14n10.

The issues here are numerous and quite complex. Cf. footnote 28 below. Insofar as embedded constructions are involved, the dispute is intimately related to issues concerning Frege's notion of indirect sense. See footnote 25 below.

¹¹Quine, *op. cit.*, at pp. 109–110. The expression 'believes-true' is, however, significantly misleading. For discussion, see my "Relational Belief," in P. Leonardi and M. Santambro-

the phrase 'believes the proposition expressed by'. The latter cannot be used if one's objective is to avoid commitment to propositions, but might be used, for example, by one (such as Dummett) who supposes that a 'that'-clause is to be understood by reference to its contained sentence. Moreover, the pair of words, 'believes' and 'accepts', may be replaced by other pairs of suitably related terms, e.g., 'asserted'-'uttered', 'disbelieves'-'rejects', etc.

We demonstrate that the proposed analysis fails as follows: Translating both analysandum and analysans into French, we obtain,

(1') *Chris croit que la terre est ronde.*

(2') *Chris accepte* 'The earth is round'.

(The word '*accepte*' is used here schematically for the literal French translation of whatever English phrase replaces 'accepts', subject to the same possible variations mentioned earlier.) We pause to note that the proper translation for (2) is not

(3') *Chris accepte* '*La terre est ronde*'.

This sentence mentions a particular French sentence not mentioned in (2), while lacking any mention of the English sentence mentioned in (2). It is thus (2') rather than (3') that captures the literal meaning of (2).¹² Likewise, (1) and (1') are literal translations of one another. But it is evident that the French sentences (1') and (2') are not synonymous. For they "would obviously convey different meanings"—indeed, logically independent propositions—to a French speaker having no knowledge of English. Of the two only (1') conveys the content of what Chris allegedly believes. Sentences (1) and (2) must therefore differ in meaning in English, contrary to the proposed analysis.

2.

As noted above, the scope of the argument is wide. It is equally applicable, for example, against the *redundancy* or *disquotational theory of truth*, according to which the English sentence 'The earth is round' is true in English' simply reduces to 'The earth is round'. The argument demonstrates that the two sentences are in fact logically independent. It is also directly applicable to a longstanding controversy in orthodox Fregean theory. Frege held that the English sentence (0) ordinarily denotes its truth value—in this case, the value truth ("the True")—but that, when occurring in an indirect or oblique (*ungerade*) context in English, as in (1), it instead has its indirect denotation, denoting what is ordinarily its English sense, the proposition that the

gio, eds., *On Quine* (Cambridge University Press, 1995).

¹²Cf. G. E. Moore, "Russell's 'Theory of Descriptions'," in his *Philosophical Papers* (New York: Collier Books, 1959), pp. 149–192, at 156–157, where he anticipates Langford's translation test.

earth is round.¹³ Frege held further that when (0) occurs in any English indirect context, it takes on its indirect sense, which is a concept of its indirect denotation, or ordinary sense. But which of the myriad concepts of the proposition that the earth is round is thereby expressed? Carnap complained that “Frege nowhere explains in more ordinary terms what this third entity is.”¹⁴

The matter remains controversial. Dummett argues that, for Frege, the indirect sense in English of (0) is the ordinary sense in English of the phrase

(4) the ordinary sense in English of ‘The earth is round’.¹⁵

Dummett does not support this exegetical thesis by citing any passage from Frege’s writings. Instead he provides quite general considerations in favor of the interpretation:

There is nothing in what Frege says about direct [i.e., ordinary] and indirect sense and reference [denotation] to rule out the possibility that, although distinct expressions, in the same or different languages, may have the same sense, no sense can be given to us save as the sense of some particular expression; such a thesis would fit very well what Frege sometimes says to the effect that *we* can grasp thoughts only via words or other symbols. But, if so, then, if an expression stands for a sense, and does so in virtue of *its* sense, that sense must involve a reference, overt or covert, to some expression—the same or different—whose sense its referent is (*op. cit.*, p. 91).

It is perfectly consistent to combine the thesis that the object of belief is a thought [proposition] with the thesis that we can apprehend a thought only as the sense of a sentence (in a verbal or symbolic language). It is therefore equally consistent to combine the thesis that a clause in *oratio obliqua* [indirect discourse], or an expression within that clause, stands for its ordinary sense with the thesis that, in understanding it as referring to that sense, we apprehend that sense as being the sense of that clause or expression. . . . Frege [adheres] to both these theses (p. 94).

¹³“Über Sinn and Bedeutung”, translated as “On Sense and Reference,” in R. M. Harnish, ed., *Basic Topics in the Philosophy of Language* (Englewood Cliffs, N.J.: Prentice Hall, 1994), pp. 142–160, at 144. I follow Church in translating Frege’s use of ‘*Bedeutung*’ as ‘denotation’ rather than ‘meaning’ or ‘reference’, and Frege’s use of ‘*Gedanke*’ as ‘proposition’ rather than ‘thought’. I also use the word ‘concept’ in Church’s sense, which is very different from Frege’s use of ‘*Begriff*’.

¹⁴*Meaning and Necessity*, §30, pp. 129–133.

¹⁵*The Interpretation of Frege’s Philosophy*, at pp. 89–100. This represents a turnabout for Dummett. In his earlier work, *Frege: Philosophy of Language*, he considered the thesis that the indirect sense of (0) in English is the customary sense of (4), only to dismiss it as “rather implausible” (p. 267). Both this thesis concerning indirect sense, and the exegetical thesis that Frege’s theory implies the former thesis, are defended in Gary Kemp, “Salmon on Fregean Approaches to the Paradox of Analysis,” *Philosophical Studies*, vol. 78, no. 2 (May 1995), pp. 153–162, wherein specific references to Frege’s writings are provided (at p. 160) in support of Dummett’s interpretation.

Dummett adds further on that Frege thought that “we can grasp a thought only as expressed in some way” (p. 98), and that the thesis that the indirect sense in English of (0) is the ordinary sense of (4) “does appear to follow from the two theses, taken together: the thesis that a sense can be given only as the sense of some expression, and the thesis that an expression in *oratio obliqua* stands for its ordinary sense” (p. 95).¹⁶ He continues, saying that “our grasp of the sense of the expression . . . , on Frege’s account, . . . leaves us with no access to that sense save as the sense of some expression” (p. 97).¹⁷

Echoing Carnap, Dummett argues against Frege that it is preferable not to confer on an expression a concept of its ordinary sense to serve as the sense expressed in indirect contexts.¹⁸ Despite his misgivings about the notion of indirect sense, Dummett explicitly endorses the idea that, as he puts it, “a sense can be given to us only as the sense carried by some particular expression.” He explains that to say this “implies that the most direct means by which we can refer in English to the sense expressed by, say, ‘the moon’ is by using the phrase ‘the sense of ‘the moon’ ’” (p. 95). Dummett says moreover that “we cannot refer to the sense of most expressions save by explicit allusion to the expressions” (p. 90). And he joins with Frege, as Dummett has interpreted him, in holding that

we apprehend the indirect referent as being the sense of the expression which we perceive as occurring in the *oratio obliqua* clause. . . . our way of grasping what the sense of an expression is, renders us incapable of detaching the sense from every actual or hypothetical means of expressing it. . . . when we take the expression in *oratio obliqua* as standing for its own sense, we are conceiving of that sense as the sense of that very expression (pp. 97–98).

Although Dummett does not share Frege’s belief in the need for indirect senses, it is clear from the foregoing passages that Dummett maintains the following thesis (which he cites in support of his interpretation of Frege on indirect sense): In order for us to conceive of any sense at all (in order to form a belief about it, or to speculate about it, or even merely to entertain a

¹⁶Dummett points out that the inference in question is actually invalid, but he allows (pp. 98–99) that it is validated by the addition of a third thesis (which Frege held and which Dummett rejects) as premiss, to wit, that “the sense of an expression is the way in which its [denotation] is given to us.”

¹⁷Bishop Berkeley argued, against Locke’s doctrine of “abstraction,” that one cannot conceive of, for example, a color without also conceiving of some shape or other of that color. According to Dummett, Frege did not hold, in the same spirit as Berkeley, merely that one cannot conceive of a sense in any way without also conceiving of it as the sense of some expression or other. It is not that any conception of a sense we have, must be *accompanied* in cognition by a conception of it as the sense of some expression. The point, rather, is that in conceiving of a sense, we conceive of it only as the sense of *e*, for some expression *e* or other, since we have no conception of the sense other than as the sense of *e*, for some expression *e*, for such a conception to accompany. (This will be made more precise below. I am grateful to Charles Chihara for bringing this distinction to my attention.)

¹⁸Carnap, *op. cit.*, at p. 129; Dummett, *Frege: Philosophy and Language*, pp. 266–269.

thought about it, etc.), there must be some expression e (of some language l) such that we conceive of the sense in question (or as Dummett also puts it, the sense is “given to us”) as the ordinary sense of e (in l); we are unable to conceive of a sense in any way other than as the ordinary sense of e (in l), for some expression e (of some language l).¹⁹ Let us call this *Dummett’s Thesis*.

The considerations cited by Dummett in favor of his interpretation of Frege are unconvincing, especially in light of Frege’s explicit pronouncement (which both Carnap and Dummett may have overlooked) that the indirect sense in English of (0) is rather the ordinary sense in English of the alternative phrase

(5) the proposition that the earth is round.²⁰

One may wonder whether the phrases (4) and (5) are not themselves synonymous in English. In fact, Geach explicitly argued that on Fregean theory, such phrases are completely interchangeable (*op. cit.*, p. 168–169). And Dummett evidently treats such phrases as synonyms.²¹ Furthermore, Dummett’s interpretation depicts Frege as having held that the ordinary sense of (5) in English presents the proposition in question as the ordinary sense of some particular linguistic expression. The only plausible candidate for that expression is the English sentence (0).²² This would make (5) a mere English paraphrase of (4)—even if it is a “less direct means” of denoting the proposition denoted by each. If (4) and (5) are indeed synonymous in English, then Dummett’s formulation of Frege’s thesis concerning indirect sense is simply another way of saying the same as Frege.

Any suspicion that (4) and (5) are synonymous may be dispelled, however, by the Translation Argument. Of course, (4) and (5) denote the same proposition in English, but their literal French translations—‘*le sens ordinaire en anglais de ‘The earth is round’*’ and ‘*la proposition que la terre est ronde*’, respectively—clearly carry different meanings for the French speaker who knows no English. Hence, (4) and (5) are not ordinarily synonymous in English, i.e., they differ in ordinary English sense.

Furthermore, the Translation Argument demonstrates that the thesis Dummett erroneously attributes to Frege is in any case incorrect. For just

¹⁹Dummett does not explicitly speak in a relativized manner of the sense of an expression *in a language*. The parenthetical references to the language l are included here for the benefit of those whose view of linguistic expressions and their semantics requires for propriety the relativization to a language. See footnote 9 above.

²⁰“*Über Sinn und Bedeutung*,” at p. 149 of Harnish.

²¹In *The Interpretation of Frege’s Philosophy*, at p. 89, there occurs an otherwise inexplicable switch, wherein the discussion, suddenly and without notice, changes its focus from an identification of the indirect sense of a sentence like (0) with the ordinary sense of the corresponding analogue of (5), to an identification of the indirect sense of ‘Aristotle’ instead with the customary sense of ‘the sense of ‘Aristotle’

²²Cf. the argument given by Dummett *op. cit.*, p. 95, top paragraph. See also Kemp, *op. cit.*

as (0) expresses its English indirect sense in (1), (0') expresses its French indirect sense in (1'). Yet unlike (2'), (1') evidently makes no mention of (0). It is probable, furthermore, that the particular linguistic item creating the indirect context in (1) is not the English word 'believes' but 'that'.²³ For terms denoting the same proposition are typically interchangeable, with no affect on truth value, following occurrences of 'believes', 'asserted', 'doubts', etc. Consider for example the following inferences:

Carnap believed Frege's central doctrine in the philosophy of mathematics.
 Frege's central doctrine in the philosophy of mathematics was logicism.
 Therefore, Carnap believed logicism.

Church doubts logicism.
 Logicism is the doctrine that mathematics is reducible to logic.
 Therefore, Church doubts that mathematics is reducible to logic.

By contrast, the word 'that' is equally involved in substitution failures that do not involve belief ('Bert asserted *that* . . .') and even in substitution failures that do not concern attitudes of any kind, for example in contexts concerning modality ('It is a necessary truth *that* . . .'). The word 'that' is plausibly regarded as a device of sense-quotation, which when attached to an English declarative sentence forms the standard English name for the proposition ordinarily expressed by that sentence (in a manner analogous to that in which syntactic quotation marks form the standard name of the expression enclosed within). As such, 'that' would be a paradigmatic *ungerade* device ("oblique operator") of English, with the phrase 'the proposition' occurring in (5) functioning as a grammatical appositive to the 'that'-clause.²⁴ This hypothesis on Dummett's proposal implies that, since (0) is induced by the 'that' prefix to express its English indirect sense in (1), (1) itself may be rewritten without alteration of meaning in a form dispensing with any *ungerade* device (beyond ordinary quotation marks), simply by substituting (4) for the shortened version of its alleged synonym (5) within it:

(6) Chris believes the ordinary sense in English of 'The earth is round'.

Since this is a sentence of precisely the form of (2), the Translation Argument, as originally given, disproves the theory that it is an English paraphrase of

²³It must be admitted that the construction 'Chris believes the earth is round', without the word 'that', is perfectly grammatical English, and (0) occurs nonextensionally therein. This phenomenon, however, does not immediately yield the result that 'believes' is a nonextensional (*ungerade*) operator. It is arguable that (0) is induced to shift to the indirect mode here by other (perhaps pragmatic) factors. (Indeed, linguists commonly refer to the phenomenon as "that' deletion.")

²⁴Cf. my *Frege's Puzzle* (Atascadero, Ca.: Ridgeview, 1986, 1991), at pp. 5–6; and "Reference and Information Content: Names and Descriptions," in D. Gabbay and F. Guenther, eds., *Handbook of Philosophical Logic IV: Topics in the Philosophy of Language* (Boston: D. Reidel, 1989), pp. 409–462, at 440–441.

(1). Again by contrast, the hypothesis that the English word ‘that’ is a device for sense-quotation strongly supports Frege’s actual claim concerning the indirect sense of a sentence like (0).²⁵

3.

A few years after Church’s paper appeared, Geach protested,

Very often, what we count as correct translation will include translation of quoted expressions; a translator of *Quo Vadis* would not feel obliged to leave all the conversations in the original Polish, and we should count it as perversely wrong, not pedantically correct, if he did so.²⁶

Others have since echoed Geach’s complaint, notably Tyler Burge and Dummett.²⁷ It must be observed that each of Burge, Dummett, and Geach offers a reply different in various respects from the other two—and it is not obvious that any of the three agrees entirely with any other—but they share an emphasis on divergences between translation in actual practice and the special, sense-preserving translation proposed by Church. Translators would very likely proffer (3’) rather than (2’), they argue, as a correct rendering of the English (2) into French. No one denies that (3’) fails to preserve (2)’s mention of (0); (3’) mentions different words of a different language altogether. Insofar as preservation of meaning, or sense, requires the preservation of denotation, rendering the English (2) into French by means of (3’) does not preserve meaning.²⁸ But Burge, Dummett, and Geach each deny

²⁵The Translation Argument is not supportive of all aspects of Fregean theory. As is shown in my article “A Problem in the Frege-Church Theory of Sense and Denotation,” *Noûs*, vol. 27, no. 2 (1993), pp. 158–166, while the argument supports Frege’s thesis concerning indirect sense, it thereby leads to an inconsistency when combined with a Fregean solution to the Paradox of Analysis, of a sort advocated by Church in his review of the Black/White exchange concerning the Paradox of Analysis, *The Journal of Symbolic Logic*, vol. 11 (1946), pp. 132–133. I argue in the article that relinquishing the Fregean solution to the Paradox of Analysis threatens the Frege-Church theory, by collapsing Frege’s and Church’s original argument for the pivotal distinction between the sense and denotation of an expression. (Whereas this difficulty exposes a potentially serious weakness in the Frege-Church theory of sense and denotation, it does nothing to weaken the force of the Translation Argument.)

²⁶*Mental Acts*, pp. 91–92. (I thank Saul Kripke for providing this reference.)

²⁷Burge, “Self-reference and Translation,” especially pp. 141–144; Dummett, *loc. cit.* Burge’s response to the Translation Argument is also endorsed by James Higginbotham, in “Linguistic Theory and Davidson’s Program in Semantics,” in E. Lepore, ed., *Truth and Interpretation: Perspectives on the Philosophy of Donald Davidson* (Oxford: Basil Blackwell, 1986), pp. 29–48, at 39n. (I thank Higginbotham for providing the last reference.)

²⁸This point is explicitly acknowledged by Dummett (*Frege: Philosophy of Language*, p. 372; *The Interpretation of Frege’s Philosophy*, p. 90). It is more or less acknowledged by Burge (*op. cit.*, p. 141), although his overall response to the Translation Argument is explicitly part of a program to avoid commitment to propositions (pp. 152–153). Geach espouses an extreme skepticism regarding the notion of synonymy. He argues that (3’) is “of the same force as” (his version of) (2), and that (3’) and (2) are “reasonably equivalent,”

that correct translation must preserve meaning—insofar as the preservation of meaning requires the preservation of denotation. Thus Dummett writes, “There is no ground for the presumption that the practical canons of apt translation always require strict synonymy. On the contrary, translations of fiction and, equally, of historical narrative (including the Gospels) always translate even directly quoted dialogue.”²⁹ Amplifying the argument, Burge says, “translation of foreign quoted material aims at conveying the ‘point’ of the passage that contains it” (*op. cit.*, p. 145). And according to Burge, what is crucial to the point of sentences like (2)

is not part of the grammar or semantics of the sentences themselves. It is better seen as involved in a convention presupposed in the use and understanding of such sentences. . . . What is involved in rightly construing the expressions that are mentioned in problem sentences like [(2)] is . . . the ability to understand those expressions as they would be intended if they were used by the person who uses the relevant token of the sentence in which they are mentioned (p. 146).

Burge argues that the operative nonsemantic, pragmatic convention in connection with (his version of) the English (2) directs one to interpret the sentence it mentions in the specified manner, and that this yields the result, contrary to Church, that (3') is a better translation of (2) into French than is (2').

This general line of criticism was cogently refuted independently by Herbert Heidelberger, Casimir Lewy, and Leonard Linsky.³⁰ It is completely inessential to the Translation Argument whether (2') is deemed a correct

but specifically stops short of declaring that they are either the same, or different, in meaning. By the same token, Geach does not propose (2) as a meaning-preserving analysis of (1). It is unclear therefore why he does not concede that any author of (1) is committed to the existence of the proposition that the earth is round (this being what the Translation Argument is aimed at demonstrating), and let this be his reason for recommending that the author substitute (2), which lacks any such commitment. (Cf. Quine, *op. cit.*, and my “Relational Belief” for discussion.) In any event, Dummett's reply has the advantage over Geach's (and Quine's) that it does not depend (at least not to the same extent) on any implausible or otherwise controversial skeptical theses concerning synonymy.

Burge claims that the sentence he proposes for (2) involves self-denotation, in such a way that the best translation will preserve this feature at the expense of denotation. The details of Burge's argument will not be pursued here. One minor correction should be noted, however. Contrary to Burge's initial claim (which he credits to W. D. Hart) that translation of a self-denoting sentence either preserves self-denotation or denotation but not both, translations may be given that preserve neither one. (For whatever it is worth, it is even probable that such translations have been given in actual practice.) Burge's argument requires only the weaker claim that no translation of a self-denoting sentence preserves both denotation and self-denotation.

²⁹ Frege: *Philosophy of Language*, p. 372. But see also *The Interpretation of Frege's Philosophy*, p. 90.

³⁰ Heidelberger, Review of Dummett's *Frege: Philosophy of Language*, in *Metaphilosophy*, vol. 6, no. 1 (January 1975), pp. 35–43, at 42–43; Lewy, *Meaning and Modality* (Cambridge University Press, 1976), at pp. 64–66; Linsky, *Oblique Contexts* (University of Chicago Press, 1983), at p. 8. (I thank C. Anthony Anderson for providing the last two

translation into French of the English (2). The claim that an actual translator or interpreter would offer (3') instead is similarly irrelevant. The Translation Argument is concerned exclusively with the semantics of (1) and (2), and not with any pragmatic "conventions presupposed in their use" or with any resulting "practical canons of apt translation" of texts containing either. As Heidelberger correctly notes, the construction "*S*' is a translation into *L*' of the *L* expression *S*" may even be replaced uniformly throughout the argument by "*S*' has the same meaning in *L*' that *S* has in *L*", thereby eliminating any allusion to translation. Any controversy concerning translation (in particular, whether apt or correct translation must preserve meaning) is thus seen to be entirely irrelevant.

Dummett appears to have conceded the irrelevance of the issue of whether the English (2) would be translated into French in actual practice by (2') rather than (3'). Yet (1') is clearly not synonymous in French with (2'), which explicitly mentions the English sentence (0). Once it is conceded that (2') has the same meaning in French that (2) has in English, the critic of the Translation Argument has no alternative but to challenge the remaining premiss, that (1') is a sense-preserving French translation of the English (1). In response to unspecified critics (presumably including at least Heidelberger, Lewy, and/or Linsky), Dummett does just that.³¹ And indeed, Dummett's interpretation of Frege implies that Frege should have rejected this premiss. For according to that interpretation, Frege is supposed to have held that

references.) See also Saul Kripke, "A Puzzle about Belief," reprinted in N. Salmon and S. Soames, eds., *Propositions and Attitudes* (Oxford University Press, 1988), pp. 102–148, at 142n25.

In his discussion in *The Interpretation of Frege's Philosophy*, Dummett attributes both the thesis that the indirect sense of (0) in English is the ordinary sense of (4), and the exegetical thesis that Frege held the former thesis, to Heidelberger. Dummett also there accuses Heidelberger of inconsistently conjoining these theses with an endorsement of the Translation Argument (pp. 91, 94). These attributions are dubious. Although Heidelberger defends the Translation Argument against Dummett's criticism, he explicitly declines to endorse the argument and instead expresses sympathy for the alternative criticisms of it by Davidson and Putnam (p. 43n). Moreover, he does not straightforwardly propose either of the theses in question. Instead he correctly attributes to Frege the thesis that the indirect sense of (0) in English is the ordinary sense of (5), while mis-identifying this thesis with the alternative thesis which Dummett had branded "rather implausible" (p. 37; see footnote 15 above). As noted earlier, Dummett also fails to distinguish between these two theses concerning indirect sense, and therefore fails to distinguish properly between the corresponding exegetical theses concerning Frege on indirect sense. (It should also be noted that whereas Heidelberger explicitly attributes to Frege the thesis that the indirect sense of (0) in English is the ordinary sense of (5), he also attributes to Frege a fallacious argument for that thesis which Frege does not give, and which is in fact inconsistent with his views.)

³¹ *The Interpretation of Frege's Philosophy*, pp. 90–91. The premiss is explicitly rejected by Kemp, *op. cit.*, and Stephen Leeds, *op. cit.* Curiously, Dummett ultimately endorses the premiss (p. 94), on the ground that (1) has the same "conventional significance" in English that (1) has in French (p. 99). It is unclear why Dummett insists nevertheless that it is illegitimate for Church to assert this premiss, on the same or very similar ground, in the course of his argument against the proposed analysis.

(1) is synonymous in English with (6), which mentions the very expression (0), whereas the French (1') instead mentions (0'). In the general case, the proponent of (2) as an English analysis of (1) will contend that (1') is synonymous in French with (3'), which explicitly mentions (0'), and therefore does not have the same meaning in French that (1) has in English. Such a proponent might even enlist the support of translation at this point, since the sense-preserving translation of (3') into English bears little resemblance to (1).³²

Though the argument's appeal to sense-preserving translation may be thus thwarted by controversy, Church's general point might still be made without appealing to any contested translation. Church supports the premiss that (1') and (2') are not synonymous in French by observing that they "obviously convey different meanings" to a French speaker who knows no English, with only (1') conveying the content of what Chris is supposed to believe. In a similar vein, one might object to the proposal that (1) is synonymous in English with (2) on the ground that different information is conveyed to an English speaker by (1) than is conveyed to a French speaker by (2')—which, it has now been conceded, is a sense-preserving French translation of (2).

In response to this possible objection, Stephen Leeds objects that

what information a sentence conveys to a hearer depends not only on what the sentence means but on what background information the hearer has. The mere ability to understand a language can constitute such background information; for example, '*Luther sprach: 'Hier steh ich'*' will convey more to someone who speaks German than its strict translation into English: 'Luther said: '*Hier steh ich*' will to a monolingual speaker of English (*op. cit.*, p. 46).

This last point might also be illustrated by (2) and (2'). The two have the same meaning in their respective languages, yet an English speaker obtains more information on the basis of the former than a French speaker obtains on the basis of the latter. Church himself noted, as part of his argument, that the knowledge of what (0) means in English would enable one to infer from (2') the content of the belief attributed to Chris. Leeds contends that it is arguably this ancillary knowledge, rather than the content semantically expressed by (1), that likewise accounts for the information conveyed to an English speaker by (1) that is not conveyed to a French speaker by (2'). Indeed, as we have seen, Burge argues that the pragmatics involved in the use of (2) (and therefore also in the use of its alleged paraphrase (1)) directs one to interpret the mentioned sentence (0).

It is here that this general response to the Church Translation Argument betrays a failure to grasp the central point of the argument—or perhaps I

³²For more on this sort of issue, especially as it relates to Burge's response to the Translation Argument, see my "A Problem in the Frege-Church Theory of Sense and Denotation," at p. 166n15.

should say, at least one of the central points of the argument—and in a sense, one of the main points also of Frege's philosophy of language.

4.

Just as the “practical canons of apt translation” are entirely irrelevant to the Church Translation Argument, so also is the information obtained on the basis of an utterance. To use a terminology I introduced in previous work, the information obtained from an utterance can involve not only *semantically encoded information*, but also *pragmatically imparted information*.³³ (What counts as apt translation, for that matter, may also be concerned to some extent with information of both kinds.) The Translation Argument, by contrast, is concerned exclusively with the former. One who knows the English language is able to infer additional information from an utterance of (2) not semantically contained within (2) itself. While this additional information is thereby pragmatically imparted (at least indirectly) to an English speaker by the utterance, it is not directly “conveyed” by (2) in the sense relevant to the Translation Argument. Rather, it is inferred from the semantically contained information taken together with the ancillary knowledge of what (0) means in English. When Church argues that (1') and (2') convey different information to a French speaker who knows no English, he is speaking of the information semantically encoded in each, the propositions that the French sentences convey to the French speaker solely in virtue of their literal French meanings. He explicitly contrasts this with information that may be inferred from this together with knowledge of English. And indeed, the very conclusion of the argument (the denial of which Leeds seeks to defend) is that (1) and (2) semantically contain different information, despite the fact that the content of (1) is easily inferred from an utterance of (2) given knowledge of the English meaning of (0).

Translation between languages is invoked merely as a device to facilitate our seeing the difference in semantic content that exists between (1) and (2)—or as a special case, between (1) and (6)—despite the ease with which one is inferred from the other, relying on our knowledge of English. The merely auxiliary role of translation in the Translation Argument was first noted explicitly by Church himself:

The existence of more than one language is not usually to be thought of as a fundamental ground for the conclusions reached by this method. Its role is rather as a useful device to separate those features of a statement which are essential to its meaning from those which are merely accidental to its expression in a particular language, the former but not the latter being invariant under translation. And distinctions

³³ *Frege's Puzzle*, *loc. cit.* (footnote 24 above), pp. 58–60 and elsewhere (especially pp. 78–79, 84–85, 100, 114–115).

(e.g., of use and mention) which are established by this method it should be possible also to see more directly.³⁴

In the application of the Translation Argument to the question of indirect sense, the distinction that one should be able to see more directly is a special distinction between the meanings of (4) and (5). This same distinction accounts for the difference in meaning between (1) and (2).

What exactly is this special distinction, and how are we supposed to see it without resorting to translation? The answer to this is what I take to be the crucial point, and the very point that Church's detractors have failed to appreciate. Church puts this point by noting that the proposed analysis of (1)

must be rejected on the ground that [(2)] does not convey the same information as (1). Thus (1) conveys the content of what [Chris believes] . . . it is not even possible to infer (1) as a consequence of [(2)], on logical grounds alone—but only by making use of [an] item of factual information, not contained in [(2), that (0) means in English that the earth is round] ("On Carnap's Analysis of Statements of Assertion and Belief," pp. 168–169 of Linsky).

Consider (6), as a special case of (2), and the purely semantic differences that Church is limning between it and (1). Church's main point is that (1) gives the content of the belief attributed to Chris in a special manner, a manner in which (6) does not. In short, (1) *identifies* that content. To be sure, both (1) and (6) specify the content, but (6) does so only by describing it in the manner of (4), as *whatever sense (0) ordinarily expresses in English*. This is indeed a way of conceiving of the English ordinary sense of (0)—it is a concept of the proposition, in Church's terminology—but it is a concept of that sense that even one who has no understanding of (0), as an English expression, may possess with perfect mastery, provided he or she knows only that (0) is a meaningful English expression. For such a person is in a position to infer that (0) ordinarily expresses in English its own English ordinary sense. This inferred knowledge is trivial; it does nothing to further the quest to learn what, by contrast, one who understands (0), as a sentence of English, thereby knows, viz. that (0) specifically means *this* proposition in English: that the earth is round.

This is essentially a special case of Russell's more general distinction between *knowledge by acquaintance* and *knowledge by description*.³⁵ The lat-

³⁴ "Intensional Isomorphism and Identify of Belief," in Salmon and Soames, p. 168n22. In a similar vein, Church had written in "A Formulation of the Logic of Sense and Denotation," at p. 5n: "This device is not essential to the explanation, but is helpful in order to dispel any remnants of an illusion that there is something in some way necessary or transparent about the connection between a word or a sentence and its meaning, whereas, of course, this connection is entirely artificial and arbitrary."

³⁵ Russell, "Knowledge by Acquaintance and Knowledge by Description," reprinted in N. Salmon and S. Soames, eds., *Propositions and Attitudes* (Oxford University Press, 1988), pp. 16–32.

ter is a distinction between two kinds of knowledge of things, as opposed to knowledge of facts (in French, two kinds of *connaissance* as opposed to *savoir*). Knowledge of a thing by acquaintance might be explained as a conception of the thing *qua* “that *F*,” perhaps perceptually ostended or otherwise demonstratively selected, for a particular sortal ‘*F*’ (which might even be the universal sortal, ‘thing’). Knowledge of a thing by description, by contrast, is a correct conception of the thing *qua* “whatever uniquely satisfies *C*,” invoking some purely descriptive condition *C*. In Church’s terminology, knowledge of a thing by description is exactly the conceiving of that thing through the apprehension of a concept of it.³⁶

³⁶In calling a condition “purely descriptive,” I mean to preclude its being such a condition as might be expressed in the form ‘the condition of being [identical with] that very *F*’. It is assumed here that Church’s notion of a *concept* likewise excludes such conditions. Cf. my *Reference and Essence* (Princeton University Press and Basil Blackwell, 1981), pp. 14–23 (where the term ‘descriptonal’ is employed instead of ‘descriptive’).

Russell construed acquaintance in a very strict sense which excluded the possibility of acquaintance with particulars other than oneself or mental items directly contained in one’s consciousness. The distinction itself can be drawn independently of this severe restriction, however, and is clearly legitimate with regard to more familiar notions of acquaintance. One such notion is that of having perceptual, or other natural or “real,” cognitive contact with a particular person or object—the sort of connection that is sufficient to enable one to form beliefs or other attitudes *about* the object (in an ordinary sense). A somewhat stricter notion imposes the further condition of *knowing who or what* the object is, in an ordinary sense. (Some philosophers, having evidently overlooked the possibility of perceiving an object without knowing who or what the object is, have confused these two broader notions of acquaintance. See my “How to Measure the Standard Metre,” *Proceedings of the Aristotelian Society*, New Series, vol. 38 (1987/88), pp. 193–217, especially at 200–201*n*, 213ff.)

Throughout I use the term ‘identification’ for a notion of acquaintance implying knowledge of who or what the object is. Some contemporary neo-Russellian theories of meaning deny that one who knows the content of (1) automatically thereby knows what proposition it is that Chris believes (i.e., automatically thereby knows at least one proposition that Chris believes). Such theories may hold instead that one who knows the content of (1) is thereby acquainted with the believed proposition in some less familiar way, and may not know exactly what proposition is in question. Knowing what *F* so-and-so is (as special cases, knowing what proposition Chris is hereby held to believe, or knowing what person—or who—so-and-so is) may be a matter knowing of so-and-so, *de re*, that so-and-so is it (him/her), believing this fact about so-and-so while conceiving of it in a special, identifying way. (See my *Frege’s Puzzle*, pp. 103–118, on the notion of believing a proposition while taking it a particular way; see also footnote 43 below.) Even such theories, however, will generally recognize an important epistemological difference between the contents of (1) and (6), such that knowing the fact described by (6) falls well short of knowing that fact described by (1). It may be acknowledged, for example, that one who knows the content of (1)—by contrast with one who merely knows the content of (6)—*ipso facto* knows something *de re* about the proposition that the earth is round, namely, that it is something Chris believes (even, perhaps, without knowing exactly what proposition is in question). This is sufficient for my primary purpose in the discussion to follow. For related discussion, see Mark Richard, “Articulated Terms,” in J. Tomberlin, ed., *Philosophical Perspectives*, 7: *Language and Logic* (Atascadero, Ca.: Ridgeview, 1993), pp. 207–230.

It is possible that there is a gradation of notions of acquaintance. This would not make Russell’s distinction between knowledge by acquaintance and knowledge by description untenable; on the contrary, it would make for a multiplicity of legitimate Russellian dis-

Russell thought of the two kinds of knowledge as mutually exclusive. To be sure, the very same thing may be simultaneously known in each of the two ways, but on Russell's conception of the distinction, no knowledge of a thing by description is also acquaintance with that same thing. Other philosophers embrace a strict representational epistemology according to which all knowledge of things is achieved only through the apprehension of concepts (in Church's sense), so that all knowledge of things is ultimately knowledge by description (in Russell's sense). Any knowledge that can be called 'acquaintance', on such a view, is merely a peculiar kind of knowledge by description, one in which the relevant descriptive condition or concept is of a special sort. It is arguable that Frege in particular held a strict representational epistemology. And indeed, this epistemological stance may lie behind the principal divergence between broadly Fregean and Russellian semantic theories.³⁷

There is an infinite-regress argument against the tenability of this strict representational sort of epistemology: If conceiving of a thing invariably invokes a concept of that thing, then in order to conceive of any particular thing x , one must, in that very act of conceiving, apprehend some antecedently understood concept c_1 which is a concept of x . But by the same token, in order to know c_1 , one would have to apprehend some further antecedently understood concept c_2 which is a concept of c_1 , and so on. It seems to follow that in order to conceive of anything at all, one would have to apprehend each of an infinite sequence of antecedently understood concepts. One is invited to conclude from the threat of this infinite regress that all knowledge of things ultimately rests on "direct" knowledge of things, knowledge that is not mediated through concepts of those things.³⁸

Textual evidence suggests that, in a sense, Frege instead embraced the infinite regress, via his infinite hierarchies of indirect senses (ordinary sense, indirect sense, doubly indirect sense, and so on).³⁹ It is a possibility also

tinctions. The distinction on which I rely in the discussion to follow need not be made completely precise, and will be sufficiently obvious to support the conclusions reached by its means.

³⁷As explained in the previous note, Russell himself held a representational epistemology with regard to all particulars other than oneself and the mental contents of one's consciousness. Contemporary Russellians have typically favored a less restrictive epistemology on which one knows various concrete particulars "directly," i.e., without appealing to individuating qualitative concepts of those particulars.

³⁸Cf. the infinite-regress argument in Russell, *op. cit.*, at pp. 28–29 of Salmon and Soames.

³⁹One may not straightforwardly conclude from the infinite-regress argument that according to the strict representational sort of epistemology in question, in order to conceive of a thing x , one must *in that very act of conceiving* apprehend each of infinitely many concepts. For although the epistemology requires that the act of conceiving of x necessarily involves an act of apprehending a concept c_1 of x , it does not require that the act of apprehending c_1 necessarily involves conceiving of c_1 . One might even label the act of apprehending a concept without conceiving of it a kind of "direct acquaintance" with the concept.

One may not even conclude from the infinite-regress argument that according to strict

that Church holds a similar epistemological view.⁴⁰ Even so, both Frege and Church doubtlessly recognized that knowledge of a thing by acquaintance has a very different cognitive flavor from mere knowledge by description (i.e., from knowledge of the thing not by acquaintance).

The distinction is made evident in the familiar contrast found in pairs of color terms like 'white' and 'the color of snow'.⁴¹ The former identifies the color in question in a way that the latter does not. One who, because of limited experience, is ignorant of both the color of snow and the color of Church's hair, may still know that Church's hair is the color of snow, i.e., that Church's hair has the same color that snow has, whatever color that may be. If such a person may be said to know what color Church's hair is, then he or she knows it merely by description. Just as he or she knows that Church's hair is the color of snow, he or she also knows that snow is the color of snow. What such a person lacks is the knowledge of *which color* that is, the identifying information normally taken to be contained in the words: 'Snow is *white*'. A person who has been deprived of sight since birth may be incapable of knowing any color except merely by description (e.g., as the property, visually manifested in some manner or other, of reflecting light of

representational epistemology, in order to conceive of anything one must already apprehend each of infinitely many concepts. What is required on Frege's doctrine of the hierarchy is that one be able to acquire an apprehension of any one of the infinitely many concepts on demand, so to speak, in order to comprehend a sentence that embeds an expression within a sufficiently large number of *ungerade* operators. Strict representational epistemology nevertheless yields a possible answer to Russell's famous "no backward road" observation and the difficulty it is supposed to raise for Frege's doctrine. It is true that on Frege's theory, for anything x there are countless concepts of x , no one of which can be singled out as privileged or as the "designated" or "standard" concept of x . But according to strict representational epistemology, in conceiving of a concept c_1 through one's acquaintance with it, one is thereby apprehending a special identifying concept c_2 of c_1 . By attending to what one is apprehending, one can conceive of c_2 through one's acquaintance with it, and hence through one's apprehension of a special identifying concept c_3 of c_2 , and so on. Thus it seems that one need only attend to what one is apprehending to generate a proper Fregean hierarchy starting from a single concept. Even if there is no "backward road" (privileged branch) from a thing that is not a concept to a concept of the thing, it seems there may be a backward road from a concept to a concept of the concept. (I am indebted here to remarks made in a seminar by Saul Kripke and to later discussion with C. Anthony Anderson.) Cf. my "Reference and Information Content: Names and Descriptions," *loc. cit.*, and "A Problem in the Frege-Church Theory of Sense and Denotation," at p. 163.

⁴⁰It must be noted, however, that Church rejects Frege's notion of indirect sense. See "A Problem in the Frege-Church Theory of Sense and Denotation," pp. 164–165n10.

⁴¹A number of philosophers have noted differences of meaning between such terms. For a sample of the relevant literature, see D. M. Armstrong, "Materialism, Properties and Predicates," *Monist*, vol. 56, no. 2 (April 1972), pp. 163–176, at 174; Jaegwon Kim, "On the Psycho-Physical Identity Theory," *American Philosophical Quarterly*, vol. 3, no. 3 (July 1966), pp. 227–235, and "Events and Their Descriptions," in N. Rescher, ed., *Essays in Honor of Carl G. Hempel* (Dordrecht: D. Reidel, 1969), pp. 198–215, at 205–206; Bernard Linsky, "General Terms as Designators," *Pacific Philosophical Quarterly*, vol. 65 (1984), pp. 259–276; N. L. Wilson, "The Trouble with Meanings," *Dialogue*, vol. 3, no. 1 (June 1964), pp. 52–64. (The last is evidently the ancestor of the other discussions.)

such-and-such wavelengths.) The legitimacy of this distinction between two different ways of knowing the color white (or of knowing the color of Church's hair, etc.) seems sufficiently obvious that it will be readily recognized even by those who hold that the knowledge that snow is white is ultimately knowledge to the effect that snow has whatever color it is that uniquely satisfies a certain, special visual condition (perhaps a phenomenological condition).

The analogy between the pair of contrasting color terms and (4)–(5) is striking. In particular, knowing the English meaning of (0) by the description (4) is not a way of *understanding* (0), in any ordinary sense. As noted above, someone who speaks no English, upon learning only that (0) is a meaningful expression of English, is thereby given its meaning by this description. The person still lacks information specifying what that meaning is—to wit, the identifying information that (0) expresses in English the proposition that the earth is round. (Compare again knowing what color snow is only by the description 'the color of snow' vs. knowing that snow is this color: white.)

Earlier we applied the Translation Argument against Dummett's apparent hypothesis that (4) and (5) are ordinarily synonymous in English. A more direct application of the argument is possible. The translations of the following metalinguistic sentences reveal a fundamental difference in meaning:

- (7) 'The earth is round' ordinarily expresses in English the proposition that the earth is round.
- (8) 'The earth is round' ordinarily expresses in English the ordinary sense in English of 'The earth is round'.

The meta-English sentence (8) is tautologous, or virtually so. By contrast, (7)—or more simply '(0) means in English that the earth is round'—"conveys the content," in Church's terminology, of (0) in English; it identifies the English meaning of (0), semantically specifying it in a way that (8) does not even come close to doing.

Translation into another language of both (7) and (8), and likewise the translation of both (1) and (2), is merely a pedagogical aid which more clearly reveals their divergent semantic properties. We have already seen that the question of whether the strict sort of translation that is invoked in The Translation Argument conforms with the practice of actual translators and interpreters is quite irrelevant to the purpose for which translation is pressed into service. What is essential for that purpose is that the translation be what Church calls 'literal', i.e., sense-preserving.⁴² The relevant differences in meaning between the English (4) and (5)—which is the principal point of the argument—can be seen independently of translation, for example by appealing to the striking analogy with 'white' and 'the color of snow'. And as Church says, it should be possible also to see the point directly.

⁴² "Intensional Isomorphism and Identity of Belief," footnote 25 (p. 168 of Salmon and Soames).

5.

Recall Leed's contention that it is arguably not the semantic content of (1) in English but the understanding of what (0) means (which, according to Burge, is pragmatically required by (1)), that accounts for the additional information that an English speaker obtains from (1) but a French speaker does not obtain from the sense-preserving translation of (6). This observation is meant to isolate the claim that, semantically, (1) specifies the content of the belief attributed to Chris (as does (6)) in precisely the manner of (4). But this claim flies in the face of Church's main point, that (1) semantically "conveys the content" of Chris's alleged belief, identifying that content in a special manner exhibited by neither (6) nor its French translation. The content of Chris's belief is not merely pragmatically imparted to an English speaker by an utterance of (1) *via* an inference. Contrary to Leeds, the content of Chris's belief is semantically encoded by (1). Indeed, Leed's rejoinder is nearly enough self-defeating. For it implicitly recognizes that there is a special way of thinking of the proposition that the earth is round—a way of being acquainted with it—such that one who knows that (0) in English expresses that proposition conceived in that way, knows what (0) means in English, whereas one who knows only that (0) in English expresses the English ordinary sense of (0) (conceived in that way, by that description) does not know what (0) means. This special identifying "way of thinking" of the proposition seems to be carried in English by (5), and it would seem to be precisely this that so markedly distinguishes (5) from (4). It is natural to assume, in fact, that the special way of thinking of the proposition is nothing less than the concept semantically expressed in English by (5). It is difficult to imagine how else one might express it.⁴³

The foregoing considerations reveal the reasons for the failure of the theory that Dummett mistakenly imputes to Frege. For the hypothesis that the indirect sense of (0) in English is the ordinary sense of (4) yields the erroneous conclusion that one who understands no English beyond the words 'Chris believes that', and who is informed that (0) is a meaningful English sentence without being given its actual meaning, may thereby know what (1) means in English. In fact, it would seem that what he or she still needs in order to know the meaning of (1) is to be given the meaning in English of (0) *qua* the proposition that the earth is round, i.e., via the concept that is ordinarily expressed in English by (5) rather than that ordinarily expressed by (4). It is thus possible to see directly, without resorting to translation, the supe-

⁴³Presumably understanding (0), as a sentence of English, entails knowing what (0) means in English, but it is arguable that understanding, in a strict sense, requires more than this (perhaps acquiring the knowledge of the meaning of (0) in a special computational manner). There are delicate issues, on which the present discussion is neutral, concerning the extent to which the English meaning of (5) captures the way of conceiving the proposition in question that is possessed by one who correctly understands (0) as a sentence of English. See footnote 36 above.

riority of Frege's thesis concerning indirect sense over the thesis Dummett erroneously attributes to him.

The foregoing also dramatically exposes a fatal error in Dummett's Thesis that the only way in which we can conceive of any sense is as the sense of some particular linguistic expression. Using Church's terminology (in combination with some of Dummett's), the thesis may be stated more precisely thus:

For every concept c_1 , if someone conceives of c_1 , then there is some concept c_2 of c_1 such that that very act of conceiving of c_1 consists in apprehending c_2 ; and furthermore, for every concept c_2 of c_1 that we can apprehend, there is some expression e (of some possible language l) such that: (i) c_1 is the ordinary sense of e (in l); and (ii) c_2 presents c_1 as the ordinary sense of e (in l), i.e., to apprehend c_2 is exactly to conceive of c_1 as the ordinary sense of e (in l).⁴⁴

Although Dummett attributes this thesis to Frege, it is in fact deeply out of sync with the fundamental character and structure of Frege's philosophy of language. Frege does say that we apprehend propositions through words.⁴⁵ And it seems clearly true that we do this with at least a great many propositions. It by no means follows, however, that we are unable to conceive of the proposition except as whatever sense it may be that those words ordinarily express. Frege would certainly have insisted, against Dummett, that there are infinitely many ways to denote the proposition that the earth is round without mentioning particular linguistic expressions, either explicitly or implicitly: 'the proposition that Columbus set out to prove by sailing westward to India', 'the proposition that Aristotle proved on the basis of the shape of the earth's shadow on the moon', 'Chris's favorite proposition', 'the first thing Columbus asserted upon sighting the mainland of America', etc. These unremarkable phrases, and many others, express graspable concepts that "give us" the proposition in ways other than as the sense of an expression.⁴⁶ More important, the very apprehension of a proposition, even by means of the words through which we apprehend it, crucially involves an identifying conception of the proposition, a knowledge of it by acquaintance and not merely as whatever it is that these words ordinarily express. This is

⁴⁴See footnotes 19 and 36 above. The first conjunct expresses strict representationalism with regard to concepts. On a Fregean theory the word 'as' occurring in Dummett's constructions '... is given to us as —' and 'conceives of ... as —' must be itself regarded as an *ungerade* operator. Dummett's Thesis, as formulated here and as given by Dummett himself, thus involves quantification into a nonextensional context. (I am not claiming that Dummett would accept my specific formulation of his thesis, only that he explicitly endorses the thesis itself, which I formulate thus, and attributes the same thesis to Frege. The textual evidence for these claims is clear.)

⁴⁵For example, in "On the Scientific Justification of a Conceptual Notation" (reproduced in his *Conceptual Notation and Related Articles*, T. W. Bynum, ed., (Oxford University Press, 1972), pp. 83–89), Frege says that "we think in words . . . , and if not in words, then in mathematical or other symbols" (p. 84). See footnote 15 above.

⁴⁶In light of this, Frege undoubtedly rejected even the weaker, Berkeleyan thesis mentioned in note 17 above.

true in fact of understanding in general; there is no comprehension without identification.

Dummett's Thesis precludes the possibility of a language that works the way Frege thought all language worked, and even the very possibility of language itself. On Dummett's view, in taking (0) to express such-and-such, one must, in that very act of cognition, conceive of the concept in question as *whatever sense is ordinarily expressed by e*, for some particular linguistic expression *e*—there being no other way for us to conceive of any concept. This theory makes all of language unintelligible for us in principle. Dummett's Thesis leaves our grasp of language in a state of ignorance exactly analogous to someone who, from birth, sees the world only in black and white and shades of grey. A person who has always been completely color-blind may know that physical objects are colored, and that certain of them have the same color as certain others (snow and Church's hair, grass and emeralds, etc.), but in some sense has no way of learning what color anything is. Dummett's Thesis reduces us all to the state of the international traveler who knows that the words he or she sees and hears have meaning, but is completely ignorant of what those meanings are. Indeed, the theory renders us considerably worse off than the traveler. A tourist can identify the foreign meanings by consulting a phrase book. Dummett's theory has the consequence that we are unable even to understand expressions by translating them into our native language. For the only knowledge we have of the meanings of *our own* words is by the description: whatever it is that those words mean. On Dummett's theory, there is no identification of meanings, no knowledge of meaning by acquaintance, only knowledge by description. This makes the veil of syntax utterly opaque, and the wall of unintelligibility impenetrable even in principle. Since there can be no comprehension without identification, Dummett's theory has the unintended consequence that we comprehend nothing.⁴⁷

The fundamental flaw in Dummett's theory can also be seen through the theory of definition, by means of a variation of the infinite-regress argument considered above. According to Dummett's Thesis, in knowing that the ordinary sense of an expression e_1 (in a language l_1) is such-and-such, one must conceive of that sense as the ordinary sense of some expression e_2 (of a language l_2). This is tantamount to the claim that every meaningful linguistic expression that the speaker understands is understood by means of a kind of verbal definition: The ordinary sense of e_1 is the same as the ordinary sense

⁴⁷It is arguable that a person completely color-blind from birth may nevertheless learn of the color green (*de re*) that grass and emeralds are *that color*, by learning that they reflect light of such-and-such wavelengths under visually normal conditions. Even so, there still seems to be some knowledge that those of us who see green (as green) have, and that the completely color-blind person lacks, concerning the color of grass. In some sense, the completely color-blind person still does not know how grass looks, phenomenologically, with regard to color. By contrast, if Dummett's theory were correct, none of us could know *of* the proposition that the earth is round (*de re*), that (0) expresses it in English (let alone could we understand what (0) means in English—see footnotes 36 and 43 above).

of e_2 , or as it is sometimes written, $e_1 =_{\text{def}} e_2$.⁴⁸ The definiens e_2 would likewise be understood by means of an analogous definition, $e_2 =_{\text{def}} e_3$, and so on. It is well known, however, that not all expressions of a language may be understood by means of verbal definition. There has to be a stock of primitives, whose sense is learned in some way other than by verbal definition (by ostensive definition, for example). Dummett's Thesis leads ultimately to a vicious circularity among the definitions. And this makes all understanding impossible even in principle.

The root problem with Dummett's Thesis is that it restricts all knowledge of meaning to knowledge by description, precluding even the possibility of our identifying the ordinary sense of any expression. Since there is no comprehension without identification, Dummett's Thesis makes comprehension utterly unattainable. And this, I submit, excludes the very possibility of the phenomenon we call *language*.

If I am correct, the main point of the Church Translation Argument is exactly the antithesis of Dummett's Thesis. The 'that'-clause in English expressions like (1) and (7) carries with it a special way of conceptualizing the content of the sentence following 'that', an identifying way of thinking of the proposition which constitutes acquaintance rather than mere knowledge by description. Church's appeal to translation serves to illuminate this fundamental point. Frege's explanation of the indirect sense of (0) in English as the ordinary sense of (5) rather than that of (4) almost certainly reflects his own grasp of this same fundamental point, and with it a repudiation of Dummett's Thesis.

Insofar as understanding requires acquaintance, what is it that we are required to be acquainted with? If there is no comprehension without identification, what is it that we are identifying? Not just sentences in a language, as we have seen. But if not just sentences in a language, then what else?

The Translation Argument has been with us a long time—longer even than I have. Yet many language theorists today have missed its principal point. If nothing else, there is an important lesson to be learned from the failure of the argument's critics to appreciate that point, and from the decisive collapse of at least one theory that has been proffered in defiance of the argument.

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⁴⁸This notation is normally used for definitions within a single language. For present purposes we may think of the union of all of the separate languages spoken by a particular speaker as constituting a single comprehensive language. (Any resulting lexical ambiguities may be resolved by means of disambiguating subscripts.) Alternatively, the notation is easily extendible to accommodate inter-language definitions, for example by writing: $[e_1, l_1] =_{\text{def}} [e_2, l_2]$.