Sense as Mode of Representation*

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Half a century ago, Sir Michael Dummett wrote:

> It has become a standard complaint that Frege talks a great
> deal about the senses of expressions, but nowhere gives an
> account of what constitutes such a sense. (Dummett, 1973, p.
> 227)

And it still is a familiar complaint. What's worse, when Frege does
pause to indicate what the sense of some particular expression might
be, he usually falls back on definite descriptions. Thus, the sense of the
name "Aristotle" might be "the pupil of Plato and teacher of Alexander
the Great" (Frege, 1984c, op. 27, n. 4); the (public) sense of "I" might
be "he who is speaking to you at this moment" (Frege, 1984d, op. 66).
Such remarks make it tempting to suppose, as Saul Kripke (1980, p. 27)
notoriously did, that Frege accepted a form of the description theory of
names, according to which the sense of a proper name is *always* given by
a definite description. Most commentators nowadays follow Dummett
(1973, p. 110) in rejecting that attribution,[1] but that only makes the

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[1] That said, there are other remarks that may suggest that senses are descriptive. I
have in mind particularly this passage:

> The sense of a proper name is grasped by everybody who is sufficiently fa-
> miliar with the language or totality of designations to which it belongs; but
> this serves only to illuminate a single aspect of the thing meant, supposing
> it to have one. Comprehensive knowledge of the thing meant would require
> us to be able to say immediately whether any given sense attaches to it.
> (Frege, 1984c, op. 27)

Granted, Frege is talking only about the senses of names here, but these remarks are
easiest to understand if Frege is thinking of senses as descriptions. The "single aspect"
is then the property used to individuate the object. (The final remark then amounts, in
effect, to an explanation of why identity statements need not be trivial.) I doubt that

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question what senses are supposed to be more pressing, since no other answer seems to suggest itself.

What we get from Frege instead are a variety of uses to which he proposes to put the notion of sense. We might therefore choose to emphasize the theoretical roles that sense plays for Frege and to regard sense itself as programmatic. Frege's mention of descriptions can then be taken to suggest that, even if not all senses are descriptive, we can at least see how, in the special case in which the reference of a name plausibly is fixed by a description, a name might have a feature that could plausibly be identified with its sense. The challenge then becomes to identify what other features of names might play the same role or, the more heroic alternative, to defend the view that reference is always fixed by description.

What are the roles that the notion of sense is supposed to play? Dummett collects many of these in Chapter 6 of *Frege: Philosophy of Language*, which is titled "Some Theses of Frege's on Sense and Reference", and David Chalmers (2002, §2) presents a similar list in "On Sense and Intension". I'll offer my own.

By far the most important of the roles sense plays is the one with which Frege introduces the notion.

Thesis 1 Differences of sense track differences in 'cognitive value'.

This is what is often called 'Frege's criterion for sameness and difference of sense': Two beliefs (or other 'propositional atittudes') have different senses if it is possible for a thinker to hold the one belief but not to hold the other. The notion of possibility involved here is meant to be quite minimal. It is not required that it should be *rational*, under some circumstances, to believe, say, that Hesperus is a planet but not to believe that Phosphorous is. There might be cases, such as believing that A but not believing that $A \wedge A$, where that seems implausible, and yet we might want to distinguish the contents of these beliefs. Then again, if we are operating with a notion of belief that is not necessarily closed under logical inference—a notion of explicit rather than implicit belief, say—then there is nothing irrational about such a combination: Perhaps the question whether $A \wedge A$ simply hasn't arisen. Still, believing that Hesperus is a planet but not believing that Phosphorous is a planet seems as if it can be a rationally stable position, and one might want it

is what Frege really meant. Rather, I take him simply to have been emphasizing the ineliminably perspectival nature of cognition (Burge, 2009).

to be explained why that is. It's a natural suggestion that the notion of sense should play some role in that account. We'll return to this issue below.

For the moment, the important point is just that Thesis 1 ultimately reflects a metaphysics of propositional attitudes on which they are *binary* relations between thinkers and what Frege calls 'Thoughts'. Then, if it is metaphysically possible for a given thinker to be in one belief-state but not, at the same time, to be in another, then there simply must, by Leibniz's Law, be different Thoughts, as Frege calls them, to which those two belief-states do or would relate them.

Thesis 2 The sense of a sentence is a Thought.

Motivated as it primarily is by the sort of phenomena that lie behind Thesis 1, the notion of sense is primarily cognitive. But Frege insists that it is also linguistic.[2] In many ways, this reflects a simple, and attractive, picture of linguistic communication. The speaker has a certain belief that they wish the hearer to come also to have: That is, they believe a certain Thought that they wish the hearer also to believe. So they (asssertively) utter a sentence whose own content is that very Thought. In understanding this utterance, the hearer recognizes that Thought as its content and so is able to identify what Thought they are being invited to believe: In effect, the sentence 'encodes' the Thought in perceptible form by having it as its content.

Thesis 3 Sense is strongly compositional.

The first two theses concern the contents of beliefs and sentences: Thesis 1 implies that the Thought that is the content of the belief that Hesperus is a planet differs from that Thought that is the content of the belief that Phosphorous is a planet; Thesis 2 then implies that the sentences

(1)   Hesperus is a planet

(2)   Phosphorous is a planet

express different senses (i.e., Thoughts). But Frege's most famous discussions of sense concern proper names, and his conclusion is that the names "Hesperus" and "Phosphorous" have different senses. Frege seems to draw this conclusion from the fact that (1) and (2) have different senses

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[2] Jason Stanley used to call this claim "Frege's Thesis": the very same thing that's fit to be the content of an attitude is also fit to be the content of an utterance.

and does so without much by way of explanation. It appears, therefore, that he must be assuming that sense is compositional: that the sense of a complex expression, such as a sentence, is determined by the senses of its parts (and how those parts are combined).

In fact, Frege seems to hold something stronger. There are several places were he suggests that (1) and (2) have different senses *because* "Hesperus" and "Phosphorous" have different senses (e.g. Frege, 1984b, op. 14). Compositionality in the sense of 'determination' cannot support such a claim.[3] Reference, too, is supposed to be compositional, but the fact that "Mars" and "Venus" have different references does not explain why the sentences "Mars is a planet" and "Venus is a planet" have different truth-values, since they don't. Rather, Frege seems to hold that the sense of a sentence is, somehow, *composed from* the senses of its constituents, a view he expresses by saying that the senses of the parts are themselves *parts* of the whole (Frege, 2013, v. I, §32). The Thought that Hesperus is a planet must thus be composed *of* an 'objectual' sense and a 'predicative' sense, and the Thought that Phosphorous is a planet must be composed of a different 'objectual' sense but the same 'predicative' one.

This sort of language is plainly metaphorical, and one might wonder whether it can be made to do substantial work. But we must keep in mind the fundamental status of Thesis 1: Claims about sense must always ultimately surface in claims about cognitive value. Read in that light, what Thesis 3 implies is that, however we might ultimately want to understand what 'objectual' senses are, that must put us in a position to understand the cognitive differences between the corresponding Thoughts. That is: The difference between the 'objectual' senses corresponding to "Hesperus" and "Phosphorous" must allow us to explain why Thoughts in which they are swapped exhibit the cognitive differences they do.[4]

Thesis 4 Thoughts are truth-conditions.

Frege could hardly be more explicit about this thesis, at least as concerns his formal language:

> Every… name of a truth-value [that is, every sentence] *expresses* a sense, a *thought*. For owing to our stipulations

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[3] See Heck and May (2011) for much more on this point.

[4] Note that this way of understanding Thesis 3 also encompasses another Fregean thesis about sense: that the sense of a part is exhausted by the contribution it makes to determining the senses of larger expressions in which it occurs. This is a form of the 'Context Principle' (Frege, 1980, p. x, §62) at the level of sense.

[concerning the meanings of the primitive symbols], it is determined under which conditions it refers to the True. The sense of this name, the *thought*, is: that these conditions are fulfilled. (Frege, 2013, v. I, §32)

But Thesis 4 has a number of additional aspects.

First, Frege clearly seems to be implying whether the condition under which a sentence refers to the True is fulfilled is entirely a matter of how things objectively are: Once one has a Thought, that is to say, whether it is true is a matter of how the world itself is. There are no remaining degrees of freedom. This is one way to understand the famous Fregean thesis that sense determines reference, at least in the case of sentences. And, in light of Thesis 3, it is unsurprising that Frege holds a similar view in the case of proper names (Frege, 1984c, op. 30).

Conversely, Frege holds that only what is potentially relevant to truth-value is part of the sense. This, I take it, is Frege's best reason to distinguish sense from what he calls 'tone' or 'coloring' (see Dummett, 1973, ch. 1). Many of his discussions of this sort of point insist that tone involves 'ideas', which Frege dismisses as merely subjective. But his discussion of this point in the unfinished "Logic" of 1897 is more careful. He is willing to allow that the use of one word rather than another may involve Thoughts that are not, in some strict sense, *expressed* by the use of the word, plainly anticipating the notion of conventional implicature that would later be introduced by H. P. Grice (1989). The reason the difference between "dog" and "cur" does not rise to the level of sense is, Frege says, because it does not affect truth-value: "That is a dog" and "That is a cur" will always be true or false together, "[e]ven if it is grossly unfair to the dog to think of it in this way. . . " (Frege, 1979b, p. 140).

So Thoughts *are* truth-conditions in so far as they include everything that is needed to determine truth-value, given how the world itself is, and nothing that is not needed to determine truth-value.

Except for Thesis 2, the various claims we have discussed to this point do not concern language but would apply to sense considered only in relation to propositional attitudes. Frege makes a number of additional claims about various roles that sense is suited to play with respect to language. These include:

Thesis 5 Sense is indirect reference. That is, the reference of a complement clause such as "that Hesperus is a planet", as it might occur in "Alex believes that Hesperus is a planet", is the sense of the embedded sentence "Hesperus is a planet".

I will not discuss this claim, however, because our focus here will be on questions about the contents of propositional attitudes. I do not mean to imply that Thesis 5 is of no interest. Frege's proposal that there is a single notion fit to play a central role both in philosophy of mind and in philosophy of language is of great interest, but it also gives rise to some extremely challenging questions. I suspect myself that this bold thesis ultimately fails (Heck, 1995, 2002). But however that may be, the question whether we should distinguish the content of the belief that Hesperus is a planet from that of the belief that Phosphorous is a planet—and, if so, how—remains. One might think, in fact, we need to answer that question first before we can evaluate bold thesis. In any event, clarity is not served by characterizing the notion of sense from the outset in terms of a mixture of claims about mind and language.[5]

As said above, the sorts of principles we have been discussing do not by themselves tell us what sense is. They only constrain it. It's a nice question nonetheless whether there is any single notion that will do all the work Frege wants done, even if we ignore the applications to language. I will be arguing here that there may be no such notion. The difficulty concerns Theses 1 and 4, which are arguably the two claims that are most central to Frege's understanding of sense.

There are two traditions I will be discussing. The first, whose most familiar form is descriptivism, begins with Thesis 4, characterizing sense as what I shall call a 'condition on reference'. In order to satisfy Thesis 1, however, these conditions must be ones that are, in some sense, known to the thinkers whose mental states we are attempting to characterize. For familiar reasons that I shall recount in section 2, that forces conditions on reference to take a certain form that, ultimately, leads to abandonment of the spirit, if not the letter, of Thesis 4.

The other tradition, who best-known proponent is Gareth Evans, begins with Thesis 1 and characterizes sense in terms of facts about the thinker that make it possible for them to be in a certain representational state. These facts explicitly do not figure in the representational content of the state itself. Indeed, it is for that very reason that Evans's view does not regard sense as a condition on reference. But that, or so I will argue in section 3.4, seems to imply that Evans cannot uphold Thesis 4, that is, that he cannot regard sense as representational, as part of

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[5] Contemporary writers are usually pretty good about this, but the older literature often conflates issues about mental and linguistic content. Many of Ned Block's desiderata for a semantics for psychology, for example, concern language (Block, 1986, p. 616–9).

truth-conditions.

So, if I'm right, you can have Thesis 1 or you can have Thesis 4, but you cannot have both. Since I regard these two theses as essential to Frege's conception of sense, I therefore do not think there is any such thing as Fregean sense.

1 Dummett and Chalmers on Sense

Kripke's *Naming and Necessity* was first published as a (very long) paper (Kripke, 1972), just as Dummett's *Frege: Philosophy of Language* was going to press. Dummett added a lengthy appendix responding to Kripke's criticisms of Frege and, as mentioned above, vehemently objecting to Kripke's attribution to Frege of the description theory of names (Dummett, 1973, p. 100). In fact, Dummett had already distinguished Frege's theory from Russell's in Chapter 5, to which the appendix is appended. Dummett remarks that many philosophers

> suppose that Frege conceives of the sense of an ordinary... proper name as being that of some definite description.... Of course, in trying to say what the senses of different names may be, Frege is naturally driven to citing such definite descriptions: but there is nothing in what he says to warrant the conclusion that the sense of a proper name is always the sense of some complex description. (Dummett, 1973, p. 97)

Dummett goes on to argue that Kripke's arguments do not undermine the view Frege actually holds. What I want to do, in the present section, is to explain what understanding of the notion of sense Dummett attributes to Frege and to compare it to David Chalmers's account of sense in terms of epistemic intensions. As we'll see, Dummett's account anticipates Chalmers's and is in some ways more careful, if less formalistic.

Perhaps surprisingly, given the passage just quoted, Dummett does not deny that speakers who are competent with a given name must always grasp some uniquely identifying condition that an object must satisfy to be the referent of that name. Indeed, Dummett endorses that view explicitly:

> The sense of a word... consists in some means by which a reference of an appropriate kind is determined for that word. ... [T]he understanding which a speaker of a language has of a word in that language... can never consist merely in

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> his associating a certain thing with it as its referent; there must be some particular means by which this association is effected, the knowledge of which constitutes his grasp of its sense. (Dummett, 1973, p. 93; see also pp. 91, 95, 229)

Note that Dummett is not merely saying that there must *be* some condition an object must satisfy to be the referent of the name. Almost everyone who accepts that names have determinate reference would agree with that claim.[6] (E.g., if the causal theory of reference is true, then the condition in question is a causal one.) He is also saying that, to understand the name—to be able to use it with the reference it has—one must, in some sense, know what the condition in question is.

One might wonder, then, just how Dummett can reject Kripke's claim that Frege was a description theorist. The answer is that it matters in what sense the speaker knows the mentioned condition.

> What is important about Frege's theory is that a proper name...must have associated with it a specific criterion for recognizing a given object as the referent of the name; the referent of the name, if any, is whatever object satisfies that criterion. Sometimes the criterion may be capable of being conveyed by means of a definite description, in other cases not. (Dummett, 1973, p. 100; see also p. 138 and Dummett, 1978a, p. 129)

I take Dummett to mean here that the condition may not even be expressible by the speaker (that is, in the language of the speaker). And, strictly speaking, that is enough to defend (Dummett's) Frege against Kripke's insistence that his view is to be lumped with Russell's. According to Kripke, to accept the description theory is to hold that the referent of a name, for a given speaker, is whatever object has (some weighted) most of the properties that speaker believes the referent to have (Kripke, 1980, p. 64). But what Dummett is denying is precisely that the 'condition' an object must satisfy to be the referent is one that the speaker needs to *believe* the object to have. Rather, the speaker might have only what would later be called a 'recognitional capacity':[7] an ability to recognize the referent when presented with it.

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[6] The exception would be deflationists, who do not really want to talk about reference at all.

[7] I have been unable to find any use of that term in Dummett prior to 1982, when it is used by Evans in connection with what he calls "recognition-based identification" (Evans, 1982, p. 269), and to which he devotes an entire chapter. But, as we shall see

It would be a year or so before the the distinction between implicit and explicit knowledge would assume a central position in Dummett's thought about language (in "What Is a Theory of Meaning?" (Dummett, 1975), delivered at Wolfson College in 1974). But it seems reasonable to interpret him as suggesting that speakers might, in the sort of case he emphasizes, have only an *implicit* grasp of the condition an object must satisfy to be the referent. Dummett comes close to putting the point in these terms in "Frege's Distinction Between Sense and Reference", which was originally published in Spanish in 1975. Much as in "What Is a Theory of Meaning? (II)" (Dummett, 1976), Dummett insists in "Frege's Distinction" that "[a] theory of meaning...gives a theoretical representation of a practical ability..." (Dummett, 1978a, p. 128) and emphasizes the need to "explain in what...implicit knowledge consists..." (Dummett, 1978a, p. 129). Shortly thereafter, he makes much the same point we have just been discussing.

> Kripke has labelled Frege's thesis that proper names have sense 'the description theory', identifying it with the view that every proper name has the same sense as some definite description. It is, indeed, essential to Frege's view that a name can have the same sense as a definite description; but to think that a name can have no other kind of sense is seriously to misinterpret Frege. The idea that someone may have a capacity for recognising an object which he cannot further explain is in no way absurd, and it would be quite wrong to suppose that Frege had any motive to deny that a grasp of a name might, on occasion, consist in its association with just such a capacity.... (Dummett, 1978a, p. 129)

Dummett goes on to insist that we cannot simply rest with the observation that the speaker has such a capacity but must describe it more carefully. Doing so will reveal the condition an object must satisfy to be the referent of the name.

It is easy to get the sense that Dummett is of two minds about this. On the one hand, he writes: "We must not ask *how* or *by what* the object is recognized; even if there is an answer, the subject does not have to know it" (Dummett, 1978a, p. 129). But it is the second of these

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shortly, Dummett does speak, in "Frege's Distinction Between Sense and Reference", of "a capacity for recognising an object" or "a capacity for recognition" (Dummett, 1978a, pp. 129, 130).

two remarks that is important here, not the first, and it is clear that Dummett means only that the subject does not have to know *explicitly* how they recognize the object. It matters very much *how* they do so. That is because the sense of a name, even when explained in terms of recognitional capacities, must be able to play the cognitive role for which sense was originally introduced, a point Dummett emphasizes.

> All that is necessary, in order that the senses of two names which have the same referent should differ, is that we should have a different way of recognizing an object as the referent of each of the two names: there is no reason to suppose that the means by which we effect such a recognition should be expressible by means of a definite description or any other complex singular term. (Dummett, 1973, p. 98)

At the very least, then, we need to say enough to explain how the speaker might be in a position to recognize someone as Alex, say, but not as Tony, despite that fact that Alex and Tony are one and the same, and so not know that Tony is F, although they do know that Alex is F. As Dummett (1978a, p. 129) puts the point, "...although a subject may be unable to give any *account* of [their recognitional] capacity, it requires further *description*". To justify the claim that the names have different senses, we need (in principle) to articulate the different ways in which the speaker recognizes the object. In doing so, we would also be elaborating the condition an object needs to satisfy to be the referent of the name.

We might say, then, that Dummett understands sense as *a condition on reference*. How much it matters whether this condition can be stated in the language of a given speaker is a question to which we shall return. The point to appreciate is that, in *some* sense, this condition does need to be known to the speaker, even if it is not known explicitly: The speaker's use of the name must be guided by their appreciation of the condition that determines its reference; only then can sense, so construed, do the explanatory (cognitive or psychological) work for which the notion of sense was introduced.

This same sort of view has been defended, more recently, by Chalmers, in his paper "On Sense and Intension".[8] Like Dummett, Chalmers (2002, pp. 142–3) argues that, in many cases, there may be no suitable

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[8] And developed further in his book *Constructing the World* (Chalmers, 2012). But I'll focus on the earlier paper, since semantic issues lie slightly below the surface in the book.

description that might be used to state a condition on reference. But, he suggests, we should

> think about the work that descriptions are doing here. The role of a description is plausibly to give us a *condition on extension*: a condition that an entity in the world must satisfy in order to qualify as an expression's extension, depending on how the world turns out. . . . It may be that for some expressions. . . , there is no description that can do this job. It is nevertheless not implausible that the expression's extension depends in *some* fashion on how the world turns out, and in particular that full knowledge of how the world turns out puts a subject in a position to identify the expression's extension. We can then generalize to think of an expression's sense as the relevant condition on extension, whether or not this condition can be captured by a description. (Chalmers, 2002, p. 143, emphasis original)

Chalmers's view extends Dummett's in a few ways. First, he offers this as a model not just of the senses of proper names but of expressions in general. Hence his use of the term "extension" rather than "reference". Second, whereas Dummett seems to think that sense is determined by recognitional capacities only for a handful of names,[9] Chalmers regards the case in which a description is available as exceptional or, at least, as just a special case of a more general phenomenon. Competence with a given expression requires, Chalmers (2002, pp. 144–5) claims, a capacity to determine its extension given sufficient (in the limit, complete) information about the world.[10]

It is a virtue of Chalmers's discussion that he is very clear about the need for conditions on extension to be grasped, in some sense, by speakers.

> What do conditions on extension have to do with cognitive significance? An attractive idea is that when an expression plays

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[9] Writing: ". . . [T]he suggestion that our understanding of all, or even of many, names is of this kind is no more than ludicrous" (Dummett, 1978a, p. 129). I'd have thought that our understanding of the names of most people we encounter in our daily lives was of this kind (if one likes this kind of model).

[10] There is another obvious difference between Chalmers and Dummett. Since Chalmers is not tempted by the sort of anti-realism for which Dummett is famous (see e.g. Dummett, 1959, 1978b, 1991), Chalmers frames his account from the outset in terms of facts about the world that may be unknown by ordinary thinkers, or even unknowable.

a certain cognitive role for a speaker, then it will be associated with certain tacit criteria for identifying the extension of the expression, given sufficient information about the state of the world. It is natural to hope that these criteria will reflect the cognitive role of the expression in some deep respects. In order to tie a condition on extension to cognitive significance in this way, it is important that the relevant condition on extension be understood *epistemically*, in a manner that is closely connected to a speaker's knowledge and cognition. (Chalmers, 2002, p. 143, emphasis original)

Chalmers proceeds to use this observation to motivate his treatment of sense in terms of epistemic intensions. Intensions, in the sense of modal logic, are functions from possible worlds to extensions. To think of these epistemically, then, we need to think of possible words themselves in epistemic terms—not as ways the world might have been, but as ways the world might actually turn out to be. The underlying picture, again, is that competence brings with it, or even consists in, a capacity to determine the extension of one's words given sufficient information about the world. To put it differently, and to focus on proper names, competent speakers have a disposition to pick out some object as the referent of a name, given enough information about the world in which they live. The epistemic intension associated with a proper name thus maps a given possible world onto the object that competent speakers are disposed to identify as its referent in that world.

This aspect of Chalmers's view is often regarded as distinctive, but it is in fact already present in Dummett, who notes in his discussion of Kripke in the mentioned Appendix that this sort of understanding of sense can naturally be expressed in terms of intensional logic.[11] Dummett first claims that comptence with a term requires one to have the sort of disposition on which Chalmers's account depends:

> ...[A]nyone who grasps the principle by which we determine whether [a predicate] is true of any given object will be able to say, given a sufficient description of some possible world, whether or not it would be true of a given object in that world. And...someone who does not fully grasp the sense of the predicate may be able to discover [what it is] by describing

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[11] Dummett had worked on modal logic early in his career and co-authored a technical paper on logics between S4 and S5 (Dummett and Lemmon, 1959).

imaginary circumstances, and asking whether the predicate would or would not be true of given objects in those circumstances. (Dummett, 1973, p. 133)

As Dummett notes, however, there is a question about what sorts of 'worlds' these should be taken to be. He reminds us that "Kripke operates... with two notions of possibility, an epistemic and a metaphysical one" (Dummett, 1973, pp. 133–4) and then argues as follows:

> ... [I]t is plain that it is the notion of *epistemic* possibility that is required if we want to represent sense as a function from possible states of affairs to reference. Sense is... a cognitive notion: it relates... to the way in which we set about determining the reference of our words. Hence, if we want to get at the sense of an expression by imagining states of affairs and asking what its application would then be, these states of affairs should be taken as those which might *turn out to be so*, whether also classifiable as real [i.e., metaphysical] possibilities or not. (Dummett, 1973, p. 134, my emphasis)

Dummett, however, is far less enthusiastic than Chalmers is about the prospects for identifying senses with epistemic intensions. His reason is that epistemic intensions are insufficiently fundamental. In so far as speakers do have a disposition to identify the extension of a predicate, given a complete description of a possible world, that disposition must be grounded in some "principle by which we determine whether or not [the predicate] applies to any given object" (Dummett, 1973, p. 133). Dummett is prepared to allow that such a principle will *generate* an epistemic intension, but it is the principle, he insists, that is "genuinely explanatory" (Dummett, 1973, p. 134). The upshot is supposed to be that sense should be identified with what Chalmers (2002, p. 143) calls the speaker's "tacit criteria for identifying the extension of the expression", not with the intension that those criteria generate. But Dummett does not really give us sufficient reason, in the Appendix on Kripke, to reject the identification of senses with epistemic intensions. All he really says is that it is the criterion that a speaker actually grasps. We'll return to this issue in section 2.4.

Part of what explains Chalmers's attraction to the view that senses are epistemic intentions is his concern with the question *what senses are*, metaphysically speaking. I confess that my Dummettian heritage makes it somewhat difficult for me to take that worry seriously. What matters

is less what sense is than what *grasp* of sense is, and to grasp the sense of a name, on this view, is (implicitly or tacitly) to know a condition on reference that enables one, given sufficient and appropriate information, to determine the referent of that name. Perhaps one will want to say, then, that senses *are* conditions,[12] and conditions themselves can be treated intensionally, if one wishes. For the moment, though, I propose to set this issue aside and focus on what Chalmers and Dummett have in common: the view that senses are conditions on reference, however we think of the latter.

2 Sense As a Condition on Reference

If sense is a condition on reference, and if meaningful names have sense, then, for each such name N, there is a condition Φ_N that an object must satisfy for it to be N's referent. As we have seen, both Dummett and Chalmers deny that this condition will always (or even often) be expressible by some linguistic description, or be explicitly and consciously known to the subject, but the condition is nonetheless one that competent speakers grasp and which guides their linguistic behavior. So one question we might want to ask is: To what extent do the familiar arguments against the description theory of names depend upon the claim that the associated description must be expressible by the speaker?

2.1 The Modal Argument

As is well known, Kripke offers several different arguments against the description theory in *Naming and Necessity*. The first of these is generally known as the modal argument. It purports to show that a proper name can *never* have the same meaning as a definite description. This allows us to side-step an issue that will arise later, namely, what the associated description might reasonably be taken to be in the case of actual proper names, like "Kurt Gödel". The modal argument is meant to apply even to what Evans (1979, p. 162) would later call 'descriptive names', whose reference is (relatively) uncontoversially[13] fixed by some description. Real-life examples are rare, but Kripke mentions a few,

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[12] I find it puzzling why Chalmers (2002, p. 142) insists that descriptions are "linguistic entities" and therefore rejects the claim that senses are descriptions. Surely descriptions are just conditions or, if you like, properties.

[13] Dickie (2015) has questioned whether this is always true, and I think she has a point (Heck, 2017, pp. 740–1). But we can set the issue aside here.

including "Jack the Ripper" and "Neptune". Dummett (1981, p. 112) mentions "Deutero-Isaiah" and the case on which we'll focus, "St Anne", which is used as a name for the mother of Mary the mother of Jesus of Nazareth. Little is known about St Anne, other than that she was a Jewish woman who lived in Roman-occupied Palestine a couple decades before the common era.

It seems to me that it is much less clear than is usually supposed exactly what the modal argument is. Chalmers (2002, p. 160) writes that "Kripke's central point against the description theory was that names and descriptions function differently in modal contexts...". Understood in this way, Kripke's argument consists in pointing out that

(3)   It is necessary that St Anne was a parent.

(4)   It is necessary that the mother of Mary was a parent.

have different truth-values. This datum is now mostly uncontroversial, though it cannot be properly appreciated without Kripke's famous distinction between 'metaphysical' and 'epistemic' notions of necessity, which is introduced in the course of discussing exactly this kind of example.

Several sorts of replies to this argument have been offered: Dummett (1973, pp. 127–8) suggests that the phenomenon is one of scope; Jason Stanley (1997) suggests that the descriptions associated with names should be 'rigidified'; Chalmers (2002, pp. 161ff) suggests that names have two kinds of intensions, epistemic and subjunctive. (I'll explain below what these are.)

The difficulty, however, is that Kripke explicitly and vehemently denies that the modal argument concerns such statements as (3) and (4). Rather, he says, his claim concerns "the truth conditions, with respect to counterfactual situations, of... *all* sentences, including *simple* sentences" that contain no modal operators at all (Kripke, 1980, p. 12). That is, the argument is supposed to concern these two sentences:

(5)   St Anne was a parent.

(6)   The mother of Mary was a parent.

But what claim about these sentences is Kripke making? One claim he makes is that (5) is metaphysically contingent whereas (6) is metaphysically necessary (Kripke, 1980, p. 13), which makes this version of the argument closely parallel the earlier one. But are our 'intuitions' about the 'modal status' of such sentences sufficiently secure for Kripke to rest

as much he does on them? A second difficulty is that, as Stanley (1997, §III) makes clear, it is not at all obvious that this observation shows that (5) and (6) do not have the same meaning. If we interpret the argument this way, then Kripke seems just to be assuming that modal status is determined by meaning.

Kripke (1980, pp. 32ff) famously distinguishes two senses in which a proper name might be 'semantically associated' with a definite description: the description might "give the meaning" of the name or it might merely "fix the reference" of the name. If, with this distinction in mind, we reflect again on Kripke's later remark that the modal argument concerns "the truth conditions, with respect to counterfactual situations, of...*simple* sentences", then all falls nicely into place. What Kripke means to be observing is not that (5) and (6) differ in 'modal status' but simply that they have *different truth-conditions*. And surely that would be enough to show that they have different meanings. Such an argument disposes of Dummett's suggestion, though not of Stanley's. It still open to us to hold that the description with which "St Anne" is semantically associated is "the *actual* mother of Mary", since (5) and

(7)   The actual mother of Mary was a parent.

will be true in the same counterfactual situations. But there difficulties with this view (see Soames, 1998) that I'd prefer to avoid if possible.[14]

Chalmers responds differently.[15] As already noted, he distinguishes an expression's epistemic intension from its subjunctive one. The difference between these lies in what kinds of possible worlds are in the domain of the intension in question. In calculating the epistemic intension, we are supposed to ask what the extension of a given expression would be if the world turned out *actually to be* a certain way. It could turn out, for example, that Mary never existed. Perhaps Jesus did not have a human mother; perhaps the stories about him do not concern a historical person, and Jesus himself did not exist. If so, then "St Anne" has no reference. In calculating the subjunctive intension, however, we are meant to consider *counterfactual* situations. Here, we may assume that Mary really did exist and so, being a mortal woman, had a mother. But it

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[14] I don't necessarily mean to be saying that I think Soames's objections are unanswerable, only that they do pose problems. The main difficulty with Soame's discussion is that he assumes a conception of propositions and their consituents that is bound to be controversial.

[15] Though in a way that is anticipated by Stanley (1997, pp. 151ff) and, as we have seen, by Dummett himself.

is metaphysically possible that St Anne should have died in infancy, and if so she would never have been a mother. So there are possible worlds, 'considered as counterfactual', in which St Anne existed but Mary did not, whereas there are no possible worlds, 'considered as actual'—that is, as alternative ways things might actually turn out to be—in which St Anne exists but Mary does not. After all, St Anne, if she existed at all, was (actually) the mother of Mary.

Chalmers first introduces this distinction, as mentioned earlier, to account for the difference between (3) and (4). He later raises the question, however, whether the truth-conditions of (5) are given by its epistemic intension or its subjunctive intension. In response, he insists that there is no need to choose: there are just two notions of truth-condition, and both are needed. But there is a much stronger response available, which was foreshadowed above. It is part of Frege's view, which we recorded earlier as Thesis 4, that Thoughts are truth-conditions and so that the sense of a sentence is its truth-condition. We can distinguish epistemic truth-conditions from subjunctive truth-conditions if we wish. But, once this sort of distinction has been drawn, it is clear that the notion of truth-condition invoked in Thesis 4 must be modeled by *epistemic* intensions if it is going to be modeled by intensions at all. We have already seen that Dummett (1973, p. 134) makes precisely this observation: "...[I]t is plain that it is the notion of epistemic possibility that is required if we want to represent sense as a function from possible states of affairs to reference".[16] Chalmers (2002, p. 159) similarly remarks that "...the notion of sense was always tied to epistemic notions such as apriority, not to notions such as 'metaphysical necessity'".[17]

I'd put the point this way: Even if we (wrongly) construe Frege as a description theorist, there is simply no reason to think that he is committed to any of the claims at which the modal argument is directed, whether they concern (3) and (4) or (5) and (6). In fact, I would go further: It is far from clear to me that *any* of the philosophers Kripke identifies as endorsing the description theory are committed to *any* claims that the modal argument might refute.[18] In particular, there is no good

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[16] Stanley (1997, pp. 151ff) makes a similar point.

[17] In a footnote attached to this sentence, Chalmers (2002, p. 180, note 8) remarks that "Dummett 1973 [*Frege: Philosophy of Language*] makes a similar point in discussing Kripke's argument". No: Dummett makes *exactly* this point.

[18] One possible exception is Russell, since he held that names are abbreviations for descriptions. But Russell tended to be unconcerned with modal phenomena, so it is difficult to be sure. A second exception might be David Lewis. Kripke (1980, pp. 43ff)

reason to saddle such philosophers with Kripke's thesis (6), which, for our purposes, may be stated as:

Thesis (6) The statement, "If N exists, then N is the Φ_N" expresses a (metaphysically) necessary truth.

This thesis is supposed to be distinctive of the view that the associated description Φ_N "gives the meaning" of a proper name instead of just fixing its reference (Kripke, 1980, p. 65). But what I am suggesting is that the form of the description theory that was historically popular was always that descriptions 'fix the reference' and was never that they 'give the meaning'—though, before Kripke made that distinction explicit, there were ample opportunities to confuse, or to conflate, these two claims, opportunities of which many philosophers took advantage.

Late in Lecture I, Kripke quotes a passage from John Searle's paper "Proper Names":

> To put the same point differently, suppose we ask, "why do we have proper names at all?" Obviously to refer to individuals. "Yes but descriptions could do that for us". But only at the cost of specifying identity conditions every time reference is made: Suppose we agree to drop "Aristotle" and use, say, "the teacher of Alexander", then it is a necessary truth that the man referred to is Alexander's teacher—but it is a contingent fact that Aristotle ever went into pedagogy (though I am suggesting it is a necessary fact that Aristotle has the logical sum, inclusive disjunction, of properties commonly attributed to him...). (Searle, 1958, p. 172)

Kripke (1980, p. 61) then remarks: "Such a suggestion, if 'necessary' is used in the way I have been using it in this lecture, must clearly be false". And that is of course correct. But it is far from obvious that Searle *is* using the term "necessary" in the way Kripke was then urging us to use it. Like almost everyone else who wrote before *Naming and Necessity* was published, Searle would not have distinguished metaphysical from epistemic necessity and so would have used "necessary" ambiguously or confusedly. Charitably to interpret Searle, then, we need to ask in which sense he was plausibly using the term in this passage.

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spends quite some time discussing the bearing of counterpart theory on these issues. If some purely qualitative conditions are needed to identify an object in other worlds, then that might well lead to Thesis (6). But Lewis is a very special case, and counterpart theory has nothing obvious to do with Frege's reasons to introduce the notion of sense.

And the rest of Searle's paper makes the answer obvious. The central question Searle (1958, pp. 167–8) means to be discussing is "how it comes about that we are able to refer to a particular object by using its name". The answer is supposed to be that there is a cluster of associated descriptions that the referent of the name uniquely satisfies.[19] So descriptions, on Searle's account, primarily play a reference-fixing role. Indeed, the material omitted from the quotation above, which Kripke fails to indicate with elipses,[20] reads, following a colon: "any individual *not having* at least some of these properties could not *be* Aristotle" (Searle, 1958, p. 172, my emphasis). Searle obviously means that the *actual* reference of the name "Aristotle" could not fail *actually* to have some of the properties in the associated cluster. Nothing in Searle's discussion commits him to thesis (6), that is, in this case, to the claim that it is *metaphysically* necessary that Aristotle should have at least one of the properties in the cluster.

Kripke also identifies Sir Peter Strawson (1959, ch. 6) as having endorsed the description theory in *Individuals*. Kripke does not explicitly claim that Strawson is committed to thesis (6) or even to the strong form of the description theory according to which descriptions 'give the meaning' of names.[21] In Strawson's case, however, it appears that he could accept that descriptions 'give the meaning' of names without being committed to thesis (6) because of how he thinks descriptions themselves work. According to Strawson (1950), a sentence like:

(8)   The mother of Mary had a childhood illness that rendered her infertile.

does not, as Russell held, assert that Mary had one and only one mother who had a childhood illness that rendered her infertile. Rather, the sentence *presupposes* that Mary had one and only one mother and asserts,

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[19] Searle's view is actually a bit more subtle. He seems to think that the cluster is open-textured. (In a later paper, Searle (1978) seems almost skeptical of the notion of literal meaning.) But I'll ignore that aspect of his view here.

[20] Early in Lecture II, Kripke quotes part of this passage again (Kripke, 1980, p. 74). The elision is indicated there, but that quotation has other (though less significant) problems. It begins with "Suppose we agree...", but there is no indication that the earlier part of that sentence has been elided. It also omits the parenthesis before "though", replacing it with a comma and so, unsurprisingly, also omits the closing parenthesis.

[21] As we shall see below, however, Kripke does suggest that anyone who attempts to use the description theory to address the informativity of identity-statements, as Strawson does, is committed to such a view.

of that person, that she had such an illness.[22] So if we consider

(9)   The mother of Mary could have had a childhood illness that rendered her infertile.

then, according to Strawson, this sentence presupposes that Mary had one and only one mother and asserts, of that person, that she could have had a childhood illness that rendered her infertile. I can see no reason, then, that Strawson cannot regard (9) as true even while insisting that no utterance of (8) could be true. Hence, Strawson can equally regard

(10) St Anne could have had a childhood illness that rendered her infertile.

as true, even if he takes it to be an abbreviation for (9). Strawson's view thus seems to have been immune to the modal argument because, again, of his views about descriptions.

Moreover, one does not have to agree with Strawson about the analysis of descriptions to hold a view that has the same immunity. In particular, one could hold that descriptions *understood as Strawson understands them* 'give the meanings' of proper names, whether or not Strawson is right about how actual descriptions work. More simply, the view would be that each proper name N is associated with some identifying condition Φ_N (or a cluster of such conditions); that the referent of N is the object, if any, uniquely satisfying Φ_N (or some weighted most of the cluster of conditions); and that a statement of the form "$\Psi(N)$" presupposes that the referent of N satisfies Φ_N (or some weighted most) and says, of N, that it is Ψ. Competence with the name would require appreciating this last fact concerning what its use presupposes, and so the description(s) associated with a name would be part of its meaning in one reasonable sense.[23]

Does the associated description 'give the meaning' of the name on this view? Kripke never clearly explains what that phrase is supposed to mean. When he spells out the description theory of names at the end of Lecture I, the only thesis proprietary to the view that descriptions give the meanings of names is the previously mentioned thesis (6), which concerns metaphysical necessity. But one would have supposed that

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[22] I am neglecting a number of aspects of Strawson's position that do not matter for present purposes, such as that only utterances of (8) make assertions.

[23] Manuel García-Carpintero (2000) holds a version of this view. My own discovery of it was independent.

thesis (6) was supposed to be a consequence of the claim that descriptions 'give the meanings' of names, not a statement of it. Much of the time, Kripke seems to regard Russell's claim that names abbreviate definite descriptions as the paradigm case of the view that descriptions 'give the meanings' of names.[24] If so, then one can see why he would suppose the view committed to thesis (6), since "If the Φ_N exists, then the Φ_N is Φ_N" looks to be metaphysically necessary, at least given Russell's account of descriptions. As we have seen, however, that is not obviously so on Strawson's account.[25]

The most plausible interpretation, however, is surely that, when Kripke talks about a description 'giving the meaning' of a name, he is thinking of meaning as intension, in the sense of modal logic. So the view that descriptions 'give the meanings' of names is the view that the intension of a name is the intension of the associated description. Moreover, the fact that names are rigid whereas descriptions (on a Russellian analysis) typically are not—that is, names have constant intensions whereas descriptions typically have non-constant ones—then immediately implies that names do not have the same intensions as typical descriptions. That then leaves the way open for a defender of the description theory simply to claim that the intensions of names are always those of associated *non*-typical descriptions, such as actualized or rigidified descriptions, or to insist that descriptions understood as Strawson understood them are (at least sometimes) rigid.[26] But the more important point, for our purposes, is that Kripke's terminology is extremely tendentious. Even if we do think of meaning in terms of intension, we might prefer epistemic intensions rather than 'metaphysical' or, in Chalmers's terminology, 'subjunctive' ones. And we need not think of meaning in terms of intension at all.

That said, Kripke does gesture towards an argument that the description theory must be understood in the stronger sense. Early in Lecture I, when he is introducing the description theory, he mentions a number

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[24] For example: "Frege and Russell certainly seem to have the full blown theory according to which a proper name is not a rigid designator and is *synonymous* with the description which *replaced* it" (Kripke, 1980, p. 58, my emphasis).

[25] It's worth emphasizing that Strawson's account of descriptions is alive and well. My sense is that it's extremely widespread among linguists, if a bit less so among philosophers.

[26] In discussing the passage from Searle mentioned above, Kripke (1980, p. 61) mentions that Searle's claim would be correct if he had "some very interesting essential property commonly attributed to Aristotle" in mind. It turns out, in effect, that he might also have had a very boring essential property of Aritstotle in mind: being the *actual* Φ.

of advantages that it is supposed to have, including that it promises an account of the informativity of identity-statements (that is, an account of the cognitive significance of names). He writes:

> . . . [Y]ou see a star in the evening and it's called "Hesperus". . . . We see a star in the morning and call it "Phosphorus". Well, then, in fact we find that it's not a star, but is the planet Venus and that Hesperus and Phosphorus are in fact the same. So we express this by "Hesperus is Phosphorous". Here we're certainly not just saying of an object that it's identical with itself. This is something that we discovered. A very natural thing to say is that the real content [is that] the star which we saw in the evening is the star which we saw in the morning. . . . This, then, gives the real meaning of the identity statement in question; and the analysis in terms of descriptions does this. (Kripke, 1980, p. 29)

So, Kripke seems to be suggesting, it's essential to this story that the "real meaning" of a statement involving proper names be the same as that of a statement in which the names have been replaced by the associated descriptions. And he later argues that, if you abandon the view that descriptions 'give the meanings' of names in favor of the view that they merely 'fix the reference', then you lose the ability to account for the informativity of identity-statements (Kripke, 1980, pp. 58–9).

Is that right? To answer this question, I suggest that we ask whether Strawson can account for the informativity of identity-statements involving descriptions. If so, then he presumably also has an account of the informativity of identity-statements involving names. So consider:

(11) The last 'star' visible in the morning is identical with the first 'star' visible in the evening.

This sentence, on Strawson's view, presupposes that there is a unique body that is the last 'star' visible in the morning and that there is a (possibly different) unique body that is the first 'star' visible in the evening, and it asserts of those bodies that they are identical. Does that explain how (11) can be informative? Well, yes and no. It's clear enough how one could fail to realize that (11) is true: For it to be true, there has to be a single body that is both the last 'star' visible in the morning and the first 'star' visible in the evening. But that is not what (11) itself asserts, so those considerations do not settle the question whether (11) can be informative.

To put the problem another way, forget about the sentence (11). What is really at issue is the epistemological status of a certain *belief* that we might have, the one we express as "Hesperus is Phosphorous". Even if we think of this belief as amounting to the one expressed by (11), that only raises the question what belief *is* expressed by (11). If the descriptive material does not figure in the content of what is expressed by (11), then it would seem that (11) just expresses the identity of an object with itself. The fact that the descriptive material is presupposed is not obviously relevant, since presupposition is not a notion obviously applicable to belief. But that makes it quite unclear what Strawson should say about identity-beliefs.

Still, it is easy enough to modify the neo-Strawsonian view elaborated earlier (see p. 20) so as to account for such beliefs. The view will now be one not about names but about the sorts of singular thoughts that are expressed using proper names. On this account, then:

NS1 A thought expressible using a proper name will always have some associated identifying condition Φ (or a cluster of such conditions).

NS2 The object that such a thought is about will be that object, if any, that uniquely satisfies Φ (or some weighted most of the cluster of conditions).

NS3 The fact that the object of the thought is the Φ will not just be known to, and a priori for, the thinker of such thoughts but will specify the cognitive or inferential role of such a thought and thereby specify its content, its sense.

The fact that, when such thoughts are expressed using a proper name, it is presupposed that the referent of the name is Φ might then be regarded not as an independent fact about the meanings of names but as a consequence of the nature of the thoughts names are used to express.[27]

More would need to be said, of course, properly to develop such a view. But it seems likely that, when it was so developed, it would end up being a form of the view that sense is a condition on reference—the view attributed earlier to Dummett and Chalmers. The roundabout route we have taken to this point was thus not meant to lead us to a different view

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[27] This proposal is in the spirit of the elegant view developed by García-Carpintero. His focus, though, is on language. He proposes to account for the informativity of identity-statements by claiming that, in them, presupposed material is actually expressed (García-Carpintero, 2000, pp. 141–2). But that doesn't address the question about belief.

but to show that already in Strawson we find a view that is immune to the sorts of objections Kripke brings against the description theory of names in Lecture I.

Now let me be clear: That is by no means to say that Kripke's discussion in Lecture I is not valuable. It remains just as important as it ever was. But its importance, or so I am suggesting, is not that it refutes the 'strong' form of the description theory, a form that is needed if the description theory is to provide a solution to Frege's puzzle. That view was never held,[28] and it is not needed to solve Frege's puzzle. Rather, Kripke's contribution was to clear up certain independently important confusions—most importantly, the conflation of metaphysical with epistemic necessity—that made it difficult to see what form of the description theory *is* needed to solve Frege's puzzle. To put it differently, Lecture I is mostly very, very important ground-clearing.[29] The crucial arguments in *Naming and Necessity*, as I read it, are those in Lecture II, to which we now turn.

2.2   The Epistemic Arguments

In Lecture II, Kripke offers a series of arguments against the weaker form of the description theory: one according to the descriptive conditions associated with names merely 'fix their reference'. There are two main arguments,[30] which I call the 'argument from ignorance' and the 'argument from error'.[31] These arguments are harder to evaluate, since, in this case, it is an important issue what sort of description *actually does* fix the referent of a given name. In the context of the modal argument, we could simply focus on descriptive names, for which no such question need arise.

The argument from ignorance purports to show that one can use a name to refer to someone even if one does not have identifying informa-

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[28] Except, perhaps, by Lewis. See footnote 18.

[29] I take myself to have learned this from Bob Stalnaker.

[30] Chalmers (2002, p. 173) suggests that there is also a third argument, one to the effect that "Gödel proved the incompleteness of arithmetic" would be a priori (for certain people) if the description theory were true, but it is not a priori because we could discover that it is false. Such an argument seems to assume, however, that what is a priori is infallible (or at least unrevisable), which I see no reason to accept. But if the issue is just that we could discover that the claim in question is false, then that is the argument from error.

[31] Both terms have antecedents in the literature, but, so far as I can tell, there is no established terminology.

tion about that person. Kripke (1980, pp. 81–2) develops the argument using a now famous example about Richard Feynmann and Murray Gell-Mall. Many people do not know anything about these two people other than that they are famous physicists.[32] Other people might have a fair bit more information about them, yet not know anything that distinguishes them. Yet, Kripke insists, such people can still use these two men's names to refer to them.

The argument from error purports to show that, even if one does have information about a person that is uniquely identifying, the name might not refer to the person of whom that information is true. Kripke (1980, pp. 82–7) develops this argument at somewhat greater length, using several examples, the best-known of which concerns Kurt Gödel and the mysterious Schmidt.

> Let's suppose someone says that Gödel is the man who proved the incompleteness of arithmetic.... In the case of Gödel that's practically the only thing many people have heard about him—that he discovered the incompleteness of arithmetic. Does it follow that [for such people] whoever discovered the incompleteness of arithmetic is the referent of "Gödel"? ...Suppose that Gödel was not in fact the author of this theorem. A man named "Schmidt", whose body was found in Vienna under mysterious circumstances many years ago, actually did the work in question. His friend Gödel somehow got hold of the manuscript and it was thereafter attributed to Gödel. On the view in question, then, ...since the man who discovered the incompleteness of arithmetic is in fact Schmidt, we [who have heard nothing else about Gödel],[33] when we talk about "Gödel", are in fact always referring to

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[32] Kripke (1980, pp. 68ff) dismisses meta-linguistic descriptions such as "is named 'Richard Feynmann'" because of worries about circularity. But there could easily be a similar example in which the two characters had the same name. For example, there were two pitchers in Major League Baseball, both named "Pedro Martinez", whose careers overlapped. One might know that, but not know anything else about them. One might well wonder, however, whether such a person could use the name "Pedro Martinez" to refer to one of the pitchers rather than the other. (For some related worries, see Gray (2016, 2020).) I myself have no strong commitments about this, though I think I can imagine a case where the answer would be "yes". But let me not pursue the issue here.

[33] It's clear that this is Kripke's intention, though some discussions of this example seem to miss this point. Kripke's lectures were delivered at Princeton University, and he mentions later that some of the people in the audience "may have met the man" (Kripke, 1980, p. 89). Gödel was then at the Institute for Advanced Study, at Princeton.

Schmidt. But it seems to me that we are not. We simply are not. (Kripke, 1980, pp. 83–4)

If, indeed, the only information someone has about Gödel is that he proved the incompleteness of arithmetic, then, if this story were fact, and if the description theory were true, the name "Gödel", as used by that person, would refer to Schmidt.[34] But, Kripke insists, that simply isn't true: Such a person would still use "Gödel" as a name of Gödel.

That, of course, is the crucial claim here: that, even in this sort of scenario, someone who 'knows' only that Gödel proved the incompleteness theorem still uses "Gödel" to refer Gödel (and so does not, after all, know what they think they know). It seems to have been widely assumed, at least until recently, that this claim rests upon 'intuition'. But it has also been argued that such intuitions are culturally variable (Machery et al., 2004) and that it is therefore unwise to rely upon those intuitions (Mallon et al., 2009, pp. 338–40). But the first step here is already a mis-step: Kripke's argument simply doesn't depend, essentially, upon an appeal to anyone's intuitions about the Gödel–Schmidt case. As Max Deutsch (2009, pp. 451–3) emphasizes, Kripke gives independent arguments in favor of this claim, and the arguments are what carry the weight. As I argue elsewhere, the crucial insight that underlies Kripke's argument is that using language to engage rationally with one another person presupposes (at least) a certain constancy of reference. Kripke is just right that the use of proper names is embedded into the social fabric of our lives. That is why all extant theories of proper names strive somehow to incorporate the social aspects of language-use, and that includes modern forms of the description theory.

The basic strategy for doing this was already described by Dummett in "The Social Character of Meaning",[35] which was written in 1973:

> Suppose that the causal theory of reference is correct in that it gives an accurate account of the way in which, in problematic cases, it is generally agreed that the reference of a name is to be determined; most speakers are tacitly aware that this is the proper procedure, and those who are not are prepared to abide by it as soon as they discover that it is generally

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[34] To put the point in Chalmers's terms: The epistemic intension of "Gödel", for such a person, would map the possible world Kripke has described to Schmidt.

[35] It is, I think, because Dummett was never attracted to the kind of individualism that Kripke is attacking in Lecture II that he reacts so negatively to Kripke's discussion. And, indeed, there is nothing about descriptivism that enforces individualism.

> accepted. Then the causal theory does not replace the thesis that proper names have senses; it merely gives an account of what sorts of senses they have.... (Dummett, 1978c, p. 423)

What Dummett is suggesting is that the descriptivist can just borrow the account of reference Kripke himself proposes as an alternative— or whatever other account one might prefer. I call this kind of move "Nozick's Gambit",[36] since Kripke reports Robert Nozick as having made such a suggestion very early on:

> As Robert Nozick pointed out to me, there is a sense in which a description theory must be trivially true if any theory of the reference of names, spelled out in terms independent of the notion of reference, is available. For if such a theory gives conditions under which an object is to be the referent of a name, then it of course uniquely satisfies these conditions. (Kripke, 1980, p. 88, fn. 38)

Kripke is right, a descriptivist might say, that the reference that the name "Gödel" has, in John's mouth, is inherited from the use of that name by the person from whom John learned it, say Toni. And so on, if need be, back to someone who knows enough about Gödel to be able to use the name to refer to him autonomously. But then we can simply say that, among the descriptions people associate with the name "Gödel" is: the person at the end of the causal–historical chain that ends with my own use of that name. Or maybe Kripke isn't quite right, and his view needs modifying or replacing. No problem! Just incorporate whatever the right view is into the description that fixes reference.

I find it difficult to see what other response to Kripke might be available. And, indeed, what is now known as 'causal descriptivism' (Kroon, 1987) has become orthodoxy amongst descriptivists. Thus, Chalmers (2002, p. 170) suggests that, "...if we want to approximate the epistemic intension of the [ignorant] speaker's use of 'Feynman' in a description, one might start with something like 'the person called 'Feynman' by those from whom I acquired the name'". Remember, however, that this is a proposal about what the *sense* of the name might be, so the 'causal description' must be one that is, in some sense, known to the speaker themselves. Otherwise, it would not be able to do the cognitive and

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[36] In chess, a 'gambit' is, roughly, a Trojan horse: an offer of material to one's opponent in exchange for some other advantage.

epistemic work that the notion of sense was introduced to do. That will turn out to be important, indeed, crucial.

2.3 Do Speakers Really Have the Required Dispositions?

It's tempting to respond that an adequate 'causal description' would be so enormously complex that it would out-strip the conceptual resources of ordinary speakers. But, as said earlier, we need not hold that the description is explicitly known by ordinary speakers, and, for the same reason, we need not be worried that even philosophers do not know, explicitly, what the right description is. Chalmers puts this point well. Kripke's own specification of the description theory limits the conditions in the 'cluster' to properties the speaker *believes* the referent to have. But Chalmers's "intensional framework is not. . . committed to the idea that the intensions associated with a name correspond to explicit beliefs of the speaker" (Chalmers, 2002, p. 169).

Nonetheless, we do, need ". . . the relevant condition on extension [to] be understood epistemically, in a manner that is closely connected to a speaker's knowledge and cognition" (Chalmers, 2002, p. 143). Dummett (1978c, p. 423) is careful to frame his proposal in a way that respects this requirement: He is prepared to accept that "the reference of a name is to be determined" by tracing connections between speakers, but he insists that "most speakers are tacitly aware that this is the proper procedure". Moreover, Dummett argues that, if the causal theory of reference is correct, then speakers *must*, in some sense, be aware that it is:[37]

> The alternative is to suppose that the causal theory gives a correct account of the conditions for a name to have a particular object as its referent, even though. . . most speakers would repudiate that means of determining the reference of the name. . . . Such an idea would appear to involve the same fallacy as "They're all out of step but our Willie". (Dummett, 1978c, pp. 423–4)

But that is not the only alternative. Dummett seems simply to be assuming that most speakers have some means of determining a name's reference. The competing proposal, rather, is that there might be some speakers who do not know how to determine the referents of some of

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[37] Something like this claim is at the core of Kroon's (1987) argument for causal descriptivism. Kroon does not mention Dummett.

the names they use, but who are still able to use those names to refer to the same people as others simply in virtue of their standing in the right sorts of relations to other users of those names.

And that, again, is the central issue here. The target of Kripke's epistemic arguments is a form of what Tyler Burge (1979) calls 'individualism': the view that the meaning of a word, for a given speaker, is determined entirely by facts about that particular speaker and *not* by social facts concerning their relations to other speakers (see esp. Kripke, 1980, p. 91).[38] I observed above that there is very little disagreement, among philosophers, that social facts are somehow relevant to the determination of reference. The question is whether those social facts are relevant only because ordinary speakers *regard* them as relevant. That is what Dummett is claiming: The causal–historical theory must be evaluated not (just) as a proposal about what determines reference in a metaphysical sense but as a proposal about how reference is determined, or is to be determined, in an epistemic (or practical) sense. But Dummett gives no real argument for this claim.

The reason, I suspect, is that Dummett was never commmitted to individualism in the first place. He argues, in "The Social Character of Meaning", that it is futile to theorize about the language of an individual speaker in abstraction from the larger linguistic community of which they are a part. Indeed, for Dummett (1978c, p. 428), the sense of a name is determined "by the practice of the linguistic community taken as a community..., and the knowledge that is relevant to sense is...the knowledge possessed by the community as a whole". Dummett is happy to allow that Kripke's epistemic arguments pose a threat to Frege's actual position, since Dummett seems to think that Frege did embrace individualism in Burge's sense. But Dummett insists that "only rather inessential modifications of [Frege's] theory would be needed" to reconcile it with Kripke's arguments, or with Putnam's related arguments about the division of linguistic labor (Dummett, 1978c, p. 426).

Chalmers, on the other hand, is clear about his commitment to individualism, so it is easier to see what he is arguing. In his discussion of Kripke's epistemic arguments, he writes:

> ...[W]hen speakers use a name such as "Gödel" or "Feynman"
> in cases such as [Kripke's], how do they determine the refer-

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[38] The question whether there is an important role for relations in which the speaker stands to their non-social environment may be set aside here. Indeed, Dummett (1978c, p. 429) himself notes that this is a very different matter.

ent of the name, given sufficient information about the world? For example, if someone knows only that Feynman is a famous physicist and that Gell-Mann is a famous physicist, how will external information allow her to identify the distinct referents of "Feynman" and "Gell-Mann"? The answer seems clear: she will look to *others*' use of the name. (Chalmers, 2002, p. 170, emphasis original)

So Chalmers is very much raising the question what ordinary speakers know about how reference is determined—or, if one prefers, how ordinary speakers are disposed to answer questions about reference when they arise. And, indeed, I am happy to agree that, in many such cases, speakers will proceed just as Chalmers suggests. But that is not enough. Chalmers needs it to be the case that *every* speaker who uses a name 'deferentially' would proceed in this way—or in whatever the right way is. Chalmers seems to regard such a capacity as part of linguistic competence itself:[39]

> We can think of this as being part of what using a language involves. If a subject uses an expression, then given sufficient information about the world, the subject will be in a position to know the extension of the expression. . . . One could put forward a thesis holding that when a subject using an expression is given sufficient information about a scenario, the subject is in a position to know the extension of the expression under the hypothesis that that scenario is actual. (Chalmers, 2002, p. 144)

That is: Anyone who is competent with a given expression must be able, given sufficient information, to determine its extension. That is not, again, to say that they need to have explicit knowledge of how the

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[39] Compare Dummett:

> . . . [A]ny one person, if he is to be said to understand the name, must be in command of some correct means of identifying the river: if he knows only that "the Thames" is used as the name of a river, and cannot in any way tell which river it is the name of, he is in the same position as one who knows that "beige" is a colour-word, but does not know which colour it applies to; he has only a partial understanding of its sense. (Dummett, 1973, p. 99)

The last remark may be correct, but the question was whether such a person is capable of using the name with its ordinary reference. It is a much stronger claim that they are not, and Dummett does not make such a claim explicitly.

extension is determined, but only that they are disposed to make certain sorts of judgements, or to carry out certain sorts of investigations.

But is such a thesis plausible? Is it really true that anyone who uses a name 'deferentially' must know how to determine to whom the name refers? What if the speaker is a small child? What if they have cognitive disabilities? Of course, Chalmers could deny that such people are able to use names 'deferentially', but that does not strike me as terribly plausible.

Chalmers's response, I take it, would be insist that we are licensed to idealize here, which is something we need to do anyway. Actual speakers make mistakes, get confused, and fail to make full use of the information available to them; none of that is relevant to how reference is determined. Chalmers is, in fact, prepared to allow that making full use of available information can involve arbitrarily long chains of reasoning, so long as the reasoning in question is a priori (Chalmers, 2002, pp. 144, 150). Perhaps, then, one could argue that the facts about how reference is determined are knowable a priori and so are available to appropriately idealized versions even of small children. I don't myself see any reason to believe that meta-semantics is a priori, but I'll not pursue the point here.[40] This sort of idealization already raises significant problems.

2.4 Problems With Idealization

As just mentioned, Chalmers's own account of sense in terms of epistemic intensions in effect assumes that the information that is available to a speaker is closed under a priori inference. As a result, and as he is well aware, Chalmers (2002, p. 150) is therefore unable to account for the informativity of any identity-statement that is knowable a priori, such as the arithmetical identity $59 + 46 = 105$. And not just identity-statements. Any statement that is knowable a priori will be regarded by Chalmers as cognitively insignificant, which seems to imply that all of pure mathematics is to be so regarded.

Chalmers (2002, p. 150) seems to think that it is at best unclear what Frege meant when he claimed that mathematical and even logical truths can be cognitively significant. But Frege's most basic claim was

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[40] It sometimes seems to be assumed by people in Chalmers's camp that the sorts of thought experiments on which Putnam and Burge rely are a priori and so that the sorts of theses they support are, too. But those thought experiments are based upon judgements about reference, and I see no reason to suppose those judgements are a priori.

surely just that it can be informative to be told, e.g., that $59 + 46 = 105$—informative in the simple sense that one might reasonably fail to believe that $59 + 46 = 105$, even if one already did believe that $105 = 105$. The argument for such a claim simply parallels the usual argument in the case of empirical identities: What we believe makes a difference to how we act, and people act differently depending upon whether they know that $59 + 46 = 105$ (see Heck, 2012b). To give a simple example, suppose Drew needs there to be exactly 105 bricks in the pile and knows that they have added 59 while Alex has contributed 46 (and that there are no other bricks there). If Drew also knows that $59 + 46 = 105$, then they will be ready to take a break; if not, then not. The claim that "$59 + 46$" and "105" must have different senses then follows, as usual, from Frege's assumption that belief is a binary relation between thinkers and Thoughts, which will imply that the Thought that $59 + 46 = 105$ is different from the Thought that $105 = 105$. Of course, one might reject this claim of Frege's, but to do so is to reject the claim that cognitive significance is always to be explained in terms of a difference of sense or, more generally, a difference of content.

One might respond that logic and mathematics are such special cases that we might be justified in giving some other account of the cognitive significance of logical and mathematical beliefs. Such a view seems to be held, for example, by Robert Stalnaker (1999b; 1999c). I find such views deeply dissatisfying myself, but I'll not pursue the matter here.[41] The more immediate worry is that, whatever account Chalmers might choose to give in the mathematical case, it will work just as well in the empirical case. Chalmers (2012, pp. 248–9) suggests, for example, that we might regard the sense of "$59 + 46$" as structured. But, as Stanley (2014, p. 671) emphasizes, that is precisely the strategy Russell employed, as an *alternative* to Frege's, to deal with empirical cases of cognitive significance. More generally, the resources we need in the mathematical case will be finer-grained than the resources Chalmers allows himself in the empirical case, so the latter can be reconstructed from the former (Stanley, 2014, p. 674).

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[41] It's not quite true that, on such views, logical inference must forever remain a mystery: If one believes that $A \wedge B$, it does not follow that one must already believe A; so perhaps there is room for some account of how inference leads to new beliefs. But what is true is that Stalnaker must regard all logically valid inferences as being no more complex than conjunction elimination. If A implies B, then A is logically equivalent to $A \wedge B$; so the inference from the belief that A to the belief that B just is the inference from a belief with the content that $A \wedge B$ to one with the content B.

It need not just be mathematical identities that pose this sort of problem, either.[42] I don't know how Pythagoras (as many think) discovered that Phosphorous is Hesperus, but maybe what happened is that he plotted the positions of Phosphorous and Hesperus over a series of weeks and then observed that, if you continue Phosphorous's path after it disappears behind the sun, then it would be expected to emerge at exactly the position at which Hesperus in fact appears. It is easy to imagine that, at some point along the way, Pythagoras had all the *empirical* information he needed to make the discovery that Phosphorous is Hesperus. All that was left for him to do was to make some calculations or, perhaps, to prove a theorem. So, as Stanley (2014, p. 673) puts it, there seems to be no principled distinction between cases of cognitive significance involving merely empirical matters and ones involving logical or mathematical facts. I suggest that similar considerations could be used to construct a (no doubt contrived) example in which the descriptions used to pick out Hesperus and Phosphorous could be proven, geometrically, to pick out the same object.[43]

Dummett (1978c, p. 423) rejects the sort of idealization we have just been discussing, remarking that any account that seeks to treat sense in terms of intensions is "thoroughly retrograde", precisely because it must conflate the senses of statements that, though of different cognitive significance, are equivalent in whatever respect is at issue. But Dummett nonetheless regards the notion of sense as an idealization. At the end of a lengthy discussion of what the senses of various expressions might reasonably be taken to be, Dummett (1973, p. 105) concludes: "The notion of sense is... of importance, not so much in giving an account of our linguistic practice, but as a means of systematizing it". Ordinarily, Dummett suggests, there are no definite facts about what the sense of a given expression actually is. It is only when we are forced, for various practical or theoretical reasons, to refine or reform our language that definite (or at least, more definite) senses for some expressions might be determined. But this raises a version of the same problem we just discussed in connection with Chalmers. Take two names that are cognitively different for a given speaker (or even for a given linguistic community). How do we know that they will not 'idealize' to names that are cognitively equivalent? What we want—what I want, anyway—is

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[42] Stanley (2014, pp. 668–9) develops a different sort of example.

[43] Indeed, Frege himself gives a similar example in *Begriffsschrift*, though it concerns purely geometrical objects (Frege, 1967, §8).

an account of the contents of the utterances we actually make (and of the thoughts we actually entertain), not an account of the contents of utterances that might be made in 'idealized' circumstances using the same words.

2.5   The 'Given Object' Problem

For Dummett, one grasps the sense of a name when one has an ability to identify its referent. As we have seen, Dummett thinks of this ability as one ordinary speakers actually have, although that is not to say that the ability is one such speakers can always exercise. They may lack relevant information, or meet other practical obstacles. Nonetheless, Dummett's model is what I shall call the 'recognitional model': In the simplest sort of case, the idea is that grasping the sense of a name involves being in a position to recognize its referent when presented with it, at least under favorable conditions. But this begs the question how that object is supposed to be 'presented'.[44]

Dummett is clearly aware of this problem:[45]

> As a first approximation to the model...which Frege had in mind, we may try the following: To know the sense of a proper name is to have a criterion for recognizing, for any given object, whether or not it is the bearer (referent) of that name.... (Dummett, 1973, p. 229)

> [But] what is meant by talking of being 'given' an object[?] ...In understanding a proper name or a predicate, I am supposed to be able to recognize something as establishing that a given object is the referent of the name or that the predicate applies to it: but what is it that I recognize to be established?

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[44] Evans seems sensitive to this issue as well, introducing the notion of a 'fundamental idea' to deal with it (Evans, 1982, §4.4). I confess that I have always found this the most puzzling thing in *Varieties of Reference*. But it makes some sense seen in these terms. That said, it's hard to reconcile that interpretation with Evans's discussion of ideal verificationism (Evans, 1982, §4.5).

[45] A form of the problem also arises in Searle when he writes:

> Suppose for the sake of argument that we have independent means for locating an object; then what are the conditions for applying a name to it; what are the conditions for saying, e.g., "This is Aristotle?" (Searle, 1958, pp. 169–70)

So it appears that Searle is assuming, as Dummett ultimately does, that the object is given demonstratively (though talk of location is reminiscent of Evans).

That such-and-such a name stands for the object, or that such-and-such a predicate applies to the object—indeed: but *which* object? The given object, of course: but here we have a right to ask, "How was it given?" (Dummett, 1973, p. 231, emphasis original; see also p. 488 and Dummett, 1978a, pp. 131–2)

Dummett's discussion of this worry is long and complex, and he never really resolves it, even to his own satisfaction. His initial proposal is that we should think of the object as given demonstratively, through ostension. But this seems to lead to problems in the case of proper names of historical figures. Does understanding the name "Frege" require one to know how to determine the truth of some claim of the form "That man is Frege", where 'that man' is picked out, *in the present*, through ostension? As Dummett (1973, p. 235) remarks, even if such a position were defensible, it is hardly plausible "that it is in [the] capacity to accomplish such rarely called for feats" that one's grasp of the sense of such a name consists.

Note, however, again with Dummett, that the sense may be given in a quite different way, say as: the author of *Die Grundlagen der Arithmetik*. Dummett (1973, pp. 238–9) himself does not think this really solves the problem: He thinks that we still need to raise the question what it would be to identify some particular individual as the author of that book, which simply returns us to the question how that individual is given to us. But Dummett's argument for this conclusion involves assumptions that are of a piece with his anti-realism. In the present context, these views are at best optional. The more natural view is that, if the sense of a name is given by a description that fixes its reference, then it is simply up to the world to decide which object satisfies that description.

One thing this reveals is that what I am calling the 'given object problem' does not arise for all forms of descriptivism. In particular, it does not arise for classical descriptivism of the 'famous deeds' variety. It arises for Dummett because of a subtle change that occurred when he moved away from classical descriptivism and towards an account based upon recognitional capacities. As I just mentioned, a description determines the associated referent *by itself*, given various facts about the world. In that case, we can just talk about which object satisfies the associated condition; there is no need for that object to be 'given' to anyone, let alone to be 'given' in some special way. But when we abandon the older model and construe sense in terms of a speaker's capacity to determine to which object a name refers, then we are talking about *someone's* determining

the referent and so are talking about determination in an epistemic sense. In that case, the object does have to be 'given' to the speaker, in some way.

The difficulty is not that this problem threatens Dummett's account of the senses of proper names. Rather, it reveals that account to be specific to proper names and, in particular, not to be one that can be extended to perceptual demonstratives. We cannot say that grasping the sense of such a demonstrative consists in one's having a criterion for recognizing whether any given object is the referent of that demonstrative. To say that would be to say that one's grasp of the sense of one demonstrative consisted in one's ability to determine the truth-values of identity-statements involving other demonstratives, i.e., statements of the form: *this* is *that*. One might well think that one does have to have such a capacity. Dummett (1978a, p. 130), in fact, holds precisely that view, since he thinks that grasp of the sense of a demonstrative requires grasp of the 'criterion of identity' for the object demonstrated. Even if that is so, however—and it may not be so—the point reveals the crucial disanalogy between names and demonstratives.

It is not in realizing that *this* is *that* that we recognize a 'given object' as the referent of the demonstrative. Rather, in apprehending the object as *this*, we have already recognized it; we then recognize an object as *that*, and judge it to be the same as the object we identified as *this* (or not). The case of proper names is very different. A proper name is supposed to be associated with a condition on reference: a condition an object must meet to be the referent of that name. Grasp of such a condition, Dummett wants to say, is not always explicit but often consists just in one's ability to apply the condition, that is, to determine in practice whether some object given through ostension meets the condition. The use of proper names, on this view, is thus parasitic on the use of perceptual demonstratives, which are what give us opportunities to apply our 'recognitional capacities'. Dummett's model of the sense of proper names, that is to say, presupposes that there is no further need to identify the referent of a perceptual demonstrative: That is what counts as being 'given' an obejct. The recognitional model thus cannot also work for perceptual demonstratives.

What other options are available to Dummett for giving an account of the senses of perceptual demonstratives? Well, there is a parallel literature on that very question. David Kaplan (1978; 1989) famously argued against descriptivist treatments of demonstratives by developing versions of Kripke's modal arguments. But, of course, those arguments can

be answered in the same way as Kripke's. Variants of Kripke's epistemic arguments can also be developed for the case of perceptual demonstratives, however, as work by Keith Donnellan (1970) shows.[46] It might seem as if the lesson of those arguments must be somewhat different from the lesson of Kripke's. I argued earlier that Kripke's central point is anti-individualistic: that his arguments force some acknowledgement of the social character of language-use. That is certainly not the upshot of Donnellan's arguments. But, at a deeper level, the upshot is the same. The only plausible descriptivist response to Kripke's arguments, or so I have argued, is to employ Nozick's Gambit. That is also the only plausible descriptivist response to Donnellan's arguments: What the descriptivist must do is claim that the sense of a perceptual demonstrative is given by a condition on reference that simply incorporates whatever story the externalist wants to tell about how reference is determined. For example, the sense of a perceptual demonstrative might be given, to zero-th approximation, as: whatever stands in the right sort of causal relation to the perceptual experience that grounds that demonstrative. If one wants to object that this condition will be too complex actually to be grasped by ordinary thinkers, then the response will once again be that the condition does not need to be grasped explicitly.

It should be clear that Chalmers has the same problem, for the same reason. On his picture, it is an idealized agent who is supposed to be able to determine the referent of a name given full information. But that means identifying some object, given in some other way, as the referent of the name. Chalmers does not tell us what other way is, but his metaphor of the 'Cosmoscope' certainly makes it seem as if the privileged method is demonstrative (Chalmers, 2012, ch. 3).

Stalnaker (1999; 2001; 2012) has complained, repeatedly, that such views conflate semantics with meta-semantics: that they take what *fixes* content actually to be *part of* content. He may be right, but it is difficult to make the charge stick, because proponents of such views are well aware of what they are doing: incorporating the relational facts that fix reference into the condition on reference that is supposed to constitute sense. What Stalnaker's worry should do, however, is remind us of the sort of question discussed in section 2.3. It is no doubt true there need to *be* facts that determine what the extensions of various expressions are. But why should we suppose that those facts need to be known, in

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[46] Donnellan's paper pre-dates *Naming and Necessity*, but he credits one of his central examples to Kripke.

any sense, to users of those expressions? Chalmers does not give us any reason to accept that claim. What he offers instead is an argument that, if the condition that determines the reference of an expression is not known to its users, then that condition cannot be made to do the epistemic and cognitive work that the notion of sense was supposed to do. But instead of concluding that such conditions simply *must* be known to ordinary speakers, we might instead conclude that the attempt to model sense in terms of conditions on reference is a failure, precisely because it imposes such an implausibly strong requirement on ordinary speakers.

Classical descriptivism, once again, did not have this problem. It was never very clear exactly what the descriptions associated with most proper names were supposed to be. But it generally was clear that the properties that figured in such a description were supposed to be ones that a given speaker believed the bearer to have. That served to guarantee that the descriptive condition played some sort of role in the speaker's cognitive life. And, as I have already remarked, the descriptions that tended to be proposed pre-Kripke generally involved properties that objects objectively do or don't have: famous deeds and the like. There is no 'given object problem' for such views.

2.6 Objectivity

It has been observed by Laura Schroeter (2005) and Jeff Speaks (2010) that, if we adopt the causal descriptivist response to Kripke's epistemic arguments, then certain statements turn out to be a priori that one would not have thought merited that status.[47] Recall the suggestion made by Chalmers (2002, p. 170) that, if I am generally ignorant of astronomy, then the intension of the name "Andromeda" for me will be something like: the celestial body called "Andromeda" by those from whom I acquired the name. If so, then it looks as if the following ought to be a priori for me:[48]

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[47] In certain circles, this result was 'folklore' long before. But, unlike Dummett, Chalmers makes a great deal out of the a priority of certain sorts of claims, which makes the result more important.

[48] Thus, Chalmers writes:

> . . . [T]o evaluate a deferential use of the name in an epistemic possibility, the speaker may need the name itself (as used by her) to be present in an epistemic possibility, so that she can determine where that name was acquired. (Chalmers, 2002, p. 173)

Why "may need"? I would have thought "will need". There's no causal chain if there's no name. (Chalmers suggests that we might instead make use of certain "marked thoughts",

(12) If Andromeda exists, then the name "Andromeda" exists.

(13) If Andromeda exists, then people exist (namely, the ones from whom I acquired the name)—and, indeed, I exist.

It is no help to respond that there might be other speakers—ones better informed than I am—for whom the epistemic intension is different. The question raised by Kripke was how we should understand the senses of such names for 'ignorant' speakers. There is, at the moment, no sensible response on the table besides causal descriptivism, and if we insist, as Dummett and Chalmers do, that reference-determining facts must somehow be known to speakers, then causal descriptivism is bound to have this sort of consequence. The more promising response is thus the bullet-biting one: to insist that, for such a speaker, such statements really are a priori, despite their not intially seeming to be (Elliott et al., 2013).[49]

The real problem here, I want to suggest, is not that (12) and (13) don't seem like good candidates for a priori truths.[50] Rather, just as Kripke's modal argument is not really about modality but about truth-conditions, so Schroeter's and Speaks's observations are not really about a priority but about the kind of content that causal descriptivism ascribes to such *simple* sentences as:

(14) Andromeda contains over one billion stars.

The worry is that, for an ignorant speaker, such sentences turn out to be not (just) about celestial bodies but also about people and words. Indeed, the point is not really one about language but about the contents of the thoughts such ignorant speakers are able to entertain.

Some years ago, I had the privilege of discussing both demonstratives and "Demonstratives" with David Kaplan. At one point during our discussion, Kaplan responded to something I had said—I was articulating a

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but that will not avoid all of the problems Schroeter and Speaks raise, let alone the one I'm about to raise.)

[49] Schroeter (2013) and Speaks (2014) both wrote a reply to Elliott, *et al.*, but neither of them makes the point that follows.

[50] If that were the only problem, then perhaps we could re-tutor our intuitions. But Chalmers wants the notion of a priority to do significant work. In particular, it's supposed to underwrite an argument against materialism, one founded on the claim that certain sorts of theoretical identifications have to be grounded in a priori truths (Chalmers, 1996). Chalmers's articulation of a theory of content is part of that larger project. If a priori truths turn out to be cheap, then that makes the argument against materialism more difficult.

view of demonstratives similar to Evans's—by insisting that, when one says "That man is happy", what one asserts has nothing to do with any perceptual relation one bears to the man in question. When I pressed him to explain what he meant, Kaplan started to speak in familiarly modal terms: What one is asserting could still obtain even if one were not perceiving anything, or even if one did not oneself exist. But I have since come to think that what was bothering Kaplan does not really have anything to do with modality.

Here is a different version of the same worry, as expressed by Stalnaker:[51]

> ...[I]t is part of the idea of a proposition (an idea that was important to Frege...) that propositions, or Thoughts, be characterizations of the way the world is, characterizations that are intelligible independently of thinkers that think the Thoughts, or speakers who assert them. (Stalnaker, 2012, p. 759)

This is over-stated. I am not quite sure that we need to deprive idealists of the very notion of a proposition. And of course there can be propositions that are not "intelligible independently the thinkers that think" them, namely, self-referential propositions that are about those very thinkers. Still, there is something importantly right about Stalnaker's remark. The reason this sort of idea was important to Frege is that, for Frege, Thoughts capture *the objective content of acts of judgement*, independent of their subjective accompaniments and the contingencies that make it possible for one to think such Thoughts (Frege, 1984c, opp. 29–30; Frege, 2013, v. I, pp. xiii–xxvi). Frege denies, for example, that the physiological conditions that make it possible for us to think what we do are any part of the contents of those Thoughts.

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[51] Compare these remarks from his paper "Twin Earth Revisted":

> Whether the content of my belief involves water itself or just a general description of a substance meeting certain conditions, *if my belief is to be understood as a belief about the world outside of me*, and not just about my sensations and experiences, then... my having a belief with that content will depend on the existence of some regularities and dependencies that relate me to my environment. (Stalnaker, 1993, pp. 305–6, emphasis altered)

Stalnaker seems worried, mostly, that our beliefs will otherwise turn out to be *only* about our sensations and experiences, but I'm suggesting that there is a more general worry here: that our beliefs about water will turn out to be *partly but essentially* about our sensations and experiences.

In part, what motivates this aspect of Frege's view is his concern with communicability and inter-subjectivity. And, indeed, causal descriptivism seems to imply that different ignorant speakers use sentences like (14) to express different propositions: Each of us uses it to express a proposition that is, in part, about the speakers from whom each of us learned the name, and those will generally be different speakers. But Frege himself allows, in a now famous footnote, that we probably have to live with variations of sense in the case of ordinary language (Frege, 1984c, op. 27, n. 4); there is no easy argument against Frege to be found here.[52] But what lies even deeper in Frege's thinking is his realism: his commitment to the existence of an objective world that is, metaphysically speaking, independent of us, and his conviction that we can, nonetheless, think and communicate Thoughts about that world. It is this same commitment that lies behind the remarks of Stalnaker and Kaplan mentioned above: Assuming this kind of realism, what we want to understand is how thought about the objective world is possible, that is, how it is possible for us to think Thoughts that are about how things are in that world, and not just about ourselves, or about the world as it relates to us.

In particular, what lay behind Kaplan's remark to me was the assumption that a perceptual relation to an object can make *objective* thought about it possible. When I meet someone for the first time, it becomes possible for me to entertain certain sorts of Thoughts I could not previously have entertained. But those Thoughts, although made possible by my perceptual relation to this new person, are not *about* my perceptual relation to them but are about the person as they are quite independently of me. And it is this same sort of assumption, I want to suggest, that is ultimately motivating Schroeter and Speaks: An ignorant speaker who uses the name "Andromeda" is no less capable of objective thought about Andromeda—thought about how that galaxy is, quite independent of them—than is a speaker who can individuate that galaxy independently. Thus, Schroeter (2012, p. 186) writes elsewhere: "As rational epistemic agents, we aim to represent objectively important features of the world rather than a projection of our current limited understanding of what's important". But causal descriptivism, *by its very nature*, makes the content of such a person's assertions of (14) not just about celestial bodies but about words and people and, ultimately, about themselves. It's narcissism on steroids.

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[52] See Heck (1995, 2002) for more on this passage and its significance.

I take the case of demonstratives to be the most important one. It seems to be a popular view nowadays that our most basic way of engaging cognitively with the world involves perceptual demonstratives. But if we think of the senses of demonstratives in terms of epistemic intensions, as Chalmers would have us do, then we get consequences similar to those noticed by Schroeter and Speaks: In any possible world, considered as actual, the referent of a perceptual demonstrative used by me will be the object to which I stand in a certain complex relation. Such statements as

(15) If that man exists, then so do I.

will thus turn out to be a priori, on Chalmers's account. Perhaps one could evade that consequence by fiddling with what is meant by 'a priori'; perhaps one might prefer just to embrace it. But the real point is that the *content*, the *truth-condition* of my utterance of "That man is happy", on this view, turns out to concern not just a certain person and their mood but me and my perceptions. That is not a consequence that can be avoided. That just is the view.[53]

Indeed, it is not obvious that, on Chalmers's account, the content of my utterance of "That man is happy" really concerns *that man* at all. In the actual world, I happen to stand in a certain perceptual relation to (say) Fred, so it is Fred's mood that determines the truth or falsity of my utterance. But the truth-*condition* of my utterance does not specially concern Fred. There are other epistemically possible worlds in which I stand in the same perceptual relation to Barney, and in those worlds it is Barney's mood that determines the truth or falsity of my utterance. It is only in a weak sense, then, that my utterance is 'about' Fred:[54] As things actually are, it is Fred's mood that determines whether what I said was true. But there are quantified sentences that meet that sort of condition, such as "There is one and only one person in this city who owns a distillery, and that person is happy". (No wonder Fred is so happy.) Such sentences are in no very interesting sense 'about' whoever that happens to be, so it is not clear why perceptual demonstratives should be any different.

The obvious response is that another kind of content is available to Chalmers, defined in terms of 'subjunctive' intensions. Since content of

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[53] In particular, that the content involves me and my perceptions is what, according to Chalmers, makes identity-statements involving demonstratives a posteriori even when they are necessary.

[54] This distinction, between 'strong' and 'weak' aboutness, is used to great effect by Grossman (2019).

that sort co-incides with content as Kaplan would have us understand it, Chalmers could insist that the objectivity of our thoughts is accounted at that level. But the move from epistemic to subjunctive intensions is too easy to be satisfying (Recanati, 2012, pp. 18ff). The way we dispose of the relevance of me and my perceptions is by 'actualizing' or 'rigidifying' the descriptions that correspond to the epistemic intensions of our words.[55] But is it really plausible that it is in our grasp of the meaning of "actually" and other metaphysical modalities that our capacity for objective thought about the world consists? I would have thought the opposite was true: That it is my capacity for objective thought about the world—my appreciation that the happiness or otherwise of *that man* has nothing to do with me and my perceptions—that grounds my understanding of metaphysical modalities.

There is no doubt much more to be said about this issue, and I am not going to try to say it all here. For the moment, I want just to make two observations. The first is that the question how objective thought about the world is possible is central to much of the older literature on reference. One finds it discussed in Russell as well as in Frege, and it is a central preoccupation of Strawson, Putnam, Burge, and Evans, among many others. It would be a nice project for someone to trace this thread through the literature and to investigate the ways a concern for objectivity has shaped discussions of reference.[56] In raising the question whether causal descriptivism can secure the objectivity of thought, then, I am not 'moving the goalposts' but reminding us of what the debate over reference was always about.

Second, the problem to which I am pointing is, once again, not one that afflicts all forms of descriptivism. In particular, classical descriptivism of the 'famous deeds' variety does not have this problem. This is a corollary of points made in section 2.5. If I identify Frege as the author of *Die Grundlagen*, then who "Frege" refers to is a matter of who wrote that book, which is a matter of how the world is, quite independently of me. What gives rise to the problem we have been discussing is the particular nature of the conditions on reference that constitute the senses of (most) proper names according to *causal* descriptivism.

This, I think, is why the issue about objectivity has been so hard to keep in focus: It's not a problem that afflicts descriptivism as such.

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[55] This, I think, is what's really bothering Soames (1998), who puts the point in terms of what the constituents of the proposition are. But that's a technical notion whose details can hardly decide this kind of issue.

[56] Grossman (2019) does some of this work in his dissertation.

Rather, it afflicts only certain forms of descriptivism. As it happens, though, the vulnerable forms of descriptivism are precisely those that have become dominant since the work of Kripke, Putnam, and Burge put pressure on classical descriptivism. In effect, then, what I've been arguing is that one can avoid Kripke's epistemic arguments by going causal descriptivist, but that only gives rise to new, and equally serious, if not worse, problems. If those problems have been missed, that's because it has not been adequately appreciated just how different causal descriptivism is from classical descriptivism.

Now, I should emphasize that I do not claim to have shown that causal descriptivism and its variants cannot secure the objectivity of thought. What I have shown is that there is a serious worry about their ability to do so, and that this worry issues precisely from the way in which such views try to incorporate the facts that determine reference into content. More generally, the problems we have been discussing issue from the requirement that the condition on reference that constitutes sense be, in some sense, *known* to the thinker—if not explicitly then implicitly, as reflected in their idealized dispositions to identify the referent. This requirement, in turn, is imposed, both by Dummett and by Chalmers, because it seems to be required if conditions on reference are to do the epistemic and cognitive work that the notion of sense was introduced by Frege to do.

But is that really necessary?

3   Sense As Mode of Representation

There is another tradition of thought about sense that also grows out of Dummett's work. On this picture, it is in general a mistake to think that it should even be possible to state what the sense of a given expression is, in the way that we can straightforwardly state what its reference is. Thus, Dummett (1975, p. 104) observes in "What Is a Theory of Meaning?" that it is not even clear what "a grammatically correct form for a direct ascription of meaning" would be like for a proper name, as opposed to a sentence: "Alex is human" means that Alex is human, but what does "Alex" mean if not just Alex? What Dummett (1976, p. 74) offers as an alternative, in "What Is a Theory of Meaning? (II)", is that a theory of sense should be a theory of what knowledge of reference consists in: To understand the name "Alex", the idea is, one has to know to whom it refers; but that knowledge—of what "Alex" refers to—might take many

different forms, and each such form will correspond to a different sense that the name "Alex" might have. But there need be nothing we can extract from such an account of which we can then say that *it* is the sense of "Alex".

Perhaps the best known statement of this kind of idea is in what follows the remark quoted at the very beginning of this paper.

> It has become a standard complaint that Frege talks a great deal about the senses of expressions, but nowhere gives an account of what constitutes such a sense. This complaint is partly unfair. . . . It is true enough, however, that he says practically nothing directly about what the senses of expressions of different types consist in. . . . Indeed, even when Frege is purporting to give the sense of a word or symbol, what he actually *states* is what its reference is:[57] and, for anyone who has not clearly grasped the relation between sense and reference, this fact makes his hold on the notion of sense precarious. The sense of an expression is the mode of presentation of the referent: in saying what the referent is, we have to choose a particular way of saying this, a particular means of determining something as the referent. In a case in which we are concerned to convey, or stipulate, the sense of the expression, we shall choose that means of stating what the referent is which displays the sense: we might here borrow a famous pair of terms from the *Tractatus*, and say that, for Frege, we *say* what the referent of a word is, and thereby *show* what its sense is. . . . Thus, in a certain sense, it may be said that we cannot directly state what the sense of an expression is. . . . (Dummett, 1973, p. 227, emphasis original)

In some cases, one might have explicit knowledge of a condition on reference; in other cases, one might just have a capacity to recognize Alex (Dummett, 1978a, pp. 128–9). That is why, to Dummett himself, this view does not seem distinct from the one discussed above.

But for others this sort of view takes very different forms. In the work of John McDowell (1977), for example, it is elaborated in defense of 'modesty'[58] in the theory of meaning. On this view, there is really no

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[57] I think Dummett has in mind here, most of all, Frege's specifications of the references of the expressions of his formal language in *Grundgesetze* (Frege, 2013, Part I), which take precisely that form. For more on that, see Heck (2007a) and Heck (2012a, Part I).

[58] The term is introduced by Dummett in "What Is a Theory of Meaning?", which is by

more that we can do to record the difference in sense between "Hesperus" and "Phosphorous" than to note that:

(16) "Hepserus" refers to Hesperus

whereas

(17) "Phosphorous" refers to Phosporous

It is not, of course, that

(18) "Hesperus" refers to Phosphorous

is false, but only that this statement of what the reference of "Hesperus" is does not 'display' what its sense is. To borrow from Wittgenstein again: Both (16) and (18) correctly say what the reference of "Hesperus" is, but only (16) 'shows' what its sense is. But if this is to be at all convincing, the metaphor of 'showing' needs to be unpacked. And I do not myself think that McDowell ever successfully unpacks it (Heck, 2007b, §3)

I want to focus here, however, on the version of this approach defended by Gareth Evans. The core idea is introduced in the following passage from his paper "Understanding Demonstratives":

> Frege's idea was that to understand an expression, one must not merely think of the reference that it is the reference, but that one must, in so thinking, think of the reference *in a particular way*. The way in which one must think of the reference of an expression in order to understand it is that expression's sense. No substantial, or positive theory of the notion of a way of thinking of something is presupposed by this conception of sense. If the intuitive notion needs to be supplemented, we can appeal to the general idea of… what makes it the case that a thought is about the object which it is about; two people will then be thinking of an object in the same way if and only if… what makes the one person's thought about that object is the same as… what makes the other person's thought about that object. (Evans, 1985b, p. 294, emphasis original; see also Evans, 1982, p. 20)

Evans makes several points here. The first is that the notion of sense, as Frege uses it, is largely programmatic. He is of course right about

and large a criticism of 'modest' approaches to the theory of meaning. McDowell (1987) takes up the mantle; Dummett (1987) replies; and McDowell (1997) responds again.

that, but the quip "*If* the intuitive notion needs to be supplemented" must surely have been in jest. So far as I can tell, there is no 'intuitive' notion of a 'way of thinking', and, even if there were, there is too much controversy about how it is to be deployed for it to be used in such an embryonic state.

Evans's suggestion is that we may develop the notion of a way of thinking in terms of "what makes it the case that a thought is about the object which it is about". Actually, Evans himself speaks of an "account" of what makes a thought about its object. I've elided such language from the quoted passage, however, in order to emphasize how gratuitous it is. Evans's idea is that, for each (singular) thought, there will be an object the thought is about,[59] and there will also be some property that the thought has in virtue of which it is about that object. It is this property of the thought with which Evans is, in effect, proposing that we may identify a 'way of thinking' and so, ultimately, a sense. To be a bit more precise, for each episode of singular thought directed at some object x, there is supposed to be a corresponding truth of the form:[60]

> S is thinking of x at t in virtue of the fact that $R(S, x, t)$. (see Evans, 1985b, pp. 315–6)

Which relation R occurs on the right-hand side here will determine which sense is associated with this particular episode of thought about x.

There are three main difficulties with this suggestion:

(i)   Evans gives the proposal essentially no motivation: It comes completely out of the blue.

(ii) It's not entirely clear what to make of the idea that senses *are* such features of thoughts.

(iii) There's a worry that this proposal conflates semantics and meta-semantics, in much the same way as discussed at the end of section 2.5.

We'll discuss these issues in the sections that follow.

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[59] Setting aside empty thoughts. Evans (1982, Ch. 10) has a fair bit to say about these, and of course they pose a special problem for externalism. But my purpose here is to explore how much light Evans's approach to sense *might* throw on cognition, so these sorts of problems need not detain us.

[60] The way Evans formulates this scheme isn't quite right. Presumably, it is a particular thought that S is having at t—or, even better, a particular constituent of that thought—which will refer to x. I'll include this aspect in formulations below.

3.1 Motivation

In some ways, Evans's proposal might seem familiar enough. Indeed, it might seem far too familiar. The so-called 'R-relation' with which Evans is proposing to identify sense might seem just to be a condition on reference. If there's a difference between Evans's view and that of Chalmers and Dummett, then, it would seem to be that Evans takes a broadly externalist attitude towards these relations. Sense, then, it might seem, is the condition an object must satisfy to be the object of a particular singular thought, but no assumption is being made that this condition is in any way known to the thinker.

This sort of interpretation of Evans seems to be fairly common. Stalnaker (2012, p. 760) seems to assume it, for example. As Stanley (2012, pp. 776–7) points out, however, this is a misreading. The sense that an expression has for a given speaker is not a condition that an *object* must meet to be the referent of that expression (as used by that speaker). Rather, it is a condition that the *speaker* must satisfy to be able to use that expression to refer, in a particular way, to whatever they use it to refer to. The condition, that is to say, is very close to what Christopher Peacocke (1986) would later call a "possession condition".[61] The most natural application of Peacocke's notion is to such concepts as conjunction. Peacocke would have us ask: What must be true of a given thinker for them to grasp the concept of conjunction? What has to be true if the expression "and" (say) is to express the concept of conjunction for them? The answer to this sort of question—perhaps it involves accepting certain rules of inference—gives the possession condition for conjunction.

Evans is making a similar proposal about singular terms. The notion of 'concept' that Peacocke has in mind is at the level of sense (not, as Frege used the term "concept", at the level of reference). So the 'concept' expressed by a singular term, if we want to talk that way, is its sense, and the question that Evans would have us ask is: What must be true of a given thinker for them to grasp that sense? What has to be true of them if some given expression is to express that sense for them? Or, better: What has to be true of a given episode of singular thought for

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[61] Peacocke's view differs from Evans's in many ways, most importantly, to my mind, in its commitment to a substantial notion of the a priori. Evans, so far as I can tell, had no such commitment. But Evans and Peacocke, as they are both well aware, are in different ways giving substance to Dummett's idea that a theory of sense is a theory of what knowledge of reference consists in (Dummett, 1978a, p. 129). In that sense, for those of us steeped in Dummett's thought, Evans's suggestion does not come 'out of the blue'.

that sense to figure as part of its content?

It is because Evans is thinking of sense in this way, as what I shall call a 'grasping condition', that is possible for him to regard some singular senses as *de re* (McDowell, 1984): as *essentially* being about the objects they are about. Consider, for example, my current thought that this keyboard is noisy. If sense is a condition on reference, then the singular sense associated with this thought might be something like: being the object that is causing my current tactile and auditory perceptions as of a keyboard. There need be no keyboard present for me to have a thought with such descriptive content. But Evans is very much not proposing to identify the content of my thought with the content of such a descriptive thought. What he is proposing is that the singular, *de re* sense involved in my demonstrative thought about my keyboard is *individuated* by what makes it be about my old-school, clickety-clack keyboard. And that, Evans will ultimately propose, involves my standing in a particular sort of cognitive-cum-perceptual relation to that keyboard, which thus figures in the sense itself, as it were. As Evans sees it, then, when one thinks a thought with this sense, one cannot but stand in a cognitive-cum-perceptual relation to this particular keyboard, which therefore must exist if thinking a thought with that sense is so much as to be possible.[62]

None of that is intended as a defense of this aspect of Evans's view. Rather, my point is simply to emphasize how different Evans's view really is from the view that sense is a condition on reference. Evans certainly did not intend his view simply to be an externalist version of that one. One might nonetheless wonder just how different Evans's view really is. We'll return to this question in section 3.3.

The question before us now is simply why Evans's view should even be taken seriously. As said already, he introduces it without giving it any motivation at all. If it were an externalist version of the view that sense is a condition on reference, then the lack of motivation would be understandable: Evans might reasonably have thought that his proposal could simply inherit the motivation of the more familiar, internalist version. But, if that is not what he is proposing, then something really does need to be said about why it should even seem sensible to suggest that sense might be cashed out as a condition on thinkers rather than as

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[62] The sense might therefore be identified with $\lambda S.R(S, x, t)$. Note how this makes it possible for someone else to stand in the same relation to x and so to have a thought with the same sense. We'll return to this point below.

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a condition on the objects of thought.

In at least one case, though, I think the appeal of this sort of approach is easy enough to appreciate. The case I have in mind is that of self-conscious or, as David Lewis (1979) famously called it, *de se* thought. From a Fregean point of view, the question at issue here is how we should understand *de se* senses. But a more basic question is just: What is it for a particular thought to be a *de se* thought? Note that it would not help here to answer that *de se* thoughts are ones with a certain sort of distinctive content, since the question would then be what it is for a given thought to have that kind of content (Stanley, 2011, pp. 88–9). And, of course, *de se* thoughts are not just ones that are about the thinker themselves. To rehearse a standard sort of example, I might see someone in a mirror and think, "Their pants are torn". If, unbeknownst to me, I am seeing myself in the mirror, then I am thinking a thought about myself. But that is not a *de se* thought. The *de se* thought is the one I might express by saying, "*My* pants are torn".

What Evans is suggesting is that we should attempt to characterize *de se* thoughts in terms of what makes them be about the thinker themselves. In the case in which I see myself in the mirror, my thought is about me because (say) it is connected in some appropriate way to my visual perception of a certain object, which just happens to be me. The *de se* thought, by contrast, is supposed to be about me because of how it is connected to "our special ways of gaining knowledge of ourselves, both mental and physical, both past and present" (Evans, 1985b, p. 318).[63] It is by no means obvious that this is the right approach. But as a proposed research direction, it has some promise, if only because it seems reasonably clear how to generalize it to other cases, e.g., to the question what distinguishes demonstrative thoughts from other sorts of thoughts, which is of course one of the central topics of *Varieties of Reference*.

The more pressing question for us, however, is still why it should seem at all plausible that the research project just described should be expected to throw light on the question what the *senses* of self-conscious thoughts are, and how they differ from those of other thoughts about the thinker themselves. Indeed, it seems doubtful that just any extensionally adequate way of drawing the distinction between self-conscious thoughts and self-referential thoughts will serve to illuminate the senses of the former. But Evans clearly is not interested simply in picking the *de se*

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[63] Evans (1982, ch. 7) devotes a chapter of *Varieties of Reference* to attempting to say more about the nature of self-conscious thought.

thoughts out from the rest. As he mentions, philosophers have been obsessing for a very long time about the wide variety of ways in which self-conscious thoughts are distinctive. A truly adequate account of the nature of the *de se* would, Evans insists, be one that allowed us to explain the special features of such thoughts in terms of what makes them *de se* thoughts in the first place.[64] Exactly which features of *de se* thoughts should be so explained is presumably a matter for debate. Should their so-called 'immunity to error through misidentification' be included, as Evans suggests? Even if we waive that question, however, we are still some distance short of any satisfying reason to suppose that sense can be individuated by grasping conditions, as Evans is proposing.

3.2   The Explanatory Value of Grasping Conditions

Since the notion of sense is so programmatic, the right question for us to ask at this point is just: Can grasping conditions do the cognitive and epistemic work that the notion of sense was introduced to do? For the moment, we may focus on the basic phenomenon of Frege cases. So consider again the two thoughts mentioned above: that *their* pants are torn and that *my* pants are torn. It seems that, in such a case, I could believe either one of these thoughts without believing the other. Can that fact be explained in terms of these two thoughts being (as we'll suppose) associated with different grasping conditions?

Evans himself identifies this as the central issue and notes that what is required is that his principle (P) should be true:

(P) If ~~the account of~~ what makes a subject's thought T_1 (about x to the effect that it is F) about x is different from ~~the account of~~ what makes his thought T_2 (about x to the effect that it is F) about x, it is possible for the subject coherently to take, at one and the same time, different epistemic attitudes towards the thoughts he entertains in T_1 and in T_2. (Evans, 1985b, p. 201, strikeout added)

Evans suggests that (P) can be strengthened to a biconditional, but I myself would want to strengthen it in a different way: What we want is for the cognitive difference mentioned to be a *consequence* of the

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[64] This is the point of the uncharitable (and even sarcastic) remarks at the end of "Understanding Demonstratives" (Evans, 1985b, pp. 320–1). It's equally why I tend to find the debate over whether the contents of *de se* attitudes are 'centered worlds' uninteresting and unilluminating.

difference in sense; that is to say, the fact that it is possible for the subject to take different attitudes towards T_1 and T_2 should be *explained* by the fact that what makes T_1 about x is different from what makes T_2 about x. That seems likely to be what Evans intended, anyway.

Evans describes (P) as "very plausible", but he does not really argue for it. His interest, at least at this point in "Understanding Demonstratives", is in deflecting the claim, which figures prominently in the paper by John Perry (1977) to which Evans was replying, that senses must always be descriptive—or, as we might now say, must be conditions on reference. Thus, in words that echo those he used in introducing the idea of grasping conditions (see p. 46 above), Evans writes:[65]

> At no point is it necessary for Frege to adopt any substantial theory of what form these accounts [mentioned in (P)] must take. In particular it is not necessary for him to suppose that ways of thinking of objects can always be given by giving some definite description uniquely true of the object.... It is not necessary, because it is not plausible to suggest that the only kind of account of what makes a subject's thought about an object which is capable of making (P) true is one which relies upon the subject's possessing a unique description of the object. (Evans, 1985b, pp. 301–2)

But this seems almost disengenuous. It may not seem plausible *to Evans* that no view other than descriptivism can provide the sort of account that (P) requires. But, especially given the dialectical situation, something needs to be said about the shape of the alternative. And, in fairness, as I have already indicated, Evans does have quite a lot to say about the matter later, in *Varieties of Reference*.

It is easiest to see what (P) requires if we think about one of the examples Perry discusses. Imagine yourself in a room in San Francisco. Before you are two widely separated windows, looking out over the bay. Through the left window, you see the bow of a ship; through the right window, the stern of a ship. As far apart as the windows are, it is not at all

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[65] Here, the reference to 'accounts' is harder to eliminate. But I take the point to be that Frege does not need to be committed to "any substantial theory of" what makes a Thought be about the object it is about and, in particular, need not think that what does so is always the fact that the object in question meets some descriptive condition known to the thinker. But we philosophers of mind have to give 'accounts' of these relations: We need to articulate what the relations in question are if we're to understand the contents of these thoughts and explain their distinctive features.

obvious that these are parts of the same ship. It is easy, then, to see how you might come to believe that *that* ship is an aircraft carrier without thereby coming to believe that *that* ship is. As it happens, however, these are the bow and stern of the aircraft carrier *Enterprise*, which (according to Wikipedia) was, at 1,123 feet (342m) long, the longest naval vessel ever built. Now it is clear enough that what makes one's thought that that$_{bow}$ ship is an aircraft carrier be about *Enterprise* is different from what makes one's thought that that$_{stern}$ ship is an aircraft carrier be about *Enterprise*. But it is not so clear whether that fact, by itself, implies that "it is possible for the subject coherently to take...different epistemic attitudes towards the thoughts" (Evans, 1985b, p. 201). It is even less clear that the mentioned difference puts us in a position to *explain why* it is possible for someone to take such different attitudes.

Consider a different sort of case. In his paper "Singular Terms", Michael Devitt outlines and defends a version of the causal theory of names. Toward the end of the paper, Devitt raises the question how such an account can deal with Frege cases. He writes:

> Frege rightly saw that the solution to the difficulty lay in the different "modes of presentation" of the object associated with "a" and "b".... For us the modes are the causal networks underlying the names. There is nothing more to the 'meaning' of names than these networks. Underlying "a" will be a very different [causal] network from that underlying "b". Thus the 'cognitive value' of "$a = a$" will be very different from that of "$a = b$". (Devitt, 1974, p. 204)

At the very least, however, there is a large lacuna here: How exactly is it supposed to follow from the fact that the causal networks are different that the cognitive values are different? It would be one thing if, like Chalmers and Dummett, we could assume that speakers (in some sense) *knew* that the referent was determined by the associated causal network. But that is precisely the view to which we are trying to find an alternative, and Devitt certainly isn't making any such assumption.[66]

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[66] Devitt returns to this issue in his book *Designation*, where he proposes an account of Frege cases in terms of "abilities to designate" (Devitt, 1981, ch. 5, esp. §5.5). So far as I can see, however, what does the actual work is the assumption that the two names are associated with distinct mental representations. The causal networks themselves play no role. (In a yet later discussion, Devitt (1989, p. 227) makes explicit reference to mental files. Again, they are what do the work.)

This sort of 'account', however, is not at all what Evans has in mind—and not just because he is so staunchly opposed to the causal theory of reference (Evans, 1973, 1982, §§3.3–3.4). When Evans actually attempts to say something about the grasping conditions that are supposed to determine sense, he almost always articulates those conditions in terms of broadly *epistemic* relations between (i) the cognitive states in whose content he is interested and (ii) what he thinks of as the more basic sorts of states, such as perception, from which we gather information about the world. This surfaces already in the brief remark Evans makes about the nature of self-conscious thought in "Understanding Demonstratives":

> . . . [A]n account of self-identification—of the way in which we know, when we think of ourselves, which object is in question—would have to relate it to *our special ways of gaining knowledge of ourselves*, both mental and physical, both past and present. (Evans, 1985b, p. 318, emphasis added)

But the most developed such accounts are in *Varieties of Reference*, whose main focus, as I have already said, is the nature of demonstrative thought. In accord with the general approach we have been discussing, that means that the central issue is what makes a particular demonstrative thought be about the object it is about.

Early in the chapter on demonstrative identification, Evans summarizes the sort of proposal he means to defend:

> . . . [D]emonstrative thoughts take place in the context of a continuing informational link between subject and object: the subject has an evolving conception of the object, and is so situated vis-à-vis the object that the conception which controls his thinking is disposed to evolve according to changes in the information he receives from the object. This already imports an element of discrimination, and it rests upon certain very fundamental perceptual skills which we possess: the ability to keep track of an object in a visual array. . . . It is a consequence of this necessary condition that a subject who has a demonstrative Idea of an object has an unmediated disposition to treat information from that object [delievered though the perceptual link] as germane to the truth and falsity of thoughts involving that Idea [i.e., way of thinking]. (Evans, 1982, p. 146, emphasis removed)

The fine details of Evans's view do not matter for our purposes, so let me abstract a bit. The rough idea is that what distinguishes (perceptual) demonstrative thoughts, first and foremost, is their being 'controlled' by some stream of perceptual experience.[67] What that means is that the deliverances of that perceptual stream constitutively provide evidence relevant to the subject's evolving beliefs about the object that is the target of the demonstrative thought in question. The object that the demonstrative thought is about then just is the object of the perceptual experience that 'controls' it.[68]

In the case of my thoughts about that$_\text{bow}$ ship, they are 'controlled' by my perceptual experience of a ship as seen through the window on the left: What I see through that window cannot but be regarded by me as relevant to how things are with that$_\text{bow}$ ship, even if I choose to reject what I see as misleading. By contrast, my simultaneous perceptual experience of a ship as seen through the window on the right is not something I must, in the same way, regard as relevant to how things are with that$_\text{bow}$ ship; nor is my experience as of a ship as seen through the window on the left necessarily relevant to my beliefs about that$_\text{stern}$ ship. Of course, if I believed the ships to be the same, then I would so regard it. That is why Evans describes the subject as having "an *unmediated* disposition to treat information" gathered from the left-window stream as relevant to their beliefs about that$_\text{bow}$ ship (but not to those about that$_\text{stern}$ ship).[69] And it is what I had in mind when I said that the deliverances of that stream are "constitutively" relevant to one's beliefs: Other perceptual information might be regarded as relevant, but certain perceptual information cannot but be regarded as relevant.[70]

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[67] This is the sort of thing that Dickie (2015, pp. 50–1) has in mind, as well, when she speaks of the 'proprietary' means of justification associated with a particular sort of singular thought. I don't think, though, that it's a requirement that perceptual evidence 'trump' non-perceptual evidence. See Heck (2017).

[68] What makes something the object of the perceptual experience? Evans's answer seems to be that it is the dominant causal source of the experience. But the overall shape of his view is consistent with almost any answer to this question.

[69] This is what I had in mind in my reply to the objection on p. 159 of "Solving Frege's Puzzle".

[70] It's by deploying this sort of idea that I would propose to handle the kinds of cases that worry Recanati (2016, pp. xi–xiii), where different sorts of evidence seem relevant to a given Thought at different times. But I simply do not find the passage he quotes from Millikan (1997, p. 511) all that impressive. It may well be, in the end, that modes of presentation are not needed to individuate mental states. (That was the conclusion of Heck (2012b), which we're presently reconsidering, in effect.) But I don't think the problem with modes of presentation is that they lack clear identity conditions. The

The epistemic link between a demonstrative thought and the perception that 'controls' it is, on Evans's view, part of what makes that thought the very thought that it is.

So we have a sketch here of the general form of a grasping condition for perceptual demonstrative thoughts:[71]

> S's perceptual demonstrative thought τ is about x because τ is 'controlled' by a perceptual experience of S that is about x.

Of course, all kinds of details are needed here—Evans's discussion in *Varieties* provides one version—but the question we still need to answer is whether grasping conditions can do the cognitive and epistemic work that the notion of sense was introduced to do. More precisely: Can we explain, in terms of this account of the grasping conditions of perceptual demonstrative thoughts, why it is possible, and can even be rational, to believe that that$_{\text{bow}}$ ship is an aircraft carrier without believing that that$_{\text{stern}}$ ship is an aircraft carrier?

The answer seems to be affirmative. The basic point is that the two thoughts are 'controlled' by different perceptual streams. One might well receive information from the left-window stream that licensed the belief that that$_{\text{bow}}$ ship is an aircraft carrier without receiving any such information from the other stream; one need not regard the information received from the left-window stream as even relevant to the question whether that$_{\text{stern}}$ ship is an aircraft carrier. Information from the left-window stream thus can constitutively be evidence that that$_{\text{bow}}$ ship is an aircraft carrier without so much as counting as evidence that that$_{\text{stern}}$

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stream of questions Millikan asks Evans may be difficult to answer, but asking difficult questions is not the same as showing that those questions cannot be answered, and Millikan does not even bother to consider how Evans might have answered her. She is also mistaken that Evans's 'dynamic Fregean thoughts' are "unFregean" (Millikan, 1997, p. 512). Evans (1985b, esp. §V) spends a good deal of time in "Understanding Demonstratives" considering and rejecting that very charge. It's just a mistake to think that "...the very first job of [Fregean senses] was to correspond to shared meanings of words and sentences in public languages" (Millikan, 1997, p. 107). Yes, Frege held that Thoughts are the senses of sentences, but that simply does not imply that he thought this was essential to them, let alone definitive of them. I could continue. But, frankly, Millikan is so utterly unsympathetic to Frege's thought, and Strawson's, and Evans's, that most of what she says simply fails to engage them.

[71] Other conditions in the same spirit would do just as well for our purposes. We could work, for example, with the sort of alternative developed by Dickie (2015, ch. 4). From our currently lofty viewpoint, Dickie's view is very much of the same type as Evans's, for all the differences of detail.

ship is an aircraft carrier. Since one might well possess such evidence, the crucial combination of attitudes could indeed be rational.

What makes Evans's suggestion workable—what makes it satisfy his condition (P)—is thus the fact that epistemic relations are built into the grasping condition itself: Such thoughts have, as it were, a certain sort of epistemic profile simply in virtue of their being the kinds of thoughts they are.[72] This explanation does not require the thinker to *know*, in any sense, that their thought is about a certain object because it is controlled by a perceptual stream that has that object as its target. Nor does the thinker need to know that some particular pereceptual stream is specially relevant to certain of their beliefs in order to treat it as such. These facts just need to obtain.

We can easily imagine a similar development of Devitt's treatment of proper names.[73] The idea would be that name-based thoughts are constitutively connected to information delivered linguistically through the use of that name, that is, to what Evans (1982, p. 125) calls the "social informational system". Thus, it is part of what makes one's Twain-thoughts the very thoughts they are that what other speakers say using the name "Mark Twain" is constitutively evidence concerning how things are with (the person one calls) 'Mark Twain', whereas what speakers say using the name "Samuel Clemens" is not.[74] Moreover, as I argued earlier, so much as regarding what others have to say as bearing upon one's own beliefs presupposes a certain constancy of reference. All else being equal (which it may not be), my Twain-beliefs are thus about the same person as those from whom I acquired the name. So a grasping

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[72] This sort of point is developed at length by Recanati (2012), who acknowledges his debt to Evans. (Recanati's view is, on my reading, yet another instance of the general sort of approach we are discussing.)

[73] It has been suggested to me that this might well have been what Devitt had in mind. I would agree that there are indications of such a line of thought, but attributing it to Devitt (at least in *Designation*) seems to me to require some very charitable reading.

[74] For most of us today, this is probably not true. My Twain-thoughts, for example, probably are not really distinct from my Clemens-thoughts. I have no independent epistemic access, so to speak, to Clemens—as far as I'm concerned, "Samuel Clemens" is like a nickname for Twain—and I treat other speakers' utterances using "Mark Twain" or "Samuel Clemens" as equally relevant to my Twain-thoughts. But, of course, for other speakers, that need not be so—even if they believe, or even know, that Twain and Clemens are identical (Recanati, 2012, Ch. 4). This is particularly clear if we think in terms not of binary belief but in terms of credence: My credence that Twain is Clemens could be very high (and supported by good enough reasons to count as knowledge) without being 1.

condition for name-based thoughts might be something like:[75]

> S's name-based thought τ is about x because it is constitutively sensitive to information delivered linguistically through the use of the name N, where N itself figures in an appropriate causal network in which S participates and that terminates in a 'baptism' of x with N.

One could then tell a story, based upon this sort of condition, about why it is possible, and how it can even be rational, for someone to believe that Twain is famous without believing that Clemens is famous.[76] There is, once again, no need for the thinker to *know* that their Twain-thoughts are about Twain in virtue of their participating in a causal network that terminates in a 'baptism' of Twain with "Twain", nor to know that utterances involving the name "Twain" are specially relevant to those thoughts.

So, if what we want from a theory of sense is a treatment of the puzzles about cognitive value, then Evans's proposal could perhaps let us have that. But, as we shall remind ourselves in section 3.4, that is not the only constraint on the notion of sense. Right now, however, I want to return to the question whether Evans has really provided us with an alternative to the view that sense is a condition on reference.

3.3   How Different Is Evans's Account of Sense?

There are two respects in which Evans's account of sense is supposed to be different from those we discussed earlier. First, Evans's grasping conditions are conditions on thinkers, rather than on objects of reference. Second, Evans does not require thinkers in any sense to know the grasp-

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[75] To be clear, I do not mean to commit myself to this particular account. It is the general structure of the account in which we're interested. What is doing the work here is not the reference to causal networks but the connection between name-based thoughts and the thinker's use of the relevant name (not just as speaker but also as auditor). One could replace the talk of causal networks with talk of name-using practices, and then one would have a grasping condition closer to what Evans (1982, ch. 11) sketches in *Varieties*. Alternatively, one might prefer the sort of account developed by Dickie (2015, ch. 5).

[76] Some work will be needed, though, to deal with Paderewski cases, i.e., cases of the sort discussed in "The Sense of Communication" (Heck, 1995, p. 95). I've made it too easy for myself, in effect, by talking about "the" name N, when "the" name N can almost always be used to talk about many different people. But this complication does not undermine the general point I'm trying to make.

ing conditions that individuate the contents of their thoughts, but only to satisfy those conditions.

One might object, however, that the first point is over-stated. It's easy to extract a condition on reference from the grasping conditions stated in the last section. For example:

> x is the referent of S's name-based thought τ iff τ is constitutively sensitive to information delivered linguistically through the use of the name N, where N itself figures in an appropriate causal network in which S participates and that terminates in a 'baptism' of x with N.

Indeed, that is just a trivial re-writing. Moreover, one might think that the second point is one that Chalmers and Dummett emphasize themselves. What Dummett and Chalmers require is only that the thinker be appropriately sensitive to the facts that determine reference, e.g., that they be disposed, under appropriately idealized conditions, to identify the referent of a name in accord with the condition just stated (or whatever the right condition might be). As we saw, there are problems with that way of articulating what an 'implicit grasp' of such a condition might involve. But couldn't Chalmers and Dummett simply accept Evans's corrective and agree that all that is actually required is that the thinker (and object) satisfy the appropriate condition?

Well, of course, but not without consequence. Evans's view, I take it, is that name-based thoughts have the content they do—that is, have any kind of content at all—in virtue of one's actual participation in the practice of using the relevant name. The grasping condition for name-based thoughts requires one to have communicated with other speakers using that name (where that need not require one ever to speak oneself). Similarly, Evans takes perceptual demonstrative thoughts to have the content they do in virtue of one's actual perceptual engagement with an object in one's environment. It is not, then, just that Evans has an externalist attitude about thinkers' *satisfaction* of these conditions. Rather, the conditions themselves are externalist. On Evans's view, that is to say, it is not just that one need not know anything about causal chains; it is that his alternative to knowing about causal chains is being part of one.

It is not my purpose here to argue in favor of Evans's position. My purpose here is simply to argue that Evans's position really is distinct from those of Chalmers and Dummett. What makes it distinctive is the fact just mentioned: that Evans's grasping conditions are already

externalist, involving appropriate sorts of relations in which the thinker stands to their environment. In discussion, at least, I have found that people often overlook this sort of point, contenting themselves with the observation that *of course* there have to be facts about the thinker themselves that make it the case that they are thinking a thought with a certain content. And, indeed, of course: It is not as if what makes it the case that my thoughts have the content they do could have nothing to do with me. By itself, however, that shows nothing: There are facts about me that make it the case that I am a parent, too, but my being a parent is nonetheless an irreducibly relational fact about me. The facts that make my thoughts about what they are could be irreducibly relational, too, and so not ones that are independent of my physical and social environment.

This is why Nozick's Gambit is not as easy to implement as one might have thought, not if one's purpose is defend internalism and individualism against Kripke *et al*. Of course one can, as Devitt does, simply take the sense of a name to be individuated by the facts, whatever they are, that fix reference. But, by itself, that does not help. (Not that Devitt thinks otherwise.) Those facts are liable to be external and relational. So one has, somehow, to *internalize* the relational facts. In teaching, I call this move: internalizing the external.

The obvious way to do that is to claim that thinkers *know* what fixes reference. Then the external facts are relevant because thinkers take them to be relevant. But, absent a heavy dose of idealization, that claim is just patently false. Another option, which is the one Chalmers and Dummett pursue, is to claim that speakers know such things at best implicitly: that their recognitional judgements are sensitive, somehow, to whatever it is that fixes reference. But we have seen that there are obstacles to that strategy, as well, and our present discussion only adds to them: Is it really plausible that every creature that is capable of perceptual demonstrative thought is sensitive, in the way Dummett and Chalmers require, to whatever it is that fixes the referent of such a thought?

This is a far more challenging question than the corresponding question about proper names, discussed in section 2.3, because the range of creatures capable of such thoughts is, at least plausibly, much greater. I am willing to grant, in a charitable spirit, that many adults do have some vague appreciation of the fact that their perceptual demonstrative thoughts are about whatever is the source of the perceptual information streams that controls those thoughts. But, if infants are capable of any

thoughts at all—and I take it that they clearly are—then demonstrative thoughts are presumably among them, and I see no reason at all to suppose that infants, surprisingly sophisticated as they are, have the conceptual resources that would allow their recognition judgements to be sensitive to the sorts of facts to which Chalmers and Dummett need them to be sensitive. The same goes for non-human animals, if one supposes, as I once again would, that they are capable of demonstrative thought. In particular, I see no reason to think that all creatures capable of demonstrative thought must be able, in any sense, to think *about* their thoughts, or their perceptions, or the relation between them and the world. But thinkers cannot be cognitively sensitive, even dispositionally, to conditions they cannot register.

If so, however, then what make a creature's demonstrative thoughts about whatever they are about are facts about how those thoughts are related to that creature's perceptions, and how its perceptions are related to its environment—facts the creature need not be able to appreciate. It is hard to see why things should be any different for adult human beings. If one has the curiosity, intellectual capacity, and leisure-time to reflect upon such matters, one might develop some understanding of how one's thoughts relate to one's environment. But the facts themselves are what are primary, and they are what do the work. Reflective understanding of their significance, where it exists, is a proto-philosophical bonus.

3.4   Semantics vs Meta-semantics

> Every [sentence] *expresses* a sense, a *thought*. For owing to our stipulations, it is determined under which conditions it refers to the True. The sense of this [sentence], the *thought*, is: that these conditions are fulfilled. (Frege, 2013, v. I, §32)

That is Frege's clearest articulation of the claim that Thoughts are truth-conditions, which I earlier labeled Thesis 4. I take this claim to be essential to Frege's view. It is what ultimately distinguishes it from the sorts of views explored in my paper "Solving Frege's Puzzle" (Heck, 2012b)—e.g., that senses are mental particulars—or from Devitt's view that the senses of proper names are causal networks.

Why does it matter whether Thoughts are truth-conditions? The fundamental problem that Frege introduces the notion of sense to resolve is really a logical one. The question is why these two sentences

(19) Twain is an author

(20) Twain is not an author

are logically incompatible—why beliving them both would be to contra-
dict oneself—whereas (20) and

(21) Clemens is an author

are not incompatible. It is plainly not enough simply to observe that the
same *name* occurs in (19) and (20) but not in (20) and (21). Nor, obviously,
is it enough that names with the same reference occur in (19) and (20).
Rather, what makes (19) and (20) incompatible, according to Frege, is
that expressions with the same *sense* occur in both of them (Taschek,
1992; May, 2006). Generalizing, then: That expressions re-occur with
the same sense will be a crucial feature of an extremely wide range of
logically valid inferences; it will be the only thing that distinguishes
those inferences from closely related ones that are not logically valid (or
even coherent). The formalization of informal reasoning thus requires us
to use the same formal symbol where, and only where, there is sameness
of sense. Sameness of sense, that is to say, is what sameness of symbol
in Frege's formal language is supposed to guarantee or reflect. It is what
matters for logic.

But logic, Frege insists, is about truth (Frege, 1979b, p. 128). And
Frege is quite clear that there can be elements of the 'meaning' of a
sentence that have nothing to do with its truth. These are what Frege
calls "tone" or "coloring". (Poetic subtleties and pejoration are among his
examples.) Sense, by contrast, includes only what is relevant to truth,
and it includes everything that is relevant to truth (Frege, 1979a, pp.
197–8). That, as said earlier, is what the doctrine that Thoughts are
truth-conditions comes to, in the end. So the fact that (19) and (20) are
incompatible whereas (21) and (20) are not is supposed to imply that the
Thoughts expressed by (19) and (21) are different. But if logic is only
about the truth-relevant features of sentences, and if sense includes only
what is relevant to truth, then there must also be some truth-relevant
difference between (19) and (21), some difference in what they represent,
some difference in their truth-conditions.

I am not defending this argument: Indeed, I do not, in the end,
think that it is defensible (Heck, 2012b, pp. 170–2). But I do think
it is clear that Frege was moved by some such considerations. And,
quite independently of what Frege believed, it is an important issue
whether logical and, more generally, rational relations supervene on

representational content.[77] If they do, and if (19) and (21) have the same representational content, then (21) and (20) must be every bit as incompatible as (19) and (20).

Is sense, as Evans understands it, an aspect of representational content? Sense plausibly is an aspect of representational content if sense is a condition on reference. That is one of the central virtues of that view. But, on Evans's view, it is hard to see how sense could be representational. Evans takes the senses of demonstratives and proper names to be *de re*: The sense expressed by "Twain" is essentially one that is of Twain. Hence, the Thought that is expressed by (19) is also one that is essentially about Twain: That thought would not be expressed by (19) if "Twain" did not refer to Twain. Hence, the sort of truth-conditional difference that Chalmers and Dummett take there to be between (19) and (21) cannot exist for Evans. In particular, in a world in which "Twain" and "Clemens" do not refer to the same person, at least one of those two sentences would not express the same Thought that it does in our world. For this reason, although I know of nowhere that he makes this claim explicitly, and there is surely some wiggle room here somewhere, I find myself wanting to say that, for Evans, (19) and (21) must have the same truth-conditions, the same representational content.

I think this is also what is really bothering Stalnaker when he complains about the way that (as he sees it) Fregeans confuse semantics with meta-semantics. This is a worry that goes back at least to Kripke (1980, p. 59): "Frege should be criticized for using the term 'sense' in two senses. For he takes the sense of a designator to be its meaning; and he also takes it to be the way in which its reference is determined". This same distinction also figures centrally in Kaplan's work: The big new idea in "Dthat" (Kaplan, 1978) is that we must distinguish those aspects of a word's 'meaning' (in some broad, pre-theoretic sense) that *fix* its content (and which Kaplan calls 'character') from those that are *part of* its content. But, as I've said, this objection has been pressed hardest by Stalnaker. Here is one characteristic expression of it, part of which we have already seen:

> The equivocation is between a constituent of propositional
> content on the one hand, and a relation between a thinker

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[77] Note, for example, that without this assumption, the so-called Problem of Logical Omniscience (see e.g. Stalnaker, 1999b,c) never arises, even if we assume that the contents of beliefs are sets of possible worlds. Of course, that also means that there's at least the option of solving the Problem of Logical Omniscience by abandoning the mentioned assumption.

and the content of his or her thought on the other. Stanley [who was elaborating on Evans] is explicit in saying that modes of presentation, as he understands them, are "ways of hypostasizing our relations to objects in virtue of which we can think about them [the objects]". But these "ways" are also constituents of the propositions themselves.... I don't think anything can play both of these roles, since it is part of the idea of a proposition... that propositions, or Thoughts, be characterizations of the way the world is, characterizations that are intelligible independently of thinkers that think the Thoughts, or speakers who assert them. (Stalnaker, 2012, p. 759)

Stanley replies that Stalnaker has mischaracterized Evans's position.[78] Consider Evans's account of the Thought expressed by a particular utterance of "Today is fine".[79] The part corresponding to "today"—the way of thinking of a day that figures in this Thought—will be given by the property someone must have in order to be thinking of the then-current day as 'today' (rather than as, say, 11 June 2023). As Evans sees it, this involves the thinker's standing in a certain sort of relation to that day: There is some relation R_{today} such that thinking of 11 June 2023 as 'today' on that day means having the property $\lambda S[R_{\text{today}}(S, 11 \text{ June } 2023)]$.[80] So Evans proposes to represent the Thought expressed on 11 June 2023 by "Today is fine" as:

(22) $< \lambda S[R_{\text{today}}(S, 11 \text{ June } 2023), \text{sense of "fine"} >$

Having explained all that, Stanley then writes:

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[78] There are certainly some respects in which this is so. Specifically, Stalnaker (2012, p. 760) seems somewhat puzzled by the way that Evans 'factors' what it is about the speaker that makes it the case that they are thinking a self-conscious Thought about themselves into a relation and one of its terms. But this 'factoring' is something Evans (1985b, p. 316) only does in order to give an account of the respect in which two different people can be thinking of themselves in 'the same way' even though they are *not* thinking Thoughts with the same content (see Stanley, 2012, pp. 775–6).

[79] Stanley switches to this case because the case of self-conscious Thoughts, which are what Stalnaker discusses, is of course a special case: Since these too are supposed to be *de re*, they are *not* intelligible independently of the thinker who thinks them; to be thinking such a Thought, the speaker must stand in a certain kind of cogntive-cum-whatever relationship with themselves.

[80] Read this as: The property of an S such that $R_{\text{today}}(S, 11 \text{ June } 2023)$. I'll omit the relativization to time, as both Stalnaker and Stanley do.

> I fail to see how this account results in a view of propositions according to which their intelligibility depends on thinkers who think these thoughts. Anyone can grasp this proposition, without having any attitudes towards thinkers. All they need to do to grasp this proposition is to have certain dispositions towards the day in question [the ones described in R_{today}], and think of the property of being fine in the relevant way. (Stanley, 2012, p. 775)

That is right as far as it goes, but I am not sure that Stanley has fully appreciated the generality of Stalnaker's worry.

Reflect upon what sorts of things will figure in the relation R_{today}: It will involve all sorts of cognitive and epistemic relations in which I am required to stand to a particular day, which will themselves be mediated by various of my perceptual and introspective faculties. Putting these sorts of relations into the Thought expressed by "Today is fine" might not make such Thoughts "[un]intelligible independently of thinkers that think" them, but it does seem to give those Thoughts the wrong sort of content. To parrot Kaplan, when I think that today is fine, I am just thinking about a day; I am not thinking about any cognitive and epistemic relations in which I stand to that day.

This particular difficulty, however, is not due to anything essential to Evans's view, but only to a way in which it can be misleading to use such constructs as (22) to represent Thoughts as Evans conceives them. The problem is that (22) makes it appear as if the relation R_{today} is itself somehow *part of* the content of every utterance of "Today is fine". But this is a mistake—though not an unreasonable one, given the notation. As Evans himself remarks:

> No one can give an account of the constant meaning...of a demonstrative without mentioning some relational property...which an object must satisfy if it is to be the referent of the demonstrative in that context of utterance, but the *idea* of this property plays no part in an explanation of what makes a subject's thought about himself, or the place he occupies, or the current time. (Evans, 1985b, p. 320, emphasis altered)

Evans is making a number of points here, but I take this remark to be very much in the spirit of the one I have attributed to Kaplan. Indeed, I argued in section 3.3 that the whole point of Evans's approach is to explain how such relational properties can individuate sense *without*

thinkers having any awareness of them, which, I take it, is what Evans means when he speaks of the "*idea* of this property".[81] Which, as the last sentence of the passage quoted above clearly indicates, would not be news to Stanley: One does not have to 'grasp' the relation R_{today} to be able to think about 11 June 2023 as 'today' but only *to stand in* that relation to 11 June 2023. As Stanley (2012, p. 775) is interpreting Evans, that simply "requires having certain dispositions towards the day in question".[82]

Stanley discusses this same sort of issue in *Know How*. The topic there is self-conscious thought. Stanley reminds us of the general form of Evans's account of sense, which will involve some relation R_1 between the thinker and the object of their thought. He then rehearses the following objection:

> Since Evans holds that this relation is itself in the content of any first-person thought, he thereby attributes to any person having a first-person thought a thought whose content contains the relation determined by the account of what it is to have a first-person thought about an object. And one might worry that this is too sophisticated. On one way of viewing it, even trained philosophers do not have beliefs containing Evans's relation R_1. If so, then having a thought with this relation as its content is not a precondition for having a first-person thought. (Stanley, 2011, p. 85)

As Stanley observes, the conclusion of this argument is simply correct: Sense is not to be identified with such relations as R_1, if what that means is that such relations figure as part of representational content. Rather, Stanley suggests, we should define senses contextually.[83] The model

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[81] Ironically, this may also be what most distinguishes Evans's account from Perry's, and Kaplan's. What Perry calls "role" and what Kaplan calls "character" are supposed to correspond to linguistic meaning. As such, they will naturally be known to competent speakers and so will give rise to a priori truths, such as that of (any utterance of) "I am here now" is true. But Evans spends a good deal of time arguing that role and character cannot, for that very reason, play the role of sense. (The passage quoted just above is part of that argument.) The crucial step is to allow the relational properties that individuate sense *not* to be known to speakers.

[82] Note that these are not dispositions to *identify* the day, so they are not dispositions of the sort that Chalmers and Dummett require.

[83] I realized only recently that Evans makes essentially the same proposal:

> ...[T]wo people will...be thinking of an object in the same way if and only if...what makes the one person's thought about that object is the same

here is Frege's proposed contextual definition of directions (Frege, 1980, §64), according to which two lines have the same direction just in case they are parallel:

$$\mathrm{dir}(a) = \mathrm{dir}(b) \text{ iff } a \parallel b$$

So let R_i and R_j be relations between thinkers and things—the sorts of relations that individuate senses. Then, Stanley says, we may contextually define senses as follows:

$$\sigma(\lambda S(R_i(S, o)) = \sigma(\lambda S(R_j(S, o)) \text{ iff } \forall S(R_i(S, o) \equiv R_j(S, o))$$

Roughly, R_i and R_j determine the same sense just in case a thinker bears R_i to a given object iff they bear R_j to that same object.

This proposal faces a dilemma. Is it or is it not possible for distinct relations R_i and R_j to satisfy the right-hand side? If it is, then one might well worry that these distinct relations might give rise to Thoughts with different epistemic and cognitive profiles—in particular, to a case in which the thinker could have different attitudes towards the same Thought, in violation of Thesis 1. But if it is not possible, then Stanley's contextual definition is equivalent to this one:

$$\sigma(\lambda S(R_i(S, o)) = \sigma(\lambda S(R_j(S, o)) \text{ iff } R_i = R_j$$

And such definitions are extremely suspicious. Compare:

$$\phi(x) = \phi(y) \text{ iff } x = y$$

What is the special abstract entity that belongs to each thing uniquely? Its haecceity? Its singleton? But what about its doubleton $\{\{x\}\}$? Or the multiset $\{x, x\}$? Is metaphysics really that easy (see Heck, 2011)?

The right reaction to the objection Stanley is considering, it seems to me, is to re-iterate the original motivation for the approach to sense that we have been exploring throughout this section. Do not expect to be told what Thought is expressed by an utterance of "Today is fine" in any other terms than: that today is fine.[84] Indeed, Evans himself emphasizes

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as... what makes the other person's thought about that object. (Evans, 1985b, p. 294)

Stanley seems to have overlooked this antecedent as well, since he does not cite Evans in this connection.

[84] If the utterance was made on some other day, then of course this raises questions about 'cognitive dynamics'. Evans (1985b, §IV) broaches this topic, but I shall ignore it here.

this point, citing the very paper of McDowell's that was mentioned above and alluding to Dummett's invocation of the saying–showing distiction. Unlike McDowell, however, Evans agrees with Dummett that we do at least owe an account of *what it is* to entertain the Thought that today is fine (as opposed to some other Thought) and to ensure, through principle (P), that this account coheres with Frege's Thesis 1. Since our account of what it is to think a given Thought also individuates that Thought— in the sense that distinct Thoughts will correspond to different such accounts—such representations as (22) can be used to model Thoughts formally. The use of such notation does *not* imply, however, that R_1 is part of the representational content of self-conscious Thoughts or that it has to be grasped by the thinkers whose Thoughts these are. That is why I said earlier that such representations are *misleading* rather than *wrong*.

Stalnaker's charge that Evans is conflating meta-semantics with semantics is thus misplaced. But that is just one horn of the dilemma with which Stalnaker means to be confronting Evans. On the one hand, we can take R-relations to be part of representational content. If we do that, then it is clear enough how "I am F" (as uttered by me) and "RKH is F" can have different truth-conditions. But then we are vulnerable both to Stalnaker's charge that we are conflating semantics with meta-semantics and to Kaplan's worry that we are just getting the content wrong.[85] On the other hand, we can follow Evans and deny that R-relations figure in representational content. But the R-relation is what differentiates self-conscious Thoughts from those that are merely about the thinker. If R-relations do not figure in representational content, then it becomes difficult to see how "I am F" and "RKH is F" can have different contents. As Stalnaker (2012, p. 760) puts it, "It seems that the sense [in the form of R-relations] is playing no role in the truth conditions of the proposition expressed".

One might try to avoid this conclusion, as Stanley (2012, p. 777) does, by claiming that R-relations are relevant to the truth-conditions of

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[85] We're on this horn of the dilemma if, as considered in section 3.3, we re-write grasping conditions as conditions on reference and then use them to define a notion of 'primary' (or epistemic) intension with which to model representational content. That, again, is the lesson of the observations due to Schroeter and Speaks that were mentioned at the beginning of section 2.6. Such a formal object may have other uses but if, with Evans, we take R-relations to *determine* rather than constitute content, then primary intensions are actually secondary, and content itself is given by 'secondary' (or subjunctive) intensions (Stalnaker, 2001, esp. pp. 149–50).

attitude ascriptions. But the most that can be said here is that they might be: One would have to see an actual theory of attitude ascriptions before committing to any stronger conclusion. More importantly, however, even if that were right, the point is simply orthogonal to the one Stalnaker is making, which is about the truth-conditions of *simple* sentences. That is where the original puzzle about cognitive value arises, not with attitude ascriptions.

I conclude that Evans's account of sense, though it might help us understand Frege cases, makes sense irrelevant to representational content. On Evans's view, the contents of propositional attitudes are, at best, Russellian propositions.

4 Conclusion

There are two options for those not satisfied with the austere treatment of Frege cases defended in "Solving Frege's Puzzle". The first is to take sense to be a condition on reference. I argued in section 2, however, that this approach faces a number of serious objections, the most important of which is that it distorts the contents of our thoughts and threatens their objectivity. The second is represented by Evans's account of sense in terms of grasping conditions. I argued in section 3, however, that this view fails to secure any difference in representational content between such sentences as (19) and (21) and so forfeits Thesis 4.[86]

How bad is that? If I'm right, then Evans's view also forfeits the claim that rational relations supervene on representational content, which I suggested above is a significant departure from Frege. But, in a different way, Evans's view is closer to Frege's than is the view of "Solving Frege's Puzzle". On that account, for the purposes of psychological explanation, we can type mental states in terms of Russellian content and the mental representations that have that content: one's Twain-beliefs are distinguished from one's Clemens-beliefs only in virtue of the mental representations that underlie them. Evans, by contrast, is suggesting that we should type mental states in terms of Russellian content and R-relations, and the latter are intimately tied to content. Indeed, for Evans, the very same thing that determines reference—the

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[86] It is certainly not worth our having a verbal dispute over the meaning of the term "content". Some authors have used the term in such a way that content need not be representational. I find such usages disorienting, but I have been careful to frame my claims here explicitly in terms of *representational* content.

way I am connected to the object of my thought—is also determining sense, just in a more fine-grained way. Someone else might be related to the object of my thought in the same 'way' I am, even though many of the details differ. So sense, according to Evans, is an abstraction from representationally significant features of mental states, even if it does not affect representational content. Sense, as we might put it, is *mode of representation*.

Why might one prefer Evans's view? One suggestion might be that it's an advantage of Evans's view that he has a way of typing thoughts inter-personally. There's a clear sense, on Evans's view, in which two people might be thinking of *Enterprise* in the same way when they both think of it as that$_{\text{bow}}$ ship, say: They just need both to satisfy the relevant condition $\lambda S.R_{\text{bow}}(S, Enterprise, t)$. But, while that may be true, it's less clear how much it helps. It doesn't, for example, help us explain successful communciation, since sameness of Thought in this sense isn't required for successful communication, or so I have argued in elsewhere (Heck, 2002). It's arguably not sufficient, either, though this point is more delicate.

I mentioned toward the beginning of this chapter that it is not, in general, required for there to be a difference in sense between two sentences A and B that it should be *rational* to believe the one and not the other. What's required is simply that it should be *possible* to believe the one and not the other. Frege himself is not always sufficiently sensitive to this point. There are a number of places in his writing where he suggests that two sentences have the same sense when one might have thought they should have different senses. Frege suggests (1984b, op. 11) in "Function and Concept", for example, that these two formulae

(23) $\forall x(x^2 - 4x = x(x - 4))$

(24) $\grave{\epsilon}(\epsilon^2 - 4\epsilon) = \grave{\epsilon}(\epsilon(\epsilon - 4))$

which are the two sides of an instance of Basic Law V,[87] have the same sense. But, given the strong compositionality of sense, the structural difference suggests they cannot have the same sense. Moreover, it is quite obviously possible to believe (23) but not (24), as Frege concedes when he notes that Law V "is not as obvious as the other[]" logical laws of his system (Frege, 2013, v. II, p. 253). Ordinarily, one would have thought that settled the question whether (23) and (24) have different

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[87] The latter says that the function $x^2 = 4$ has the same 'course of values' (or graph) as $x(x - 4)$ (i.e., and roughly, that $\{(x, y) : y = x^2 - 4x\} = \{(x, y) : y = x(x - 4)\}$).

senses. But it also seems compatible with claiming that, so long as one understands the two expressions, it will never be *rational* to believe one but not the other (especially if we idealize in some way). If we tie sense to rationality in this way, then, it will be much harder to demonstrate difference in 'cogntive value' than it has usually been supposed to be.

But there are different sorts of cases here. Naïvely, at least, one would suppose that it could be rational to believe that Twain is an author but not to believe Clemens is an author and not just because the latter question has not arisen. One could be actively engaged in trying to decide whether Clemens is an author while being fully conscious that Twain is—and, indeed, being fully conscious that one way of establishing that Clemens is an author would be to show that Clemens was actually Twain. The sort of view defended in "Solving Frege's Puzzle" does not explain this fact. Indeed, it does not see there as being any psychologically relevant difference between the pairs (23) and (24), on the one hand, and (19) and (21), on the other. But nor does the Relationist approach to Frege cases prohibit us from recognizing such differences where they exist and typing psychological states in other terms, as well, should we have reason to do so. Explaining the difference between the pairs just mentioned might count as such a reason.[88]

The obvious question, however, is whether, if we invoke R-relations to explain differences of cognitive value, that will not make formal relations redundant. Possibly. It depends upon whether we can use R-relations to explain why certain thoughts are 'co-ordinated' with others. For example, my thought that that$_{\text{bow}}$ ship is F contradicts my (potential) thought that that$_{\text{bow}}$ ship is not-F but not the thought that that$_{\text{stern}}$ ship is not-F. Why? It's tempting to say that it's because evidence from the perceptual stream that bears upon the thought that that$_{\text{bow}}$ ship is F must also bear upon the thought that that$_{\text{bow}}$ ship is not-F but not upon the thought that that$_{\text{stern}}$ ship is not-F. But, of course, evidence *not* from the perceptual stream bears upon those thoughts as well. Maybe there's some story to be told here, though.[89] But the question whether R-relations can do all

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[88] Note that this is quite different from the sort of reply given to the objection stated on p. 163 of "Solving Frege's Puzzle". There, the point was that some of the differences in behavior that depend upon whether someone believes (19) or (21) can be explained by other differences in what they believe (e.g., they believe that Twain lived in Hartford, but not that Clemens did). The difference recorded by R-relations is not, however, that kind of cognitive difference.

[89] Jim Pryor (2016, §9) gives a number of similar examples in his paper "Mental Graphs". Aidan Gray (2020) has since argued that these examples cannot do the work Pryor wants them to do.

the work here seems to me less important than the question whether there is useful work for them to do. And, arguably, there is.[90]

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