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## DEMONSTRATIVE SENSE AND RIGIDITY

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It is often thought that endowing a demonstrative with a Fregean sense leaves no room for maintaining that it is also a rigid designator. In addition, some philosophers claim that indexicals – surely the paradigms of singular reference – pose a serious threat to the Fregean sense/reference approach as they do not comply with the view that singular terms have Fregean senses.

In this paper I argue that neither of these is true. As the main goal of the ensuing discussion is to provide a general structure of a feasible position, my investigation is limited to demonstrative terms only, though I believe that the basic tenets of this paper also hold for some other indexicals. The heuristic device that I exploit in this paper is the same one that led Frege to argue that proper names have senses: namely, the paradox, or puzzle, of identity. In the present case, though, this paradox is couched in terms of identity statements containing demonstratives, be they of different types or just different tokens of the same demonstrative.

The use of a demonstrative that I am concerned with is the so-called deictical one. By this I mean, in accordance with usual terminology, a demonstrative expression such as ‘this’ and ‘that’ (or ‘this F’, ‘that F’, etc.) which has the function of drawing attention to an object, event, process, etc., and is normally accompanied by some paralinguistic act on the part of the speaker.<sup>1</sup>

### I

As far as deictical demonstratives are concerned, the paradox of identity can be presented in the following way. Regarding a certain ship,<sup>2</sup> the

sentence 'This ship is identical with this ship', uttered in such a way that the first token of the enclosed demonstrative refers to the ship via its bow, while its second token refers to it via its stern, may be informative (though it need not be) in cases in which, say, the ship's middle is obscured by another object. The obvious explanation is that the informativeness of such an utterance is the result of two different ways in which the same object can be presented to the subject who is perceiving it. As Evans would say, the informativeness of such a sentence stems from two different particular ways of thinking of the object.<sup>3</sup> In fact, it is highly intelligible to assume that whenever an object is singled out in the way required by the correct use of a deictical demonstrative, i.e., perceptually, it is given to us in some particular way, which amounts to the plausible view that there is no such thing as bare knowledge of the referent of a demonstrative.<sup>4</sup> This is to say that the perceptual discrimination of such an object always involves some conceptual elements, though the discriminating subject need not be aware of them.

This accords with Frege's claim that the sense of an expression is the mode of presentation of the expression's referent (1980, p. 57). However, Frege also saw the sense of an expression as what is grasped by everybody who is sufficiently familiar with the language, i.e., who understands it.<sup>5</sup> In other words, Frege had two conceptions of sense which, as far as deictical demonstratives are concerned, exclude each other. According to the first conception, the sense of a demonstrative shifts with the shift of the demonstrative's referent. One way to illustrate this is provided by those cases in which two different tokens of the same demonstrative type which in fact refer to the same ship through two different parts of that ship are believed to refer to two different ships. Another way of illustrating this can be derived from Frege's cursory remarks about indexicals (1977, pp.10-11; 1979, pp.134-5) which suggest that the sense of, e.g., the demonstrative 'this' in the sentence 'This is a beautiful day' shifts with the day of utterance. According to the second conception of sense which is found in Frege – as that which is grasped by everybody who is familiar with the language – the sense of a demonstrative is the same on all occasions of its use, corresponding thus to what is nowadays called its linguistic meaning.

That demonstratives have linguistic meaning, i.e., that there is something invariable that we grasp when we learn how to use them, can hardly be disputed. However, the linguistic meaning of a demonstrative is incapable of solving the aforementioned paradox of identity. For the

linguistic meanings of the two occurrences of the given demonstrative in the sentence ‘This ship is identical with this ship’ are the same, so that if sense and linguistic meaning were the same, the senses of both occurrences of the demonstrative would be the same. As a result of this, these senses would be incapable of accounting for the informativeness of this sentence.

Furthermore, when we consider the kind of sense, i.e., Thought, which, according to this conception, the sentence itself would have, we are led to the following conclusion. On a par with the senses of its constituents, the sense of the whole sentence, i.e., the Thought it expresses, would be the same on all occasions of its use. Now, as a result of the sameness and difference, respectively, of the referents of the two occurrences of the enclosed demonstrative, such a sentence would on some occasions be true, on others false. From a Fregean perspective this would, however, yield the fatal result that the same Thought is both true and false. That is, the Thought which on this view the sentence ‘This is a beautiful day’ would express would be true when it is uttered on, say, a sunny day and false if the day in question is rainy and miserable.

This brief discussion illustrates that the linguistic meaning of a demonstrative cannot be its sense. It thus leaves us with the mode of presentation associated with a demonstrative as its *bona fide* sense. That is, unlike its linguistic meaning, the mode of presentation associated with a deictical demonstrative fulfils the role that a Fregean sense is expected to fulfil.<sup>6</sup> As far as deictical demonstratives are concerned, this also renders groundless the claim that indexicals do not comply with the view that singular terms have senses, mentioned above. This claim – whose most prominent proponent is Perry – rests on the mistaken assumption that the linguistic meaning of an indexical is the only candidate for its sense. I shall now turn to a refutation of the other anti-Fregean claim stated above – the claim that if a singular term is a rigid designator it cannot also have a Fregean sense.

## II

It is commonly assumed that deictical demonstratives and indexicals in general are rigid designators. However, Kaplan argues that their rigidity leaves no room for a Fregean sense.<sup>7</sup> I will argue that the conception of sense as the mode of presentation is consonant with the thesis of rigid designation, provided it is not subjected to the restriction imposed on it

by Kaplan. As will be shown, this restriction on rigid designation stems from the view held by Kaplan – as well as by Donnellan (1974) and Perry (1977) – that the referent of a singular term is itself a component of the proposition expressed by the sentence as a whole. That this view is unintelligible will become clear in due course.

As is well-known, the thesis of rigid designation was introduced by Kripke, who characterises it in the following way:

A designator *d* of an object *x* is *rigid*, if it designates *x* with respect to all possible worlds where *x* exists and *never designates an object other than x with respect to any possible world*.<sup>8</sup>

Regarding the notion of a possible world Kripke says:

A possible world is *given by the descriptive conditions we associate with it* . . . ‘Possible worlds’ are *stipulated*, not *discovered* by powerful telescopes. (1980, p. 44)

A little bit later (with respect to Nixon’s winning the election) he says:

We just say ‘suppose this man had lost’. It is *given* that the possible world contains *this man*, and that in that world, he had lost. There may be a problem about what intuitions about possibility come to. But, if we have such an intuition about the possibility of *that* (*this man’s* electoral loss), then it is about the possibility of *that*. It need not be identified with the possibility of a man looking like such and such, or holding such and such political views, or otherwise qualitatively described, having lost. We can point to the *man*, and ask what might have happened to *him*, had events been different. (1980, pp. 45-6)

This is to say that, as regards our use of deictical demonstratives, possible worlds are stipulated in such a way that the object we take to be the referent of a demonstrative (token) in the so-called actual world is also its counterfactual referent, i.e., its referent with respect to other possible worlds; or, in terms of the foregoing definition, deictical demonstratives designate rigidly. Let us see now how the account of sense as the mode of presentation relates to the outlined claim that demonstratives are rigid designators.

The fact that a certain object is given to us under a particular mode of

presentation does not clash with the stipulation that, when a certain object is referred to by a certain demonstrative (token), it is still referred to by it when we consider the object counterfactually. What is more, the rules governing a demonstrative commit us to the thesis of rigid designation. This is because according to these rules a deictical demonstrative can be used to refer only to an object that is related to us in a certain sort of way, i.e., under a particular mode of presentation. Thus we cannot refer by means of a deictical demonstrative to a possible, non-actual, object such as a unicorn, for it is not related to us in the way required by the correct use of a demonstrative.<sup>9</sup>

Because of these rules a deictical demonstrative can correctly be used to refer only to objects in the actual world and in such a way that when it refers to a certain object, it refers to it regardless of whether we state something about it with respect to the actual world or consider what might have happened to it (i.e., consider it counterfactually). This is to say that the referent of a demonstrative is kept fixed, i.e., that a demonstrative is a rigid designator.

A similar result can be achieved without appealing to the apparatus of possible worlds. Peacocke (1975) suggests a criterion which does not make use of this apparatus. According to this criterion, an expression is a rigid designator if and only if its referent 'directly enters into' the truth-conditions of a sentence containing the given expression; that is, the truth-condition for a sentence involving such an expression is that *that object* (or its unit sequence) satisfy a certain predicate or predicates. Thus, definite descriptions (in the use of them with which Kripke was concerned when he denied that they are rigid designators) are not rigid designators as the way in which they relate to objects, i.e., by specification, renders the objects to these truth-conditions 'indirectly'. On the other hand, Peacocke claims that on this criterion indexicals (which he calls demonstratives) are rigid.

With respect to this criterion, the conception of the sense of a demonstrative as the mode of presentation commits us again to the thesis that demonstratives are rigid designators. For it only makes sense to assume that the truth-conditions of a demonstrative sentence involve the object itself, i.e., involve it 'directly'. To assume that what is involved is not the object itself but the mode of presentation, is not viable. For two or more subjects can entertain the same referent of the same demonstrative (token) under different modes of presentation. Consequently, if the truth-condition of a demonstrative sentence does

not involve the object itself the truth of a sentence (Thought) is relative to the particular subject entertaining it.

This account differs from that offered in Kaplan's work 'Demonstratives' in that he claims that a proposition *expressed* by a demonstrative sentence involves the object itself, coinciding thus with its truth-condition. According to him, this is a better alternative to the view that such a sentence expresses a Fregean sense, since he suggests that the latter cannot account for the fact that the referent of a demonstrative (indexical) is kept fixed in all possible worlds. However, as we shall see shortly, Kaplan understands the Fregean sense to be something that mediates, in the way of determination, between the term and its referent, which, as is clear by now, has nothing to do with the kind of sense befitting a deictical demonstrative. The latter is, as we have seen, in perfect harmony with the rigidity thesis.

Kaplan's central thesis is that demonstratives and indexicals in general are not only rigid in the sense discussed above, but directly referential, where this is taken to mean the following:

... I intend to use 'directly referential' for an expression whose referent, once determined, ... is taken as *being* the propositional component. (1989, p. 493)

This is to say that the proposition expressed by a sentence containing a deictical demonstrative includes the referent of the demonstrative *itself*. This view of the structure of a singular proposition (which Kaplan takes from Russell's *Principles of Mathematics*) faces, however, the problem of accounting for the paradox of identity, and being aware of this Kaplan seeks a solution by appealing to a Fregean sense that he attributes to the speaker's *demonstration* (e.g., his pointing at the object). That is, he claims that the analogy between definite descriptions and demonstrations is close enough to provide a sense and reference analysis of the 'meaning' of a demonstration on the model of the definite description. With this analogy in mind he writes:

The same individual could be demonstrated by demonstrations so different in manners of presentation that it would be informative to a competent auditor-observer to be told that the demonstrata were one. For example, it might be informative to you for me to tell you that



That [pointing to Venus in the morning sky] is identical with that [pointing to Venus in the evening sky].

(I would, of course, have to speak very slowly). The two demonstrations . . . which accompanied the two occurrences of the demonstrative expression 'that' have the same demonstratum but distinct manners of presentation. It is this difference . . . that accounts, the Fregean claims, for the informativeness of the assertion. (1989, pp. 514-5)

What Kaplan seems to mean is that Frege's other conception of sense discussed in section I above – that the sense of a demonstrative is constant on all occasions of its use – cannot solve the paradox of identity, as we have already established. Hence, that kind of sense has to be replaced with some other which can fulfil this role. This, according to Kaplan, gives rise to what he calls 'the Fregean theory of demonstratives' which takes the sense of a demonstration accompanying an utterance of a demonstrative to be the sense of the demonstrative itself in order to solve the paradox. However, as we have seen in section I above, the paradox is solved in terms of the sense as the mode of presentation of the referent, which seems to provide us with its only intelligible solution.

According to Kaplan, what is wrong with 'the Fregean theory of demonstratives' is this. As in the case of definite descriptions, the sense of a demonstration which the corresponding demonstrative takes on determines its referent (if any) by specification, and as such it can specify different objects in different possible worlds. Thus, according to this theory, demonstratives are not rigid. However, since Kaplan believes that demonstratives are rigid, he concludes that this theory is wrong. Yet, as discussed, he believes that the sense of a demonstration provides the solution to the paradox of identity; that is, he accepts what he calls 'the Fregean theory of demonstrations'.

However, as will become clear shortly, the sense of a demonstration provides us with no solution at all. Nevertheless, it does provide us with the solution to a parallel paradox that arguably arises not with demonstratives but with acts of demonstration. As with definite descriptions, this paradox concerns the hearer's not being aware that the senses of two or more acts of demonstration on the part of the speaker demonstrate one and the same object by specification. This kind of situation occurs when, for example, the speaker points more than once

to an object located behind the hearer's back and the hearer takes these pointings to specify two different objects, rather than different aspects of the one object.

The paradox concerning deictical – or, as Kaplan calls them, perceptual – demonstratives, the primary concern for both Kaplan and this paper, is by contrast always an outcome of the subject's perceptual discrimination of the relevant object. The foregoing Venus example as well as the following statement from his 'Afterthoughts' make clear that this is also how Kaplan sees this paradox:

We will need to be able to formulate sentences of the formal language in which different intentions are associated with different syntactic occurrences of a demonstrative, if we are to face the looming challenge of Frege's Problem, in which one who is simultaneously perceiving two parts of what may or may not be a single object asserts 'That<sub>1</sub> is that<sub>2</sub>'. (p. 587)

Kaplan is, however, running together the sense as the mode under which an object is given to the subject with the sense of a demonstration which is in fact of a different type. He believes that he is providing a solution to Frege's Problem in terms of the latter kind of sense, though he is in fact trading on the former one. However, he is in no position to acknowledge the former since it is inconsistent with his view that a singular proposition contains the object referred to as its component.<sup>10</sup>

Further, the view that the referent itself is a propositional component, where a proposition is taken to be a certain state of affairs, makes sense only in conjunction with the view that what is *expressed* by a demonstrative sentence is a Fregean sense. Accordingly, it can be granted that such a sentence *asserts* a certain proposition, but does not express it.

Now, despite the impression that Kaplan's view commits him to the bare knowledge thesis, he insists that his account of Frege's Problem refutes this thesis, i.e., 'direct acquaintance theories of direct reference' in his terminology. In section XVII of 'Demonstratives' he addresses this issue. By this stage he has enriched his apparatus by introducing the demonstrative 'dthat'. This is 'a special demonstrative which requires completion by a description and which is treated as a directly referential term whose referent is the denotation of the associated description . . .' (*op. cit.*, p. 521) Kaplan writes it as 'dthat [ $\alpha$ ]', where ' $\alpha$ ' is any

description (or any singular term), while 'dthat' is the demonstrative 'that' with the following singular term functioning as its demonstration.

As with Kaplan's treatment of demonstrations, he now seeks to solve the paradox of identity by appealing to the difference in the senses of descriptions accompanying two co-referring utterances of a demonstrative. It is, however, by no means obvious that each utterance of a demonstrative hinges in this way either overtly or tacitly on some description(s). However, granting that it does, Kaplan then faces a problem parallel to that regarding the sense of a demonstration. As discussed, the kind of sense which determines its referent by specification cannot solve the paradox of identity that arises with respect to identity statements featuring deictical, i.e., perceptual, demonstratives. This is because the latter is always an outcome of the subject's perceptual discrimination of the relevant object, not of the object's different specifications.

The same considerations hold for Kaplan's latest proposal. In the passage from 'Afterthoughts' quoted above he appeals to different intentions that are to be associated with different syntactic occurrences, i.e., tokens, of a demonstrative if we are to face the looming challenge of Frege's Problem. That is, he now considers the demonstration associated with an utterance of a demonstrative as a mere externalisation of the speaker's directing intention. (*ibid.* p. 582) However, the speaker's directing intention can no more solve this problem than can the sense of a demonstration. It is clear by now that this problem is an outcome of the subject's perceptual discrimination of the relevant object and not something that results from those features and devices whose role is to enable the subject to single the object out. None of the features proposed by Kaplan solve this problem; his theory of direct reference only amounts to just another 'direct acquaintance theory of direct reference'.<sup>11,12</sup>

## NOTES

1. See, for example, Lyons 1975. I leave out of consideration the anaphoric use of a demonstrative which would require special treatment. By anaphora I mean the kind of relationship that holds between, e.g., a pronoun and its antecedent (see Chastain 1975, p. 204). That a particular demonstrative expression is used anaphorically usually means that it either functions as a variable bound by its antecedent quantifier phrase, or that it is what Geach calls a pronoun of laziness, i.e.,

a pronoun that simply goes proxy for some expression constructible from words occurring in the syntactic environment of its antecedent, and which is employed to avoid repetitious language (see Geach 1972 and Edberg 1986).

2. This example is based on one in Perry 1977.

3. Evans 1985. In supplementing the intuitive notion of a way of thinking of something, he suggests that we can appeal to the general idea of an account of what makes it the case that a thought is about the object it is about. Two people will then be thinking of an object in the same way if and only if the account of what makes the one person's thought about that object is the same as the account of what makes the other person's thought about that object. See also his 1982, section 1.5.

4. For a discussion of the impossibility of bare knowledge of the referent of an expression see Dummett 1975, p.124 ff., and 1976, pp.128-9, as well as his 1991, chapter 5.

5. This is a paraphrase of what he says about the sense of a proper name: 'The sense of a proper name is grasped by everybody who is sufficiently familiar with the language or totality of designations to which it belongs' (1980, p. 57).

6. In this paper I will not discuss the question of the relationship between the mode of presentation and the linguistic meaning of a demonstrative. For this relationship see, for example, McDowell 1984. According to him, particular modes of presentation can be grouped into sorts; different modes of presentation can present their different objects in the same sort of way – for instance by exploiting their perceptual presence. And the univocity of a context-sensitive expression can be registered by associating it with a single sort of mode of presentation.

7. See Kaplan's manuscript 'Demonstratives' which was circulating for years as a mimeograph. It has now been published (referred to here as Kaplan 1989), and is accompanied by his new paper entitled 'Afterthoughts' which includes his current critical stance towards some of the theses advocated in the main body of the text. However, 'Afterthoughts' does not reveal whether Kaplan still maintains the view that a demonstrative cannot have both a Fregean sense and be rigid.

8. This statement of Kripke's originates from Kripke's letter to Kaplan reprinted in the aforementioned 'Afterthoughts' (p. 569). It is intended to settle the issue as to what Kripke really meant by calling a designator rigid, given that Kaplan (as well as Salmon 1982, pp. 33-4) had found that Kripke had dealt with more than one type of rigid designator ('Demonstratives', section IV). The new formulation is also useful as it is stated in terms of the expression 'with respect to all possible worlds' rather than 'in every [all] possible world[s]', which can be found in his original definitions, e.g., in Kripke 1971, p.145 and in Kripke 1980, p.48. The phrase 'with respect to' captures Kripke's intention more accurately than the earlier expression 'in'.

9. That such objects are not related to us in this way is another way of saying – as David Lewis does – that there isn't any trans-world causation. Referring to Kripke's remark quoted above that possible worlds are not discovered by telescopes, he claims that the lack of such causation is the real reason why there could not be a very powerful telescope for viewing other worlds. 'Telescopic viewing, like other methods of gathering information, is a *causal* process: a 'telescope' which produced images that were causally independent of the condition of the thing 'viewed' would be a bogus telescope. No trans-world causation, no trans-world telescopes.' (1986, p.80)

10. Furthermore, there are cases in which the paradox arises though the acts of demonstration associated with two utterances of a demonstrative have the same sense, as well as cases in which there is no demonstration and consequently no sense of a demonstration. Kaplan is aware of the latter kind of case and claims that in such circumstances a demonstration is opportune: 'However a demonstration may also be opportune and require no special action on the speaker's part, as when someone shouts 'Stop that man' while only one man is rushing toward the door.' ('Demonstratives', note 9, p. 490) Yet it is hard to imagine that such a demonstration can have the kind of sense that determines its referent by specification.

11. Kaplan also considers the possibility that the cognitive difference relevant to Frege's Problem that arises with respect to proper names might rest on nothing more than syntax (see the last section

of part III of his 'Afterthoughts' and also his 1990). However, he does not attempt to show how this problem is actually solved along these lines.

12. I am indebted to L. J. O'Neill, F. C. White, E. E. Sleinis, M. Nicholls and the Editor of *Philosophical Papers* for their helpful comments on earlier drafts of this paper.

## REFERENCES

- Chastain, Charles (1975) 'Reference and Context', Gunderson, ed., *Language, Mind and Knowledge*, Minnesota Studies in Philosophy of Science, pp. 194-269.
- Donnellan, Keith (1974) 'Speaking of Nothing', *Philosophical Review* 83, pp. 3-30.
- Dummett, Michael (1975) 'What is a Theory of Meaning?', Guttenplan, ed., *Mind and Language*, Clarendon Press, Oxford, pp. 97-138.
- Dummett, Michael (1976) 'What is a Theory of Meaning? (II)', Evans and McDowell, eds., *Truth and Meaning*, Clarendon Press, Oxford, pp. 67-137.
- Dummett, Michael (1991) *The Logical Basis of Metaphysics*, Harvard University Press, Cambridge Massachusetts.
- Edelberg, Walter (1986) 'A New Puzzle about Intentional Identity', *Journal of Philosophical Logic* 15, pp. 1-25.
- Evans, Gareth (1982) *The Varieties of Reference*, Clarendon Press, Oxford.
- Evans, Gareth (1985) 'Understanding Demonstratives', in his *Collected Papers*, Clarendon Press, Oxford, pp. 291-321.
- Frege, Gottlob (1977) *Logical Investigations*, Blackwell, Oxford.
- Frege, Gottlob (1979) *Posthumous Writings*, Blackwell, Oxford.
- Frege, Gottlob (1980) *Translations from the Philosophical Writings of Gottlob Frege*, Blackwell, Oxford.
- Geach, Peter (1972) 'Referring Expressions Again', in his *Logic Matters*, Blackwell, Oxford, pp. 97-102.
- Kaplan, David (1989) 'Demonstratives' and 'Afterthoughts', Almog, Perry and Wettstein, eds., *Themes from Kaplan*, pp. 481-563 and 564-614.
- Kaplan, David (1990) 'Words', *Proceedings of The Aristotelian Society, Supplementary Volume*, LXIV, pp. 93-119.
- Kripke, Saul (1971) 'Identity and Necessity', Munitz, ed., *Identity and Individuation*, New York university Press, New York, pp. 135-164.
- Kripke, Saul (1980) *Naming and Necessity*, Blackwell, Oxford.
- Lewis, David (1986) *On the Plurality of Worlds*, Blackwell, Oxford.
- Lyons, John (1975) 'Deixis as the Source of Reference', Keenan, ed., *Formal Semantics of Natural Language*, Cambridge University Press, Cambridge, pp. 61-83.
- McDowell, John (1984) 'De Re' Senses', *The Philosophical Quarterly* Vol. 34 No. 136, pp. 283-294.
- Peacocke, Christopher (1975) 'Proper Names, Reference and Rigid Designation', Blackburn, ed., *Meaning, Reference and Necessity*, Cambridge University Press, Cambridge, pp. 109-132.
- Perry, John (1977) 'Frege on Demonstratives', *The Philosophical Review* LXXXVI, pp. 474-497.
- Salmon, Nathan (1982) *Reference and Essence*, Blackwell, Oxford.