Frege's Theory of Hybrid Proper Names Developed and Defended

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Does the English demonstrative pronoun 'that' (including complex demonstratives of the form 'that F') have sense and reference? Unlike many other philosophers of language, Frege answers with a resounding 'No'. He held that the bearer of sense and reference is a so-called '*hybrid* proper name' (Künne) that contains the demonstrative pronoun and specific circumstances of utterance such as glances and acts of pointing. In this paper I provide arguments for the thesis that demonstratives are hybrid proper names. After outlining why Frege held the hybrid proper name view, I will defend it against recent criticism, and argue that it is superior to views that take demonstrative pronouns to be the bearer of semantic properties.

1. Introduction

Gottlob Frege's work is central to discussions in contemporary philosophy of language. However, one of Frege's theses has been unduly neglected.[1] Frege holds that in the case of demonstratives and indexicals the bearer of sense and reference is a 'mereological crossbreed of words and non-words' (Salmon), a '*hybrid* proper name' (Künne). An example will illustrate Frege's idea. Take my uttering the sentence 'That dog is shaggy' with assertoric force while pointing to Fido. My assertoric utterance presents a Fregean thought as true. According to Frege, the *sentence* I utter can express this thought only *incompletely*:

> [T]he mere wording, as it can be written down, is not the complete expression of the thought; the knowledge of certain [circumstances] accompanying the utterance, which are used as means of expressing the thought, is needed for us to grasp the thought correctly. Pointing the finger, hand gestures, glances may belong here too. (CP, p. 358 [p. 64]—all original page numbers in square brackets)

[1] Burge (1979, p. 400) briefly mentions that Frege takes the sense of indexicals to be indicated or expressed by circumstances of utterance, but does not explore this idea any further. This is done by Künne (1982 and 1992) and Salmon (2002). Kaplan (1986, p. 287, n. 118) uses the Fregean idea as a starting point for a theory of demonstratives according to which 'the use of a demonstrative could be thought of as a device for putting an object into the very syntax of the sentence, … '. Kaplan develops a theory of demonstratives closer to the Fregean idea in Kaplan 1989a, Sect. IX.

Mind, Vol. 116 . 464 . October 2007
doi:10.1093/mind/fzm947

The object that expresses the thought completely cannot be written down because it contains the circumstances of utterance:

> [It is] … *the whole consisting of the concept-word together with the demonstrative pronoun and accompanying circumstances* which has to be understood as a proper name. (PW, p. 213, my emphasis)

What has to be understood as a proper name contains the English expression 'that' *plus* certain circumstances of utterance: acts of pointing, glances of the eye, and so forth. Another action can also take the role of the act of pointing or the glances: if the Godfather shoots Ernesto and comments 'He will sleep with the fishes', he has raised Ernesto's salience without pointing to him. I will use 'demonstration' to cover all attention-guiding actions.

While for Frege demonstratives are hybrid proper names, current semantic theories have modelled context-dependent expressions in general and demonstratives in particular differently. From the situation in which a context-dependent expresion is uttered one can extract objects relative to which semantic values can be assigned to the elements of the utterance. Take my utterance of 'I want that dog' made while pointing to Fido. In this case we need at least to extract the agent (myself) the time of utterance (yesterday) and either the demonstration or the demonstratum (the demonstrated object) from the situation to assign a truth-condition to the utterance.[2] The sequence of the objects extracted for semantic purposes, the context-parameters, represents the intuitive context of utterance.[3] If one pairs the sentence uttered (or a syntactic representation of it) and the context-parameters and takes the linguistic meanings of the indexicals and demonstratives into account, one will reach the conclusion that my utterance says of myself and the dog demonstrated that yesterday the former wanted the latter.[4] Current theories of indexicals and demonstratives generalize this treatment: the designated circumstances of utterance are parameters of the reference relation, not constituents of the expression uttered.

[2] Salmon (2002, p. 517ff.) argues that a demonstration is a further context-parameter, while Lewis (1970, p. 227) and Caplan (2003) only allow the demonstratum to be a context-parameter. I will not discuss the demonstrata view here, since I take the arguments against it given by Salmon to be convincing. An interesting position is that of Braun (1996). His theory 'treats demonstrations as "points of evaluation" *that are distinct from contexts*' (Braun 1996, p. 161, my emphasis). Frege will agree that demonstrations are not context-parameters, but instead of introducing a new sort of points of evaluation he will classify them as constituents of hybrid signs.

[3] See Lewis 1980, p. 85. *The functional notion of context of utterance* is the sequence of those parameters needed to determine extensions (Kaplan 1989b, p. 591). The functional notion of context does not require that the parameters are correctly related to each other.

[4] For a clear statement of the general idea, see Predelli 2005, p. 41.

Given this alternative, Salmon's question is justified:

> Can it make any difference whether we say that a word plus a context designates a given object, or instead that the word designates the object 'relative to' or 'with respect to' the context? (Salmon 2002, p. 563)

In this paper I will argue that the answer to Salmon's question is 'Yes' when demonstratives are under consideration. It will also become clear that Frege's theory should not be extended to indexicals.

The paper has a historical (Sect. 2) and a non-historical part (Sects. 3 to 7). In the historical part, I will reconstruct Frege's reason for his view that demonstratives are hybrid signs that contain demonstrations. The non-historical part will explore and defend the Fregean theory of demonstratives. In order to turn Frege's proposal into a theory, we need to answer five questions:

> Question 1: Why should one take certain circumstances of utterance to be constituents of the uttered name and not to be context-parameters? (Section 3)
>
> Question 2: Is a demonstrative sentence syntactically or semantically incomplete? (Section 4)
>
> Question 3: Does the Fregean theory of demonstratives solve Frege's puzzle concerning demonstrative utterances? (Section 5)
>
> Question 4: Does the Fregean theory underwrite the rigidity of demonstratives? (Section 6)
>
> Question 5: Is the Fregean theory superior to its competitors? (Section 7)

The starting point of this paper is my answer to Question 1 in section 3: I will argue that some circumstances of a demonstrative utterance are non-verbal signs with a non-natural meaning. These signs are constituents of the demonstrative sentence used by the speaker. Theories of demonstratives that do not acknowledge demonstrations as signs will turn out to be inadequate.

2. Frege on hybrid proper names

The following passage from 'Logic in Mathematics' contains the background for Frege's view about demonstratives and indexicals:

> The sentences of our everyday language leave a good deal to guesswork ('überlassen manches dem Erraten'). It is the surrounding circumstances

> which enable us to make the right guess. The sentence that I utter does not always contain everything that is necessary; a great deal has to be supplied by context, by the gestures I make and the direction of my eyes. But a language that is intended for scientific employment must not leave anything to guesswork. A concept-word combined with the demonstrative pronoun or definite article often has in this way the logical status of a proper name in that it serves to designate a single determinate object. But then it is not the concept-word alone, but the whole consisting of the concept-word together with the demonstrative pronoun and accompanying circumstances which has to be understood as a proper name. (PW, p. 213)

Frege's starting point is uncontroversial. I can only come to know what you asked by uttering 'Will Arjen Robben be able to play in the semi-final?' by making various *educated guesses*. The mere wording of the question 'Will Arjen Robben be able to play in the semi-final?' does not allow one to recognize the relevant thought without any doubt. It leaves open who Arjen Robbben is, which semi-final, for how much of the game, in which position, and so forth, Arjen Robben is supposed to play.

The fact that natural language utterances leave room for guesswork is unproblematic. Frege himself points out that the required guesses are in general easily made.[5] We are sufficiently alike to jump reliably, within a margin of error, to similar enough conclusions to understand each other. I will count as understanding your utterance of a propositional question if I grasp a thought sufficiently similar to the one you express. If I guess that *A* expresses with his utterance of *s* the thought that p and that p is similar enough to the thought that *A* attaches to s in his utterance, I will understand *A*'s utterance:

> The task of vernacular languages is essentially fulfilled if people engaged in communication with one another connect the same thought, *or approximately the same thought*, with the same proposition ['Satz']. (Letter to Peano, PMC, p. 115, my emphasis)

Frege stresses that only a language that is intended for scientific employment should not leave anything to guesswork. Why? The 'scientific employment' here is in Frege's project to show that one can prove every arithmetic truth from logical laws and definitions *alone*. Hence, he must make sure that there are no hidden assumptions in his proofs. If the language we used in our proofs would leave something to guesswork, the conclusions of our proofs would depend on the premisses *and the right guesses*. The proofs might still establish that a proposition

[5] See Frege's talk of '*noch so leichtem Erraten*' ['very easy guessing'] in NS, p. 13. The English translation (PW, p. 12) obscures this point.

is true, but the premisses of the proof would not exhaust the propositions on which the truth of the conclusion depended. Hence, giving a proof would not be the right way to establish the truth-grounds of a proposition completely. But that is exactly Frege's aim. This reason for the 'nothing is left to guesswork' slogan is at work on the first page of *The Basic Laws of Arithmetic*:[6]

> Each of these formulas is a *complete* [sentence] including all the conditions necessary for its validity. This completeness, which does not [tolerate tacit] attachment of presuppositions in thought ['*stillschweigend hinzuzudenkende Voraussetzungen*'], seems to me to be indispensable for the rigour of the conduct of proof. (BL I, p. 1–2 [VI]—partly my translation and emphasis)

Complete formulas help to avoid enthymematic inferences that rest on tacit background premisses. If our formulas are incomplete, proving them cannot establish definitively on which propositions their truth depends. The completeness of the formulae is an essential requirement for a language *designed for giving gapless proofs.*

If complete sentences are only required in a language that is designed to give gapless proofs, why should *natural languages* that are not designed for this purpose contain complete sentences partially consisting of the circumstances of their utterance?

Frege's answer might appeal to the requirement that a language must be free from ambiguity:

> Language proves to be deficient, however, when it comes to protecting thought from error. It does not even meet the *first requirement* which we must place upon it in this respect; namely being unambiguous. (OSJ, p. 84 [p. 50], my emphasis—and see also PW, p. 213)

The sentence 'That man is bald' can express different thoughts with different truth-values in different circumstances. If we add the circumstances of utterance to the sentence, the new composite object consisting of 'That man is bald', a particular demonstration, and a time can express only one thought. This compositum of words and objects is, in Frege's sense, unambiguous.

However, the requirement of being unambiguous is simply not fulfilled by natural language sentences. Frege's aim is to have a reformed language in which every sentence expresses exactly one thought completely. Hence, Frege introduces complete sentences, which is desirable for the purpose of regimenting arguments given in natural language, but not for the semantic description of natural language.

[6] See also OSJ, p. 84–5 [p. 50–1]; letter to Jourdain (undated) in PMC, p. 79; and VB, p. 37.

Frege gives in 'Thoughts' an alternative answer to the question as to why certain circumstances of the utterance of a sentence should be considered constituents of the expression uttered:

> [Often] … the mere wording, which can be made permanent by writing or the gramophone, does not suffice for the expression of the thought … If a time-indication is conveyed by the present tense one must know when the sentence was uttered to grasp the thought correctly. Therefore the time of utterance is part of the expression of thought. (CP, p. 358 [p. 64])

But why should the circumstances that must be identified to grasp the thought expressed be constituents of the expression? Why not a parameter of the context of utterance? Frege does not provide an answer to this question.

To sum up: Frege's theory of complete sentences does not seem to shed light on the meaning of natural language demonstratives and indexicals. However, I will argue in the next section that, independently of Frege's own motivation, it is plausible to think of natural language *demonstratives* as signs that contain certain circumstances of their utterance. Frege is right about demonstratives but for the wrong reasons.

3. A rationale for the Fregean theory of demonstratives

I make an assertoric utterance of 'That dog is hungry' and also point at Fido. Why take the pointing to be a constituent of the expression, as Frege claims, and not a context-parameter? Here is the argument for Frege's view:

(P1) If a feature *f* of the situation in which a sentence *s* is uttered is a sign that has to be understood in order to grasp the thought expressed by the utterer *U* of *s*, *f* is not a context-parameter, but a constituent of the expression uttered by *U*.

(P2) A demonstration is a sign that has to be understood in order to grasp the thought expressed by a demonstrative remark.

(C) Therefore: A demonstration is a constituent of the expression uttered in making a demonstrative utterance.

Let us start with a platitude. A central part of our common-sense notion of a sign is that a sign is a representation that can be understood or misunderstood. Our common-sense notion of signs allows for non-verbal signs. Consider the use of tailor's swatches, which is governed by the convention that only particular properties of the sample are exemplified. Understanding what the tailor says when he accompanies his

utterance with a presentation of a swatch requires you to know these conventions and to understand the presentation of the swatch properly. The presentation of the sample has a conventional meaning that you might get wrong.[7]

The first premiss can now be made plausible by considering the following question. When you say 'It is raining now', the words you uttered are constituents of the total utterance situation. Why do we say that the time of your utterance is a constituent of the context of utterance, while the word 'now' is not? Because the word 'now' is a sign with a meaning that can be understood, the time is not. This principle is at work when we specify what belongs to the intuitive context of utterance. The speaker, time, and so forth, are taken to be context-parameters because they are not signs that have meanings. Signs are parts of the expression uttered, whether the sign is verbal or not.

Now on to the second premiss. Pointing is a further example of a non-verbal sign. An act of pointing can be understood like an utterance of a singular term. I misunderstand your utterance of 'Fred Perry' if I get your reference wrong (I identify the wrong person on the strength of your remark) or if I do not grasp the linguistic meaning of the word uttered. Full understanding is only achieved if, on the basis of your utterance, I come to know to whom 'Fred Perry' refers. Similarly, you misunderstand my act of pointing to Fred Perry if you look in the wrong direction or you take it to be an obscene gesture, and so forth. You understand my demonstration if you realize which object is being demonstrated. Many pointing gestures have conventional elements: in which direction I have to look to appreciate a demonstration correctly is a conventional matter. In order to understand a demonstration, I have to be aware of conventions and the communicative intention of the 'demonstrator'.

Although the idea that demonstrations are non-verbal signs is mostly ignored in the philosophy of language, it is explored by psychologists specialising in speech comprehension. For example, Bühler argues that pointing gestures are conventionalized signs comparable to road signs.[8]

Why can a demonstration be understood? Because it is like an utterance an action made with communicative intentions, and at least some demonstration types are governed by conventions. Demonstrations have, to use Grice's term, non-natural meaning.[9]

[7] See the story in Goodman 1984, p. 193–4.

[8] See Bühler 1934, p. 79; for a similar classification, see Clark 1997, p. 165.

[9] See Grice 1989, p. 125ff., for an analysis of the meaning of a gesture (waving).

The Gricean model of communication further develops the idea that demonstrations are signs. Grice holds that behaviour can be intention-dependent evidence for a belief.[10] Typically, if I make an assertoric utterance of 'It is raining', I (i) intend that you come to believe (know) that it is raining, and (ii) intend that you come to believe that by recognizing that I have the intention (i). If one can take trust and cooperativeness for granted, the manifest intention to impart the belief (knowledge) that it is raining is a good reason to believe that it is raining. Hence, if I utter 'It is raining' with the intention just described, I produce intention-dependent evidence to accept what the utterance says. If you are aware of my intention in saying what I say, you have evidence for the belief that it is raining.

Demonstrations are also made with a Gricean intention and qualify as intention-dependent evidence. In making a demonstration I guide your attention to an object because I intend you to recognize that I make the demonstration with the intention that you perceive a particular object. Your recognition of my intention justifies your belief that this particular object is referred to in my remark.

Berckmans has proposed an explication of the concept of demonstratively uttering something that uses the Gricean mechanism. (See Berckmans 1990, p. 283.) (DU) follows his lead (let 'u(d)' be short for the utterance *u* containing the demonstrative d):

(DU) *S* demonstratively utters u(d) iff *S* makes u(d) and

1. S makes a demonstration δ;
2. intending that the addressee *H* recognizes that *S* intends to draw her perceptual attention to the object *x* by making δ;
3. intending that *H*, partially on the basis of her recognition of (2), comes to know an appropriate proposition concerning *x*.

Together with tacit knowledge of the linguistic meaning of 'that', this Gricean mechanism—if it works under favourable conditions—enables one to come to know which object is demonstratively referred to on the occasion of use. Possession of this knowledge is necessary in order to grasp what the demonstrative utterance said, that is, which thought was expressed.

To summarize: if there is a demonstrative utterance, there is an action (demonstration) that is made with the communicative inten-

[10] A good outline of this idea is given by Bennett (1976, p. 13–14).

tions outlined in (DU).[11] The communicative intentions give the demonstration a non-natural meaning. Hence, the demonstration is a sign that can be understood. If we add to this our first premiss, we arrive at the conclusion that a demonstration is part of the expression used to make a demonstrative utterance: the expression has verbal and non-verbal constituents.

Now we have an independent motivation for the Fregean view of demonstratives. In the following sections I will explore and defend the Fregean view. However, before doing so, I need to address the problem that some utterances of a demonstrative seems to be intelligible without a demonstration. Consider the following example. You and I hear a painfully loud noise. I know that you must hear it, and you know that I must hear it, and so forth. Hence, I can say 'I wish that noise would stop' without making a demonstration. This is a prima facie example of an intelligible demonstrative utterance without a demonstration.[12] How can one defend the Fregean view that demonstratives are incomplete signs that require completion by a demonstration?

Künne proposes that the demonstratum, not the demonstration, is the completing element (Künne 1992, p. 725–6). In addition, he suggests a plausible conception of sameness of sense for hybrid proper names:

> (HPS1) For two hybrid proper names to have the same Fregean sense it is a necessary as well as sufficient condition that they contain the same non-linguistic entity and indicator-tokens which have the same linguistic meaning …
> (after Künne 1992, p. 728)

If one accepts Künne's modification of Frege's theory, and (HPS1), the modified Fregean theory cannot solve the version of Frege's puzzle concerning identity statements with demonstratives. A true utterance of 'That ship is that ship [pointing continuously to the *Enterprise*]' is uninformative, while a true utterance of 'That ship [pointing to the *Enterprise* by pointing to its bow] is that ship [pointing to the *Enterprise* by pointing to its stern]' can be informative. Hence, the tokens of the hybrid proper name in the second utterance should express different senses. But according to (HPS1) and the proposed modification, all tokens of the hybrid proper names in both utterances express the same

[11] Braun (1996, p. 161) argues that demonstrations are not context-parameters because they are actions, while standard parameters are not. I agree, but I hold that the contrast between context-features that are signs and those that are not is more fundamental.

[12] See Kaplan 1989, p. 525, and Künne 1992, p. 725–6, for examples that make this point.

sense. For the *demonstratum* and the demonstratives are the same. One can respond to this problem by either giving up (HPS1) or the thesis that the demonstratum is the completer of the hybrid proper name. Künne rejects (HPS1); the sense of a hybrid proper name is not a function of the meaning of its constituents. I prefer to abandon the thesis that the demonstrata complete demonstratives, because there are independent reasons that the demonstration is the completer. After all, the demonstration has a non-natural meaning and is used with communicative intentions. Moreover, a weakened version of (HPS1) seems plausible: [13]

(HPS2) If the verbal constituents of two hybrid proper names are synonymous words and the non-verbal constituents are either the same demonstration or tokens of the same demonstration, the hybrid proper names express the same sense.

The disjunction is necessary, since two hybrid proper names that contain numerically different demonstrations of the same type can be combined to make an uninformative identity statement. (Think of pointing twice to the same ship in the same way and saying 'That ship is that ship'). Frege holds that different but related indexicals ('now', 'then') can express the same sense. Therefore, the sameness condition specified in (HPS2) is only sufficient. If it is sufficient and demonstrations are the completers of demonstratives, we can use the Fregean theory to solve the identity puzzle (more in Sect. 5). However, the Fregean now needs a new solution to the problem of the missing demonstration!

Campbell has made a distinction that points to an alternative response to the problem of the missing demonstration:

> [T]here is the communicative instrument, the means by which I focus your attention onto the right object, and there is the visual discrimination, the way I achieve my visual fix on the object. (Campbell 2002, p. 106)

The examples show that the communicative instrument, the act of pointing, is not generally required to make an intelligible statement by uttering a demonstrative sentence. However, they do nothing to show that the non-communicative perceptual discrimination is not essential to understanding a demonstrative. Should we then take the perceptual discrimination of an object as the circumstance of utterance that completes a demonstrative? No. A perceptual discrimination is not a sign, hence it does not qualify as a constituent of a hybrid sign.

[13] For another Fregean reason, see Künne 1992, p. 725.

What can the demonstration be in the problem cases? In the limiting case, the demonstration and the utterance made are identical. Let us go back to the noise example. Uttering 'I wish that noise would stop' is, in the given circumstances, sufficient to guide your attention to the right object: the sound we all cannot fail to hear. My audience has to recognize that I made my utterance with the intention to draw their attention to the sound that simultaneously can be heard and that is already salient in the context. Otherwise they fail to understand my utterance. The utterance is performing two roles: it is expressing a thought and it is a demonstration, an action guiding the perceptual attention of the audience. Hence, there is a demonstration in the problematic cases, although it is not an action distinct from the utterance.

4. Is a demonstrative syntactically or semantically incomplete?

Section 3 provided an intuitive understanding of hybrid proper names. It also helped to make clear in which sense a demonstration is part of a hybrid proper name. Take the utterance of 'that dog' accompanied by the act of pointing at Fido. The demonstration of the dog is part of the Fregean proper name 'that dog', because one has to understand the demonstration and the complex demonstrative 'that dog' in order to grasp what the speaker said with the utterance. Someone who only understands the words composing the complex demonstrative 'that dog' does not understand the utterance in the way it should be understood. For the speaker cannot come to know which object is mentioned in the way intended by the speaker. Someone who only understands the demonstration without understanding the words 'that dog' cannot properly understand it either. He cannot come to know which object is being pointed at. Is the dog demonstrated, undetached parts of the dog, and so forth?

One cannot grasp what an utterance with a demonstratively used demonstrative pronoun says if there is no demonstration. In the limiting case, the demonstration and the utterance coincide. One needs to appreciate the fact that the utterance itself shall guide one's attention to understand the utterance. Frege's thesis is that the demonstrative pronoun 'that' is not the kind of expression that has, as its sense, a mode of presentation of an object. The demonstrative pronoun 'that' is an incomplete expression, something Frege sometimes calls a 'concept-word'. (See Künne 1982, p. 67–8.) The concept-word 'capital of Sweden' is incomplete. If we complete it with the definite article, we get the complete definite description 'the capital of Sweden', denoting Stock-

holm. If we complete 'that' with a demonstration (and, if necessary, a further concept-word), we get a hybrid proper name that has sense and reference. Without the demonstration we do not have a singular term that purports to have a semantic referent. The sentence 'That dog is funny' is semantically incomplete without a demonstration: one cannot make a truth-evaluable claim with it. (See Braun 1996, p. 157.)

Semantic incompleteness is compatible with syntactical completeness. Take the English (typographically individuated) proper name 'John Miller'. If you find the name in a book of frequent English names, you should not ask 'Who is John Miller?' The generic name 'John Miller' does not refer to anything—*it does not even pretend to refer to something*. None the less, the string of words 'John Miller lives in Brighton' is a syntactically complete English sentence. Similarly, 'This is a dog' is a complete sentence of English, but it can neither be true nor false. If you find 'This is a dog' written on a blackboard, *but there are no acts of pointing, and so forth*, you can establish that there is a complete English sentence on the board, but you cannot raise the question of its truth or falsity. For this reason I reject Kaplan's (1989a, p. 515) and Salmon's (2002, p. 501) interpretation of Frege as proposing a *syntactic* incompleteness thesis. A sentence like 'This is a dog' is a syntactically well-formed English sentence, not a sentence fragment. But, although it is a proper sentence, it does not express a Fregean thought.

Salmon argues against Frege that a complex demonstrative, the English word, is a designating singular term. The demonstration is not part of the sign but a contextual parameter to which the character is sensitive. I will return to Salmon's positive proposal in section 7.1, but in this section I wish to look at the following critical point. Salmon tries to convince his readers that demonstratives are designating singular terms by appealing to their intuitions:

> Far from being an 'incomplete symbol', a demonstrative—the word itself—is a designating singular term if anything is. When Ralph points to Ortcutt and declares, 'He is a spy!' the word 'he' surely designates Ortcutt. Furthermore, even if the pointing itself is regarded as somehow designating Ortcutt, intuitively it is the word 'he' *rather than some hybrid consisting of the word and the pointing* that semantically designates Ortcutt. (Salmon 2002, p. 515)

According to common sense, an English word is a typographically individuated meaningful string of letters. But whether or not the English word 'that' has a semantic referent in a context of utterance is not an issue that can be decided or argued for on the basis of intuitions. Ordinary speakers know that different utterances of 'that' can refer to different things. This leaves open what the *fundamental* bearer of reference is.

Shall we say it is the utterance itself? Or the typographically individuated word with respect to a context? Or a token of this word? Or the hybrid proper name? Common sense is compatible with all of these alternatives. What decides between them are theoretical considerations, not intuition. Hence, there is no *intuitive* basis to prefer Salmon's approach to Frege's.

Salmon argues further that the thesis that demonstratives are incomplete implies that they are constantly changing their meaning:

> In fact, as with Frege, each utterance of 'that' accompanied by a different demonstration with a different content is an utterance of a different term with a different meaning—even if the demonstrata in that context are exactly the same … [T]his is obviously incorrect. (Salmon 2002, p. 512)

Frege's view does not imply that each utterance of *the English word 'that'* with a different demonstration has a different linguistic meaning. What it implies is that different *hybrid proper names that contain the English word 'that'* and circumstances of utterance have different Fregean senses. This is not obviously false. The English demonstrative pronoun 'that' is univocal, but we have no intuitions about the univocality of hybrid proper names. For example, there are no dictionary entries for hybrid proper names. According to (HPS2), different hybrid proper names that contain different circumstances of utterance express different senses. Since different hybrid proper names contain the English word 'that', the hybrid proper name also has derivatively a univocal and constant linguistic meaning. In contrast to hybrid proper names, the demonstrative pronoun 'that' is not the *kind of expression* that semantically refers at all. It does not express a mode of presentation of an object. If we heed the distinction between linguistic meaning and Fregean sense, Salmon's objection dissolves. A prima facie reason to distinguish between Fregean sense and linguistic meaning is that the linguistic meaning of both occurrences of 'this' in 'This is this' is the same. Hence, taking the sentence to contain two tokens of the demonstrative pronoun cannot register the informative character of some utterances of this sentence, while the Fregean sense of hybrid proper names can do so.

5. Frege's puzzle concerning demonstratives

How does the Fregean theory of demonstratives explain that an utterance of 'That is identical with that' can be informative, while another is not, although both utterances of 'that' refer to the same object? By appealing to the Gricean mechanism that is involved in understanding the demonstration. Let me spell this out.

In order to come to know which object is being demonstratively referred to, the audience must recognize the intention with which the demonstration is made and form the intended perceptual belief. This belief is justified by the Gricean mechanism which leads to its acquisition. Coming to *see* that *that object* is made salient by the action requires that the audience perceives the object. Sometimes understanding the demonstrative does not require perceiving the object demonstratively referred to. If I point to an opaque box saying 'This ring was a fine gift', I can only rationally intend that you perceive the box on the strength of my demonstration and that you acquire the inferential knowledge that the ring in the box is referred to.[14] In this paper I will not be concerned with such complicated uses of demonstratives. I will focus on the basic use of demonstratives.

Now not all ways of perceiving the demonstratum will lead to a belief justified by the Gricean mechanism. Only those ways of perceiving the object that are effected by recognizing the intention with which the attention-guiding action is made will do so. Perceiving the demonstratum in a way that is not required by the intentions figuring in the Gricean mechanism does not enable you to understand what was said. Take the following well-known example. (See Perry 1977, p. 12f.) You and I are looking at what is in fact one big ship, the Enterprise, but the middle of it is obscured by a building. Hence, one might think that the stern and the bow belong to two ships. I point to the bow, expecting you to perceive the bow of the ship, and say 'This ship is an aircraft carrier'. However, unbeknown to me, you have changed your location and, while hearing my utterance, you perceive the stern of the *Enterprise*. You perceive the right object, but you do not perceive it in the way I intended you to perceive it. If you come to believe that that ship—you point to the stern—is an aircraft carrier, on the basis of my utterance, are you grasping what I said by my utterance? No, you are not. Although this belief is true, it does not constitute knowledge. You are not epistemically entitled to this belief on the strength of my assertion and demonstration. (See Heck 2002, p. 24f.) However, understanding an utterance shall transmit an entitlement to believe what the assertion states. Thus, you do not understand my demonstrative remark when you acquire a belief about the right object on the basis of the demonstrative remark. You cannot come to *know* that that ship (*you point to the stern*) is referred to, since the attention-guiding action cannot provide intention-dependent evidence for *this belief*. In making my utterance and demonstration my intention was that you should fix your

[14] Berckmans discusses deferred ostension in his 1990, p. 287.

perceptual attention on that ship (*I pointed to the bow*) and you did not recognize and comply with that intention. Hence, in order to understand an utterance containing a demonstrative, one must, among other things, know which object is demonstratively being referred to. Under normal circumstances one can only acquire this knowledge by applying the method the speaker intends you to apply: namely, perceiving the object guided by his demonstration.

Consider the case in which you are walking along the *Enterprise* while its middle part is occluded. You point first to the stern and later to the bow. You say:

(S1) That ship [pointing to the stern] is the same ship as that ship [pointing to the bow]

The utterance of this sentence expresses a thought that can extend your knowledge. Why? The speaker makes the demonstrations with different intentions and, hence, following the 'method' he intends you to use to come to know which object is talked about, requires different ways of perceiving what is in effect the same ship. In order to understand the first 'that ship [pointing to the stern]' and the second 'that ship [pointing to the bow]' one must come to know different things.

By contrast, an utterance of:

(S2) That ship is the same ship as that ship [continuously pointing to the bow during the utterance]

contains the same hybrid proper name 'that ship [pointing to the bow]' twice. In order to come to know which thing is being referred to by the two utterances of the hybrid proper name, the same knowledge is required.

If one also want to cover utterances such as:

(S3) That ship [pointing to the bow] is the same ship as that ship [pointing to the bow, again]

one must make room for two tokens of the same hybrid proper name. An utterance in which two tokens of the same hybrid proper name flank the identity-sign is uninformative.

When are two different demonstrations tokens of the same demonstration type? Demonstrations are actions performed in a certain manner with the intention of drawing attention to an object. Hence, it is prima facie plausible to assume that two different actions performed in the same way with the same intention are tokens of the same demonstration type. If I point twice to the same ship in the same manner, say

by pointing to its bow, and the ship looks the same and there is no reason to change one's background beliefs about the situation in which the act of pointing takes place, the utterance will be uninformative.

My audience and I will often perceive the same object differently because of the difference in perspective and other perceptual conditions (you are wearing sun glasses, I am not, and so forth).[15] None the less we want to say that the audience can understand my utterance of 'That is an aircraft carrier [pointing to the stern]' completely. The Gricean model allows us to do this, since the perceptual fix on the object that the speaker intends the audience to achieve in virtue of his demonstration need not be the same perceptual fix that he has achieved. Different members of the audience may even perceive the demonstratum under different perceptual modes of presentation and none the less come to know the same thing: that that object is being referred to. The audience counts as understanding what the speaker said by his demonstrative remark if it comes to know in the right way, that is, the one intended by the speaker, which object is being referred to and which property is attributed to it. This restricts the ways in which one can single out the object of discussion, but it leaves sufficient room to allow different speakers to single out the same object differently and still do so in accordance with the speaker's intentions.

6. Does the Fregean theory underwrite the rigidity of demonstratives?

Kaplan has developed the Fregean theory of demonstratives differently. He correctly holds that a demonstration means something, which is in line with the results of section 2. (See Kaplan 1989a, p. 514.) However, he takes the demonstration to have the same sense as an indexical definite description like 'the object that appears thus-and-so from here now'.[16] In addition, Kaplan assumes that:

> [t]he sense of a sentence containing demonstratives is to be the result of replacing each demonstrative by a constant whose sense is given as the sense of the associated demonstration. (Kaplan 1989a, p. 516)

Consequently, an utterance of (S2) 'That ship is the same ship as that ship' accompanied by two different demonstrations says that the ship that appears from here now thus-and-so is the same ship that appears from there then so-and-so. I will now argue that Kaplan's identification

[15] This problem is developed by Kaplan (1989a, p. 515).

[16] See Kaplan 1989a, p. 515 f., and 1989a, p. 526.

of the sense of a hybrid proper name with the sense of a definite description leads to problems. Since the Fregean is not committed to this identification, he should drop it.

Kaplan's solution proposed solution to the demonstrative version of Frege's puzzle leads to a new problem for Kaplan's Fregean theory: demonstratives turn out to be non-rigid, while we intuitively take them to be rigid.[17] He makes this point with the following example (1989a, p. 516f.). You say 'He [+δ] is from New York'. 'δ' is the name of your demonstration of *A*, who is from New York. The truth and falsity of what you say by uttering 'He [+δ] is from New York' depends on whether *A* is from New York or not. Now suppose that someone else, *B*, had disguised himself as A and taken his place. If you had made the same utterance and same pointing gesture as in the original utterance in this situation, you would have been referring to *B*. This simply illustrates that the reference of a demonstrative can vary from one context of utterance to another. But *what you said with your original utterance accompanied by* δ would still be true in the counterfactual situation. Consider, for instance, the following expansion of the story:

> He [pointing to *A*] is living in New York. Suppose that *B*, who is from Princeton, had disguised himself as *A* and taken his place while I made my demonstration. Would what I had just said with my utterance of 'He is living in New York' be false under this supposition?

The answer is: surely not. But according to Kaplan's Fregean theory, the original utterance of 'He [+δ] is from New York' says that the person that looks so-and-so from here now is from New York. In the counterfactual situation *B* would satisfy the descriptive concept and hence the utterance was about him and not *A* as we supposed. Thus, Kaplan's Fregean theory makes demonstratives non-rigid. Salmon takes this argument to be an 'immediate reduction of Frege's account' (Salmon 2004, p. 513).

However, Kaplan's Fregean theory and the Fregean theory developed here can resist Kaplan's argument. If the demonstrative 'he' is merely a placeholder for the definite description that expresses the same mode of presentation as the demonstration associated with the demonstrative utterance, why should the sense not be specified by a *rigid* definite description, for example 'the man who is located over there *in the actual world*'? This move ensures that the Fregean thought expressed by an utterance of 'He [+δ] is from New York' has the right counter-factual truth conditions. Nothing said so far rules this possibility out.

[17] See Kaplan 1989a, p. 516, and 1989a, p. 524.

Kaplan's argument is also ineffective against the Fregean view from sections 4–6. This view explains the difference in cognitive value between 'That ship [pointing to the stern] is the same ship as that ship [pointing to the bow]' and 'That ship is the same ship as that ship [pointing continuously to the bow]' without assuming that demonstrations 'express' descriptive modes of presentation. Grasping what you said by your utterance of 'He [pointing to *A*] is from New York' requires me to come to know which man you are talking about via the method you intend me to use. In this case it requires me to perceive the man on the basis of your demonstration. What I will come to know is that you said that he [pointing to *A*] is from New York. If I trust you and you speak from knowledge I can come to know that he [pointing to *A*] is from New York. But if understanding does not consist in grasping a descriptive concept, Kaplan's argument does not get off the ground.

Kaplan's descriptive and the non-descriptive Fregean view from sections 4–6 are both compatible with the observation that demonstratives are rigid. But while Kaplan's descriptive view simply postulates that an utterance of a demonstrative is synonymous with a particular rigid definite description, the Fregean theory of demonstratives has a plausible explanation why demonstratives are rigid that follows from its basic assumption. Often we can only say what a demonstrative utterance stated by re-using a demonstrative together with a pointing of the appropriate type. If I am asked to report what your utterance of 'He [+δ] is from New York' said, and the context of my report contains your demonstratum, I can report: 'NN said that he [pointing to *A*] is from New York'. But what if the demonstratum is no longer available for demonstrative reference? Sainsbury (2005, p. 160) has argued that we report what is said by a demonstrative utterance by first setting the scene and then using anaphoric pronouns anchored in the scene-setting part. The demonstration that was part of the demonstrative utterance is referred to or described:

> Pointing to *A*, she said that $he_{(A)}$ was from New York. (See Sainsbury 2005, p. 160)

In both cases the correct specification of what you said does not involve descriptions, but either a repetition of the demonstration or scene-setting in which the original demonstratum is introduced again. Hence, if we evaluate what you said for truth in counterfactual circumstances, the original demonstratum will be the object on which the truth of what is said depends in these circumstances. After reporting what you said in the scene setting style outlined, one could truthfully continue: 'And what he said *in pointing to A* with the words "He is from New

York" would even have been true if *B* had disguised himself as *A* and had taken *A*'s place'.

This response to Kaplan's objection to the Fregean theory of demonstratives raises another question. Frege holds that sentences with empty (complex) demonstratives express thoughts that are neither true nor false. (See CP, p. 362 [p. 68].) But can one hold that an utterance with an empty demonstrative says something if one abandons the assumption that the sense of a demonstrative is the sense of a definite description? Yes, if something is said by an utterance with an empty demonstrative, one should be able to report what the speaker thereby said. Scene-setting reports are naturally extended to utterances with empty demonstratives. (See Sainsbury 2005, p. 167.) Macbeth, hallucinating a dagger, asks: 'Is this a dagger, which I see before me … ?' One can report what he said in the scene-setting style by saying: 'Hallucinating some object, Macbeth pointed to it, and asked whether it was a dagger that he saw before himself.' By reporting in this way, one shows that—and what—one grasped from Macbeth's utterance. The description of the act of pointing which completed Macbeth's utterance is in the scope of 'Hallucinating some object, ...' and is therefore intelligible. (The use of 'pointing' is here relaxed as the use of 'see' is relaxed in 'He was so drunk that he saw pink rats'.) This reflects in indirect discourse that Macbeth's utterance of 'this' plus his act of pointing aimed at a dagger formed a hybrid proper name. This hybrid proper name has sense but no reference. Understanding a demonstrative remark is either grasping a thought about the demonstratum or grasping a thought that is essentially empty, but that can be specified in the scene-setting style.

7. The Competition

I will now examine theories of demonstratives which do not assume that demonstratives are hybrid proper names. I will start with Salmon's proposal, which is directly opposed to Frege's, and then go on to discuss the context-change theory of demonstratives. I will end by discussing Burge's and Sainsbury's accounts, which are congenial to the assumption of hybrid proper names.

7.1 Demonstrations as context-parameters

Salmon holds that demonstrations are context-parameters:

> Intuitively, the speaker's hand gestures, fingerpointings, and glances of the eye are features of the context of use, every bit as much as the identity of the speaker and the time and place of the utterance. (Salmon 2002, p. 517)

In section 3 I argued that demonstrations are non-verbal signs, things to be understood, not context-parameters. The assumption that demonstrations are signs that must be understood in order to understand a demonstrative utterance will help to explain where Salmon goes wrong.

Salmon holds that the utterance of a sentence which contains demonstratives literally expresses a singular proposition containing the referent(s) of the demonstrative(s) in the context of utterance. A demonstrative such as 'that' is connected to a linguistic rule that specifies the content of a demonstrative (that is, roughly, the object referred to) with respect to a context of utterance. It does so by describing the referent in relation to the context of utterance. (See Salmon 2002, p. 505.) The character of 'That is that' specifies the singular proposition expressed by an utterance of this sentence as *the singular proposition about the demonstrata of the separate demonstrations assigned by the context of utterance to the first and second syntactic occurrence of 'that', that they are the same*. (See Salmon 2002, p. 519.) Understanding an informative utterance of 'That is that' requires you to 'observe' the demonstrations δ_1 and δ_2 in the context and substitute them for the meta-level concept (*the demonstrations assigned by this very context*).[18] Thereby one arrives at a demonstration specific descriptive concept of the proposition expressed as:

> *the singular proposition about both the demonstratum of* δ_1 *and the demonstratum of* δ_2 *that they are one and the same*. (Salmon 2002, p. 520)

In a context of an utterance of 'That is that' in which the speaker of the context points with both hands simultaneously to *A*, the audience grasps the propositions expressed as:

> *the singular proposition about the demonstratum of* δ *that it is itself*. (Salmon 2002, p. 520)

The singular proposition described by both descriptions can be the same. Hence, we have a demonstrative version of a Frege case. Knowledge of the character of the demonstrative in tandem with an observational knowledge of the demonstration yields knowledge of a demonstration specific description of what is said.

Salmon argues that one understands a demonstrative utterance completely if one knows the singular proposition expressed by description. The description must pick out the objects referred to as objects demonstrated by the demonstrations performed in the context of utterance. Now consider again the *Enterprise* example. I can understand the demonstration specific description:

[18] 'Observe' is Salmon's term, see Salmon 2002, p. 520.

> The ship demonstrated by the first act of pointing is the same as the ship demonstrated by the second act of pointing,

if I can observe the demonstrations, although I do not come to see which object is demonstrated. I can observe *the acts of pointing*, but I cannot perceptually focus my attention on the thing(s) pointed to. In this situation I can think of what you said in the demonstration descriptive way Salmon envisages, *but I do not understand your utterance in the way you intended*.

Why not? Because merely observing a demonstration is insufficient for understanding it. But one must understand the demonstration in order to understand the demonstrative remark completely. One understands the demonstration by appreciating the intention with which it is made and the conventions that govern it. Understanding the demonstration results in a perceptual discrimination of an object in accordance with the intention of the demonstrator (see Sect. 3). If the addressee of my utterance can only observe my demonstrations and describe the proposition expressed in relation to them, he has failed to understand them and hence failed to understand the hybrid proper names completely. The speaker made the demonstration openly intending his audience to focus their perceptual attention on something in virtue of recognizing his intention when he uttered 'That ship is the same as that ship'. He wanted you to realize (and rationally expected you to come to know) on the basis of the understanding the demonstration and the utterance that *that thing* is *that thing*. If the audience just arrived at a descriptive identification of the referent as the object demonstrated, they have come to know something but not the right thing. Merely thinking of the demonstrata in a descriptive way as *the demonstrata of this very demonstration (act of pointing)* is insufficient for grasping what was said by the demonstrative utterance. Salmon therefore misses an important point. The problem for Salmon's view arises precisely because he treats a sign as a context-parameter.

By contrast, the Fregean assumes (i) that demonstrations are constituents of hybrid proper names, and (ii) that one understands a hybrid proper name only completely if one understands all its constituents. The Fregean view yields the right result: in order to grasp what I said with my utterance of 'That ship [pointing to the bow] is the same ship as that ship [pointing to the stern]' my addressees need to go beyond uniquely describing the proposition expressed in terms of the demonstrations in context.

7.2 Demonstrations as context shifters

Another alternative to the Fregean view is the context-shifting theory.[19] It assumes that the context of utterance of a demonstrative contains some objects that are demonstrated by the agent of the context. This is modelled as a sequence of demonstrata. One and the same object can occur at different positions in this sequence. (See Garcia-Carpintero 1998, p. 554.) Each context of utterance has a focal demonstratum (that is, one that is made salient by the speaker). Different subscripts to different *thats* name different contexts of utterance: '1' in 'that$_1$' refers the context of utterance 1, and so on. The central idea of the context-shifting theory is:

> that the interpretation of *any* syntactic occurrence of a given demonstrative-type triggers a change of context, so that after the interpretation the position in the sequence of demonstrata we have considered no longer represents the demonstratum in focus, and we have now moved to a new context in which a new position in the sequence is considered to interpret any new syntactic occurrence of that demonstrative-type. (Garcia-Carpintero 1998, 555; my emphasis)[20]

Each new utterance of a demonstrative plus demonstration changes the context of utterance: a new object is made salient and becomes the focal demonstratum.

Garcia-Carpintero argues for the central idea of the context-shifting theory by appealing to what he takes to be an empirical fact. The context-shifting theory

> reflects the empirical fact that whenever a proper demonstrative use requiring a demonstration (as opposed to an anaphoric use) of a demonstrative is made, a competent speaker can (compatibly with his linguistic competence) justifiably believe that both demonstratives have different contents. (Garcia-Carpintero 1998, p. 558)

The context-shifting theory can handle informative utterances of the form 'That is (identical to) that' in which the demonstrative pronoun is used demonstratively and requires a demonstration. The different utterances of 'that' plus their demonstrations change the context. Hence, they have different focal demonstrata. The different focal demonstrata can turn out to be the same object, but understanding the demonstratives in an utterance of a sentence of the form 'That is (identical to) that' never entitles one to assume co-reference. Hence, one is always entitled to doubt that that [pointing to *A*] is identical to that

[19] Braun (1996, p. 152–5) outlines the theory without endorsing it.

[20] See Braun 1996, p. 153.

[pointing again to *A*] and it is a genuine insight to come to know that this is so.

The context-shifting theory is silent about the role of the demonstration. But it is compatible with the thesis that the demonstration is a constituent of the uttered expression. However, the context-shifting theory is incompatible with the Fregean assumption that *different* hybrid proper names can have the *same* sense and reference. According to Garcia-Carpintero, one is *never* non-inferentially entitled to take co-reference between numerically different demonstrative uses of a demonstrative with numerically different demonstrations for granted. The reasoner is only entitled to trade on co-reference if at least one of the demonstratives is used anaphorically. (See Garcia-Carpintero 1998, p. 543f.) Because of this, argues Garcia Carpintero, demonstrations cannot be types with repeatable tokens. For the introduction of demonstration types would open up the possibility to have different occurrences of the same demonstrative accompanied by the same demonstration. This in turn would allow a competent speaker to take the identity of the demonstratum of two demonstrative uses of the same demonstrative for granted. (See Garcia-Carpintero 1998, p. 558.)

The basic problem for the context-shifting theory is that the alleged 'empirical fact' motivating its central idea is not a fact. Even if we have two *proper* demonstratives, we *are* often entitled to take identity of demonstratum for granted.[21] If I argue:

Argument 1:

(P1) That ship [pointing to the stern of the *Enterprise*] is the same as that ship [pointing to the bow of the *Enterprise*].

(P2) That ship [pointing again to the stern of the *Enterprise*] is an aircraft carrier.

(C) Hence, that ship [pointing again to the bow of the *Enterprise*] is an aircraft carrier,

and I keep track of the ship during my course of reasoning, and I am neither aware of nor are there any defeating circumstances, I have produced a valid and complete argument. In this situation I am non-infer-

[21] See Campbell 1994, p. 87. Frege's view is needed to describe arguments with demonstratives in which we do not have syntactically guaranteed co-reference and hence the entitlement to assume co-reference cannot be based on syntactically marked co-reference. The latter is made manifest in logical form by sameness of index, that is, a number or something similar assigned to all expressions that syntactically depend on the same antecedent (see Fiengo and May 1994, Ch. 1). Hence, hybrid signs cannot be just natural language representatives of what linguists call 'syntactic expressions' which contain indices.

entially entitled to take co-reference between the first occurrence of 'that ship' in (P1) and the occurrence of 'that ship' in (P2) for granted. (See Campbell 1994, p. 86f.) The entitlement may be defeated, after all unnoticed substitutions of ships (even large ships) may occur. But it still exists. This entitlement is similar to our entitlement to rely on preservative memory in long inferences.

Since in Argument 1 the uses of the demonstrative are not anaphorically linked, Garcia-Carpintero must hold that the argument is incomplete and relies on a surpressed background premiss. He writes about arguments in which proper demonstratives are used:

> If, in the course of a discussion, I say 'that is brown', pointing to a table, and I later say 'that belonged to my mother', pointing to the same table, I will certainly be taken (and will expect to be taken) to be referring to one and the same table, without having used any anaphoric expression to achieve my goal. *It is not on the basis of our linguistic competence with demonstratives that we should expect this*, though; it is only on the basis of our experience with the world around us: *it is on the basis of our mutual knowledge of the fact that visual table-like features continuously instantiated—as far as we can perceptually tell—at one and the same location belong,* ceteris paribus*, to one and the same table.* (Garcia-Carpintero 1998, p. 558; my emphasis)

Hence, in order to produce a complete and valid argument we would need to add a suppressed mutually known premiss to the original premisses:

(P1) $\text{That}_{\text{context1}}$ ship is $\text{that}_{\text{context2}}$ ship.

(P2) $\text{That}_{\text{context3}}$ ship is an aircraft carrier.

(P3) Visual features as of a ship continuously instantiated in one location belong to the same ship. (Background premiss)

(C1) Hence, $\text{that}_{\text{context4}}$ ship is $\text{that}_{\text{context5}}$ ship.

(P3) Visual features as of a ship continuously instantiated in one location belong to the same ship. (Background premiss)

(C2) Hence, …

But if we start to expand Argument 1 in this way, we never will reach the complete argument. All instances of Argument 1 with proper demonstratives turn out to be incompletable. The context-shifting theory can only prevent this infinite regress by giving up the reason that motivates the theory in the first place.

Garcia-Carpintero aims to ground the *semantic* claim that each different syntactic occurrence of 'that F' which requires a demonstration

occurs in a new context with a new focal demonstratum on the *epistemic* claim that one is never entitled to take identity of demonstratum for granted. Hence, if one is under certain circumstances entitled to take identity of demonstratum for granted, the context-shifting theory is no longer motivated: some demonstrative utterances accompanied by a demonstration do not shift the context. Moreover, if one is sometimes entitled to take identity of demonstratum for granted, one should introduce types of demonstrations to reflect this fact. This move is also open to the context-shifting theory, but again only at the cost of undermining its foundation. For instance, the context-shifting theorist could argue that every new demonstrative utterance accompanied by a demonstration shifts the context, but that the original and the new context of utterance are similar enough to ground an entitlement to take sameness of demonstratum for granted if the different contexts contain tokens of the same demonstration demonstrating the same thing. This move puts demonstrations in the context of utterance and it is problematic for the reasons given in the previous section. But even if we set these reasons aside, there are problems for the modified context-shifting theory. For the crucial explanatory work would be done in the modified theory by the demonstrations: sameness/difference of demonstration explains when an identity statement with demonstratively used demonstratives is informative (trivial). Hence, the explanatory work the context-shifting theory originally supposed context-change to do is done in the modified version by sameness/difference of demonstration. Consequently, the context-shifting theory is again unmotivated or becomes a version of the Fregean theory.

Can one find other context-parameters to ground the entitlement to trade on identity of demonstratum? No, as we have seen when we have a demonstrative use of a demonstration it is necessary to *understand* the demonstration. Understanding the demonstration correctly in the right circumstances is crucial for coming to know which object is demonstratively referred to. Every theory which leaves the demonstrations out will miss an important feature of demonstratives that is, at least in part, responsible for the entitlement to trade on identity. Hence, these theories will be inadequate.

Now compare the Fregean view. Since the Fregean view of demonstratives allows for the same hybrid proper names to occur in different contexts, it can use his standard assumptions to model trading on identity of demonstratum and to explain why the argument is valid and complete.

First, the first and second premisses of the argument contain tokens of the hybrid proper name 'this ship [pointing to the stern of the *Enterprise*]'. According to (HPS2), these tokens have the same sense.

Second, Frege takes sense to be transparent in the following way: if the singular terms '*a*' and '*b*' have the same sense, and someone grasps the sense of '*a*' and grasps the sense of '*b*', that person immediately knows that *a* is identical to *b*.[22]

Hence, repetition of a hybrid name makes the addition of a premiss which states that the repeated 'that' tokens refer to the same thing superfluous. Grasping the sense of the synonymous tokens implies knowing that their reference is the same.

The Fregean theory also explains why we can sometimes trade on identity when we use proper demonstratives. Understanding a proper demonstrative requires that one also understands the accompanying demonstration. Understanding the demonstration involves, in the successful case, perception of the demonstratum. In the normal case, perception presents an object as existing independently of us:

> Someone who simply never took himself to be keeping track of objects from instant to instant would be someone for whom perception had ceased to have, as part of its intrinsic character, the representation of objects as independently existing. (Campbell 1994, p. 87)

Take an example: when I perceive an apple on the table, I will have rational expectations about how the object will look if I change my location, the conditions change or something affects it. If nothing defeats my rational expectations, I am entitled to take an object that satisfies my expectations to be the same that I perceived before. Hence, if understanding two demonstrations results in two perceptions which represent an object that on both occasions looks the same, and I have no reason to 'mistrust appearances', I am entitled to take for granted that the uses of the demonstrative which supplements the demonstration pick out the same object.

[22] Frege uses this principle in the discussion of the Gustav Lauben example in 'Thoughts'; see CP, p. 358 [p. 65]. It is implicit in the thesis that a sentence of the form '$a = b$' is trivial if '*a*' and '*b*' have the same sense. Sameness of sense shall make sameness of reference obvious. The original Fregean transparency claim may be too strong. Particularly in the case of arguments with demonstratives, it seems implausible to hold that merely grasping the same sense yields immediate knowledge of co-reference. The fact that two tokens of a hybrid proper name have the same sense cannot exclude the possibility of an unnoticed exchange of objects. This suggests the weaker transparency claim that, if the singular terms '*a*' and '*b*' have the same sense, and someone grasps the sense of '*a*' and grasps the sense of '*b*', that person has the defeasible right to take for granted that *a* is *b*. (See Campbell 1994, p. 88.) Possessing this defeasible right allows us to trade on identity in the arguments under discussion.

To summarize: the context-shifting theory in its original version takes all arguments with multiple occurrences of proper demonstratives either to be invalid or incomplete. The theory holds that one is never entitled to trade on co-reference without further justification. This is not in accordance with our inferential practice, while the Fregean theory has the resources to describe our inferential practice because it acknowledges that demonstrations are signs. The context shifting theory can only prevent making arguments of the above type either invalid or incomplete by undermining the initial motivation for the theory.

7.3 Make successful demonstration a condition for having truth-conditions

Frege and Burge are in agreement about a distinctive feature of demonstratives: without an additional non-linguistic factor, they don't even purport to refer:

> Sentences containing demonstrative constructions are neither true nor false apart from actual use. To evaluate 'That is a dog' as true or false, we need someone to use 'that' in the sentence referentially. For this reason, formal representations of sentences involving demonstrative constructions are open sentences. The object language user completes the semantic interpretation of such sentences extralinguistically—via his act(s) of reference. (Burge 1974, p. 212)

This sounds exactly right. Demonstratives are semantically incomplete and can only be completed by an act of reference. Frege takes the action to be a demonstration and makes the demonstration a constituent of the sentence uttered. Burge leaves the action unspecified and he takes its performance to be a necessary condition for the possession of truth-conditions. Here is then Burge's conditional theorem for an utterance of 'That is an aircraft carrier':

(DB) $(\forall u, s, x)$(If u is an utterance of 'That ship is an aircraft carrier' by speaker s, and s refers with the utterance of 'that ship' in u to x, then u is true $\leftrightarrow$ x is an aircraft carrier)[23]

According to the Fregean, the demonstration itself has a meaning which should contribute to the complete meaning of the sentence. If we do not take it into account, the truth-theory will be non-interpretative.

Consider this example: let *U* be an utterance of 'That ship is an aircraft carrier' by *A* and *A* points to the *Enterprise* and thereby refers with 'that ship' to the *Enterprise.* Given this information one can derive from

[23] See Sainsbury 2005, p. 158 f.

(DB) by elimination of the universal quantifier that *U* is true if the *Enterprise* is an aircraft carrier. But in uttering 'That ship is an aircraft carrier' *A* has not said that the *Enterprise* is an aircraft carrier. It would be unfair to *A* to take him to be committed to the truth of the thought that the *Enterprise* is an aircraft carrier. If the T-theory is to be interpretative, that is, pair utterances of sentences with conditions under which the utterance is true and knowledge of which amounts to understanding the utterance, Burge's theory is not an interpretative T-theory for demonstrative utterances.

7.4 The Fregean theory of demonstratives and semantic theory

If a demonstration has a meaning which it contributes to the meaning of a hybrid proper name, and only the hybrid proper name refers, how can one give any kind of interpretative semantic theory for demonstratives? If the demonstrations have meanings, only a theory of truth that contains demonstrations in the meta-language can be interpretative. The unconditional T-sentence:

(D1) (∀*u*) (Every utterance *u* of 'That ship is an aircraft carrier' completed by a demonstration pointing to the stern of the *Enterprise* is true ↔ that ship (I make the required demonstration) is an aircraft carrier)

is interpretative. On the left (D1) describes a demonstrative utterance and the completing demonstration; on the right the demonstrative utterance and demonstration mentioned is made. The interpretaviness of (D1) comes at a price: (D1) only states the truth-conditions for an utterance of 'That ship is an aircraft carrier' correctly in contexts in which the *Enterprise* is accessible to demonstrative reference. However, a semantic theory for a language should state something that one can come to know independently of particular contexts of utterance and that is sufficient to understand utterances of L.[24] A theory that contains (D1) does not satisfy these desiderata.

[24] For a helpful discussion of the desideratum that the meta-language of a semantic theory is formal and hence free of indexicals and demonstratives, see Rumfitt 1993, p. 442ff. Rumfitt argues that one should take seriously the fact that semantic theories themselves are propounded in contexts of utterance. Hence, he allows indexicals in the meta-language. This move alone is insufficient to make the theory interpretative. Rumfitt uses the meta-linguistic indexicals as substituends for the variables of quantified T-sentences. But there is nothing in the semantic theory which requires that variables of quantified T-sentences for indexicals utterances are instantiated by indexicals and prohibits the instantiation, for example, by proper names. If one wants to cover all utterances of an indexical sentence, one will need to rely on quantification over utterances and demonstrations, which creates the problem under discussion.

If one tries to state the truth-conditions for all utterances of 'That ship is an aircraft carrier' in a context-independent way by quantifying over demonstrations, one runs into the same problem as Burge:

(D2) ($\forall u, \delta, x$) (If u is an utterance of 'That ship is an aircraft carrier' completed by the demonstration δ, and 'that ship' completed by δ refers in u to x, then u is true $\leftrightarrow$ x is an aircraft carrier)

One can easily convince oneself that (D2) entails non-interpretative T-sentences for individual utterances of 'That is an aircraft carrier'.

How can the semanticist escape the dilemma between non-interpretativeness on the one hand and unwanted context-dependence on the other for demonstrative sentences? By giving up the idea that what is said by a demonstrative sentence can be captured by a complete sentence, argues Sainsbury. In general, we can only samesay with someone who has made a demonstrative utterance if we use the combination of scene-setting and anaphora discussed in section 5. The scene-setting has to describe the demonstrations in sufficient detail to make the import of the utterance clear:

> Pointing first to the *Enterprise* by pointing to its bow and then pointing to the *Enterprise* by pointing to its stern, he said that the former ship was the latter ship.

In scene-setting we mention the acts of pointing that complete the demonstrative sentence. This fact supports the view that the demonstrative utterance is completed by the demonstrations mentioned.

Sainsbury also proposes incorporating scene-setting and anaphoric back-reference into the semantic theory. The T-sentence for 'That ship is an aircraft carrier' would be:

(DS) ($\forall u, \delta, x$) (If u is an utterance of 'That ship is an aircraft carrier' completed by demonstration δ, and 'that ship' completed by δ refers in u to x, then u is true $\leftrightarrow$ that ship_x is an aircraft carrier)[25]

In (DS) 'x' marks that the subscripted 'That ship' is anaphorically dependent on the expression that replaces the variable 'x' when the universal quantifier is eliminated. We can derive from (DS) and non-semantic information about the demonstration and the demonstratum a specific T-sentence, the right-hand-side of which can then be used in a report about an utterance of 'That ship is an aircraft carrier'.

[25] See Burge 1974, p. 211.

The combination of scene-setting and anaphoric back-reference is the best way to capture what someone has said with a demonstrative utterance independently of the original context of utterance. If we report speech acts performed with context-independent sentences, the that-clause of a speech report transparently names the Fregean thought expressed by the original utterance. Take an example. I say '2 + 2 = 4', you report 'He said that 2 + 2 = 4'. One cannot understand the that-clause '(the thought) that 2 + 2 = 4' without grasping the thought named. Why? Because a part of the that-clause (the words '2 + 2 = 4') expresses the thought that the whole clause names. In reporting my thought you grasp and express the very same thought I expressed with my utterance. Hence, the that-clause names the thought *transparently*. Does the that-clause of a scene-setting report also transparently name the thought expressed by a demonstrative utterance together with the right demonstrations? If the answer to this question would be 'Yes', the T-sentence (DS) together with information about the context of utterance would allow us to specify what a demonstrative utterance accompanied by demonstrations said. Hence, we would have found a way to integrate demonstratives into the truth-conditional framework. However, the that-clause of a scene-setting report does not transparently name the thought expressed by the utterance reported. Here is why.

Consider the following example. You say with assertoric force:

> That ship [pointing to the bow of the *Enterprise*] is the same as that ship [pointing to the stern of the *Enterprise*]

Later I report your utterance in the scene-setting style by saying:

(R) Pointing first to the *Enterprise* by pointing to its bow and then pointing to the *Enterprise* by pointing to its stern, NN said truthfully and with full justification that the former ship was the same as the latter ship

My utterance of (R) not only reports, but also explicitly endorses what you said. I can add a comment of my own to my report of what you said:

(R+) Pointing first to the *Enterprise* by pointing to its bow and then pointing to the *Enterprise* by pointing to its stern, NN said truthfully and with full justification that the former ship was the same as the latter ship, *but it is not the case that* this ship [pointing to the bow of the *Enterprise*] is the same as that ship [pointing to the stern of the *Enterprise*]

Let us now make two assumptions.

First, let us assume that I am (unbeknownst to me) in the same context of utterance you were in when you made your demonstrative utterance about the *Enterprise*: I see the ship from the same angle, in the same distance, the ship appears to me in the same way it appeared to you when you made your utterance, and so on. In this context my utterance of 'That ship [pointing to the bow of the *Enterprise*] is the same as that ship [pointing to the stern of the *Enterprise*]' accompanied by the same demonstrations as yours expresses the same thought you expressed.

Second, let us assume for *reductio* that the words 'that the former ship was the same as the latter ship' transparently name in the scene-setting report the thought originally expressed by your demonstrative utterance demonstrating the *Enterprise*.

If my words and demonstrations 'This ship [pointing to the bow of the *Enterprise*[is the same as that ship [pointing to the stern of the *Enterprise*]' express the same thought as your utterance (first assumption), and the that-clause of the scene-setting report transparently names this thought (second assumption), my utterance of (R+) should be inconsistent. For the first part of (R+) endorses the very Fregean thought that the second part rejects. Since the that-clause of the speech report shall transparently name this thought, the contradiction must be obvious to anyone understanding (R+). Consequently, someone who assertorically utters (R+) with understanding makes a manifestly inconsistent assertion. But that seems plainly false. The utterance is consistent and a speaker making it need not be criticized as irrational.

Which assumption should we reject in order to avoid this consequence? The first assumption seems to me to be independently plausible. It would be counter-intuitive to assume that my words and demonstrations 'That ship [pointing to the bow of the *Enterprise*] is the same as that ship [pointing to the stern of the *Enterprise*]' do not express the same Fregean thought you expressed with your words and demonstrations in the same situation. For example, I can twice express the same Fregean thought by uttering 'That ship [pointing to the bow of the *Enterprise*] is the same as that ship [pointing to the stern of the *Enterprise*]' in an unchanged situation making the same demonstrations. (Let us assume that the 'is' is tenseless.) If I can express the same thought twice, why should someone else not express the same thought that I did in the same situation with the same words and demonstrations?

Hence, we should reject the second assumption: the that-clause of the scene-setting part does not transparently name the thought expressed by my utterance of 'This ship [pointing to the bow of the *Enterprise*] is the same as that ship [pointing to the stern of the *Enterprise*]'. Since the thought I express with these words is the thought the original utterance expressed, the that-clause of the report does also not name transparently the thought the reported utterance expressed.

But if the that-clause of the report does not transparently name the thought the demonstrative utterance put forth, what does it do? There is a plausible answer to this question. The scene-setting report describes how NN said something about the ship, namely, among other things, by demonstrating it. But the report does not re-express the Fregean thought expressed by the utterance reported. Similarly, the T-sentence (DS) together with information about the context of utterance will provide us with a description of the thought someone expresses with a demonstrative about the *Enterprise*, but it will not enable us to grasp the thought expressed. The thought expressed by a hybrid proper name can only be re-expressed if we use another token of the same hybrid proper name. Using such a token requires making the same demonstration again. Is this a problem? Why should it be? The semantic theory gives us general and context-independent semantic knowledge about the truth-conditions of demonstrative utterances. This knowledge, together with knowledge about the context, suffices for many purposes, for instance, to make clear that NN did not state a contradiction. It is complemented by grasping the thought expressed by the demonstrative utterance when one is in a position to make a demonstration oneself. The sense of a hybrid proper name cannot be captured if we cannot use the same hybrid proper name again. No hybrid proper name is synonymous with a non-hybrid one. Why should one expect anything else?[26]

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[26] I have presented previous versions of this paper at the conference *Frege, Identity and Logic* in London 2005 and in the King's College Departmental Seminar. I am grateful to audiences at both occasions for questions and comments. I am also grateful to Ben Caplan, Richard Heck, Keith Hossack, Ruth Kempson, Guy Longworth, Fraser MacBride, Christian Nimtz, David Papineau, Gabriel Segal, Mark Sainsbury, and Tim Wharton for helpful discussions. Many thanks go to Wolfgang Künne for giving me written comments. I want to thank the Editor for helpful comments and the two anonymous referees who provided extensive comments that changed the paper significantly.

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