The Sense of Communication*

Richard G. Heck, Jr

1 Opening

In recent years, something of a consensus has emerged concerning Frege's distinction between sense and reference.¹ According to the Hybrid View, the contents of beliefs and other propositional attitudes are characteristically intensional: The content of a speaker's belief that a is F may differ from the content of her belief that b is F, even if a should be b. But, the story goes, the meanings of sentences are another matter: If the terms t and u are co-referential (and the predicate $F\xi$ is extensional), then the meanings of the sentences $\lceil t \rceil$ is $F \rceil$ and $\lceil u \rceil$ is $F \rceil$ cannot differ. So, for example, one's belief that Hesperus is Phosphorus may well have a different content from one's belief that Hesperus is Hesperus, though Hesperus is indeed Phosphorus. (Following Frege, I shall call the content of a belief, so understood, a thought.) On the other hand, the sentences "Hesperus is Phosphorus" and "Hesperus is Hesperus" have the same meaning, precisely because Hesperus is Phosphorus. Thus, Frege was right about belief but wrong about the meanings of proper names. Something like Frege's notion of sense is needed in a proper account of belief (and other propositional attitudes), but no such notion is needed in an account of the meanings of sentences (except, perhaps, in an account of the meanings of intensional operators).

The wide acceptance of the Hybrid View² derives in part from the agreed force

^{*}Published in *Mind* 104 (1995), pp. 79–106.

¹ See of course Frege (1984b). I shall translate Frege's word "*Bedeutung*" as "reference", not as "meaning".

² It is probably fair to say that the Hybrid View is dominant these days. Among the classic statements of it are Kaplan (1978), Richard (1990), and Loar (1988). Peter Carruthers (1989) actually comes close to addressing some of the concerns voiced below. In recent writing, authors are often content to presume the correctness of the account of meaning in question: It is usually the account of *belief or belief-ascription* which is taken to be controversial. Nathan Salmon, for example, holds a hybrid version of the Hybrid View, since, on the one hand, he holds that belief is a relation between agents, propositions, and "modes of acquaintance with propositions, or ways in which a believer may be familiar with propositions" (1986b, p. 441); but, on the other hand, he holds that belief-attributions quantify existentially over modes of acquaintance, whence belief-attributions are

of arguments for the claim that belief is intensional (in the sense outlined above). The arguments in question go something like this. Suppose that Officer Obie believes that Arlo (known to him as a certain musician) dumped some trash off a cliff; Obie is anxious to arrest the criminal Arlo. Suppose, further, that he meets Guthrie, whom he does not arrest, at a party. Why doesn't he arrest Guthrie? If Obie believed that Arlo was Guthrie, even wrongly, he would arrest him, so the obvious answer is that Obie does not believe that Arlo is Guthrie. That is the right explanation of Obie's behavior, if Arlo is not Guthrie, and it is the right explanation, even if Arlo is Guthrie.³ Therefore, since Obie does not believe that Arlo is Guthrie, and since he (presumably) does believe that Arlo is Arlo, the contents of these beliefs must differ. Were belief not intensional, then, since Obie believes that Arlo is Arlo, he would have to believe that Arlo is Guthrie, since Arlo is Guthrie. Our explanation of Obie's behavior, which depends essentially upon the claim that he does not believe that Arlo is Guthrie, would then fail.⁴ What distinguishes the content of the belief that Arlo is Guthrie from that of the belief that Arlo is Arlo is something like a Fregean sense, a "way of thinking of" or "way of apprehending" the object in question.⁵

Surely, however, no argument of this sort can show any *more* than that something like Frege's notion of sense is needed in an adequate account of belief. As Michael Dummett puts a closely related point:

[This] argument for the distinction between sense and reference has a major defect: it has no tendency to show that the sense of a word is a feature of the *language*. It shows, at best, that each speaker, if he is to associate a reference with a word, must attach a particular sense to it; it does not show any necessity for different speakers to attach the same sense to any one word, so long as the senses which they attach to it determine the same reference. It therefore leaves open the possibility that the sense of a word is...[but a] part of the psychological mechanism by which a speaker attaches a meaning to the word, and

extensional (see Salmon, 1986a, esp. ch. 8).

³ One always has the sense in these sorts of examples that the information that Arlo is Guthrie is being withheld. But there is no essential lack of information at this point: One does not ordinarily think that Obie's behavior cannot be explained until one knows whether Arlo is Guthrie.

⁴ Note that the problem does not only concern intuitions about belief reports—which might be susceptible of pragmatic explanation—but the status of everyday explanations of behavior. This is the best answer to (Salmon, 1986a, pp. 199ff).

 $^{^5}$ It is sometimes said that what is needed is a notion of a way of apprehending a *proposition* (see Salmon, 1986b, p. 441 quoted in note 2). But this is a mistake, due to too heavy a concentration upon sentences which contain only one proper name. Consider, for example, the inferential relations between the beliefs that a likes b, that b likes c, and so forth, where all the terms refer to the same object.

not a genuine ingredient of the meaning. (Dummett, 1978, p. 130, italics in original)

After all, for all that has been said so far, the contents of beliefs might be essentially the property of particular persons, so that different people could apprehend an object in similar ways, though never in the same way. We have, to put the point differently, been given no reason to think that the notion of sense has any application whatsoever outside the philosophy of thought.

Indeed, it has become harder and harder to fathom how arguments like that under discussion could ever have been supposed to show anything *more* than that belief is intensional, how they could ever have been thought to show that the meaning of a proper name is not just its referent. Of course, there are a number of arguments which purport to show directly that the meaning of a name is just its reference (see e.g. Kripke, 1980 and Putnam, 1975), and the popularity of the Hybrid View is due in part to the influence of these arguments. But, or so it seems to me, what has made the Hybrid View so attractive is the thought that what once seemed obvious is simply wrong: Neither the claim that belief is intensional, nor even the best argument *for* that claim, implies that the meaning of a name exceeds its reference, and it is just a mistake to suppose that they do.

So much, then, for explanation and motivation of the Hybrid View. What I wish to argue here is that it is nevertheless unstable: Once one has allowed that belief is intensional, further arguments do commit one to the view that the meaning of a name exceeds its reference. Before turning to that argument, I shall first develop the Hybrid View in more detail. I shall then discuss what I shall call the Problem of Content, the question raised by which is: How must the senses which speakers associate with a given name be related if transmission of knowledge by means of language is to be possible? What I shall argue is that the answer is not that speakers may diverge as much as they like regarding the senses they attach to a given name, so long as they attach the same reference to it, that they need only "get the reference right". What ought to be controversial is not this intermediate conclusion but the significance I shall ascribe to it, for what I shall be arguing is that it is inconsistent with the Hybrid View. This ultimate conclusion rests upon two crucial auxiliary premises: First, that conclusions about what is necessary for the transfer of knowledge yield conclusions about what is necessary for understanding; and, Secondly, that conclusions about what is necessary for understanding yield conclusions about *meaning*. In both cases, I shall not be arguing directly for these premises, though they are bound to be controversial: Instead, I shall be arguing that they ought to be acceptable to a proponent of the Hybrid View.

Since the arguments given here are directed against the Hybrid View, they show, at best, that the meaning of a proper name exceeds its reference if belief

is intensional. Even then, they may not imply that proper names have senses in Frege's sense of that term. (In fact, the notion of sense will be left almost totally unexplained.) In concluding, I shall make a few remarks about what sort of conception of the meanings of proper names might be supposed to issue from the arguments given here, but, unfortunately, I am presently unable to say very much about this; and I shall say almost nothing about the senses of (utterances of) demonstratives and indexicals.

2 Meaning and Content

At the beginning of "On Sense and Reference", Frege observes that the "cognitive value" of a sentence of the form $\lceil a \rceil$ is $F \rceil$ may differ from one of the form $\lceil b \rceil$ is $F \rceil$, even if the names $a \rceil$ and $b \rceil$ have the same reference (Frege, 1984b, opp. 25–6). If this observation is to be the foundation of an argument that the meaning of a proper name exceeds its reference, the notion of meaning must be related to that of cognitive value. Frege's plain intention is to argue that sentences of this form may have different meanings by showing that they may differ in cognitive value. He will then conclude that, since the sentences differ only in respect of what names they contain, the names must have different meanings. But what might we take the "cognitive value" of a sentence to be? And how is it supposed to be related to the meaning of the sentence?

Suppose that Tony utters the sentence, "George Orwell wrote 1984", in Alex's presence.⁶ What is required if Alex is to have understood Tony? Obviously, Alex must at least know what Tony said: She must know, in particular, that Tony said that George Orwell wrote 1984; she must, in a different sense, know what Tony said meant. Now, on the Hybrid View, what Tony said does not depend upon how Tony herself thinks of George Orwell: What Tony said does not depend, in respect of the name "George Orwell", upon anything other than its reference. Hence, to know what Tony said, as far as concerns this name, Alex must merely get its reference correct; there is no more stringent requirement. To think of George Orwell as the reference of Tony's utterance of "George Orwell", she must think of him in some way: Perhaps Tony thinks of him as the author of Animal Farm; Alex may think of George Orwell as the author of certain reports about the Spanish Civil War.⁷

⁶ Throughout this paper, I mean to be talking about the meanings of specific *utterances* of names. As will become important at the end of section 7, relevant features of the context should be thought of as contributing to the determination of the meaning of the utterance itself.

⁷ To emphasize: I am neither suggesting nor supposing that senses or "ways of thinking" must be, or usually will be, descriptive. My use of descriptive senses in examples is due, first, to unclarity about how to talk about senses of other kinds; and, secondly, to the ease with which one *can* talk about descriptive senses. The same is true of Frege.

Nevertheless, they are thinking of the same object, and Alex has understood Tony so long as she thinks something like: George Orwell, that guy who wrote about the Spanish Civil War, *he* wrote *1984*; that's what Tony said (compare Evans, 1982, pp. 305ff).

The Hybrid View is thus committed to the extensionality of understanding: Understanding an utterance depends, in respect of names, only upon the preservation of their reference, not upon the preservation of any 'intensional' features of the names used. Indeed, it is difficult to see how else one might explain the Hybrid View's commitment to the claim that the meaning of a proper name is just its reference except in terms of an insistence that, so far as linguistic communication is concerned, reference is all that matters. For how, without this claim, are we to understand to what the senses speakers associate with names do not matter? to what the Hybrid View's rejection of the claim that names 'themselves' have senses amounts? The conclusion that the Hybrid View is committed to the extensionality of understanding is not meant to be, and ought not to be, controversial. Indeed, the package is both coherent and attractive. Knowledge (like belief) is intensional. Thus, if Alex is to know that Tony's utterance of the name "George Orwell" referred to George Orwell, Alex must apprehend, or think of, George Orwell in some way. But, according to the Hybrid View, in understanding this utterance of "George Orwell", she may think of George Orwell however she pleases; that is why the "intensional" features of the name as she and Tony understand it, are not features of the name itself. Thus, not only does the conclusion that the Hybrid View is committed to the extensionality of understanding pose no threat to it, it ought to be a welcome conclusion, one which helps better to explain it.

Now, it is obvious that there is *some* sense in which one says the same thing whether one asserts "George Orwell wrote 1984" or "Eric Blair wrote 1984". The question is whether to understand someone is to know 'what she said' in this sense. The Hybrid View is committed to the claim that it is, and the argument to be given against the Hybrid View is that it is not. The question at issue here is thus: Is it enough to understand someone to get the references of her words right? But an inquiry based upon this question is all too likely to stall. One can easily imagine one side offering examples in which someone "gets the reference right" and is said not to understand; the other side, trying to explain the examples away, professing intuitional ineptitude, and offering other examples in which someone "gets the sense wrong" and yet is said to understand. How then can we resolve disputes about

⁸ Similarly, if Alex knows that Tony said that George Orwell wrote *1984*, the meaning of the sentence uttered by Tony will not itself be (part of) the content of Alex's knowledge: Rather, Alex must apprehend the meaning of the sentence in some particular way. Nevertheless, one may say that Alex knows what the sentence Tony uttered meant: She merely has a particular way of apprehending the meaning of that sentence.

whether someone has understood? Do we first have to decide what constitutes understanding? Let us hope not and instead ask: Why do we *care* whether we understand one another? Or, more precisely: What does understanding an utterance made by someone enable one to *do*? For then we may decide whether someone has understood by asking: Is she now able to do that which understanding is supposed to make us able to do?

3 Understanding, Assertion, and Belief

To understand an uttereance of an assertoric sentence, one must know how it says the world is. But just as importantly, one must recognize it as an utterance of an *assertoric* sentence, a sentence which, as Frege would say, expresses a judgement (as opposed, say, to a wish). But what is it to know that, to know what judgement the sentence expresses? or even to know *that* it expresses a judgement? One might say that, to know what judgement the sentence expresses, one must know not only how it says the world is, but that it claims the world is that way. But that does not seem particularly helpful. One might also say: An assertion is an expression of belief, not of desire (cf. Frege, 1984c, op. 62). And, granted, one can (defeasibly) infer from someone's making an assertion that she believes what she has asserted; perhaps the validity of such inferences is even a conceptual matter. In any event, there is an undeniably close connection between the notions of assertion and belief.

However, the near platitude that an assertion is an expression of belief does not exhaust this connection. At least as important is the fact that we acquire beliefs in reaction to assertions made by others. The view for which I shall be arguing in the present section can be put roughly as follows: The transmission of belief from speaker to speaker is a basic purpose of the practice of assertion—the alternative being that, though assertion can so function, that is not its purpose. The argument against the Hybrid View requires appeal to this view, or at least something like it: For the argument is going to be that the Hybrid View fails to account for the capacity of communication to transfer information from speaker to speaker.

Part of the reason we care whether we understand others is that we use other speakers as sources of information about the world. It is part of our practice of assertion that one accepts the assertions of others. (Assertions are not just expressions of belief, but also invitations to believe.) If one accepts an assertion as true, one *ipso facto* comes to have a certain belief: Hence, if one misunderstands an assertion and yet accepts it as true, one risks acquiring a false belief, even if the belief the speaker was expressing was true. In so far as we are interested in understanding, then, we are interested in communication, and an interest in communication, or so I am about to argue, amounts to just the sort of interest in belief-transmission

which I am trying to motivate. It is, unfortunately, not possible for me to establish this claim in full generality here (and not for lack of space). In arguing for it, I shall be assuming that belief is intensional, in effect arguing that it is a consequence of (that aspect of) the Hybrid View.

As argued earlier, the Hybrid View is committed to the claim that understanding depends only upon preservation of reference. Only because the Hybrid View insists that successful communication does not require speakers to attach the same or even related—senses to a given name is it compatible with the claim that speakers, qua believers, attach senses to names at all. But one might wonder why even preservation of reference ought to be required. Why do we bother even to preserve the references of the names that occur in sentences uttered by others? What sort of argument can be given for the claim that even so much is necessary for understanding? Merely to remark, at this point, that the meanings of those names are the objects to which they refer would be unhelpful, since the question is why (enough to determine) its reference should be any part of the meaning of a name. Similarly, it would be unhelpful to remark that we wish to know what others say, since the question is why we care to know 'what others say' (in this particular sense). Certainly, the reason reference must be preserved, if one is to understand, cannot (according to the Hybrid View) be that assertion is merely the expression of belief and that, to understand an assertion, we must understand what belief is being expressed: For then, to understand, one would have to do more than merely preserve reference. And, it would again be unhelpful to say merely that, in communication, we are interested to determine the beliefs of others only "up to reference": For the question would then be why are interested in the beliefs of others to, and only to, that extent.

The reason we must (at least) preserve reference is that, in communication, we use other speakers as a source of information: We acquire beliefs from them. It is thus important that we not get the references of names occurring in sentences uttered by others wrong, lest we risk acquiring false beliefs. The necessity that (at least) reference be preserved in communication is to be explained as a consequence of the fact that assertion is a mode of belief-transmission.

Indeed, an argument *for* the Hybrid View, *for* the claim that no more is required for understanding than that speakers "get the reference right", can be formulated in similar terms. Suppose that Tony asserts the sentence "Eric Blair wrote 1984". Her doing so is an expression of a belief she holds; hearing her and accepting the

⁹ David Wiggins offers an argument like that about to be given (1976, pp. 252ff). See also Carruthers (1989, pp. 48–55 and ch. 13). See also Evans (1982, pp. 299–400), but note that Evans's view is not the Hybrid View. John McDowell notes, in fn. 27 on p. 404, that Evans left notes toward a discussion of the question we are considering here; sadly, they were apparently too sketchy to warrant publication.

sentence as true, Alex comes to form a belief she could express by means of the same sentence. But so long as Tony and Alex refer to the same object by means of the name "Eric Blair", then, even if they refer to it in different ways, it is impossible that Alex's belief should be false if Tony's is true. That is: There is a certain sort of epistemic difficulty in which Alex will not find herself simply because she attaches a different sense to the name than does Tony; in particular, this difference will not lead her to acquire any false beliefs from Tony, since any beliefs she should so acquire will be true just in case Tony's are.—In short: As long as one gets the reference right, one does *not* risk acquisition of false beliefs. Hence, if the truth-preserving transmission of beliefs is the central purpose of communication, preservation of reference is all that is required for that central purpose. And that is arguably enough to establish the Hybrid View (given the intensionality of belief).

Thus, the premise that it is part of the purpose of linguistic communication to transfer belief from one speaker to another plays an important role in the only available argument, acceptable to the Hybrid View, for why so much as reference must be preserved in communication. Moreover, this premise plays a crucial role in a plausible argument for the claim that no more than reference must be preserved and so in a plausible argument for the Hybrid View. The Hybrid View thus requires that communication be essentially a means for the transmission of information, of true beliefs from one speaker to another.

4 Meaning and Cognitive Value

When Frege speaks of the cognitive value of a sentence, what he means is something like: its utility for the acquisition and application of knowledge, for reasoning, and so forth. Though Frege himself does not do so, I intend here to develop this notion a bit and employ it in a partial explanation of the relationship between the notions of meaning, understanding, and belief. Let us say that the cognitive value of a sentence, *for a speaker*, is the content of the belief she would form were she to accept that sentence as true (the belief she would form in virtue of her accepting the truth of that very sentence). That this definition is consistent with

¹⁰ The German is, I am told, a perfectly ordinary phrase. This does not, of course, imply that Frege is not using it in a technical sense, but I am not sure whether I should like to claim that he does.

¹¹ One might wish to object at this point that, if one accepts the truth of an assertion, one may acquire many different beliefs, depending upon what else one believes, what inferences one notices are then possible, and so forth. However, it seems to me that there is one thing which one would come to believe, given how one understands a certain assertion, were one to accept it as true, no matter what else one believed: Not only is there such a thing, it is the source of the other beliefs one may come to have, through inference. The claim admittedly amounts to acceptance of a version of the analytic-synthetic distinction. But I am not convinced that the distinction cannot be defended in this form.

Frege's text is easily enough seen. The cognitive values, so explained, of $\lceil t \rceil$ is $F \rceil$ and $\lceil u \rceil$ is $F \rceil$ can differ, for a given speaker, even if the names $t \rceil$ and $u \rceil$ refer to the same object: For that is just to say that the speaker can associate different thoughts with these sentences, that the beliefs she would form were she to accept them as true may have different contents, even though they concern the same object; and that is to say no more than that belief is intensional.

Frege does not speak of the cognitive value of a sentence for a speaker, but of the cognitive value of the sentence itself: It is because he so speaks that he concludes, not just that belief is intensional, but that the meaning of a name exceeds its reference. But what is the cognitive value of the *sentence*? The most obvious thing to say, I think, is that the cognitive value of the sentence itself is what is, or ought to be, common to the beliefs different speakers who understand it would form were they to accept it as true; it is what is common to the cognitive values the sentence has for different speakers who understand it.¹² The question, then, is what the relationship is between the cognitive value of a sentence, in this sense, and the meaning of that sentence: What I am going to argue in the rest of this section is that the meaning of a sentence is its cognitive value, so understood. I shall not establish this in full generality: What I shall argue is that the forms of argument employed in the last section depend upon this premise.

How must the cognitive values that a given sentence has for different speakers be related if communication is to be successful? that is, if speakers are to understand one another? The meaning of a sentence and the cognitive values it has for speakers who understand it must be related somehow. After all, those who understand a sentence may not just form any beliefs they like when they come to accept that sentence as true: Alex does not understand the sentence "George Orwell wrote 1984" if she is disposed, upon accepting its truth, to form, in the first instance, not the belief that George Orwell wrote 1984¹³ but the belief that Flipper disliked

In order not to clutter the exposition, I shall speak, as I have here, simply of the cognitive value of a *sentence*, even though I intend what is said to apply, in the first instance, to utterances of the sentence. I do not believe that the arguments to be given trade upon this abstraction from context. There must a continuity of cognitive value, for a given speaker, among various utterances of the same sentence if her later utterances of the sentence an utterance of which informed her that p are to express her so-formed belief that p. There may be some variation of cognitive value from context to context, but my central interest below is precisely in the limits to such variation.

¹² It is at this sort of point that consideration of demonstratives will make for a much more complicated story. It is admittedly dangerous to leave such matters undiscussed, in the present context, since discussions of demonstratives often play an important role in arguments for the Hybrid View. Still, Evans (1985c) gives one some reason to be confident about this.

One should not take this talk of "what is common" too literally. What is common might be the use of one of a family of descriptions, any one of which is acceptable, but not all of which need be known to any given speaker.

¹³ One can hardly avoid talk about "the" belief that George Orwell wrote 1984, but none of the

cauliflower. Now, it may be correct that a given sentence can have different cognitive values for different speakers all of whom understand it, but how different can these be? At the very least, the different beliefs speakers would form, were they to accept the truth of a sentence they all understand, surely must concern the same objects: They must at least get the references of the names in the sentence correct. Indeed, if the Hybrid View is right, the cognitive values a given sentence has for different speakers need agree, in respect of any proper names contained in the sentence, *only* so far as the references of the names are concerned.

The question what restrictions there are upon the different cognitive values a sentence may have for different speakers is a generalization of the question, discussed in the last section, why reference needs to be preserved in communication. And, in the last section, I developed, on behalf of the Hybrid View, an argument for this claim, as well as for the claim that no more than reference need be preserved. My focus upon these claims was not due simply to their intrinsic interest. Rather, after they were established, I went on to draw conclusions about the meanings of names, respectively, that the meaning of a name must determine its reference and that the meaning of a name is determined by its reference.¹⁴ In the case of the latter claim, for example, I argued (on behalf of the Hybrid View) that no more is required, if communication is to transfer true beliefs, than that the content of the belief a speaker forms, in virtue of her accepting a given sentence as true, should concern the correct objects; that is, that the cognitive values the sentence has for different speakers need only agree in reference (since the content of the belief a speaker would so form is the sentence's cognitive value for that speaker). To draw a conclusion about the meanings of names at this point is to draw a conclusion about the meaning of an expression from one about what must be common to the cognitive values a sentence has for speakers who understand it. In particular, this argument draws the conclusion that names with the same reference do not differ in meaning from the conclusion that (otherwise identical sentences containing)¹⁵ such names do not differ in cognitive value: That is to say, it draws the conclusion that the reference of a name determines its meaning from the conclusion that the reference of a name determines its cognitive value (cf. Evans, 1985c, p. 301). That such an argument should be valid, as it seems to be, requires that the cognitive

arguments to be given depend upon this way of talking: Officially, perhaps, one ought to read such remarks as e.g. "the belief (of the person in question which is related in some suitable way to RH's belief) that George Orwell wrote 1984". It will not affect the argument.

¹⁴ I mean here to be using "determine" in the mathematical sense, so that if meaning determines reference, names with the same meaning cannot have different references.

¹⁵ In the spirit of the Frege's context principle (Frege, 1980, p. x, §62), we may say that the cognitive value of an expression, for a speaker, is the contribution that expression makes to determining the cognitive values of (utterances of) sentences containing it.

value of an expression should determine its meaning.

For our purposes, however, it is more important that there is a seemingly valid argument which depends upon the converse claim, that the meaning of an expression determines its cognitive value. The first argument discussed in the last section—the argument for the claim that the meaning of a name must determine its reference—is such an argument. If argued first that the cognitive values a sentence has for different speakers must at least agree in the references ascribed to proper names contained in them (by arguing that this is required if communication is reliably to transfer true belief). I then concluded, as a kind of corollary, that the meaning of a name must at least determine its reference. That is to say, I drew the conclusion that the meaning of a name determines its reference from the conclusion that the cognitive value of a name determines its reference. That such an argument should be valid, as it seems to be, requires that the meaning of a name should determine its cognitive value.

Thus, if the forms of argument employed in the last section are valid, as they seem to be, the meanings of expressions must both determine and be determined by, and so might as well be identified with, their cognitive values. This conclusion, for which I said I would be arguing, is probably too weak. The meaning of a sentence is (not just what is common to but) what *constrains*, or *unifies*, the possibly different cognitive values it may have for various speakers who understand it. One might almost say that claims about meaning are but theoretical re-formulations of claims about cognitive value. But the important point, for present purposes, is just that the forms of argument discussed in the last paragraph are indeed valid—at least, they ought to be acceptable to a proponent of the Hybrid View, since they would seem to play an essential role in the best arguments for it. If so, then questions about the meanings of sentences may be addressed—as they have already been addressed in the last section—by asking what is or, in some sense, ought to be common to the cognitive values different speakers who understand it take a sentence to have.

Let me emphasize that the Hybrid View does not conflict with the claim that the meaning of a sentence is its cognitive value. According to the Hybrid View, speakers may associate as different senses as they wish with a given proper name, so long as they get its reference right. The cognitive value a sentence has for a speaker—the belief she would form were she to accept it as true—is therefore constrained only by the requirement that it concern the appropriate object. What is common to the cognitive values a particular sentence has for different speakers who understand it is, on this view, the contents of those beliefs stripped, in respect

¹⁶ It is precisely this form of argument that will be employed below, and its validity could use more defense than I am presently able to give it. See the end of section 7 for a bit more on this topic, which I very much hope to address elsewhere.

of any proper names contained in them, of all but their reference. Thus, not only is the Hybrid View compatible with the claim that the meaning of a sentence is its cognitive value; this latter claim, together with the claim that speakers need only "get the reference right" to understand an assertion, implies that the meaning of a proper name is just its reference.

Before turning to criticism of the Hybrid View, it is worth reviewing its accomplishments. So far, we have seen that the Hybrid View successfully accommodates Fregean arguments for the intensionality of belief; it accommodates well-known arguments that the meaning of a proper name does not exceed its reference; it is compatible with the thesis that understanding is knowledge of meaning; and, it is compatible with the thesis that there is a close connection between the meanings of sentences and the cognitive values those sentences have for various speakers. It is no wonder it has found so many adherents. It is still wrong.

5 The Problem of Content: Communication and Knowledge

Earlier, we considered an argument for the Hybrid View that went roughly as follows. Part of the purpose of linguistic communication is to transfer beliefs from one speaker to another, and we have an obvious interest in not so acquiring false beliefs. It is therefore necessary for successful communication that one get the references of another's words right. But, moreover, to guarantee that the truth of a belief so transferred will be preserved, it is also sufficient, in respect of those names, to get the reference right. What must be common to different speakers who understand a name, if communication among them is to be successful, is thus just the reference of the name. Hence, given what was argued in the last section, the meaning of the name is just its reference.

This argument rests upon quite a wrong picture of communication, namely, one according to which successful communication need only prepare the way for the transfer of true beliefs. The argument is that differences in the senses speakers attach to a given name will not obstruct the transfer of true beliefs and that *therefore* successful communication depends only upon preservation of reference. The conclusion follows only if it is sufficient to have communicated successfully—to have understood an assertion—to have put oneself in a position to acquire true beliefs should the speaker herself be expressing true beliefs. This is the crucial premise of the argument, and it is false: Moreover, if successful communication must enable one to do more than acquire true beliefs, preservation of reference alone might not be sufficient for successful communication.

The claim that communication must prepare the way for the transfer of true belief was introduced as a partial explanation of why reference must be preserved in communication—and so as part of an explanation of why there are any restrictions upon the different cognitive values speakers may understand a given sentence to have. But is this the correct explanation? Is it only because an arbitrary belief has no particular chance of being *true* that different speakers cannot understand a sentence to have arbitrarily different cognitive values?¹⁷ Granted, the mere fact that someone asserted a sentence does not give an arbitrary belief any particularly good chance of being true, but that is not why there must be a connection between the cognitive values a sentence has for different speakers. Rather, if the content of the belief one speaker forms in reaction to an assertion bears no particular relationship to the content of the belief the latter was expressing, then, even if her newly formed belief were true, she should merely have been *lucky*. Or again: If the beliefs we form in reaction to sentences asserted by others bear no close relationship to the meanings of those sentences, then, even if those beliefs should be true, we should not, in ordinary cases, *know* them to be true. We should not even have acquired justified beliefs.

Our purpose in communication is not just to assemble true beliefs. We have at least as much interest in acquiring knowledge or, at least, justified beliefs—if for no other reason than that we can pursue the truth only by pursuing justified belief. Now, earlier, I raised the question why we care whether we understand other speakers, and the answer suggested was that we use other persons as sources of information: We wish not to misunderstand because understanding is a precondition of the transfer of information. But the transfer of information we desire is not merely the transfer of true belief, but the transfer of *knowledge*.

If communication is a means of the transfer of information, then to have understood is to have put oneself in position to acquire information. If, in turn, the sort of transfer of information in question is not a transfer of true belief but of knowledge, then to understand must be to put oneself in position to come to know, should circumstances be favorable. The point is put nicely by Gareth Evans:¹⁸

[I]t is a fundamental, though insufficiently recognized, point that communication is *essentially* a mode of the transmission of knowledge. ... [I]f the speaker S has knowledge of x to the effect that it is F, and in consequence utters a sentence in which he refers to x, and says of it that it is F, and if his audience A hears and understands the utterance, and accepts it as true (and there are no defeating conditions), then A himself thereby comes to know of x that it is F. (Evans, 1982,

¹⁷ One might well note here that, if it were merely *true* beliefs in which we were interested, material equivalence would be enough. Cf. Carruthers (1989, p. 50).

¹⁸ It is worth noting, as Evans does, that the principle he states is at the root of various arguments for the importance of causal considerations both in epistemology and in semantics.

pp. 310–1, emphasis in original)

That is: If one has communicated successfully with (understood an assertion made by) one who knows what she said to be true, then *all* that is required, if one is to come to know something, is that one accept the assertion as true. ¹⁹ To have a short expression, we may say: Successful communication *enables* the transmission of knowledge.

We have, to this point, reduced the question whether the meaning of a proper name exceeds its reference to the question: What must be common to the cognitive values a sentence has for different speakers who understand it? In light of the fact that successful communication enables the transmission of knowledge, our problem may be reformulated as: How, in respect of the names contained in it, must the cognitive values that a given sentence has for different speakers be related, if communication is to be successful? that is, if the transmission of knowledge by means of language is to be the default case? This problem is what I call the *Problem of Content*.²⁰

The Problem of Content is best explained by example. Suppose that Tony hears Alex assert "George Orwell wrote 1984" and that Alex knows this sentence to be true: If Tony understands Alex and accepts the assertion as true, she will *ipso facto* form a particular belief, that which she would express as "George Orwell wrote 1984". Now, that Tony forms the belief she does is explained (in part) by her attaching the sense she does to the name "George Orwell". Though she might instead, or additionally, form the belief she would express as "Eric Blair wrote 1984", her belief would not then be justified, unless she had certain auxiliary knowledge, namely, the knowledge that George Orwell *is* Eric Blair.

One problem that this sort of example raises is what we might call the Problem of Propositional Attitudes: How it is even possible for there to be a difference between the belief that George Orwell wrote 1984 and the belief that Eric Blair did? It is this problem that leads to one half of the Hybrid View, the claim that belief is intensional. The Problem of Content, on the other hand, concerns the following difference between these beliefs: Tony's newly formed belief is at least *prima facie* justified, though her belief, had she formed it, that Eric Blair wrote 1984 would not have been. Furthermore, Tony's new belief may constitute knowledge: If Alex

¹⁹ Modulo defeating conditions, as Evans notes. The point may also be put thus: If one has understood an assertion made by one who knows what she has said to be true, and if one has good reason to and does trust her, etc., ceteris paribus, and so on, *then* all that is required if one is to come to know something is that one accept the assertion as true.—We shall ignore this complexity here. The examples to be given do not trade on it.

²⁰ The Problem of Content should not be confused with the more general problem how it is possible for knowledge to be transferred by means of language at all. The Problem of Content concerns *what* knowledge a speaker may come to have by means of communication.

says that George Orwell wrote 1984 and knows that he did, then, so long as she understands what Alex said, Tony has an *epistemic opportunity*, an opportunity to come to know that George Orwell wrote 1984; on the other hand, she need have no opportunity to come to know that Eric Blair wrote 1984. Whether she accepts this opportunity, of course, is another matter, and what else she has the chance to come to know will depend upon what else she knows: There is nevertheless a difference between what one does and does not have the opportunity to come to know purely in virtue of the fact that one has understood an assertion made by one who knows it to be true. The Problem of Content amounts to the question: What distinguishes what Tony has an opportunity to come to know from what she does not have an opportunity to come to know?

The problem we ought to understand Frege as raising in "On Sense and Reference" is thus not how the belief that a is F can differ from the belief that b is F, if a is b. Though that problem does indeed concern him, the more pressing question is: How, if the meaning of a name were just its reference, could there be sufficiently strong restrictions upon the cognitive values a sentence could have for different speakers that the transfer of knowledge should be possible? The force of this question, like the correctness of its presuppositions, depends upon a variety of auxiliary claims: First, that there is an important relationship between the beliefs different speakers associate with a given sentence and the sentence's meaning; Second, that only if there is an appropriate relation between the beliefs different speakers associate with a given sentence (and so an appropriate relation between those beliefs and its meaning) will successful communication be possible; and Finally, that communication has not been successful unless the transmission of knowledge has been enabled. It is for this reason that we have had to spend so long laying the ground for the question.

What I am going to argue in the remainder of the paper is that it is because of its inability to resolve this problem, the Problem of Content, that the Hybrid View fails: It is because communication must enable the transfer of knowledge that more than reference must be common to the cognitive values different speakers attach to a given name. Since the meaning of a sentence is what is, or ought to be, common to the cognitive values it has for different speakers, sentences that differ only in that they contain different names of a given object may have different meanings.

²¹ Let me take this opportunity to emphasize that the question is *not*: What is required if the transfer of *what is known* is to be possible? I am not assuming that communication must transfer the *content* known from one speaker to another, which would beg the question, but rather that the belief one forms on the basis of an assertion one understands must constitute knowledge if the belief expressed constituted knowledge. Even if I were going to argue that the latter implies the former, that would not be to assume the former. But I'm not really going to argue that, since that would be to argue in favor of what I below call the "strict" Fregean view.

Hence, the meaning of a name is not just its reference.

6 The Problem with the Hybrid View

Earlier, we considered an argument for the Hybrid View, for the view that the cognitive value of a sentence for a speaker who understands it need only "get the reference right". The basis for this argument was the claim that the belief someone forms in response to an assertion made by someone else is "appropriately related" to it just in case the belief would be about the same objects. But it is obvious that preservation of reference alone is not sufficient for transmission of knowledge. Suppose that Tony does not know that George Orwell is Eric Blair and that Alex asserts, in Tony's presence, "Eric Blair is Eric Blair". Suppose further that, in reaction to Alex's assertion, Tony forms the belief she would express as "George Orwell is Eric Blair". This belief does concern the correct objects: Reference is preserved. True belief is preserved. Has Tony then come to know that George Orwell is Eric Blair? Obviously not.

Some further restriction is therefore needed, beyond mere preservation of reference. A natural restriction is this one: A belief formed when a speaker accepts the assertion of a given sentence as true is appropriately related to the content of that sentence just in case it concerns the correct objects and is expressible by means of that same sentence.²³ But this will not do, either. Suppose Eric Blair were to become amnesiac and check himself into a hospital. The doctor, Tony, deciding that she needs to have *a* name by which to call him, dubs him "George Orwell". And suppose further that Alex says—*not* intending to refer to Tony's patient—"George Orwell wrote 1984" and that Tony forms, in reaction to Alex's assertion, the belief she would express to other members of her staff as "George Orwell wrote 1984". Now this belief is true: Tony's new patient happens to be Eric Blair, that is, 'the other' George Orwell. But surely it would not count as knowledge, even if Alex knows that George Orwell wrote 1984: It would not even count as justified.²⁴ Thus, preservation of reference and means of expression is not sufficient for successful

 $^{^{22}}$ Of course, the belief need not merely concern the same objects, but also involve the same 'properties' or what have you, and be similarly structured, and so on. But this part of the story is not at issue here.

²³ A related view may be found in Forbes (1990). His topic is belief-attribution, but it was his paper that inspired my initial reflections on the present topic.—When teaching this material, I call this *the spelling view*, because it amounts to claiming that the crucial difference lies in the spelling (or pronunciation) of the names.

²⁴ Compare Kripke's Napoleon-the-aardvark example (1980, p. 96). Kripke's remarks about this example do not depend upon the fact that the name *in fact* has a different reference. See also his discussion of Paderewski (Kripke, 1976, pp. 265–6).—Thanks to Charles Parsons for the present version of this example.

communication, since it does not suffice to enable the transmission of knowledge.

This argument may seem sophistical, based upon an example too trivial to show anything substantial: *Of course*, the thought might go, there are lots of George Orwells in the world, and to understand a sentence containing the name "George Orwell", one must determine which George Orwell the sentence is about; perhaps we may even say that one must determine which name is being employed, that one must disambiguate the sentence properly.²⁵ But the point the argument purports to make is precisely one about *how we must distinguish among names*. It is one thing to say that there are lots of people whose name is "George Orwell"; such names may be distinguished by their references, and examples involving confusion of different people named "George Orwell" would pose no threat to the Hybrid View. In the case under consideration, however, Tony's new patient really is 'the other' George Orwell. The name "George Orwell" that Tony uses is a different name from the name Alex uttered, and so (if this is the right thing to say) she has failed properly to disambiguate the sentence. But the names do not differ because they refer to different people, since, *ex hypothesi*, they refer to the same person.

What these examples show is that, if we are going to resolve the Problem of Content by distinguishing among names in some way, distinguishing them in terms of their reference and phonological properties will not suffice. Of course, it is hardly a revelation that, to resolve the question whether the meaning of a name exceeds its reference, we need to determine how, to understand linguistic communication, we must distinguish among names. The point of the Problem of Content, however, is that there are significant *cognitive*²⁶ or *epistemological* constraints upon how we must distinguish names. While it is not *a priori* impossible that one could produce a distinction among names couched, say, in causal terms that successfully resolved the Problem of Content, it is hard to see that there is much hope of such an account. And it is even harder to see that any such account that did not itself traffic in notions cognitive or epistemological could provide any sort of *explanation* of the distinction between what one can, and what one cannot, come to know because one has understood and accepted an assertion made by one who knows it to be true. Perhaps it is worth discussing an example.

It is because the notion of causation has important connections both with the notion of knowledge and with that of reference that it is natural to seek a causal solution to the Problem of Content. Consider again the example from above: Alex

²⁵ I hope it is clear that the argument does not turn upon any specific view about this. It is easily formulated, however, in terms of this sort of view.

²⁶ Frege, of course, was quite clear that the notion of sense is not psychological in character. I am, for this reason, using the word "cognitive" here. What Frege meant was that sense cannot be explained in terms of conscious experience. The notion of sense plainly was psychological (as we now understand this term) for him, since senses are the contents of propositional attitudes.

uses the name "Orwell" for someone she knows as an author, and so on; Tony uses it as a name for her patient. If, as one might suppose, there is really no connection between their uses of the name, then Tony's "Orwell"-beliefs are not properly related to Alex's, and Tony can gain no knowledge about the person she calls "Orwell" from Alex. But if we tell the appropriate kind of causal story, if we more finely distinguish among names, can we not do better? Suppose that we distinguish among names not just by their reference but by the sorts of causal chains by means of which the reference of a name is passed from speaker to speaker: We have the same name just in case the causal chain leads back to the same "initial baptism". Then, if there is a connection between Tony's and Alex's uses of the name, if their usage derives from the same "initial baptism", then, in that case, perhaps Tony does learn, from Alex, that George Orwell wrote 1984, that her patient did. Perhaps then Tony and Alex merely have different knowledge *about* the bearer of the name.²⁷

Causation certainly has a role to play here. There has been enough discussion of examples like that just outlined to establish that speakers may be able competently to use a name and yet know very little about its bearer, indeed, not know the basic facts that would serve to identify the bearer for others. This is one sort of reason that causation has an important role to play in the theory of reference. But the sort of causal story outlined above will not do as a solution to the Problem of Content: It is simply not sufficient, to understand an assertion, that one preserve the reference of the name and the "initial baptism" to which one is causally connected. One could acquire the name "George Orwell" from someone who used it as we all do and yet end up using it quite differently, without its reference changing. For example, one can imagine that a whole tradition should have grown up around the name "George Orwell", concerning the activities of the man we so call, that this tradition should have begun as part of our present tradition, so that it remained causally connected to the "initial baptism" by means of which the name "George Orwell" was endowed with its reference. Yet, this other practice could have diverged from the one we now have in such a way that no one would realize that the name "George Orwell", as used in the 'deviant' practice, referred to the same man as does our name "George Orwell". There could even be single speakers who used both names "George Orwell", who had knowledge about both George Orwells (so to speak), and yet there might not even be one person who so much as suspected that there was really only one George Orwell. It is easy to see how, under these sorts of assumptions, a example like that discussed earlier could be constructed.

²⁷ The view under discussion derives from (Kripke, 1980, pp. 96–7). It is important, at points such as this, to be clear that Kripke's "causal theory" is a theory of *transfer* of reference, not a theory of reference. Kripke is admirably clear about this point, more so than his followers have been.

And, though I shall not pursue it here, knowledge once again would not be transferred, for no-one can come to know that there is but one George Orwell by means of a misunderstanding.²⁸

Admittedly, this terse discussion is not sufficient to show that no broadly causal account could resolve the Problem of Content. We certainly have seen that, if one is going to resolve the Problem by distinguishing among the various names speakers understand, one is going to have to distinguish them more finely than in terms of their reference. That alone does not establish a Fregean view, since the notion of sense, as Frege conceives it, straddles the philosophy of thought and the philosophy of language. We are therefore without a demonstration that the distinction must make use of cognitive or epistemological notions, though the present discussion does indicate that the provision of a non-Fregean solution faces significant obstacles.

7 Knowledge of Reference

We have thus far been concerned with attempts to resolve the Problem of Content by distinguishing among names more finely than in terms of their reference. One might well suggest, however, that such solutions are quite out of the spirit of the Hybrid View, since one of its essential components is the thesis that the meaning of a name is just its reference; that, to understand language and communication, one need not distinguish among names any more finely than in terms of their references. Perhaps such attempts to resolve the Problem of Content are in the wrong spirit; perhaps names themselves do not need to be distinguished more finely. Perhaps such failures for knowledge to be transferred can be explained in terms of the fact that speakers do not always *know* when different names are names of a single object. After all, what makes examples of the sort we have been discussing possible is precisely that speakers need not know when names they understand are names of the same object. What the present discussion shows is just that, if speakers do not know different names to refer to the same object, that may affect the transmission of knowledge.

The suggestion is thus that what is required for understanding—what is required if knowledge is to be transferred by means of communication—is not preservation of reference, but *knowledge* of reference. Understanding, after all, is knowl-

²⁸ This example is similar to Evans's "Madagascar" case (Evans, 1985a, pp. 10–11), except that it does not *in fact* involve change of reference. One might want to reply here that more than just the "baptism" needs to be preserved, e.g., something like the "causal network" leading back to the baptism. But some account is now needed of these "networks", of what fixes their criteria of identity, an account that does not make use of the cognitive or epistemological constraints whose acknowledgement I am trying to force. I don't know of any such account.

edge of meaning, knowledge of what was said. And if one *knows* what the reference of a word is, if one *knowingly* "gets the reference right", there can be no failure of communication, no failure for knowledge to be transferred. For example, unless one already knows that Eric Blair is George Orwell, one cannot ordinarily learn, from an assertion of "Eric Blair is F", that George Orwell is F. One may certainly know that someone is referring to Eric Blair, yet not know that she is referring to George Orwell, by her use of the name "Eric Blair": That is precisely the position in which one may be if one does not know that George Orwell is Eric Blair. Hence, if one so understands an assertion of "Eric Blair is F" that, in accepting it as true, one comes to have the belief that George Orwell is F, one's belief may not constitute knowledge: For though one will have "gotten the reference right", since "Eric Blair" does refer to George Orwell, one need not knowingly have gotten the reference right. On the other hand, if one does know that "Eric Blair" refers to George Orwell, as well as to Eric Blair, then one can come to know that George Orwell is F from an assertion of "Eric Blair is F".

As the Problem of Content was originally presented, the question was: What distinguishes what one can come to know, from what one cannot come to know, in virtue of one's understanding what was asserted by someone who knew it to be true? The suggested solution is thus that what is required, to enable the transmission of knowledge, is not just that one get the reference right; further, one must *knowingly* get the reference right or, more simply, know to what the name refers. This view derives a great deal of appeal from the fact that the explanation offered above, of why one cannot come to know things about George Orwell from assertions containing "Eric Blair", closely parallels the intuitive explanation: The intuitive explanation, I submit, is that one who does not know that George Orwell is Eric Blair cannot learn things about George Orwell from assertions containing "Eric Blair" *precisely because* she does not know that "Eric Blair" refers to George Orwell.

This is not just a view, a solution to the Problem of Content. This view—that to understand a use of a given proper name, one need only know the reference—is what really underlies the Hybrid View. If, as the Hybrid View insists, belief is intensional, then there can be names of a given object that speakers do not know to be names of the same object. On the Hybrid View, however, it is not in *meaning* that such names differ, for their meaning is just their common reference; it is, instead, in *speakers' knowledge about them* that such names differ. It is part and parcel of the Hybrid View that one can believe (or know) that George Orwell is F,

²⁹ Thus, Carruthers writes: "...[I]t suffices to give me reason to add a belief to my stock of information about an individual if I know that your assertion concerns that very same thing..." (1989, p. 135). I do not mean to be endorsing this claim.

yet not believe that Eric Blair is *F*; hence, the Hybrid View is surely compatible with the fact that one can come to know, from someone's assertion of "George Orwell wrote about the Spanish Civil War" only that George Orwell, and not that Eric Blair, wrote about the Spanish Civil War. For one can know, say, that someone is referring to George Orwell, and yet not know that she is referring to Eric Blair.

The point I wish now to make is not that this solution to the Problem of Content cannot be formulated in terms of the resources available to the Hybrid View. Nor am I going to argue that this sort of solution to the Problem of Content is only apparently a solution, or is not workable.³⁰ What I am going to argue is that it is an illusion that, on this view, the meaning of a name is its reference. Bluntly: The Hybrid View has just collapsed into a Fregean view.

Something very much like the view that communication depends upon knowledge of reference is expressed in Frege's late essay, "Thoughts":³¹

Suppose...that Herbert Garner knows that Dr. Gustav Lauben was born on 13 September 1875 in N.N. and [that] this is not true of anyone else; suppose, however, that he does not know where Dr. Lauben now lives nor indeed anything else about him. On the other hand, suppose that Leo Peter does not know that Dr. Lauben was born on 13 September 1875 in N.N. Then as far as the proper name 'Dr. Gustav Lauben' is concerned, Herbert Garner and Leo Peter do not speak the same language, although they do in fact refer to the same man with this name; *for they do not know that they are doing so.* (Frege, 1984c, op. 65, my emphasis)

Frege here admits that different speakers may attach different senses to the same proper name. Shortly afterwards, however, he says that, though different speakers ought to attach the same sense to a given name, "it is often unimportant that this stipulation should be fulfilled, but not always" (Frege, 1984c, op. 66). In particular, variation of sense will be of significance in cases in which speakers do not *know* that the senses they attach to a given name determine the same object as its

³⁰ I do not, however, mean to be committing myself to the view. See note ?? for one worry about it. What I am arguing here is that, at the very least, knowledge of reference is required for understanding and that, if so, something like the distinction between sense and reference is present.

³¹ Compare Dummett (1978, p. 132): "If language is to serve as a medium of communication, it is not sufficient that a sentence should in fact be true under the interpretation placed on it by one speaker just in case it is true under that placed on it by another; it is also necessary that both speakers should be aware of the fact." Note, too, that Frege speaks not just of knowledge of reference, but of what we might call knowledge of preservation of reference. One alternative to the view under discussion here would be one according to which communication depends upon the knowledge that the object to which I refer is the same as that to which others refer. But it is unclear whether there is any real difference here.

bearer: In such cases, though the thoughts different speakers express by means of the sentence "Dr. Gustav Lauben was wounded" must "correspond in truth-value", the speakers themselves may not know that this is so; they may disagree about the truth-value of the sentence, even if they agree about other relevant facts available to them.³²

There are two important points here. First, it is frequently supposed that, on Frege's view, what is required for communication is knowledge of the sense a speaker associates with a given name (see e.g. Carruthers, 1989, p. 135. But this is mistaken. Consider, for example, an utterance of "Hesperus is a planet". To understand this utterance, one need not know how the speaker herself thinks of Hesperus, that is, have knowledge whose *content* concerns the manner in which the speaker thinks of Hesperus. The view that knowledge of reference is all that is required for communication is not inconsistent with a generally Fregean outlook. To understand an assertion containing "Hesperus", one must know that the name refers to Hesperus, this bit of knowledge being as intensional as any other. It is not sufficient, on Frege's view, to know that the name refers to Phosphorus.³³ What distinguishes Frege's position is his insistence that, to understand an utterance of a proper name, one must think of the object to which the speaker is referring in an appropriate fashion. On the strictest such view, one must think of the object in the same way as the speaker; but note that, even on this strict view, one need not entertain any thoughts about how the speaker herself thinks of the object. Nor will one need to do so on views that explain "an appropriate fashion" in weaker, more plausible terms. The object of knowledge is the reference of the speakers'

³² The proper interpretation of these passages is a difficult matter. One way of reading them is to take Frege here to be concerned with an idealization implicit in his use of the notion of sense. My own understanding of the passage owes much to Dummett (1981, pp. 101–9) and the different view of George (1997).

³³ This Fregean view is thus stronger than the view that knowledge of reference suffices for understanding. One issue here is whether the following sort of person would understand utterances of "Hesperus": Someone who knew that "Hesperus" referred to Phosphorus, but not that Hesperus was Phosphorus—and so, not that "Hesperus" referred to Hesperus. For example, if Tony does not know that Phosphorus is the first celestial body to become visible in the evening (i.e., the evening star), it is at least arguable that she cannot know that it is Hesperus. (We may safely ignore what Peacocke calls "deference-dependent" attributions of knowledge (Peacocke, 1992, pp. 29-33); consideration of these leads only to Evans's distinction between "producers" and "consumers" (Evans, 1982, pp. 376ff).) Could Tony yet know that "Hesperus" refers to Phosphorus? It is difficult to see how she could pick this fact up from speakers' usage—plus astronomical skill—without coming to know that Phosphorus was the evening star (or, more generally, if no-one knows that Phosphorus is the evening star.) Still, Tony might be told that "Hesperus" refers to Phosphorus. In such a case, she could communicate the knowledge that "Hesperus" refers to Phosphorus, and so-despite the fact that she herself has no such knowledge-effectively transfer the knowledge that Hesperus is Phosphorus. This, though, does not show that Tony understands utterances of "Hesperus"; speakers are frequently able to transfer knowledge expressed by sentences they do not (completely) understand.

utterance of the name, not the sense. One might say that the sense is not the object but the *content* of understanding.

Secondly, the strict Fregean view is, as was said, that thinking of the object "in an appropriate fashion" is thinking of the object in the same way as the speaker. But this claim is optional. There is no obvious reason why one must be committed to claiming that, to understand an utterance of a given name, one must think of the reference of the name in the very same way as the person who uttered it simply because once has accepted, first, that the meaning of a name exceeds its reference and, second, that the explanation of the meaning of a name must invoke cognitive or epistemological notions.. As said above, Frege's view was not only that there is more to the meaning of a name than its reference, but that the meaning of a name is a part of a thought, the sort of thing that can be a constituent of the contents of propositional attitudes. The present argument will not show that the meaning of a name is a sense in this sense. The present argument will show no more than that names have what we might call 'linguistic' senses, distinct from their references, and that the 'linguistic' and 'cognitive' senses speakers attach to a given name must be closely related. I claim no more: It would be consistent with everything said here if 'linguistic' senses were something like families of 'cognitive' ones.

Now, all of this having been said, is the position that understanding requires only knowledge of reference compatible with the Hybrid View? If one starts from the position that understanding requires only preservation of reference, it is natural to strengthen the condition on understanding, in light of examples considered above, so that understanding requires knowledge of reference. But then, quite different things can be required if one is to understand utterances of different names with the same reference. According to this view, to understand an assertion of "George Orwell wrote 1984", one may not think of George Orwell in any way one likes, so long as one gets the reference right; one must think of George Orwell in such a way as to know that he is the object to which the speaker is referring (no knowledge about ways of thinking being required). There are thus limits upon how one may think of George Orwell if one is to understand the utterance: If one does not know that George Orwell is Eric Blair, one cannot think of George Orwell as Eric Blair and yet understand an utterance containing "George Orwell". That is to say: There will be a (more or less vague) collection of ways³⁴ in which one may think of George Orwell if one is to understand such an utterance, and there will be a different collection of ways in which one may think of him and understand an utterance containing the name "Eric Blair". The cognitive values of (utterances of)

³⁴ And this collection will be highly dependent upon context, including especially common background knowledge. Perhaps this will worry some, but such context dependence will have to be acknowledged in any decent account of our understanding of demonstratives and indexicals.

these names may therefore be different.

The conclusion that names with the same reference may have different meanings will follow if the meaning of an utterance determines its cognitive value. We saw earlier that this principle was tacitly employed in an attractive, and seemingly valid, argument that the meaning of a name must at least determine its reference. But a defender of the Hybrid View might still demur here, denying that there being a difference between the cognitive values of utterances of "George Orwell" and "Eric Blair" implies that there is any difference of meaning. Now, what has been established is that different things may be required of a speaker if she is to understand utterances of different names with the same reference, namely, that she may need to think of the reference in different ways. Our defender must therefore deny that utterances of the names will differ in meaning if a speaker's understanding those utterances requires her to think of the referent in different ways. What is wanted, at this point, is some account of what, besides the name's meaning, contributes to determining how the speaker must think of the referent if she is to understand an utterance of the name, and it is far from clear how this might be provided. Features of the context, which might be supposed to play this role, will probably already have been taken to contribute to the determination of the meaning of the utterance.³⁵ In any event, if there is a non-verbal question whether what is required for understanding determines meaning, it is one beyond the scope of this paper.

8 Closing

The warnings and caveats offered in the last section do not themselves constitute a theory of sense. Sadly, I have no such theory to offer. In closing, however, I should like to make two suggestions about the form such a theory might take.

First, we have so far been discussing the Problem of Content only in terms of what it shows about what must be common³⁶ to the cognitive values a given

³⁵ One can certainly imagine its being replied here that reference is the only *context-independent* aspect of the meaning of a proper name. I do not have any fixed view about this matter, but it does not seem to me to be of crucial importance. It may be true, in some cases; but there might well be other cases, and it seems to me that there plainly are (e.g., "Hesperus"), where it is not. But however that may be, it remains that the meaning of any utterance of the name is not exhausted by its reference.

³⁶ One might worry that, on the view discussed in the last section, there does not seem to be anything which must be "common" between speaker and hearer beyond reference. It is, indeed, not obvious that speaker and hearer need "share" anything but reference. But one should not get carried away by talk of what is "shared" or "common". We are interested in what is required of someone if she is to understand utterances containing a proper name; we have seen that different things can be required, even when the names have the same reference. That the very same thing is not always required, of every speaker, is relatively uninteresting. See note 12.

sentence has for different speakers. I suggested earlier that the notion of meaning ought not to be understood as merely abstracting from these differences: Additionally, one should conceive of the notion of meaning as *constraining* or *unifying* the senses they attach to it. So understood, the notion of sense would be in part an idealization: The difficulty is to argue that this idealization is itself built into our linguistic practices, rather than being imposed from without.

Second, the Problem of Content can be used to argue that the notion of the sense of an expression ought to be explained, in part, in terms of the notion of justification. An explanation of the notion of the sense of a name, given in terms of what would justify an identification of an object as its bearer, could provide a solution to the Problem of Content, since differences in how speakers justify identifications of an object may give rise to failures of knowledge-transmission. Moreover, this treatment of the notion of sense could well be argued for on the basis of the claim that, to understand an expression, it is necessary that one use it in ways sufficiently similar to the ways in which it is used by others: For to hold one's use of a name, to refer to a particular object, responsible to its use by others is to hold one's judgments about the *identification* of an object responsible to what other speakers accept as justification for such identifications. Conflict between someone's use of a name and that of her fellow speakers need not depend upon her identifying the wrong object as its referent: She is out of step if she is merely unable to *justify* her identification of the bearer in terms her fellows would accept.

The reference to justification may raise suspicions of verificationism: But no kind of verificationism is intended either as premise or conclusion. It ought not be a premise but a *conclusion* of any further development of the arguments discussed here that, if speakers differ regarding what counts as justification for the assertion of a given sentence, there is a corresponding difference in the meanings they understand it to have (since such differences could obstruct the transmission of knowledge). The converse—that differences in meaning *must* be reflected in differences in what counts as justification—is certainly not presupposed by, and is arguably independent of, these arguments. Even this principle is not itself verificationist in character, though it plays a central role in an argument for a certain form of anti-realism, namely, Dummett's. The claim that semantics cannot proceed without attention to matters epistemological is not itself anti-realist, though, to borrow from Evans, "it has to a certain extent been caught up in the stampede away from" anti-realism (Evans, 1982, p. 94).³⁷ We must resuscitate the principle, for a plausible theory of the meanings of names requries that we acknowledge, as

³⁷ Evans is speaking of "Russell's Principle", which says that, to think about a given object, a person must be able to distinguish it from all other objects. Russell's Principle thus itself introduces the cognitive into semantics.

Dummett has long urged we must, the epistemic constraints the cognitive purpose of communication places upon theories of *what* we communicate.³⁸

References

- Carruthers, P. (1989). Tractarian Semantics. Oxford, Basil Blackwell.
- Dummett, M. (1978). 'Frege's distinction between sense and reference', in *Truth and Other Enigmas*. London, Duckworth, 116–144.
- —— (1981). *Frege: Philosophy of Language*, 2d edition. Cambridge MA, Harvard University Press.
- Evans, G. (1982). *The Varieties of Reference*, McDowell, J., ed. Oxford, Clarendon Press.
- —— (1985a). 'The causal theory of names', in Evans 1985b, 1–24.
- —— (1985b). Collected Papers. Oxford, Clarendon Press.
- —— (1985c). 'Understanding demonstratives', in Evans 1985b, 291–321.
- Forbes, G. (1990). 'The indispensibility of *Sinn*', *Philosophical Review* 99: 535–63.
- Frege, G. (1980). *The Foundations of Arithmetic*, 2d revised edition, tr. by J. L. Austin. Evanston IL, Northwestern University Press.
- —— (1984a). Collected Papers on Mathematics, Logic, and Philosophy, McGuiness, B., ed. Oxford, Basil Blackwell.
- —— (1984b). 'On sense and meaning', tr. by M. Black, in Frege 1984a, 157–77. Also in Frege 1997, 151–71.
- —— (1984c). 'Thoughts', tr. by P. Geach and R. H. Stoothoff, in Frege 1984a, 351–72. Also in Frege 1997, 325–45.
- —— (1997). The Frege Reader, Beaney, M., ed. Oxford, Blackwell.

³⁸ I have benefitted from discussions with Burton Dreben, Michael Dummett, Graeme Forbes, Alexander George, Michael Glanzberg, Delia Graff, Steven Gross, James Higginbotham, Kathrin Koslicki, Thomas Kuhn, Charles Parsons, Paul Pietroski, Professor Quine, Simon Saunders, and Robert Stalnaker. Special thanks is due, as usual, to Jason Stanley. Thanks also to the Editor of *Mind* and his referees for some useful suggestions.

- George, A. (1997). 'Has dummett over-salted his frege?', in R. Heck (ed.), *Language, Thought, and Logic: Essays in Honour of Michael Dummett*. Oxford, Clarendon Press, xxx–xx.
- Kaplan, D. (1978). 'Dthat', in P. Cole (ed.), *Pragmatics*. New York, Academic Publishers, 221–43.
- Kripke, S. (1976). 'A puzzle about belief', in A. Margalit (ed.), *Meaning and Use*. Dordrecht, Reidel, 239–83.
- —— (1980). Naming and Necessity. Cambridge MA, Harvard University Press.
- Loar, B. (1988). 'Social content and psychological content', in R. Grimm and D. Merrill (eds.), *Contents of Thought*. Tuscon, University of Arizona Press, 99–110.
- Peacocke, C. (1992). A Study of Concepts. Cambridge MA, MIT Press.
- Putnam, H. (1975). 'The meaning of 'meaning', in *Mind, Language, and Reality: Philosphical Papers, vol.* 2. Cambridge, Cambridge University Press, 215–71.
- Richard, M. (1990). *Propositional Attitudes: An Essay on Thoughts and How We Ascribe Them.* New York, Cambridge University Press.
- Salmon, N. (1986a). Frege's Puzzle. Cambridge MA, MIT Press.
- —— (1986b). 'Reflexivity', Notre Dame Journal of Formal Logic 27: 401–29.
- Wiggins, D. (1976). 'Frege's problem of the morning star and the evening star', in M. Schirn (ed.), *Studien zu Frege / Studies on Frege*, volume 2. Stuttgart, Bad Canstatt, 221–55.