

OPACITY, BELIEF AND ANALYTICITY*

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Frege's strategy in accounting for the behavior of expressions in indirect discourse is well known. Frege maintains the principle that the truth-value of a sentence must remain unchanged when one of the expressions in the sentence is replaced with another with which it is co-referential. Yet expressions in certain now familiar contexts appear to flout this principle. When, for instance, an expression in the scope of a verb of propositional attitude such as 'believe' is replaced with another whose reference is identical, the truth-value of the sentence seems subject to variation. Thus, although 'Superman' and 'Clark Kent' co-refer, replacement of 'Clark Kent' for 'Superman' in

- (1) Lois Lane believes that Superman is a hero

apparently results in a change of truth-value of that sentence.

Frege's solution was to conclude that expressions occurring in opaque contexts do not have their ordinary reference — rather, it is the ordinary sense of the expressions that, in such cases, comes to serve as their reference. Replacing 'Superman' with an expression that expresses the same *sense* in the sentence ('the defender of good from Krypton,' say), does not appear to have the same effect on the truth-value of a sentence as does replacing the term with one whose reference is the same but which has another sense. Frege thus preserves the principle of substitutivity; no variation in truth-value is held to occur between two belief sentences whose embedded that-clauses express the same sense.¹

A number of criticisms have been leveled at Frege's account, but one in particular raises an issue that serves as the point of departure for this paper.² The criticism is Davidson's (1984, pp. 93–108):

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

... but the notion that ordinary words for planets, people, tables, and hippopotami in indirect discourse may give up these pedestrian references for the exotica. If we could recover our pre-Fregean semantic innocence, I think it would seem to us plainly incredible that the words 'The earth moves', uttered after the words 'Galileo said that', mean anything different, or refer to anything else, than is their wont when they come in other environments.

Davidson alludes here to a familiar distinction: that between intensional entities and more mundane objects of reference. This distinction may be understood as based on another, one that Quine (1980, p. 130) has described as 'two provinces so fundamentally distinct as not to deserve a joint appellation at all. They may be called the *theory of meaning* and the *theory of reference*.' The difference between the two theories is revealed in the separate and distinct ontologies to which each permits reference. The subject-matter of the theory of meaning includes meaning, synonymy, and analyticity; that of the theory of reference, instead, includes naming, truth and extension.

Now, Davidson does seem to be right: it does seem difficult to accept that expressions in opaque contexts are ambiguous in the way Frege's account suggests. At the same time, we might suggest that the temptation to think of such a shift of reference as particularly significant seems strongest if we think of theories of meaning and reference as discriminated in the radical way mentioned above. Given that distinction, the reference shift that expressions in a that-clause appear to experience seems to be precisely a shift from entities belonging to the theory of reference to those belonging to the theory of meaning, these being disjoint provinces.

But we no longer tend to think so much of meaning and mental content as — in themselves — harbingers of the exotic. Familiar thought-experiments involving variations in the extra-individual environment have taught us that neither meaning nor mental content is isolated from the world of pedestrian reference in quite the simple way Davidson suggests. And if this is so, there is another alternative to consider in our account of the semantics of expressions in indirect discourse. The lesson we have learned from Putnam (1975, pp. 215–271) offers just the antidote we need to quash the temptation to separate meaning and reference and to provide an alternative account.

We will consider expressions of the form 'x believes that *p*,' and

argue that the determination to reject a Fregean solution to the problem of the reference of expressions in an opaque context varies in intensity relative to how inextricable the link between meaning and the extra-individual environment is perceived to be. If the link is perceived as negligible — if a theory of meaning is, as we say, internalist — then we can claim that the view that expressions in indirect discourse take their ordinary sense as reference will rest on a distinction with some significance *in that theory*. Their non-standard behavior is based, in that case, on a theory of meaning that holds that the reference of a that-clause is determined essentially by sub-cutaneous facts about an individual; on a theory of meaning, that is, that carves a significant ontological distinction between what serves as the sense of an expression, and what its reference. This may well, with some justice, stiffen the resolve of opponents to a Fregean theory, given the deep referential ambiguity that is necessarily visited on expressions on such an account.

If, on the other hand, the link is perceived as essential — if, that is, what determines the meaning of words and the reference of that-clauses is held to be the extra-cutaneous environment — then we can argue that there will be no in principle rejection of a view that takes the reference of that-clauses to be their ordinary sense; for, on such an externalist view, the semantic values of expressions in a that-clause will be their ordinary references after all, or something that involves them essentially. There is nothing exotic about an expression's taking either its denotation, or what McDowell (1984, pp. 283–294) has called its *de re* sense as reference in an opaque context, for, on an externalist theory, the cleavage between meaning and reference that Davidson appears to be presupposing does not obtain.

Now, there is another context for which the same point can be made: the context generated by the prefix 'It is analytic that' An examination of this context will show that analytic sentences are another class of sentence whose constituent expressions appear to invite the idea of a shift to their ordinary sense as reference.

Suppose '*p*' is the analytic truth 'All bachelors are unmarried males,' and compare the truth-conditions of '*p*' with those of 'It is analytic that *p*.' What makes 'It is analytic that *p*' true, on a Fregean account, are the senses referred to by '*p*''s constituent expressions, since, in this case, '*p*' is opaquely embedded. Yet what makes '*p*' itself analytically true are

the senses expressed by its constituent expressions — for '*p*' is true, as we say, in virtue of its meaning alone. The truth-conditions of '*p*' itself thus appear to involve the very entities relevant to the truth of 'It is analytic that *p*'; the very entities referred to by '*p*' when '*p*' is embedded in a that-clause.

This seems to correlate with the distinction we tend to accept between the nature of analytic truth and that of synthetic truth. For what is it that distinguishes the truth of '*p*', above, from '*q*', the synthetic truth 'All bachelors are happy'? The truth-conditions of '*q*' are a function of the ordinary reference of the expression 'bachelor' and whether or not the predicate 'happy' applies. But '*p*' is held to have a set of unique features³ that do not appear accountable for unless '*p*''s truth-conditions are specified in terms of the *senses* of its constituent expressions. These features appear to depend on '*p*''s truth-value being determined, as we say, independent of the world; in virtue, that is, of '*p*''s meaning, and that alone.

Thus it appears that both the prefix 'It is analytic that . . .' and the prefix 'x believes that . . .' have the same influence on an embedded sentence; both, we may say, are reference-shifting operators. This suggests that the distinction we tend to accept between analytic and synthetic truth seems to be yet another distinction supported by the divide between meaning and reference described by Quine above. And, if all this is right, then the same consequences of externalism about meaning that we have claimed for belief will hold for analytic truth. It would seem difficult to deny that whatever is problematic about expressions shifting their reference to exotica in belief contexts could be any less so in the case of analytic contexts. So, although analytic sentences are sentences with distinguishing features of a particular kind, and, on the face of it, it does not appear possible that an account of their truth-conditions could fail to include an account of their constituent expressions' experiencing a shift of reference to their ordinary senses, nevertheless, we cannot accept reference to exotica for analytic sentences yet deny it for belief sentences. If our objective is to recover semantic innocence, it appears that we must expunge reference to exotica from an account of the truth-conditions of analytic sentences as well.

Let us consider what it is about internalist theories of meaning that encourages an ambiguity-favoring account of the semantics of expres-

sions in the opaque contents generated by 'x believes that ...' and 'It is analytic that ...', and let us see whether externalism about meaning does indeed deflate the 'plainly incredible' view that expressions shift their reference to exotica when embedded in opaque contexts.

Belief, we are accustomed to saying, is a relation between an individual and a proposition with constituent structure. What structure a particular view assigns to propositions is largely a function of what entities it accepts as relevant to an account of meaning and content. Thus, for example, the semantic analysis of (1), above, will vary, among other things, according to whether the relevant relation is held to obtain between Lois and a proposition whose constituents are the senses expressed by the singular term 'Superman' and the predicate 'hero'; or whether, instead, Lois is held to be in the belief relation to a proposition whose constituents are the very objects and properties denoted by those expressions.

We are not entirely unaccustomed to discussing analytic truth in these terms, and it is clear that similar considerations will apply to analytic contexts as do to belief contexts. In the context 'It is analytic that *p*,' '*p*' also expresses a proposition with constituent structure. An account of this structure will vary in just the same way as do accounts of the constituent structure of a proposition in a belief context.

The contribution made by the reference of expressions is what is crucial to determining the truth-value of a sentence formed by those expressions. Now, an internalist about content must claim that it is internal facts about a subject that essentially determine that subject's mental states. Her belief about Superman's heroism is quite independent of any environmental variations with respect to Superman. The mental state enjoyed in belief is, as we have said, commonly analyzed as a relation to a proposition. And an internalist has to say that the expressions embedded in the that-clause that expresses the proposition believed express concepts that have their essential nature fixed in isolation from the environment that contains the references of those terms. In transparent contexts, this split between what words refer to and what they mean is not as evident as it becomes in opaque contexts. The truth-value of a sentence in a transparent context is a function partly of the meaning of its words and partly of the properties of what those words pick out. But the contribution to truth-value of the ordinary

reference of expressions is a liability in opaque contexts; for there, although expressions co-refer, substituting one for the other appears to affect truth-value.

And for the internalist, there is an alternative. Denotation is only one aspect of expressions; they also have meaning, *which is independently determined*. The internalist theory, operating as it does with a comparatively loose connection between what determines the meaning of expressions and what it is that those expressions refer to, is a theory of meaning where there exists the theoretical option of invoking something other than the ordinary reference of expressions to act as their reference in opaque contexts — namely, their meaning, which has distinct enough properties to offer a solution to a problem generated in those contexts by their denotation.

No such theoretical option exists, however, for an externalist about meaning, whose theory does not carve a decisive individuating incision between meaning and the world beyond the subject. But this implies that to hold that the reference of expressions in opaque contexts is their sense is, in effect, for the externalist to meet Davidson's plea. Expressions in indirect discourse ultimately take nothing other than their ordinary reference as reference, if the meaning of an expression is essentially determined by what in the environment it refers to.

Within the externalist camp theoretical commitment varies.⁴ Theories of direct reference (TDR), one variety of externalism, hold that the meaning of an expression is identical to its denotation.⁵ Another variety employs, instead, the idea of a *de re* sense. *De re* senses enmesh particulars and properties, so to speak; they are not bearers of them in such a way as to be intrinsically independent of what they bear. What consequences could follow from these types of view in holding that the reference of an expression in an opaque context is its sense — since sense is determined by reference?

To speak of expressions in opaque contexts as referring to their senses is, on a TDR, to speak in a long-winded, perhaps partly ironic way — the fact remains that the reference of expressions in those contexts is their ordinary reference and nothing more.⁶ Further, the meaning of the embedded sentence in (1) does not change, since both 'Superman' and 'Clark Kent' refer to the very same individual. These are terms with the same sense because sense is exhausted by reference

and they are terms with the same reference. That Lois may instantiate (1) and not (2):

- (2) Lois Lane believes that Clark Kent is a hero

is to be explained as arising from the conditions that govern the formation of her beliefs.⁷

If the meaning of an expression is held instead to consist in the *de re* sense it expresses, its reference in an opaque context will be ultimately no less pedestrian. It is true that, strictly speaking, the reference of an expression in an embedded sentence is, on this view, a *de re* sense, which is not *identical* to its ordinary reference. However — and this is the key point — *de re* senses are essentially determined by and not independent of the objects and properties that are their bearers. If we think of these senses as media through which ordinary reference is preserved, then it is clear that, on such a view, it is the ordinary reference of an expression that genuinely serves as its reference or semantic value in an opaque context. Crucially, a *de re* sense is not to be understood as an entity unmoored from the world of pedestrian reference; and it is precisely such unmoored entities that Davidson repudiates as *exotica*. In these terms, then, we may say that a Fregean account of (1) is innocent of reference to *exotica*.

The apparent variation in truth-value between (1) and (2) is accounted for, standardly, by the claim that expressions can share reference but differ in sense. A particular individual is the reference of the terms in the embedded sentences in (1) and (2) and it is he who, on this sort of view, determines the sense of those terms. Since a *de re* sense is not identical with the reference of an expression, however, it will not follow that two expressions with the same reference have the same (*de re*) sense. The troubles Lois generates by instantiating (1) and not (2), in spite of the fact that she is held to be in the belief relation to the very same singular proposition, are explained by taking this into account.

Now, given the analogy we have pressed between belief contexts and analytic contexts, the same account must hold, with no untoward consequences for analytic truth, for

- (3) It is analytic that Hesperus is Hesperus.

But if 'Phosphorus' replaces the second occurrence of 'Hesperus' in (3),

(3) seems, *prima facie*, to undergo the familiar variation in truth-value. Suppose, however, that we accept a TDR; if so, we do not seem to be able to deny that it is also true that

(4) It is analytic that Hesperus is Phosphorus.

A TDR holds that meaning is identical to reference; on this view, *there is no change in meaning* between the embedded sentences in (3) and (4). Further, since meaning is identical to reference, neither (3) nor (4) is any less true in virtue of meaning; although, again, to put it like this is to speak in roundabout way. It is worth mentioning here, following McGinn (1982, pp. 97–115), that a sentence can be true in virtue of meaning in two ways: in a purely semantic sense, where the analytic truth of a sentence follows from the semantic values of the terms in the sentence, which are assigned to terms by semantic rules alone; and in a more psychological sense, where analytic sentences are held to be those sentences whose terms can be substituted for one another *salva veritate* in a belief context. Accepting (4) as true may grate less, perhaps, if we think of the embedded sentence as analytically true in the purely semantic sense. If instead we characterize analytic truth in the more psychological sense, then facts about the believer become relevant, and the apparent variation in truth-value between (3) and (4) can be explained by taking facts about the believer into account.

If, on the other hand, the embedded expressions are taken to refer to their *de re* senses, then, again, the key point is that the expressions do not genuinely refer to *exotica*, for, again, *de re* senses are not independent of the objects and properties that are their bearers. *De re* senses are, we may say, *object-involving*, if they are expressed by singular terms, and *property-involving*, if they are expressed by predicates. Thus, in (3) and (4), the embedded expressions refer to their object-involving *de re* senses. This view does not, however, commit us to the truth of (4), since we can allow, standardly, that two terms that share reference need not share the same (*de re*) sense. Further, in

(5) It is analytic that bachelors are unmarried males

we say that the embedded expressions refer to their property-involving *de re* senses: that is, the ordinary reference of these expressions is what individuates the senses they express; via the *de re* senses, thus, the

ordinary reference of these expressions is preserved in an opaque context. Further, we can accept the truth of (5) in the usual way: two expressions can share both reference and sense.

Now, the context generated by 'It is analytic that . . .' is one for which it may seem as though semantic innocence is the last thing we ought to want to recover. If expressions in this context refer to their denotations or to their *de re* senses, then, given our earlier comparison of the truth-conditions of analytic sentences and those of sentences like (5), the truth-conditions of analytic sentences will be specified, in the end, in terms of the world — just like synthetic sentences. Externalism about meaning may indeed block the theoretical option of invoking a realm of meaning alone, distinguished by a unique set of properties, to serve as what it is that the truth-conditions for this class of sentence will involve. But, I would insist, it is far from clear that it follows from this that there is no analytic-synthetic distinction.⁸

We have tried to show that the theoretical alternatives offered by externalism about meaning appear to meet Davidson's plea against semantic corruption in an account of the reference of expressions in indirect discourse. And we have urged that our recuperation of pre-Fregean semantic innocence cannot be half-hearted. What goes for one opaque context must go for all opaque contexts. This suggests that our recovery will be complete only when we overcome the idea that analytic truth is an exotic kind of truth.

NOTES

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¹ In what follows we consider different accounts of the constituent structure of a proposition to examine the consequences of certain variations in the accounts. We understand Frege, familiarly, to take the sense of a sentence as the proposition it expresses: a proposition whose constituent structure consists in the senses expressed by the words in the sentence.

² Barwise and Perry (1981, pp. 387–403) also employ this particular segment to introduce their way of recovering semantic innocence. Our treatment differs in that the discussion is framed in terms of externalism about meaning in general, and extended to the question of analytic truth.

³ It is held to be knowable *a priori* and necessarily true.

⁴ Situation semantics is, of course, another variety.

⁵ Salmon and Soames, 1988, contains a number of articles that are the best introduction to a semantic theory of this kind.

⁶ An objection might be raised here that a TDR meets Davidson's challenge to exorcise appeal to intensional entities in an account of the behavior of expressions in indirect discourse only trivially, if at all. For how is it possible to claim, as we wish to, that a Fregean theory need not make an in principle commitment to an independent realm of distinct semantic entities to serve as the reference of expressions in opaque contexts, when a TDR does not support even the initial erection of the Fregean account? On a view that holds that there is nothing more to the meaning of an expression than its reference, it does not seem possible to claim that expressions in a that-clause shift their reference at all, let alone that the reference-shift they experience amounts to nothing untoward when the dust has settled. To meet this objection is not brief work; it raises, among other things, the issue of iterated belief contexts and I must defer elaboration to another paper. Suffice it to say that from the fact that an expression refers to nothing but its ordinary reference in and out of an opaque context, it does not follow that the *sense* expressed by the expression in and out of an opaque context remains the same.

⁷ This kind of solution is perfected in, among others, a number of the papers in Salmon and Soames, 1988.

⁸ I have considered the consequences of externalism about meaning for analytic truth at some length in another paper.

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