Consider the following familiar and seemingly cogent anti-Fregean argument.¹ Take a pair of strict synonyms in English, such as (presumably) 'ketchup' and 'catsup'. As these terms have the same meaning in all respects, it seems indubitable that they have the same propositional value - or semantic content - with respect to every possible context of use. Now consider a speaker, Sasha, whose mother tongue is not English and who learns the meanings of 'ketchup' and 'catsup' by means of ostensive definitions in the following way, not being told at the outset that they are straightforward synonyms. Sasha acquires the words by reading the labels on the bottles in which ketchup (or catsup) is served during meals. It happens that the same condiment is regularly served to him in bottles labelled 'catsup' at breakfast, when it is eaten with eggs and hash browns, and in bottles labelled 'ketchup' at lunch, when it is eaten with hamburgers. And such a situation induces Sasha to think that he is consuming a different condiment in each case (though one which is similar in taste, colour and consistency). Therefore, whereas 'Ketchup is ketchup' is uninformative to Sasha, 'Ketchup is catsup' would be quite informative to him: his knowledge would be substantially extended if he came to know that the condiment is one and the same in both cases. Hence, by the sort of strategy labelled by Nathan Salmon “the generalized Frege's Puzzle”,² one would come to the conclusion that the information value of 'ketchup'

¹ See Salmon 1990, 220-3.
² See Salmon 1986, 73.
(whatever it is) differs from the information value of ’catsup' (whatever it is), which clearly contradicts the obvious principle that synonymy preserves information value.

In this paper I discuss three possible rejoinders to the above sort of anti-Fregean argument. I retain the third one as the most promising.

To begin with, an indirect counter-argument could be adduced to the effect that the argument in turn contradicts the following equally obvious principle:

(E) Necessarily, if a speaker x understands two expressions E and E' in a language L, and E and E' are (strict) synonyms in L, then x knows that E and E' are synonyms in L.

Principle (E) seems to be quite plausible: having grasped the meanings of E and E', and given that E and E' have the same meaning, one is bound to be aware of this fact. And such a principle is of course violated in the anti-Fregean argument. On the one hand, Sasha is credited with an understanding of the words 'ketchup' and 'catsup' (he is supposed to have learnt the meanings of the words). On the other, the words in question are taken to be strict synonyms in English. Yet, Sasha does not know that they are synonyms. Therefore, one should apparently conclude that either principle (E) is false or the Millian argument is wrong.

Nonetheless, it should be noted that principle (E) is not unchallengeable. Consider the following parallel principle:

(E*) Necessarily, if a speaker x understands two expressions E and E' in a language L, and E and E' are not (strict) synonyms in L, then x knows that they are not synonyms in L.

Now (E*) turns out to be false. For instance, competent speakers of English will claim that words such as 'stop' and 'finish', or 'accident' and 'mistake', are synonymous, until they are

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3 This principle is subscribed to by Michael Dummett; see e.g. Dummett 1981, 323-4.
presented with examples which make clear the non-synonymy of the words as those speakers themselves use them. And such a sort of result about \((E^*)\) might be exploited to cast some doubt upon \((E)\). Thus, concerning a synonymous pair \(E\) and \(E'\), it might be claimed that a speaker who understands both \(E\) and \(E'\) might be inclined to count them as synonymous, but withhold belief in synonymy because her experience of counter-examples to \((E^*)\) makes her suspect that she is wrong.

Of course, this could hardly be taken as evidence that principle \((E)\) is false. And if the above sort of dilemma were inescapable one would be naturally inclined to take the latter horn of it; indeed, principle \((E)\) is intuitively compelling and should not be given up on that basis. However, as we shall see, there is just no need to argue from the truth of principle \((E)\) to the unsoundness of the anti-Fregean argument, and hence our dilemma turns out to be clearly escapable. I would regard the foregoing reflection about principle \((E^*)\) as at least showing that the indirect counter-argument from principle \((E)\) is not as persuasive as one might think, in the sense that the intuitive strength of \((E)\) may be after all insufficient to yield a convincing refutation of the Millian argument.

A second sort of reply to the anti-Fregean argument, which in a way complements the one just outlined, consists in what we might call the objection from partial (or imperfect) understanding. It might be argued that the 'ketchup'/catsup' story does not satisfy a requirement which turns out to be crucial to Frege’s original argument about informativeness. The requirement in question is that the speaker fully understand both sentences \(S\) and \(S'\) and therefore the singular terms out of which these sentences are composed (where \(S'\) results from \(S\) by replacing at least one occurrence of a singular term \(t\) in \(S\) with a co-referential singular term \(t'\)). And it is alleged that it is doubtful whether the anti-Fregean argument meets this kind of demand since, on the one hand, Sasha is not a native or fully competent speaker of English, and, on the other, his peculiar way of
learning the use of the words 'ketchup' and 'catsup' might be regarded as revealing that he has only a partial (or imperfect) grasp of the meanings of these words; and a full mastery is indeed required in the Fregean argument.

Now I have doubts about the effectiveness of such a line of attack. Indeed, it seems to be vulnerable to the following sort of intuitively powerful objection. Suppose that Sasha had learned the meaning of 'ketchup' in the peculiar way described before, but without the word 'catsup' coming into the story. This would normally be quite adequate for understanding. On the other hand, also learning something about 'catsup' should not undermine that. Hence, one may say that Sasha understands 'ketchup'; and, by a parallel argument, one would say that he also understands 'catsup'. Of course, there is no reason to think that such an objection would be decisive; maybe some reasonable reply could be framed against it. And one might even be inclined to think that the issue whether or not a speaker like Sasha should be credited with an adequate understanding of the words 'ketchup' and 'catsup', is a moot issue; or that it is unlikely that anything like an appeal to our ordinary intuitions about understanding would enable us to settle the dispute. Anyway, I guess that we are at least entitled to conclude that, given its relative weakness and lack of intuitive support, the objection from partial understanding is far from representing a good move against the Millian argument.

Finally, let me sketch a third sort of argumentative strategy one might pursue in dealing with the 'ketchup'/'catsup' story and similar cases from a Fregean perspective. Let us begin by taking for granted the premiss about understanding employed in the Millian argument. And let us recall that the argument is intended as a reductio, the allegedly absurd conclusion of which is the following claim:

(*) 'ketchup' and 'catsup' have different propositional values (with respect to Sasha's story);
Incidentally, some Millian theorists (especially Salmon) would take the *reductio* hypothesis to be the claim that 'Ketchup is catsup' is genuinely informative to Sasha. And the crucial premisses in the argument are these:

\( (@) \) If expressions \( E \) and \( E' \) are synonymous (in a language \( L \)) then \( E \) and \( E' \) have the same propositional value (with respect to every possible context of use).

\( ($) \) 'Ketchup' and 'catsup' are synonymous (in English).

\( (*) \) is deemed implausible because, given \( ($) \), it comes out as inconsistent with \( (@) \), and \( (@) \) and \( ($) \) are both supposed to be obviously true. Now a Fregean reply could proceed in either of the following two directions.

On the one hand, one could just reject premiss \( ($) \), while keeping \( (@) \) and endorsing \( (*) \). As a result, \( (*) \) could no longer be taken as a *reductio* of anything at all. But how could \( ($) \) be reasonably challenged? Well, one might begin by maintaining that the notion of synonymy has no clear application to the case of proper names; indeed, ordinary proper names have no linguistic meanings, in the sense that definitional clauses like those one may find in a dictionary are not, in general, available for them. Then one might claim that words like 'ketchup' and 'catsup' may be thought of as having a semantic status which is very similar to that of proper names: they are names of substances or names of kinds of stuff. One could then apparently conclude that, strictly speaking, words of that sort have no linguistic meanings either; hence, the notion of synonymy has no straightforward application to them. However, I do not think that such an approach is convincing.

First, and less important, it turns out that some authorized English dictionaries\(^4\) actually count the words 'ketchup' and 'catsup' as being strict synonyms, the latter being -

\(^4\) E.g. Collins English Dictionary and The Oxford Encyclopedic English Dictionary.
along with 'catchup' - just a spelling variant of the former (a variant used mainly in the U.S.A.).

Second, and more important, even if one happens to be reluctant to apply the notion of synonymy to names of artificial kinds, it turns out that an argument can be mounted which parallels the 'ketchup'/catsup' argument and yet involves only colour words; and the objection from the inapplicability of the notion of synonymy would hardly make sense with respect to colour words. Thus, in Portuguese there are two different words for red, viz. 'vermelho' and 'encarnado', which have literally the same meaning (at least as these words are presently used); I am pretty sure that every native (or fully competent) speaker of Portuguese would promptly acknowledge such words as being strictly synonymous.

Now suppose that Ronald, a monolingual speaker of English, is taught Portuguese by the direct method and learns 'vermelho' and 'encarnado' under the following sort of circumstances. First, he learns the meaning of 'vermelho' by being presented with samples of a particular shade of red. Then he comes to learn 'encarnado' by being presented with samples of what is in fact the very same shade of red. It just happens that, on the later occasion, Ronald does not remember the particular shade of red he saw when he learned 'vermelho'; so, when he acquires the word 'encarnado', he does not even entertain the question whether 'vermelho' holds of the samples then seen.

Let us agree that one is entitled by ordinary standards to credit Ronald with an adequate understanding of the Portuguese predicates 'vermelho' and 'encarnado'. Then it would be possible to draw from the above case conclusions which parallel those drawn from the 'ketchup'/catsup' story, a significant difference between the two arguments being that in the 'vermelho'/encarnado' argument the premiss about synonymy seems to be incontrovertible. In particular, it would not be difficult to imagine a set of circumstances
under which the Portuguese sentence 'Vermelho é (is) encarnado' (as uttered on the later occasion) would carry non-trivial or informative information to Ronald (whereas 'Vermelho é (is) vermelho' would be clearly uninformative to him).

The objection might be raised that as soon as Ronald considered the matter, he would realize that the words in question are synonymous. Yet, a possible reply might be given as follows: Ronald may realize that 'vermelho' and 'encarnado' have similar meanings, but feel unable to rule out the possibility that he will one day see a shade that will strike him as vermelho, but not as encarnado.

Alternatively, and this is the kind of move I would be inclined to favour, one could just reject premiss (@), while accepting premiss ($) and fully endorsing claim (*). Again, it would follow that (*) could no longer be taken as a reductio of anything at all. But how could one reasonably reject (@)? Well, it turns out that from a Fregean standpoint, a standpoint in which information values are (at least partially) senses or modes of presentation, claim (@) is by no means compulsory. Indeed, it seems to me that a Fregean theorist might, plausibly and fruitfully, hold the view that sameness of linguistic meaning does not entail sameness of sense.

Notice that the connection holding between the notions of linguistic meaning and Fregean sense is a very loose one, at least according to the general conception of sense with which some Fregean theorists are willing to work. The linguistic meaning conventionally correlated with a given singular term, e.g. an indexical expression, is certainly an objective feature of the term; it is something which remains necessarily constant across speakers and across occasions of use. By contrast, the Fregean senses associated with singular terms are, in many cases, non-conventional and subjective; it is always possible for singular modes of presentation to vary from speaker to speaker and/or from occasions of use to occasion of use.
Thus, different speakers may be in a position to attach distinct particular senses to a given singular term token \( t \) (at a given time), or to tokens \( t \) and \( t' \) of the same type (at the same or at different times), even when \( t \) and \( t' \) are co-referential with respect to given contexts of use; i.e., they may entertain different particular ways of thinking of the object referred to. And the same speaker may be in a position to attach distinct particular senses to singular term tokens \( t \) and \( t' \) of the same type (at different times), even when \( t \) and \( t' \) are co-referential in given contexts of use; i.e., she may entertain on distinct occasions different particular ways of thinking of the object referred to. However, in all such cases, it seems obvious that the linguistic meaning of the singular term tokens - which is conferred upon them by the types of which they are tokens - is necessarily the same. On the other hand, for any tokens \( t \) and \( t' \) of different types which are co-referential with respect to contexts \( c \) and \( c' \), it is obviously not the case that if \( t \) and \( t' \) express the same particular sense in \( c \) and \( c' \) relative to a given speaker, then \( t \) and \( t' \) are synonymous (or belong to synonymous types); according to some neo-Fregean accounts, certain uses of indexicals such as 'here' and 'there', or demonstratives such as 'this' and 'that', illustrate this point.

Moreover, one may even introduce cases in which singular term tokens \( t \) and \( t' \) which are co-referential (in given contexts of use) and which belong to different but synonymous types are nevertheless to be seen, at least in the light of certain brands of Fregeanism, as having different senses with respect to a given subject. Thus, one may safely assume that the expression-types 'yesterday' and 'the day (just) before today' have exactly the same linguistic meaning (dictionaries usually give the latter as the meaning of the former). But consider tokens of such types as uttered by a speaker, say Jones, under the following sort of circumstances. At 11:58 pm on a day \( d \) Jones asserts 'Yesterday was mild', having thus a belief about \( d-1 \); and one hour later, looking at his watch, he comes to assert 'The day before today was not mild', apparently having thus a belief about \( d \). Yet,
Jones happens to be unaware that Summer Time ends precisely at midnight on d and that then clocks go back one hour, so that the time of his later assertion is in fact 11:58 pm on d and the associated (putative) belief a belief about d-1. Now if one thinks of the modes of presentation correlated with temporal indexicals as consisting in, or as being determined by, ways of tracking a time - or re-identifying it - throughout a period of time, then it will not be the case that Jones entertains on both occasions (or, rather, at what is conventionally the same time) the same singular sense.\(^5\)

The preceding considerations motivate a picture of the relationship between linguistic meaning and information value on which there is a considerable gap between the two notions and on which claim \((@)\) is not, in general, true. Claim \((@)\) is simply taken for granted in the anti-Fregean argument; and this is so because, considered in its application to ordinary proper names and to names of (natural or artificial) kinds, it comes out as trivially true under a strict Millian account. In effect, the object or the kind referred to by any syntactically simple singular term of the above sort (in a given context) is regarded on such a view as playing a double semantic role: it is (or at least it determines) the linguistic meaning of the term; and it is also the propositional value assigned to the term (in the context). But it seems to be somehow unfair to invoke this doctrine - as a means of validating claim \((@)\) - in the course of assessing an argument whose aim is to show that such a doctrine is wrong. And once one drops the Millian conception of the information values of simple sentences as being singular propositions, which are by definition psychologically insensitive, in favour of a conception of such information values as being Fregean thoughts, which are by definition psychologically sensitive, claim \((@)\) ceases to be compelling.

\(^5\) This is a very rough description of the case under consideration. I examine the notion of indexical sense in my Oxford D. Phil. Thesis Direct Reference, Cognitive Significance and Fregean Sense.
I am therefore prepared to endorse the claim that, in general, it is possible for expressions which are strict synonymous (in a given language) to have different senses in a speaker's idiolect. Concerning the 'ketchup'/catsup' story, I would say that Sasha employs different ways of thinking of the same condiment, the 'ketchup'-way of thinking and the 'catsup'-way of thinking. He is obviously not aware that he is being presented with a single kind of stuff at breakfast and at lunch; no wonder then that the thought that ketchup is catsup is informative to him. Given their analogy with ordinary proper names, names of natural or artificial kinds are - to use Evans's terminology\(^6\) - *information-invoking* singular terms. Accordingly, one could sketchily represent Sasha's distinct modes of presentation of ketchup as consisting in different chains of information, or in separate mental files titled 'ketchup' and 'catsup', formed on the basis of his disparate cognitive encounters with the condiment at breakfast and at lunch. And a parallel treatment might be provided to the 'vermelho'/encarnado' case, the difference being that even a Millian theorist would acknowledge that colour predicates are to be assigned something very akin to Fregean senses as their propositional values in possible contexts of use. Indeed, on Salmon's theory of predicative reference, in contradistinction to the case of syntactically simple singular terms, syntactically simple predicates are thought of as having two sorts of semantic value: their information values, which are taken to be certain intensional entities like n-ary attributes; and their references, which are taken to be certain extensional entities like functions from n-tuples of objects to truth-values. But Salmon would presumably treat synonymous predicates like 'vermelho' and 'encarnado' as invariably contributing one and the same unary attribute to the information contents of sentences in which they might occur. And this would not enable us to accommodate possible differences in cognitive significance which, *pace* Salmon, we wish to take as basic data in need of explanation.

\(^{6}\) See Evans 1982, 384-5.
such as the potential difference in informative value - relative to Ronald and to his story - between a thought expressed with the help of ‘vermelho’ and a thought expressed with the help of ‘encarnado’. Thus, I would say that Ronald employs in thought different ways of thinking of redness; or, if one prefers, he employs different ways of thinking of that function or Fregean concept which yields, for any red surface as argument, the True as value. And Ronald's case seems to motivate a De Re view of the kind of senses expressed by colour terms, i.e. a view on which such senses are to be seen as being (partially) dependent upon certain perceptual relations holding between a thinker and colour samples in her environment; in effect, it is the presence of this sort of non-conceptual factors which ultimately explains why redness is presented to Ronald under distinct modes of presentation.

A consequence of the above way of countering the anti-Fregean argument is that principle (E) should be, after all, given up. We are committed to the result that e.g., though ‘vermelho’ and ‘encarnado’ are synonyms (in Portuguese), Ronald does not know that they are synonyms. If Ronald knew this then he would know that ‘vermelho’ and ‘encarnado’ are co-extensional predicates and thus that one and the same colour is presented to him on both occasions; but then a sentence such as ‘Vermelho é encarnado’ would not express a thought which would be informative to him. Therefore, since we take as intuitively sound the claim about informativeness, and since we take the objection from imperfect understanding as intuitively dubious, we are forced to reject principle (E). Now I think that there is nothing essentially wrong in pursuing this train of thought. Underlying principle (E) is a certain form of cartesianism about meaning, in the sense that our knowledge about sameness of meaning is taken to be infallible. But one may have good reasons, in this and in other areas of philosophical inquiry, to be suspicious about such cartesian principles; it
is very likely that linguistic meaning is not as transparent as it is claimed, and that even fully competent and reflective speakers may be mistaken about synonymy.

References