

teorema

Vol. XXII/1-2, 2003, pp. 5-21

Communication Without Sense*

Manuel Campos and Ramón Cirera

RESUMEN

Diversos autores de inspiración fregeana han defendido recientemente la necesidad de recurrir a los sentidos para dar cuenta de la posibilidad de comunicación. Estos argumentos han llevado a algunos filósofos a desarrollar teorías del sentido que incluyen intuiciones externalistas como las defendidas por neorrussellianos. En este artículo argumentamos que dichas teorías del sentido no funcionan. También presentamos una explicación de inspiración neorrusselliana que resuelve los problemas puestos de manifiesto por los autores neofregeanos sin recurrir a entidades como los sentidos.

ABSTRACT

Different authors of Fregean inspiration have argued recently for the need of resorting to senses in order to explain successful communication. Such arguments have led some philosophers to develop theories of sense which include some of the externalist insights brought up by neo-Russellians. In this paper, we argue that these theories of sense don't work. We also present a broadly neo-Russellian account that explains away Fregean puzzles on communication without recourse to entities like senses.

We are going to focus, in this paper, on some of the latest developments in the ongoing discussion in semantics between neo-Fregeans and neo-Russellians (also known as 'new theorists of reference' — somewhat misleadingly, given that they have been on the stage for a long time, at least since the publication of *Naming and Necessity* [Kripke (1980)¹]). Traditionally, neo-Fregeans have focused their views on the concept of understanding, which they take to be an essential component of a theory of meaning. The alternative view, dominant in neo-Russellian quarters, is to leave understanding aside and to concentrate on truth-conditions. Of course, truth-conditions are also essential for a neo-Fregean, but they are not their sole concern. The same truth-condition can be expressed in different ways. Different thoughts, differently understood, can have the same truth-value in every circumstance. Not so, say the new theorists: propositions embody truth-conditions and they are the content expressed by an assertive utterance of a sentence. Further, they are what is preserved when we communicate with those who are in different contexts [Perry (1993a), p. 231]. In these different contexts, different

individuals may understand the utterance of the sentence in non-coincident ways. If I say to you, ‘I feel cold,’ what I understand, in a broad way, has to do with something which happens to me, something I, myself, feel. You, or somebody else, will think that this is something that happens to this other person, not to yourself or himself. That is, you understand the sentence differently. What one understands helps to explain what one does. Accordingly, I am the only one who will react by putting on a sweater. Of course, there is something common to the three of us. We all think that it is I, the one who is talking, who feels cold, and the truth-conditions of this claim require that I have the stated feeling. That is what is common and also what is communicated: the proposition that embodies the truth-conditions. According to neo-Russellians, then, in a case of successful communication, what is conveyed is the proposition, not the different ways in which people think of it.

Richard Heck has contributed to the dispute between neo-Fregeans and neo-Russellians with his notorious 1995 paper “The Sense of Communication.” Although Heck initially addresses the subject in a congenial way for the neo-Russellian, he soon formulates a problem that is apparently insoluble using neo-Russellian tools. He assumes, for the sake of the argument, the most popular neo-Russellian proposal, which he calls ‘the Hybrid View’. This proposal claims that even if Fregean arguments do show that beliefs and other propositional attitudes are intensional, that is, even if the belief that Hesperus is a star is a different belief than the belief that Phosphorus is a star, the meanings of ‘Hesperus is a star’ and ‘Phosphorus is a star’ are the same, given that Hesperus *is* Phosphorus.² The propositions and the truth-conditions which they embody are the same, even if many people, especially those who don’t know that Hesperus and Phosphorus are the same planet, may think of them in different ways. So, we can conclude that something more than references and truth-conditions — something we may call ‘sense’ without any special commitment — is required in an adequate explanation of the semantic of belief sentences. But senses could be something privately associated with a word by the speaker or hearer, not components of public meaning [Crimmins and Perry (1993)]. As Heck himself puts it, “[w]e have [...] been given no reason to think that the notion of sense [the way of thinking of Venus, in this case] has any application whatsoever outside the philosophy of thought” [Heck (1995), p. 81]. Heck’s aim is to provide this reason. His strategy is to elucidate what, in a case of successful communication, the relationship is between the senses that speaker and hearer associate with a word, specifically with a proper name.³ The idea is to conclude that to have a case of communication it is not enough to get the content right: it is necessary, in addition, to think of the object—at least in the cases in which we refer to it by a proper name—in a determinate way (or ways, he is willing to accept). These ways would be senses in a much more committed manner. They would

be associated with proper names as a part of their meaning, much in the way neo-Fregeans want.

Some lines above we used a notion of understanding *in a broad way*. We did so because Heck arguably uses a narrower notion. According to him, the defenders of the Hybrid View are committed to the extensionality of understanding, given that “so far as linguistic communication is concerned, reference is all that matters.” He uses ‘understanding’ here to express what we would call ‘getting the content’. There is nothing wrong in using ‘understanding’ as Heck does, but we want to make it clear that no ways of thinking are included in the notion as used by the Hybrid View. We prefer to say that, according to this view, what is needed in a case of successful communication is to get the content right, that is, to grasp the proposition expressed by the speaker, but not to understand it in the same way. As Heck uses it, “understanding” includes grasping the cognitive value of the sentence, whatever that is, which Heck elucidates as “what is common to the cognitive values the sentence has for different speakers who understand it” [Heck (1995), p. 87], where “the cognitive value of a sentence, *for a speaker*, is the content of the belief she would form were she to accept that sentence as true.” He goes on to argue that, according to the Hybrid View, a sentence’s cognitive value is the same thing as its meaning. Then, given the extensionality of meaning defended by this view, we have that, in the case of names, only references are relevant to the cognitive values of the sentences in which they appear. In any case, we can find a common ground for the use of ‘understanding’ if we agree that understanding is what happens in cases of successful communication. Accordingly, Heck doesn’t find it useful to discuss the issue, but rather seeks to identify what is involved in communication. When we communicate, he claims, we transmit beliefs,⁴ but we do more than that: communication has to be a form of transmission of knowledge, or at least of justified belief. This point had already been argued by Evans (1982, pp. 310-311) and Burge (1993), and we are in full agreement. As Heck says very aptly: “If one has communicated successfully with [...] one who knows what she said to be true, then all that is required, if one is to come to know something, is that one accepts the assertion as true” [Heck (1995), p. 92].

It appears now that there is a problem for the Hybrid View, because if, for instance (to use one of Heck’s examples), Tony hears Alex assert ‘George Orwell wrote *1984*’ and Alex knows this sentence to be true, then if Tony understands the utterance and accepts the assertion as true, she will form the belief that George Orwell wrote *1984*. Moreover, she will be justified in believing that. But had she formed the belief that Eric Blair wrote *1984*, she wouldn’t have been justified, unless she had some further knowledge, that is, the knowledge that George Orwell is Eric Blair. On the other hand, Tony would have been justified in this second belief if Alex had said

‘Eric Blair wrote *1984*.’ How is that possible if references are the only thing relevant to the meaning, that is, the cognitive value of the sentence? If to get the content right both times is enough for successful communication, Tony must have been conveying the same thing and there is no explanation for the difference seen in *epistemic opportunity*. The only possible explanation seems to be, as Heck concludes, that Tony attaches to one name something that she doesn’t attach to the other, and this cannot be something peculiar to Tony, unconnected to the public meaning of the name. It has to be something common to the senses which different speakers associate with the name. So the meaning of the name is more than its reference.

An avenue that seems open to neo-Russellians consists in linking the cognitive value or cognitive significance with the expression itself, in this case the name. That would explain away the difference in the example we have just seen, but it wouldn’t help in another situation, described by Heck, where Eric Blair becomes an amnesiac and is arbitrarily dubbed ‘George Orwell’ by Tony, his doctor. When, after reading a literary newspaper, Alex says ‘George Orwell wrote *1984*,’ Tony believes him, thinking Alex is referring to her patient. This is a true, but unjustified, belief, since Tony thinks it is about her patient, who, unbeknownst to her, happens to be the “right” George Orwell, the writer. In the first example it is clear that after hearing Alex’s utterance of ‘George Orwell wrote *1984*’ Tony is not justified in believing the proposition that the truth-conditions of ‘Eric Blair wrote *1984*’ are satisfied, which is what she would need to be justified in believing if she were to be able to get to the belief that Eric Blair wrote *1984*. But if it is only the name that matters, in the last example, she should be justified to believe the proposition that the truth-conditions of ‘George Orwell wrote *1984*’ are satisfied and consequently she would be justified in believing that George Orwell (her patient) wrote *1984*. But she is not.

It seems then that the neo-Russellian faces significant difficulties. Nevertheless, Heck’s paper is challenging to both sides of the discussion. This is because the article doesn’t advance a theory of senses. It doesn’t go farther than expressing a moderate view of senses, more limited than McDowell’s (1977) *austere conception*. He claims no more than that there are linguistic senses closely related to cognitive senses — maybe families of them. To fill this gap with a theory of senses is the challenge Heck’s paper presents to the neo-Fregean.

It is not an easy challenge to meet: senses have to fulfill certain conditions in order to be fit for their role. At least they have to be epistemically accessible for speakers and hearers. They also have to be something known by a common speaker on the sole basis of her linguistic competence. That would make senses intersubjective, though not necessarily objective, as Frege thought. Senses have to determine their references at least, as Heck

puts it,⁵ “in the mathematical sense.” That means that names with the same sense cannot have different references. Finally, senses have to be respectably embodied, something that current cognitive science can accept; not a mysterious entity, but one that can be thought as ingrained in the cognitive apparatus of a human being. Besides, most neo-Fregeans, including Evans (1982) and McDowell (1984), have accepted the contemporary reasons for singular propositions, so the task of the neo-Fregean has to be performed within an at least partially externalist framework.

There have been a number of attempts to meet the challenge. A tempting path is to reason along the following lines: “There has to be a way in which speakers and listeners go from the words to the things themselves. We all learn this way when learning the language, because all competent speakers know it and indeed they know it as soon as they can speak the language. This way is, or embodies, the sense. It is not the reference, but it individuates the reference and is epistemically accessible to all speakers.” This reasoning builds senses on linguistic meanings in a way reminiscent of Fumerton’s (1989) bite-the-bullet strategy of Russellian causal theories.

The most appealing prospects for an approach of this kind are given by indexicals. After all, an indexical like ‘I’ has a very definite linguistic meaning: it refers to the speaker of the utterance. In a particular utterance it determines a person and carries with it a peculiar way of thinking of her. Moreover, all of this is learnt when learning the language. A recent example of this way of thinking is a paper by García-Carpintero (2000) that seeks to extract a theory of senses out of the knowledge of indexicals that Kaplan and Perry have bequeathed us. In his paper, senses are viewed as ingredients of presuppositions. These senses will not fulfill the classic Fregean role: many concessions are made on what can qualify as a sense in order to reach what the author calls “the core Fregean view,” which is tolerant enough to include objects, the utterances themselves, as components of senses. Put another way, indexicals have token-reflexive senses. We will not discuss the general view of the meaning of indexicals proposed by García-Carpintero, which is essentially Kaplan’s (1989). Nor the presuppositional part: it is surely right to think that uses of indexicals and demonstratives carry presuppositions [Soames (1989), p. 561]. We will argue, nonetheless, that even with the concessions, the theory cannot work as a theory of senses.

A way of realizing that it cannot is to see how the theory tries to solve the test that the author sets to check the accuracy of his proposal. This is Brian Loar’s well-known example: “Suppose that Smith and Jones are unaware that the man being interviewed on television is someone they see on the train every morning and about whom, in the latter role, they have just been talking. Smith says ‘He is a stockbroker’, intending to refer to the man on television; Jones takes Smith to be referring to the man on the train. Now,

as it happens, Jones has correctly identified Smith's referent, since the man on television is the man on the train; but he has failed to understand Smith's utterance. It would seem that, as Frege held, some 'manner of presentation' of the referent is essential, even on referential uses, to what is being communicated" [Loar (1976), p. 357].

According to García-Carpintero, "[w]hat Loar's argument shows is that a full semantic characterization of what is linguistically going on in examples like his also requires us to associate a mode of presentation with the indexical. [...] Communication [...] involves not merely grasping the condition [the content] signified by the speaker, but grasping it *by showing the relevant presuppositions*" [García-Carpintero (2000), p. 138]. According to this theory, these presuppositions are, or contain, the senses expressed. In particular, the relevant semantic presupposition of Smith's utterance is "*that there is a unique male most salient when the token t of 'he' is produced, and t refers to him.* [...] By determining the determinable *most salient when t occurs with male on the television screen with such and such a visual appearance* we obtain the presupposition *that there is a unique male on the television screen with such-and-such visual aspect when the token t of 'he' is produced and t refers to him.*"

But, how is Jones supposed to determine this determinable for the communication to be successful? We may guess that it is by realizing what the demonstration that accompanies the demonstrative 'he' is. Kaplan taught us that a demonstration completes a demonstrative. Nonetheless, Kaplan's later thoughts were that it was the directing intention that completed the determination of the reference, rather than the demonstration which, if present at all, was a mere externalization of the intention [Kaplan (1989a), p. 582]. It seems clear that García-Carpintero (1998, p. 532) follows Kaplan on this point. Thus, Jones has to be clear about Smith's directing intentions. The trouble is that if we need them to build a complete sense, senses lose the linguistic character they are supposed to have. Jones would need a lot of guessing concerning matters such as Smith's mental framework to interpret them correctly. Furthermore, communication between Smith and Jones seems to fail at precisely this inductive stage. It is not that Jones fails to understand what Smith says in the sense of failing to grasp the meaning of it.⁶ Rather, he commits an error in the course of a conjecturing that concerns nothing linguistic, but rather facts about who might be on Smith's mind at the time of his utterance. We will see later an analysis of cases of this sort.

Indexical expressions lend themselves to making a different point. Reflection by the interpreter on the speaker's intentions — that is, on the speaker's mental framework — do not even seem necessary, beyond consideration of what the speaker literally expresses with his utterance. Consider, for instance, the following case. Smith is with Jones in a restaurant. Sud-

denly, Smith looks Jones straight in the eye and whispers: “He’s Mary’s new boyfriend!” What happens, of course, is that Smith doesn’t want to draw attention to himself by pointing.⁷ In a case like this, how would Jones try to grasp Smith’s directing intentions? He wouldn’t. Instead, he would start looking around for someone within Smith’s visual range, within a determinate age range (not too young or too old to be Mary’s boyfriend), with certain characteristics derived from previous knowledge of Mary’s tastes or from Mary’s comments about her boyfriend. It wouldn’t be wise to consider that what Jones does is to determine the determinable sense *male most salient when ‘he’ was uttered* to get the sense *male on the first table on the right of the front door of the lounge*, which would in turn determine a person, the reference. That would be like saying “You just have to know who Smith is talking about and by that you can determine who he is talking about.” It is true that in Loar’s case what you obtain is arguably a perspective on a person rather than the person herself. We will come to this point later. Our point now is that to understand somebody who uses an indexical, there is not always a need to grasp the way in which the speaker thinks of the reference, and this applies as well in those cases where “linguistic conventions only constrain the truth-conditional contribution, whose full determination is based partly on context” [García-Carpintero (2000), p. 117]. We must determine the determinable that the indexical provides in order to get the reference. But this determination doesn’t have to pass through the grasp of the directing intentions of the speaker to complete the sense of the demonstrative. What the hearer does is to try to get the reference right; this can be done using knowledge of the context, or any other available knowledge. Very often she can try to get the reference by guessing or inferring what the intentions of the speaker might be, but this is by no means necessary.⁸ What has to be done is to get the reference and, as usual, there is the possibility of reaching a wrong conclusion or, also, of reaching the right conclusion by the wrong means. There is no need to build a sense to determine the reference of an indexical. If senses are ingredients of the presuppositions begotten by indexicals, then “the core Fregean view” has to be even more tolerant, because these senses do not determine references. Of course, there is then no point in calling these presuppositions ‘senses.’

As we said before, the indexical case is the most appealing for this brand of neo-Fregeanism. This is because indexicals have clear linguistic meanings. Mainly because they lack them, names are much harder to deal with. Nevertheless, we can follow a suggestion by Recanati and take what he calls ‘the indexical view’ of the meaning of proper names. According to that view, the linguistic meaning of the name ‘Gareth Evans’ is the rule that “[t]he reference of a particular token of [it] is the person who is related to the name type ‘Gareth Evans’ by a name-convention operative in the context of

utterance of this token” [Recanati (1993), p. 141]. Recanati, however, thinks that name-conventions are not linguistic, so they cannot be part of the meaning (sense) of the names. It is easy to agree with Recanati on this point. Let’s assume that the name-conventions, or the *name-using practices*, are very much as Evans describes in the last chapter of his *The Varieties of Reference*. We cannot build senses with these materials. They wouldn’t be epistemically accessible in the way senses are required to be. Knowledge by the speaker of name-using practices is obviously limited. A speaker doesn’t learn how to use a name or determines the referent of a certain utterance by running through the different steps that constitute a name-using practice back to the initial act of baptism. Speakers are surely *attuned*—to use John Perry’s term—to general truths concerning the use of names that involve reference to name-using practices—for instance, they are attuned to the fact that for each name-type there may be different name-using practices, or the to fact that each of these practices most likely corresponds to a different referent. Knowledge of this sort, even if only implicit, is sufficient as a linguistic basis for communication purposes. A speaker may assume it and proceed to try to identify the referent of a particular utterance using any other information available. But knowledge (be it explicit or implicit) of such general truths, together with the little information he might have concerning a particular name-using practice, will not usually suffice for the purposes of referent identification: for instance, it will not usually suffice for the purposes of singling out as the referent of the utterance one among all the individuals of which the speaker already possesses information.

As a matter of fact, name-using practices do not even need to correlate with cognitive values. The same name-using practice can branch and give rise to multiple cognitive values. We can exemplify the point with a situation in which, continuing with Heck’s example, the only thing the amnesiac remembers when he is admitted is that he is called George Orwell, but he is not identified as the writer by the hospital staff. In such a case, Alex’s ‘George Orwell wrote *1984*’ wouldn’t seem to justify Tony’s belief that the amnesiac wrote *1984* either, even though the name-using practice seems to be unique.⁹

So it seems that the ball is still in the neo-Fregean court. There are no senses on offer that do all the jobs they are required to do. The best move is to try to solve the problems, Heck’s and Loar’s to begin with, without recourse to such problematic entities. We think we can. We will try to do so using a model of belief that is inscribed inside (or is at least compatible with) the neo-Russellian tradition. It is then compatible with the maligned Hybrid View, although its roots are older—dating back, as far as we know, to Lockwood’s (1971) and Strawson’s (1974) work. It has been defended on different occasions, at different lengths and under different guises, by philosophers such

as Millikan (1984, 1994 and 1997), Perry (1990), Crimmins (1992), Crimmins and Perry (1993), and explored by Sánchez (1998) in her dissertation.

Many philosophers have found it attractive to think of beliefs as analogous to maps. Ramsey described beliefs as *maps by means of which we steer*. The analogy is supposed to emphasize the dual functional role of beliefs: their representational character and their action-guiding function. Strawson talks of the knowledge or set of beliefs an agent has about particular objects as a map where every cluster of what the agent takes to be identifying knowledge of one and the same individual is represented by a dot (a *notion*, or a *folder*, in Perry's parlance). Next to the dot the agent "writes" any names (*language-bound intensions*, in Millikan's terms) that may "invoke" that cluster of identifying knowledge. These can be compared to tags in maps. Lines (*ideas*, in Perry's proposal; *intensions*, in Millikan's) radiate from each dot, representing the various properties and relations the agent associates to the individual the dot represents. Next to each line the agent also "writes" the inscriptions that invoke these lines.

Dots can be thus invoked both through activation of tags or of lines: that is, recognition of an object can be realized through its name or through some of its properties. How recognition is brought about will have an impact on how the agent "steers" after checking the map; the steering will differ depending on the features on which recognition of the object of the thought has been based. For instance, both 'San Sebastián' and 'Donostia' are modes of activation many of us possess of a notion of a beautiful Basque city.

Words have the function of altering the cognitive make-up of the agent upon the hearing of an utterance by affecting the disposition of dots and lines. Following Perry [Perry (1997)], we can call these alterations the *cognitive impact* of the utterance. We can reflect on what happens, according to this model, when an agent hears an utterance. We can distinguish between three cases. First, when the hearer takes the utterance to carry new relational information she incorporates that new information into her stock of knowledge by making an alteration in the knowledge-map. Take the statement: 'Caesar loved Brutus;' in this case the agent draws a new line between the notion that stands for Caesar and the notion that stands for Brutus. The second case corresponds to the predication of properties. (Although Strawson doesn't mention it, it is easy to imagine a case in which no new information is transmitted because the hearer already has that information in her stock of knowledge.) Finally, if the statement is an identity statement no new lines are drawn. As Strawson says, "when it is an identity-statement containing two names from which he receives new information, he adds no further lines. He has at least enough lines already; at least enough lines and certainly one too many dots. So what he does is to eliminate one dot of two, at the same time transferring to the remaining one of the two all those lines and names which

attach to the eliminated dot and are not already exactly reproduced at the surviving dot" [Strawson (1974), p. 55]. Thus, in the Strawsonian model the fact that an agent acquires new information as a result of hearing and understanding an identity statement is explained by three facts. First, the attributive information of both files is merged. Second, one dot is eliminated. Third, the names used to invoke the notions are put together. The effect of an identity statement is to put together, in a single bundle of identifying knowledge, attributive information and recognitory abilities that were previously separated.

Another analogy Strawson draws to help us think about this is put in terms of a file system. Each file is a cluster of identifying knowledge, with a name at the top. In ordinary predication, the appropriate file is withdrawn, new information is entered and the card is returned to the stock. In relational predication, two files are withdrawn, cross-referring entries are made in both files, and then both files are returned. In the case of an identity statement, two files are withdrawn and a new one prepared; the names at the top of the files and the information contained in them are written in the new one. The new file is returned and the old ones thrown away.

The model serves to mirror certain characteristics of cognition. The world is in part formed by objects: particulars that retain their characteristics over periods of time. Tracking objects and their properties and relations is an essential part of the functions of our cognitive capacities. We can track them by different means, including their names. These means are not necessarily coordinated, so we may fail to reidentify the same object presented to us in different manners. The different elements of the model reflect, straightforwardly in our view, each of these characteristics of our cognitive relation with the world. We will use it to try to explain what we think is occurring in the cases presented by Heck and Loar.

In the first of Heck's cases, we have two names that refer to the same person. A competent speaker does not need to know that they do and indeed this is the case of Tony in the example. However, by accident or because of some confusion, Tony concludes, after hearing Alex say 'George Orwell wrote *1984*,' that Eric Blair wrote *1984*. Tony has two mental dots representing the same person, one with the name 'George Orwell' attached¹⁰ and another linked to the name 'Eric Blair.' To give some substance to this last situation, we have to assume that neither dot has a line attached to *wrote 1984*. Then Alex says 'George Orwell wrote *1984*' and Tony believes it, knowing that Alex is a reliable source of information on literary matters, which means that he actually *knows* that George Orwell wrote the book. In this case, Tony adds the information to his George Orwell file, that is, a file that not only represents the writer, but also has the name 'George Orwell' attached. She's perfectly justified in doing this. However, she wouldn't be justified in attaching this piece of information to the other dot, because she

doesn't know it refers to the same person. If she did, she would link the two dots somehow, possibly transferring the information to one file and disposing of the other one. In our example, she doesn't do this—and rightly so, for she has no reason, no justification for doing it. Such a reason would be obtained from the knowledge that George Orwell is Eric Blair. The point can easily be exemplified in a simple calculus: one cannot conclude ' Pa ' from ' Pb ' unless one also has ' $a=b$,' even if in fact ' a ' and ' b ' refer to the same object. The comparison helps drive home the fact that it is not so much the content that matters in cases such as this, but how information is organized in the agents' minds.

What essentially distinguishes Heck's second example from the first one is the deployment of names that are lexically the same, but whose use originates in different acts of naming *of the same person*. In this example, Tony receives information about George Orwell, thought of by Alex as *the writer*, and she mistakenly stores it in her mental file for George Orwell the amnesiac. Can we account for her mistake in Strawson's model? It seems we can.

In this case, Tony has a number of files (possibly one) associated with the name 'George Orwell.' She has to decide where to store the incoming information. This is something we didn't pay attention to in the first case, because we took it to be unproblematic to attach *wrote 1984* to the file representing George Orwell and with the name 'George Orwell' attached. But if we look at the matter more carefully, we will see that the situation is not so very different from the first case. To have a file under the same name does not settle the matter. Tony may have many of these. She has to identify the George Orwell Alex's sentence is about with the George Orwell of one of her files. This is something which may not be particularly difficult in the normal case. In most situations, the context makes it perfectly clear who or what we are referring to; that is, it is clear to which of our mental files our referent corresponds. When our friend Daniel says to one of us 'Edgar has flu', the hearer doesn't have to think much to conclude that Daniel is talking about his son. The communication has succeeded not because the hearer has happened to think of Edgar in a particular way, but because even if he has a large number of files with the name 'Edgar' attached, there is no reason at this point of the conversation for Daniel to tell him about the health of any of their referents but his son. So he chooses a particular file, the one that represents Daniel's son and attaches to it this new piece of information, namely that currently he has flu. Of course, he doesn't consciously perform any of these tasks, but they are performed in his head.

So, in every case of single predication using a name, the hearer has to choose one file to attach the data the speaker is providing. In other words, the hearer has to *identify* the referent of the name as the referent of the file and she does so using all the available information: what she knows about the

speaker and her knowledge, the situation in which the conversation takes place, and a great deal else, including certain principles of rational behavior, similar in spirit to Gricean maxims.

All this implies a lot of mental processing that takes place in a non-explicit fashion and usually doesn't lead to any trouble because the elements of the relevant situation are clear to both speaker and hearer. But in Heck's second example the situation is not transparent to the agent. Tony chooses the file in which to include the information assuming that it must be the amnesiac's (maybe because it is the only one she has, or because she considers it is the more appropriate one to work with — given, for instance, the fact that Alex knows the amnesiac — or maybe because she simply doesn't care to consider any other). That is, she activates the file on the basis of the idea that the referent of the sentence is the amnesiac she has recently met. But this idea is not one Alex would accept: he is not talking about someone he thinks is amnesiac. However, Tony assumes he is. That is, she assumes a certain organization of the information concerning Orwell in Alex's mind; more concretely, that he thinks of Orwell as *having three simultaneous properties*: being called 'Orwell,' being "the amnesiac," and being the author of *1984*. But he doesn't: he doesn't think of the amnesiac as the author. We can imagine Tony's train of reasoning as follows, with the failure occurring in step (4):

- (1) Alex is talking about some George Orwell.
- (2) I only know by that name [alternatively: It only occurs to me that this Orwell might be...] a person who is amnesiac and was recently admitted.
- (3) Surely Alex knows that we recently admitted an amnesiac and called him 'Orwell'— i.e., surely he has a file on a person who is amnesiac and called 'Orwell.'
- (4) So he is most likely talking about this person who he thinks is an amnesiac, called 'Orwell,' and the writer of *1984*.
- (5) So the information he is giving me should be stored in the amnesiac's file.

In sum, it is not a matter of a sense failing to be grasped; it is a matter of going through a chain of non-explicit inductive inference (in order to identify a referent), one of whose steps is faulty; namely, the one that assumes Alex is talking about someone he thinks is an amnesiac. The step concerns how the information about Orwell is organized in Alex's mind; namely, Tony assumes that it is organized in such a way that would allow Alex to conclude: "There is a person who is called 'Orwell,' who is an amnesiac and who wrote *1984*." The characteristic of George Orwell that he is "the amne-

siac” is not something that is assumed to be transmitted with the utterance, and it cannot be taken to be the meaning or part of the meaning of ‘George Orwell’ by any reasonable theory of meaning. In spite of this, it is the fact that Alex fails to think of the sentence’s referent in this way and the fact that Tony thinks he does that matters when it comes to explaining why Tony is not justified in the inferential process leading to her belief.

The explanation of the failure of communication in a case in which there is only one name-using convention doesn’t differ from the one just seen. Finally, Loar’s example seems amenable to the same kind of treatment. Communication between Smith and Jones fails because the latter bases his identification of Smith’s referent on the assumption that Smith is thinking of the person on the train; more concretely, that Smith thinks of the stockbroker as the person on the train: i.e., that he owns a file containing both pieces of information. But, of course, he doesn’t. However, as direct reference theorists have taught us, it seems clear that it would be unwise to consider *the person on the train* to be the meaning at play in the example.

Reflection on a point by Ignacio Vicario [Vicario (2001)] has made us realize that a more precise description of Tony’s reasoning in Heck’s second example brings out a further error by her in this example. Her mistake is best seen if we consider a variation on the case in which the information in Alex’s mind is organized exactly as Tony hypothesizes — say Alex has a mental file about object *a* that contains the information that *a* has properties *P* and *Q* and is called ‘*a*’ — but Alex and Tony refer to the same person through different name-using practices involving lexically the same name — namely, ‘*a*.’ Let’s model Tony’s reasoning in this case applying the pattern we have used before:

- (1’) Alex is talking about some *a*.
- (2’) I only know by that name [alternatively: It only occurs to me that this *a* might be...] a person who has property *P*.
- (3’) Surely Alex knows that there is an individual called ‘*a*’ who is *P* — i.e., surely he has a file on a person who is *P* and called ‘*a*.’
- (4’) So he is the most likely talking about this person who he thinks is *P* and *Q* and called ‘*a*’.
- (5’) So the information he is giving me should be stored in *a*’s file.

The problem is that the fact that different name-using practices are involved precludes us from considering Tony justified. But (4’) seems now true. Where in her argument is she mistaken? It seems clear the introduction of reflection by Tony concerning the fact that a single name-using practice is at

stake is required. More concretely, we think step (4') should be reformulated as follows:

(4'') So he is most likely talking about this person who he thinks is *P* and *Q* and calls '*a*' through the same name-using practice as the one associated to my file of *a*.

(4'') is, of course, false because there are two name-using practices at stake. The same sort of point can be raised concerning Tony's reasoning in Heck's second example, but not in the case in which a single name-using practice is involved or in Loar's example. Reflection, even if only implicit, on which name-using practices are at stake seems now, however, to be a necessary part of the process of interpretation by any speaker of any utterance containing a name.

John Perry (1993a and 1997) has long reflected on these matters and has developed a view that identifies cognitive impact with what he calls *pure contents*; namely, Russellian propositions involving utterances and their semantic properties. For instance, in Loar's example we can distinguish at least two levels of content for the utterance 'He is a stockbroker.' On the one hand, we have the incremental content: namely, that, say, Joe Doe is a stockbroker. On the other we have the pure content: that the most salient male in the context of the utterance is a stockbroker. It is this second level of content that is supposed to explain away cognitive puzzles. We think that the information embodied in pure contents is available to the competent hearer, and that he uses it in the process of interpreting what he is told. More concretely, we think one of the steps in the unconscious inductive argument Jones brings up to interpret Smith's sentence has precisely as content the pure content mentioned above; that is, in the reasoning leading to the interpretation of Smith's words Jones considers first, given his knowledge of English, that if Smith's sentence is to be true there has to be a most relevant male in the context to which Smith refers to say that he is a stockbroker. Jones then proceeds to conjecture who this male might be on the basis of the available clues.

Let us finally mention a couple of terminological caveats concerning justification and understanding. We all agree Tony makes a mistake in the second example, although she concludes a judgment that is true. The premises for (4) above are all true and justified. But (4) is false. The question that arises then is: is it really correct to say that Tony is *not justified* in making this step? If the reasoning she was involved in were deductive there would be no issue. But she is conjecturing, and the truth of her conclusion is therefore not secured even if the premises she uses are true. On the other hand she has sound reasons for concluding what she does. So maybe we should speak of there being a mistake, a failure of communication, but not a failure of justification. Aside from this, is it correct to say that Tony *doesn't understand* what Alex says? Loar, for instance, emphasizes that Jones fails to understand

Smith, and we agree that there is a failure of communication, but is it a failure of *understanding*? After all, Jones knows all there is to know about how the expressions in Smith's sentence are used. He seems to understand what Smith is saying, even when he makes a mistake in the identification of his referent. We think, then, that we should say that there has been a mistake concerning *referent identification* rather than a failure of *understanding*.¹¹

To sum up, it seems that the quest for candidates for senses has not led neo-Fregeans far beyond the point where direct reference theorists left them. For their part, neo-Russellians do not seem to have paid due attention to solving the cognitive puzzles that serve as the basis of modern Fregeanism. Heck's article has the great virtue of presenting in a clear manner what is expected of somebody who aspires to solve these puzzles. We hope to have contributed a plausible explanation of what goes on in people's minds in these puzzling cases that helps quell the uneasiness neo-Russellians must feel when confronted with them.

Departament de Lògica, Història i Filosofia de la Ciència
Universitat de Barcelona
Baldri Reixach s/n, E-08028, Barcelona
E-mail: campos@trivium.gh.ub.es and cirera@cerber.mat.ub.es

NOTES

* A first version of this paper was read at the VII Meeting of Spanish and Italian Analytic Philosophers, held in Gargnano, Italy. We want to thank Paolo Casalegno and Clotilde Calabi for their hospitality at the meeting, and also the participants for their questions and objections. Diego Marconi deserves special mention for his comments. We also thank Daniel Quesada and William Lycan for comments on an early version of this paper. Financial support was provided by the research project BFF2000-1073-C04-04, funded by DGES, Spanish Department of Education, and by the Catalan Government's CIRIT (SGR99-0011).

¹ First as an article in 1972.

² In contrast with the Hybrid view, we think that-clauses in attitude reports have to be understood intensionally only in certain contexts. In this we follow, for instance, Millikan (1984), Crimmins (1992), Perry and Crimmins (1993) and Sánchez (1998).

³ He deals almost exclusively with proper names and leaves aside the problems specific to indexicals.

⁴ He says that what the defenders of the Hybrid View seek when they require getting the reference right is the transmission of true beliefs. Actually, we think that they can fare better. What they obtain by getting the reference right are beliefs with the same content, not only with the same truth-value.

⁵ Heck (1995), p. 88, fn. 14. He says this with reference to *meanings*, but we think it safe to apply the requirement to senses, modes of presentation of references.

⁶ See, for instance, Wettstein (1986). We will later stress the fact that not all failures of communication imply failures of understanding. We think this is particularly the case in Heck's examples.

⁷ You may feel that the example is excessively artificial in that it involves a case of *guessing*. Smith is not trying to communicate any more than what can be expressed by 'Guess who in the room is Mary's new boyfriend'. But there are many examples that don't lend themselves to this characterization. Imagine an old lady in the middle of a mall saying "He stole my wallet", without looking at anybody in particular. Her directing intentions may be perfectly in order. She *knows* who the thief was. She's only too shocked to look anywhere else but her open purse. The hearers will look for somebody acting like a person who has just stolen something, i.e. running, hiding, etc., in order to get the reference of 'he', not in order to build a sense with the lady's directing intentions. We are grateful to Luis Valdés for raising this concern.

⁸ In his review of a first version of this paper, delivered at the Gargnano meeting, Marconi held that in any case what the hearer does is to reconstruct the speaker's directing intentions. "What else could [she] be doing, if Kaplan is right?" Well, if Kaplan is right, as we assume he is, the speaker's intentions are what, together with the character of the demonstrative, determines the reference. But Jones doesn't need to have access to them to get the reference right, and she doesn't have this access in our example. Directing intentions are perspectival. That trait is what allows them to fit with the character to build a determination of the reference (to determine the character's determinable, in García-Carpintero's words). Smith might be thinking something like *that man over there in black jeans*, while Jones, from her position, cannot even see what he is wearing. Nonetheless, Jones *knows* what Smith is saying.

⁹ There is a similar example in Heck (1995), p. 97.

¹⁰ To have a name attached to the dot is, of course, nothing beyond the agent's being able to identify the referent of the dot by means of the name.

¹¹ Josep Macià has pointed out a case related to *understanding*. Let's imagine that he says to me 'Paolo is about to come'. I understand that Paolo Casalegno is about to come. The trouble is that there are five Paolos nearby and I don't have any reason to think that Josep is talking about one of them in particular. It just happens that both Josep and I think that there is only one Paolo and by chance the one we are thinking about is the same one, both of us having met the same man separately. So I get the reference right when I conclude that it has to be this Paolo who is about to come, but this is just an accident. Would we say that I *understood* Josep's utterance? Would we say that I *knew* that Paolo Casalegno was about to come? The answer to the second question seems clearly negative, but we could have dissenting intuitions concerning the first one.

REFERENCES

- BURGE, T. (1993), "Content Preservation," *The Philosophical Review*, 102, 4, pp. 457-488.
- CRIMMINS, M. (1992), *Talk About Beliefs*, Cambridge, Mass.: MIT Press.
- CRIMMINS, M. and PERRY, J. (1993), "The Prince and the Phone Booth: Reporting Puzzling Beliefs," in Perry (1993).
- EVANS, G. (1982), *The Varieties of Reference*, Oxford: Oxford U.P.

- FUMERTON, R. (1989), "Russelling Causal Theories of Reference," in Savage, C.W., Anderson, C.A.: *Rereading Russell: Essays in Bertrand Russell's Metaphysics and Epistemology*, Minneapolis: University of Minnesota Press.
- GARCÍA-CARPINTERO, M. (1998), "Indexicals as Token-Reflexives," *Mind*, vol. 107, pp. 529-63.
- (2000), "A Presuppositional Account of Reference Fixing," *The Journal of Philosophy*, XCVII, pp. 109-147.
- HECK, R. (1995), "The Sense of Communication," *Mind*, 104, pp. 79-106.
- KAPLAN, D. (1989), "Demonstratives," in Almog, Joseph, Perry, John and Wettstein, Howard: *Themes from Kaplan*, Oxford: Oxford U.P.
- (1989a), "Afterthoughts," in Almog, Joseph, Perry, John and Wettstein, Howard: *Themes from Kaplan*, Oxford: Oxford U.P.
- KRIPKE, S. (1980), *Naming and Necessity*, Cambridge (Mass.): Harvard U.P.
- LOAR, B. (1976), "The Semantics of Singular Terms," *Philosophical Studies*, XXX, pp. 353-377.
- LOCKWOOD, M. (1971), "Identity and Reference," In M.K. Munitz ed., *Identity and Individuation*, New York University Press.
- MCDOWELL, J. (1977), "On the Sense and Reference of a Proper Name," *Mind*, 86, pp. 159-185.
- (1984), "De Re Senses," *Philosophical Quarterly*, 34, pp. 283-294.
- MILLIKAN, R. (1984), *Language, Thought, and Other Biological Categories: New Foundations for Realism*, Cambridge, Mass.: MIT Press.
- (1994), "On Unclear and Indistinct Ideas," *Philosophical Perspectives*, 8, Logic and Language, 75-100.
- (1997), "Images of Identity," *Mind*, 106, pp. 499-519.
- PERRY, J. (1990), "Self-Notions," *LOGOS: Philosophic Issues in Christian Perspective*, Volume 11, 17-31.
- (1993), *The Problem of the Essential Indexical and Other Essays*, Oxford: Oxford U.P.
- (1993a), "Cognitive Significance and New Theories of Reference," in Perry (1993).
- (1997), "Reflexivity, Indexicality and Names," in Kunne, W., Newen, A., and Anduschus, M.: *Direct Reference, Indexicality, and Propositional Attitudes*, Stanford: Center for the Study of Language and Information.
- RECANATI, F. (1993), *Direct Reference. From Language to Thought*, Oxford: Blackwell
- SÁNCHEZ, L. (1998), *A Model of the Structure of Belief*, Doctoral dissertation. Stanford University.
- SOAMES, S. (1989), "Presupposition," in Gabbay, D.; Guentner, F., *Handbook of Philosophical Logic, IV*, Dordrecht: Reidel.
- STRAWSON, P. (1974), *Subject and Predicate in Logic and Grammar*, London: Methuen.
- VICARIO, I. (2001), *Nombres, referencia y valor cognoscitivo*, Doctoral dissertation, Universitat de Barcelona.
- WETTSTEIN, H. (1986), "Has Semantic Rested on a Mistake?," *The Journal of Philosophy* LXXXVII, no. 1: 48-76.