In this paper, I shall address the much-discussed issue of how definite descriptions should be analysed: whether they should be given a quantificational analysis in the style of Russell’s theory of descriptions, or whether they should be seen instead, at least in some cases, as ‘genuine singular terms’ or ‘genuine referring expressions’, whose function is to pick out a particular object in order to say something about that very object.

I have deliberately presented the issue in very general terms, since it has many complex connections with a large number of other issues in the philosophy of language, and it is therefore difficult to be more precise without begging theoretical questions. For the same reason it is hard to discuss this matter without presupposing some theoretical framework, but I shall try as far as possible to avoid any appeal to a specific Fregean or other semantic theory, partly because the problems which emerge when we attempt to give an analysis of definite

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1 I am grateful to the Aristotelian Society for inviting me to speak in the area of Logic and Language, in which I had not previously worked for some time, and especially to Dorothy Edgington and Malcolm Budd, for allowing me in view of this to submit my paper well after the usual deadline. I am also very grateful to Simon Blackburn, Robin Le Poidevin, Peter Long, Gregory McCulloch, Peter Mott, David Over and especially Peter Smith, for many interesting discussions on related issues. But my particular additional thanks are due to David Over, for his patience and his cooperation in kindly consenting to write his paper in parallel with mine on the mutually agreed topic of definite descriptions, in order to give me more time. Thus if his reply engages my paper rather less than might be expected, the blame is to be laid entirely at my door. At the Joint Session itself, we naturally intend to focus more on particular matters of dispute between us.

2 Although Russell’s is certainly the most famous quantificational analysis of definite descriptions (see Russell (1905) and (1919) chapter 16), it is by no means the only one, and probably not the best (Dummett (1973) p. 162 and Evans (1982) pp. 57–60 suggest a binary quantifier treatment which distorts the surface structure of description sentences much less than Russell’s, while Kaplan (1970) argues that such distortion is the major objection to Russell’s theory). Partly for this reason, in what follows I shall generally use the phrase ‘quantificational analysis’ rather than ‘Russellian analysis’. A second reason for avoiding the adjective ‘Russellian’ in this connection is Evans’ use of it to describe ‘a singular term whose significance depends upon its having a referent’ (1982, p. 12), which manifestly does not apply to a Russell-style quantificational description!
descriptions can themselves reveal significant constraints on a satisfactory theory of language. In particular, I believe that they highlight certain important deficiencies in the Fregean account.

I

Let us start by asking what purpose our 'analysis of definite descriptions' is intended to serve, since this will clearly determine the appropriate criteria of success. There are at least three options here—our analysis could be intended to provide:

(a) an account of the actual conventions governing the correct use of definite descriptions in English discourse. In this sense Russell's theory of descriptions claims to provide a synonymous paraphrase or translation into regimented English which makes explicit their meaning or 'character'.

(b) an analysis of how a definite description contributes to the 'propositional content' of a sentence within which it occurs, or to 'what is said' by that sentence. In this sense the theory of descriptions claims that the 'content' of such a sentence has a quantificational structure.

(c) an analysis of the 'thoughts' or propositional attitudes which are standardly expressed using definite descriptions. In this sense the theory of descriptions claims that thoughts and beliefs thus expressed are quantificational in form.

Russell's (1905) and (1919) give the clear impression that his theory of descriptions is intended to provide an analysis of natural English (albeit one which is more perspicuous, and removes ambiguity), but his (1957) is significantly more revisionist in tone: 'I . . . am persuaded that common speech is full of vagueness and inaccuracy, and that any attempt to be precise and accurate requires modification of common speech both as regards vocabulary and as regards syntax' (pp. 241-2).

I use Kaplan's familiar terminology of 'character' and 'content' (Kaplan (1977) pp. 500-507) merely to set the scene, and will not follow his detailed development of these notions. Indeed, my arguments will presuppose nothing more than a very general, pre-theoretical understanding of each (as 'meaning' and 'what is said about the world' respectively). The term 'content' is, of course, highly ambiguous, and has also been used in connection with the propositional attitudes. For this reason I shall generally prefer the term 'proposition', which seems to have acquired a relatively standard usage amongst anti-Fregean 'direct reference' theorists such as Donnellan, Kaplan, Kripke, Perry and Salmon. To quote Kaplan (1977) p. 494, 'think of propositions . . . as structured entities looking something like the sentences which express them. For each occurrence of a singular term in a sentence there will be a corresponding constituent in the proposition expressed . . . in the case of a singular term which is directly referential, the constituent of the proposition is just the object itself.'
If we include formal accounts of definite descriptions then we should perhaps add three more options, corresponding to those above. Thus a ‘translation’ of definite descriptions into a formal notation such as predicate logic could be intended in any of the three ways: as a regimented paraphrase on the same level as English (merely differing in precision), or as a regimentation designed to exhibit the ‘logical form’ of either ‘proposition’ or ‘thought’. Of course these three perspectives, whether formal or informal, are not necessarily mutually exclusive: for example a Fregean might argue that the ‘content’ of a sentence is precisely the ‘thought’ which it standardly expresses, which is in turn determined by the conventions of language. Nevertheless it will be useful to start by distinguishing between these three aims—it is not immediately obvious that they will all coincide, and part of the burden of this paper is to argue that they go together rather less than is generally supposed.

II

To start with definite descriptions as they are actually used in English, there are several linguistic phenomena which are, at least superficially, difficult to reconcile with Russell’s theory. 7

5 I shall here say little regarding the desirability (or otherwise) of a quantificational treatment of descriptions within a formal language, partly for reasons of space, and partly because this matter is dealt with very adequately by Smiley (1981). Smiley argues that definite descriptions should be treated not as quantifiers but as singular terms, although he suggests broadly Russellian truth conditions for the sentences within which they occur. He rebuts the various arguments against such a singular term treatment, and rejects the quantificational alternative principally because of its cumbersome treatment of functions. I am sympathetic to Smiley’s account despite my denial (in Section II below) that sentences containing definite descriptions in natural language have Russellian truth conditions, because for many purely formal purposes it is reasonable to insist on such truth conditions in order to impose determinacy and to remove the ubiquitous context-relativity of natural language.

6 McCulloch (1989) pp. 230–261 provides an excellent example of a Fregean defence of the quantificational analysis, which largely depends on taking for granted the very assimilation which I here oppose. Some arguments against such an assimilation are presented below, and others, at greater length, by Wettstein (1986, 1988).

7 In addition to the three problems addressed here, Russell’s theory also has difficulty coping with generic uses of the definite article (e.g. ‘The whale is a mammal’), uses involving abstract nouns (e.g. ‘The existence of God’) or mass nouns (e.g. ‘The tea is cold’), and uses which refer to things that can overlap such as places and events (e.g. ‘The place where I work is Leeds’ cf. ‘The place where I work is Leeds University’). See Rundle (1979) for a discussion of generic (pp. 204–9) and abstract (pp. 63, 66–7) uses, and see McCawley (1985) for the problems involving mass nouns (p. 179) and overlap (pp. 179–180, 183–8).
Of these I shall here focus on just three, concerning respectively plural descriptions, so-called 'referential' descriptions, and 'incomplete' descriptions. The problem of plural descriptions is relatively straightforward, since sentences such as 'The planets have elliptical orbits' or 'The doors are open' obviously cannot be analysed directly in accordance with the basic theory, so that the theory must either be extended to accommodate them, or else must be restricted in scope so that it is understood to provide an analysis only of 'singular' definite descriptions (and presumably related singular phrases such as 'my house') rather than of all uses of the English definite article. Russell took the latter course (e.g. Russell (1919) p. 167), but we should note that such a move makes his theory significantly less attractive, since an analysis which can deal elegantly and coherently with all uses of 'the' is surely to be given preference over one which claims that the word is (unaccountably) ambiguous and which provides an analysis of only one of its 'senses' (albeit the primary one).

The second problem concerns Donnellan's famous and controversial distinction between what he calls 'attributive' and 'referential' uses of definite descriptions. In Donnellan (1966) he characterises this distinction as follows:

A speaker who uses a definite description attributively in an assertion states something about whoever or whatever is the so-and-so. A speaker who uses a definite description referentially in an assertion, on the other hand, uses the description to enable his audience to pick out whom or what he is talking about and states something about that person or thing. In the first case the definite description might be said to occur essentially, for the speaker wishes to say something about whoever or whoever fits that description; but in the referential use the definite description is merely one tool for doing a certain job—calling attention

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8 The simplest way of extending the theory to deal with plural descriptions is perhaps to analyse 'The Fs are G' as 'There is one and only one (salient) set of F's, each of whose members is G'. This adds a significant complication to the theory, and also seems very unnatural because 'The Fs and G' appears to refer to the Fs, and not to any set of Fs. Besides, such an analysis is subject to similar objections to those which I present below against the theory in its application to singular descriptions (in particular, 'the Fs' can function successfully even when there is more than one salient set of Fs).
to a person or thing—and in general any other device for doing the same job, another description or a name, would do as well. In the attributive use, the attribute of being the so-and-so is all important, while it is not in the referential use. (p. 285)

He then goes on to claim that although Russell's analysis might perhaps give an adequate account of attributive uses of descriptions, it certainly cannot deal satisfactorily with referential uses, which are more plausibly seen as functioning like proper names, as directly referential devices rather than as disguised quantifiers.

There is insufficient space here to do justice to the many interesting discussions that have been provoked by Donnellan's paper, so I shall focus principally on the question of whether or not his observations refute the quantificational analysis. First, however, I should like briefly to take issue with David Over on the precise interpretation of Donnellan's distinction. Over argues persuasively that the distinction can be elucidated (and thus shown to be 'respectable') in terms of an independently well-founded distinction between constructive and non-constructive justification: roughly, a speaker uses a description referentially if he has specific object-grounded information concerning its referent, but attributively if his use of the description is grounded only on general information, which is not derived (causally or otherwise) from the particular object in question. However I am not convinced that this account captures, with full generality, the force of Donnellan's distinction. For suppose that I have good general, non-constructive grounds for believing that each of the predicates 'F', 'G' and 'H' is uniquely satisfied, and also that the F, the G and the H are one and the same (perhaps I have a scientific theory which implies that there must be one such object). Then it seems that I can use the description 'the F', in Donnellan's words, as 'merely one tool for . . . calling attention to' that object, where 'the G' or 'the H' would serve just as well (imagine that the conversation takes place amongst a group of people, all of whom share my

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9 See Over (1985) and his reply to this paper. If my criticism here is correct it would also count against those such as Devitt (1981) who attempt to explain the distinction in causal terms.
theory and who accordingly use the three definite descriptions entirely interchangeably). It is not clear how Donnellan would classify such an example, since he does not consider any of this type, but it seems more in the spirit of his distinction to count 'the F' here as a referential use, since otherwise we would have an attributive use in which the description is 'inessential'. For I am not using the 'the F' to speak of simply ‘whatever is the F’, but rather of 'that thing which is the F, the G and the H'. Indeed, it may be that from the point of view of my theory the property of being the $F$ is much less fundamental than the properties of being the $G$ or the $H$, but that 'the $F$' is convenient for the purposes of reference simply because of its brevity. If it afterwards turns out that my theory is mistaken, and that the object which is the $G$ and the $H$ is not, after all, the $F$, then I might well consider that my use of 'the $F$' was infelicitous, in that it failed in fact to designate the object which 'I had in mind': this would surely be an instance of what Donnellan calls the referential use, despite my lack of personal acquaintance with (or constructive knowledge of) the object concerned.

Let us now turn to the question of whether Donnellan's distinction refutes the quantificational analysis. Here an influential negative answer has been given by Kripke (1977). Kripke's strategy is to argue that the phenomena to which Donnellan draws attention are purely pragmatic rather than semantic, and that because of this they fail to overturn Russell's theory as an account of the semantics of definite descriptions.  

Kripke supports this position by drawing a general distinction, applicable to a wide range of referring expressions, between the 'semantic reference' of a designator (which is determined entirely by the semantic conventions governing the designator) and its 'speaker's reference' (i.e. 'that object which the speaker intends to talk about, on a given occasion, and believes fulfills the conditions for being the semantic referent of the designator' - p. 15). The point is that such a distinction arises with any designator whatever about whose referent the speaker can be mistaken, even proper names ('I' is the only obvious exception), and this suggests that the distinction is merely

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10 As Kripke and others have observed, Donnellan himself is somewhat ambivalent on the question of whether his distinction reflects a genuine semantic difference or a mere pragmatic phenomenon.
pragmatic, and reveals no semantic ambiguity. *A fortiori* neither does Donnellan’s distinction reveal a semantic ambiguity, since it is merely a particular instance of this more general phenomenon as it arises in the special case of definite descriptions.

Kripke also supports this analysis with a thought experiment based on a general suggestion for semantic investigation: (p. 16)

I propose the following test for any alleged counterexample to a linguistic proposal: If someone alleges that a certain linguistic phenomenon in English is a counterexample to a given analysis, consider a hypothetical language which (as much as possible) is like English except that the analysis is stipulated to be correct. Imagine such a hypothetical language introduced into a community and spoken by it. *If the phenomenon in question would still arise in a community that spoke such a hypothetical language (which may not be English), then the fact that it arises in English cannot disprove the hypothesis that the analysis is correct for English.*

He goes on to claim that speakers of what we might call ‘Russell English’, in which definite descriptions are quantificational by stipulation, will use those descriptions in much the same way as we do, and that in particular, Donnellan’s distinction will be equally applicable to these quantificational descriptions. This being so, the distinction provides no difficulty for the quantificational analysis.

Kripke’s proposed test is elegant and superficially convincing, and has been taken up enthusiastically by other defenders of Russell. But quite apart from its alleged results in the particular case of definite descriptions, I have a general reservation about the view of language which it presupposes. For it seems to take for granted that the meaning of any linguistic construction can be stipulated, and that this meaning will then be unaffected even if pragmatic factors conspire to produce a general usage of that construction which is significantly different from the usage which might have been expected from the semantic stipulation alone. And this seems extremely dubious. For suppose that we consider in our thought experiment a variant of English which lacks some common and useful word or phrase, but which has
instead a stipulatively defined ‘replacement’ that can be used in similar contexts, albeit very artificially. In such a case it is very likely that for pragmatic reasons the speakers of this hypothetical language would come to use the stipulated replacement in exactly the same way as we use the original expression, since *ex hypothesi* that expression occupies in English an important niche which it is desirable to fill, and which can be filled (albeit artificially) by the new replacement. But of course this in no way suggests that the new stipulation has revealed the true meaning of the original expression. Quite the reverse—it indicates that such a stipulation is powerless by itself to determine the meaning even of the stipulated replacement, since the meaning of an expression in natural language cannot be divorced from its use, and use is determined not purely by stipulation, but also largely by pragmatic considerations.

As for Kripke’s particular thought experiment involving Russell English, I am anyway far from convinced that the linguistic behaviour of a community using quantificational descriptions would indeed match our own. My reservations here, however, are less concerned with the Donnellan phenomena (which by themselves could indeed be dismissed as merely pragmatic) than with the problem of incomplete descriptions.

Incomplete definite descriptions provide the most serious, and indeed I believe decisive, objection to Russell’s theory. The simple fact is that most definite descriptions as they are used in ordinary life (as opposed to the musings of philosophers, mathematicians and scientists) do not succeed in uniquely identifying their referent descriptively, and apparently make no pretence whatever of doing so. For example, ‘The door is open, but mind the step; come into the room—the teapot’s on the shelf, but make sure the mug’s clean . . .’ and so on. Here the

11 I call definite descriptions which fail to specify a unique referent ‘incomplete’, despite that term’s misleading Russellian and Fregean associations, because the alternatives ‘imperfect’ and ‘improper’ both take for granted what I wish to contest, that such descriptions fall short of total respectability.

12 It is interesting to note that all of the principal examples given by Russell are of complete descriptions, for example: ‘the centre of mass of the solar system’, ‘the father of Charles I’, ‘the author of Waverley’, ‘the present king of France’, ‘the difference between A and B’, ‘the first line of Gray’s Elegy’, etc. Perhaps it was a surfeit of such examples which led Kaplan (1970, p. 210) to make the totally implausible claim that ‘improper descriptions are rarely used knowingly’!
speaker surely does not in the least imply that there is one and only one door, one step, room, teapot, shelf and mug, even in the relatively limited domain of his own house. And yet this kind of speech, hopelessly sloppy by Russell’s standards, is entirely typical of our everyday conversation. On statistical grounds alone, any descriptive analysis of English should pay at least as much attention to incomplete descriptions as it does to those which are complete.

There are two common replies to this obvious problem, which can be used either singly or in combination. The first of these parallels Kripke’s reply to Donnellan, and is similarly based on the distinction between what is strictly said and what the speaker means to convey. This reply claims that the quantificational account passes Kripke’s Russell English test even in the case of incomplete descriptions, and thus that our use of such descriptions is entirely compatible with the supposition that they are strictly and literally quantificational in form. When I say ‘The door is open’, what I strictly state is that there is one and only one door (in the universe), and it is open. Because this is so patently false, however, it is manifest to the hearer that what I am trying to convey is something different from what I strictly state—I am surely intending to refer to some particular door, which is salient in the context, and to say of that door that it is open.

Now this reply might have something to recommend it if English were a language with no indefinite article and no demonstratives, but given that this is not the case, I find it quite implausible. Suppose that I intend to refer to one particular door, which is presumably a particularly conspicuous or relevant door in the context, and to say that it is open. I have at least three options in Russell English:

(a) There is one and only one door, and it is open.
(b) A door is open.
(c) That door is open.

First compare (a) with (b). Certainly (b) is moderately well suited for conveying the desired information, since one reasonably

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common use of indefinite descriptions such as 'a G' is to convey the sense of 'a certain G' or 'a particular G'. So what advantage might (a) have over (b)? Surely none whatever—on Russell's own account the two differ only in the implication of uniqueness, and this implication is both manifestly false in the case we are considering, and also entirely irrelevant. For the only sense in which uniqueness is relevant to my utterance is that there is one and only one door which I intend to talk about, but this is clearly quite independent of the claim that there exists one and only one door.

Now compare (a) with (c). Again it is (c) that is by far the more appropriate for conveying the intended meaning—it does not pretend to make irrelevant claims about the number of doors in the universe, and compared even with (b) has the significant additional advantage of making perfectly explicit that a particular door is in question. In short, an appeal to Russell English to defend a quantificational analysis of definite descriptions is totally implausible in the case of incomplete descriptions—speakers of Russell English would have at least two alternative ways of conveying the intended meaning of such descriptions, both of which would be superior to the quantificational paraphrase. I suspect that this thought experiment has appeared convincing only because those who appeal to it have failed to spell out explicitly the quantificational paraphrase of descriptions. Since we use definite descriptions all the time in a non-quantificational way, to talk about particular things, it is easy to forget that on Russell's account definite descriptions say nothing about particulars at all—they are not really singular terms but disguised quantifiers, whose surface form is misleading, and whose logical form is entirely general, as in (a) above. When this is borne in mind, however, it is obvious that such expressions would be quite unsuitable for conveying what we usually wish to convey when we use incomplete descriptions.

The second common reply to the problem of incomplete descriptions (which can be combined with the first) claims that the vague definite descriptions of ordinary language are, strictly, elliptical for some (unmentioned but implicit) uniquely specifying

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14 As shown by Chastain (1975) pp. 210 ff. and Wilson (1978) pp. 57–60, although I do not follow them in claiming any semantic ambiguity here, since this use is indeed entirely explicable on obvious pragmatic grounds.
conditions. Despite the fact that I say merely ‘The door is open’, what I really mean is something like ‘The door (which you are facing) is open’. If on the other hand I utter the same sentence in a different context, then that context may supply very different disambiguating conditions, such as ‘The door (at the front of the house) is open’, or ‘The door (to the room you wish to enter) is open’, or ‘The door (to the ancient tomb we’ve been discussing) is open’. Thus the door to which reference is made can depend not only on the physical location of the speaker and hearer, and the objects of their sensory perception, but also on the topic of their previous conversation, and even their (actual or presumed) intentions. If no general rule can be found to reduce these apparently very varied examples to order, and thus impose some determinacy on the resulting account, then it is hard to see what is gained by insisting that definite descriptions should have a strict quantificational analysis when in most practical cases this analysis will be indeterminate. If the Russellian paraphrase fails to impose either precision or determinacy, then what is its point?

Here an appeal might be made to the idea of an implicit ‘domain of quantification’, which will indeed be contextually dependent, but within which the strict quantificational analysis is intended to apply. This idea is attractive because it is not purely ad hoc, for it is needed anyway to explain the use of relatively uncontroversial natural language quantifiers such as ‘every’ and ‘some’. If I miserably exclaim after presenting this paper, ‘Everyone thought I was wrong!’, I will not be understood as making a claim about everyone in the world, but only about those who heard my talk, and even perhaps only those who were involved in the subsequent discussion. It is quite natural to interpret such quantifiers as having restricted scope, to objects which are ‘salient’ in the context, and if other natural language

15 See Bach (1987) pp. 105-8; McCulloch (1989) p. 234; Sainsbury (1979) pp. 114-5. The two replies have indeed been combined, but there is a significant tension between them which has been generally overlooked. For although they both distinguish between what is strictly said and what is implied, they differ over which side of this distinction should be analysed in a quantificational manner. According to the first reply, the quantificational account applies principally to what is strictly said (so that what is implied can be non-quantificational in form, and hence directly referential or whatever), whereas the second reply appeals to what is implied to supply the unspoken uniquely specifying conditions which enable a quantificational analysis to be defended. Those who combine the two replies are apparently trying to have their cake and eat it!
quantifiers can be restricted in this way, then it is surely plausible to allow that a similar restriction could apply to Russell’s allegedly quantificational definite descriptions. On this account, therefore, a sentence such as ‘The F is G’ which involves an incomplete description should be interpreted to mean not, ‘There is one and only one F, and it is G’, but instead something like ‘There is one and only one salient F, and it is G’.

Although this move is certainly able to explain away many examples of incomplete descriptions, I am not convinced that it goes far enough to save the Russellian analysis. For it is simply not true that in all, or even most, uses of incomplete descriptions there is one and only one salient object of the relevant kind. I can say ‘The door is open’, and be correctly understood, even if there are two or more salient doors. It need not even be the case, for reference to succeed, that the door to which I am referring is, at the time of utterance, more salient than any other—my very act of stating that the door is open may be what brings the door in question to my audience’s attention (if, for example, all the other salient doors are obviously closed). Perhaps this last type of case is exceptional, and can be dealt with by special provisions. But even if it were the case that incomplete definite descriptions could achieve reference only where the referent is initially more salient than any other object of the appropriate kind, Russell’s theory would still have been shown to be inadequate. For if the theory must interpret ‘The F is G’ as meaning ‘There is one and only one most salient F, and it is G’, then its initial bold claim of uniqueness has already been diluted to the point of non-existence. It is now no longer claiming that there is one and only one F, or indeed one and only one of any type of thing, even in the domain of discussion, since the property of being a most salient F is not one which could be possessed by more than one thing. Thus the most central feature of the Russellian analysis, namely

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16 This may seem hard to prove, since domains of salience can be very elastic. But it is not difficult to invent examples in which there are two salient items, where the first is significantly more salient than the second, so that if both are Fs then the description ‘the Fs’ will pick out the first, whereas if only the second is an F then ‘the F’ will pick out the second (consider a story about two men, as compared with the exactly corresponding story about a woman and a man). The latter case shows that the second item is indeed within the domain of quantification, and it clearly follows (barring an entirely ad hoc change of domain) that in the former case too both items fall within that domain.
its claim that ‘The $F$ is $G$’ asserts the unique satisfaction of some predicate, is completely cancelled: no substantial assertion of uniqueness is left at all. There still remains the illusion of such an assertion, arising from the fact that if the description succeeds, then there is one and only one thing to which reference is made (presumably the most salient $F$). But this is obviously something entirely different. If, moreover, Russell’s theory is reduced to this desperate defence, then its inability to deal with plural descriptions is surely damning. Of course it is true to say of any successful singular description that there is one and only one object to which reference is made. Russell’s theory, if it is interpreted as saying just this, is defended from refutation by what now looks like the purely ad hoc expedient of refusing to consider plural examples!

III

Having rejected Russell’s theory as an account of the semantic conventions governing the use of definite descriptions in English, I shall now briefly sketch an alternative account. I shall not attempt to defend it in detail here (or to present any formal treatment), though clearly much of what I have said in criticism of Russell will provide support for this very non-Russellian view.\textsuperscript{17}

The most standard use of definite descriptions is to pick out an object (or objects), in order to say something about it (or them). In this respect definite descriptions have a very similar function to demonstratives, but unlike demonstratives, they do not standardly pick out the object(s) concerned with the aid of a demonstrative gesture or whatever, but do so from the context of utterance in general (which can include demonstrative gestures, but usually does not). Thus ‘the $F$’ (or ‘the F$s$’) is typically used where the context already furnishes sufficient cues for identifying which $F$ (or set of F$s$s) is in question. This contrasts with demonstratives such as ‘this $F$’ (‘these F$s$s’) or ‘that $F$’ (‘those F$s$s’), which are typically used in cases where the contextual cues by themselves are insufficient to identify the $F$ or F$s$s in questions (usually}

\textsuperscript{17}For a more detailed informal discussion along broadly similar lines see Rundle (1979) pp. 50–66. A formal development of this sort of account would probably treat definite descriptions in general much like demonstratives, though it is, of course, an open question how demonstratives themselves should be treated.
because more than one $F$ or set of $Fs$ is salient), but where this insufficiency can be remedied by a demonstrative act.\(^{18}\)

Given their relatively modest function, definite descriptions in general need only be as specific as is necessary for picking out the object (or objects) concerned: if it is obvious which door is in question then ‘the door’ will do perfectly well, while if it is obvious which thing is in question then even ‘the thing’ may be entirely adequate! Notice that this account has no difficulty whatever in coping with plural descriptions—if we wish to speak about a group of objects (doors, say), and some description serves, in the context, to pick them out, then we can simply use the appropriate plural definite description to do so (e.g. ‘The doors are open’).

If this account is correct, then it is incomplete definite descriptions which are the rule, and complete definite descriptions which are the exception, or rather a limiting case. A complete definite description is needed when the context provides insufficient information for picking out the relevant object(s) without a precise identifying description, and this will most typically occur where very little context can be presupposed (for example at the beginning of an article in a newspaper, or when a conversation switches to an entirely new topic, or when a free-standing example is given in a philosophical treatise!). Note that there is no question of semantic ambiguity here: the meaning of a definite description is quite independent of whether it is (on a particular occasion) complete or incomplete, and this account of their use applies equally to both ‘kinds’ of description.\(^{19}\)

IV

I have argued above that sentences containing definite descrip-

\(^{18}\)The parallel between definite descriptions and indexicals such as demonstratives and pronouns runs very deep, since like many indexicals they can be used to pick out a linguistically salient object (as in anaphora); to pick out a non-linguistically salient object; or to refer back to a quantifier (functioning either as a bound variable or as what Evans (1980) calls an ‘E-type’ pronoun). We need not here take a stand on the debate between Evans and Bach (1987) as to the relationship between these various uses: it is sufficient to note that in English they frequently go together. We can also note in passing the obvious lexical similarity between the definite article and the manifestly non-quantificational indexicals ‘this’, ‘that’, ‘then’, ‘there’, and ‘thou’.

\(^{19}\)Bach (1987) pp. 103–4 points out that it is facts about the world, and not semantic facts, which determine whether a description is complete or incomplete. So we should be suspicious of any account which treats complete and incomplete descriptions differently.
tions cannot in general be paraphrased in a quantificational manner (their 'character' is not the same as that of the Russellian quantificational 'translation'), and it is not surprising that the alternative account which I have sketched, emphasising the similarity between definite descriptions and demonstratives, tells equally against an exclusively quantificational account of the 'propositional content' of such sentences. In this section, however, I shall suggest that the analysis of a sentence does not necessarily determine the analysis of its 'propositional content': the two can come apart, so that on at least one plausible account of such content, a quantificational sentence type can (on some occasion of use) have non-quantificational content, and conversely, a sentence type which has (unambiguous) non-quantificational character can sometimes be used to express a 'content' whose form is best represented quantificationally.20

A philosophical 'analysis' of a token utterance typically involves abstraction: a focussing on some features of the utterance (and its context) to the exclusion of others. The features on which we focus may be determined principally by our philosophical concerns (if, for example, we are investigating the logic of modality or obligation), but they can also be constrained by the representational capacities of any formal language which we may use as an analytical tool. Whatever the reason, however, our 'analysis' will attempt to reduce to order, by selective attention, the wide variety of factors which may have contributed to the significance of the particular token utterance.

Now suppose that for some philosophical purpose we decide to analyse a set of utterances purely in terms of 'what they say about which objects'—that is, we consider each referring expression which occurs as merely a means of 'picking out' its referent and no more.21 One reason why we might wish to do this is in order to represent the form of an argument:

20 For reasons of space the arguments in the remainder of this paper must unfortunately remain very brief and programmatic, and their full defence must wait for another occasion (most are presented at greater length in Millican (1982)). But David Over will be commenting further on those points which relate particularly to his own major concerns, namely constructive justificiation, effective reference, and the referential/attributive distinction.

21 It is not, of course, always possible to distinguish clearly between those expressions which are used to pick out objects and those which are used to describe them—the crude sort of analysis discussed here will be inappropriate in difficult cases.
This box [which I'm holding] is either empty, or contains a coin.
The box [which I'm now rattling] is (evidently) not empty.
\[ \therefore \] That box [which I've just put in my pocket] contains a coin.

This is, no doubt, an extreme example, where what is known to be one and the same object is presented in three sentences in three different ways. If this fact is quite evident both to audience and speaker, however, then it may be entirely appropriate to 'analyse' the argument as a straightforward disjunctive syllogism (\( Eb \lor Cb \), \( - Eb \therefore Cb \)). Here we are simply not interested in how the box in question is identified in each case (there is no suspicion of sleight of hand), so we have no reason for analysing the definite description and demonstratives as anything other than 'proper names'.\(^{22}\) Moreover the same could still apply even if the definite description were indeed quantificational in form: for these purposes we might be interested only in the object picked out, and not at all in the means by which it is picked out.

An example involving modality can provide a further illustration. Suppose that I mention the number 7, and then utter the following:

(1) The number which I just mentioned is prime.

Surely there is an obvious interpretation of this sentence according to which it states simply that 7 is prime, and therefore states a necessary truth. On this interpretation we are not concerned with the route to the referent but only with the referent itself, and we therefore understand the sentence as stating exactly the same as the following:

\(^{22}\) An analysis of the argument as a disjunctive syllogism could also be given in terms of what Evans (1982) calls a 'dynamic' Fregean Sense (p. 195). The idea is that if one succeeds in 'keeping track' of the box, then the various means of reference to it may express a single, dynamic Sense despite the variation in words used (see Campbell (1988) for a discussion which applies this idea to another simple inference). I am sympathetic to this approach as an account of cognitive significance (since dynamic Senses correspond roughly to the 'notional objects' which I discuss below), but it surely fits uneasily into the standard Fregean framework where the Sense of a complex linguistic expression is supposed to be a function of the Senses of its constituents. For other doubts about Evans' interpretation of Frege see Bell (1990).
(2) The number [i.e. the one I just mentioned] is prime.
(3) 7 is prime.

Perhaps some defenders of the quantificational account of descriptions might object that (1) should not be read in this way, and might claim that such a reading seems plausible only because of the scope distinctions which arise if the sentence is preceded by a necessity operator. Such objections, however, are unconvincing and ad hoc: if abstraction from the particular means of reference is allowed in the case of (2) and (3), then why should it be prohibited in the case of (1)?23 And if such abstraction is forbidden entirely, even in the case of demonstratives and other indexicals, then formal analysis of most genuine arguments will become quite impossible, since one clearly cannot fully represent, within a formal calculus, all of the gestures and physical features of the context of utterance (not to mention the beliefs and intentions of those involved) which so often in practice determine 'what is said' by the sentences of everyday discourse.24

So much for the first half of the claim of this section: that for some purposes, including perhaps the analysis of certain arguments and of de re modality, it might be entirely appropriate

23 An appeal to considerations of rigidity here would be a red herring, since the sentences under discussion are non-modal, and we are concerned only with abstraction from the route to the referent of each referring expression (a function from context of use to referent) rather than from its counterfactual behaviour (a function from circumstance of evaluation to referent) - see Kaplan (1977) pp. 493-4. We can use Kaplan's rigidifying operator 'dthat' (pp. 521-2) to emphasise the point: even in Russell English 'dthat [the number which I just mentioned]' is a rigid designator, but this clearly does not prevent the route to its referent being quantificational in form. The same would presumably apply to one of Evans' 'descriptive names' (Evans (1982) pp. 31-2, 47-51).

24 So-called 'intuitions', nurtured on predicate logic, can easily mislead us into assuming that a descriptive 'route to a referent' is utterly different in principle from a non-descriptive 'route', since only the former can be represented in our calculus—there is a strong temptation to assume that 'what is said' must include all that we can formalise and nothing more. It is interesting to note that Kaplan (1977, 1989) runs into difficulties for precisely this reason when he attempts to formalise his 'dthat-terms', since he wishes to include the rigidified description within such a term's logical syntax but not within its semantic content: 'Can an expression such as the description in a dthat-term appear in logical syntax but make no contribution to semantical form? It would seem strange if it did. But there is, I suppose, no strict contradiction in such a language form.' (1989, p. 582). Just so! What seems to be needed is a formal notation which can include the syntax of a referring expression whilst at the same time allowing it to be excluded from the structure of the proposition expressed (e.g. by underlining what counts as the propositional content).
to treat even Russellian quantificational descriptions (if any there be) as genuine singular terms when representing their contribution to the logical form of the proposition expressed. We can now draw on our previous conclusions regarding the character of definite descriptions to argue that the converse of this is also true: it can be equally appropriate to represent quantificationally the form of a proposition expressed (on some occasion) by a non-quantificational sentence type.

Assuming that those previous conclusions were correct, the argument here is fairly straightforward, and involves simply providing an example of a sentence containing a definite description where the quantificational analysis is manifestly appropriate. For I hope to have shown that in general, a quantificational paraphrase of definite descriptions will misrepresent their character: 'The $F$ is $G$' typically does not involve any uniqueness claim, since the description instead functions much like a demonstrative: as a means of drawing attention to some salient item in the context of discussion. Now although this is true, in limiting cases the item concerned may be identified purely from the description given, without any appeal to the context at all (in which case the description must, of course, apply uniquely if reference is to succeed). In such a limiting case (which must be a complete description used 'attributively'), it may well be appropriate to represent 'what is said' in quantificational terms, particularly if the only alternative is to represent the description as a directly referential 'proper name'. Again one way of bringing this out is by an appeal to modality. Consider the following sentence:

(4) The longest-lived of men is longer-lived than his father.

Now there is surely a sense in which this sentence is a necessary truth—it could not possibly be false. But this necessity cannot be discerned within any predicate logic translation which treats 'the longest-lived of men', or indeed 'his father', as a proper name: if we wish to make manifest the sentence's necessity, therefore, the quantificational treatment will be far superior.

25 For the sake of simplicity, I here ignore the possibility of reference failure, which can be avoided (even when dealing with contingent existents) by technical manipulations involving sets.
The argument just given is similar in principle to one advanced by Evans (1982, p. 55), and considerations of this sort have undoubtedly weighed heavily with many other defenders of the quantificational account.\textsuperscript{26} Having concluded that a quantificational treatment of descriptions is essential in some cases (as above), the usual follow-up is to argue that such a treatment should be extended to all cases, on the grounds that a mixed strategy, in which some descriptions are treated quantificationally but others as ‘proper names’, would imply the unlikely conclusion that definite descriptions are ambiguous.\textsuperscript{27} But we are now in a position to give two good reasons why this further argument should be resisted, one relatively superficial and one somewhat deeper. The superficial reason is that we write and speak in English, not in predicate logic, and there is no guarantee that the categories of our natural language will map uniformly onto those of our formal calculus. Thus a non-uniform representation, within that calculus, of some English construction need not be indicative of any pernicious ambiguity within English itself, especially when the formal language entirely lacks a feature, such as indexicality, which significantly affects the use of that English construction!

The second and deeper reason why we should resist the no-ambiguity argument for Russell’s theory is based directly on the results of this section, and on the distinction which has been drawn between different levels of analysis. There is of course some truth in the claim that an account of definite descriptions (or of any other linguistic construction) should ideally be unitary, and should avoid any appeal to ambiguity unless there are compelling reasons to the contrary. But this truth applies only at the level of character, not of content: if we have a unitary account of the semantic rules that govern the use of definite descriptions, then we should not be dismayed in the least if these

\textsuperscript{26}A similar conclusion can be drawn, for example, from the arguments for the ‘non-rigidity’ of definite descriptions implicit in Kripke (1972). Since validity is a modal notion, related arguments can also be constructed based on the conditions for valid inference: ‘The queen of England likes horses, therefore some queen likes horses’ will not appear valid if the definite description is represented as a ‘proper name’ of Queen Elizabeth.

rules leave open the possibility that those descriptions can be used to express a wide variety of types of proposition. Where the no-ambiguity argument goes wrong is in assuming that a quantificational content requires a quantificational character. This assumption is false, because the non-quantificational account of descriptions given in the previous section can indeed explain why, when descriptions are complete and 'attributive', they can be used to make statements whose content can be (for some purposes at least) most usefully represented in a quantificational manner. Hence the fact that such descriptions can be used to express quantificational content does not refute the claim that they function universally in the way previously described.

In this section I have argued, in outline, that an account of definite descriptions can operate at more than one level, and that the analysis given at the level of language use ('character') will not necessarily determine the appropriate analysis at the level of 'what is said' ('proposition' or 'content'). For on the one hand, even if the referent of a definite description were determined in exactly the way implied by the quantificational account, there would still be no reason why for some philosophical purposes we should not abstract from the particular means of reference and treat the description non-quantificationally, taking the object denoted rather than the definite description as a constituent of the proposition expressed. While on the other hand, the fact that definite descriptions generally function as indexicals does not prevent their being used in certain contexts to express information which might (for at least some purposes) be most usefully represented in a quantificational form. Now is not the time to discuss in detail what the purposes might be for which we would require these different representations: my aim is only to suggest that analyses at the two different levels need not be isomorphic, and that even at the level of 'content', different philosophical purposes may require that we abstract from different features of an utterance (and its context), thus leading us quite legitimately to different analyses. Putting this last point in another way, there is no such thing as the correct analysis of the content of an utterance, and for precisely the same reason that there is no such thing as the correct map of Britain: what should be included will depend upon one's interests, and one's interests can vary.
I have so far said very little about the propositional attitudes such as belief, but it is here that the need for a variety of analyses becomes most clearly apparent. In this section I will briefly sketch what I take to be a fruitful approach to these issues (though I cannot of course defend my position in detail here), and will draw some tentative conclusions regarding the role of referring expressions in the ascription of propositional attitudes.

We typically use referring expressions with the intention of talking about things in the world and communicating to other people our thoughts about those things. Most of the time we succeed, but occasionally we fail, and this failure can be due to a variety of causes. Sometimes there may simply be no object to be spoken of, for example if we have hallucinated or misinterpreted our perceptions. Sometimes we may indeed have some genuine object ‘in mind’, but use a description or other referring expression which fails to apply to it. Sometimes we may have conflated the features of a number of different objects, and taken for a single thing what are in fact many—here again reference may fail. But this does not entail any failure of communication: if our audience make the same mistake that we do, then our ‘thought’ may be understood as well as if reference had been successful. On the other hand, our reference may sometimes succeed but our communicative intention be frustrated by the ignorance of our audience, for example if they are unacquainted with the object to which we refer, or ignorant of its name, or if they are unaware that the object satisfies a description which we use to identify it. At yet other times our audience may know more than we, for example if we speak of two ‘objects’ which are, unbeknown to us, one and the same.

In any of these problematic situations, a simplistic analysis of ‘content’ in terms of ‘what is said about which objects’ will be far too crude to provide much illumination regarding the psychological significance of an utterance, either from the point of view of the speaker or of his audience. A conception of ‘propositional content’ which is transparent, in the sense of treating all co-referential referring expressions in the same way, will give psychological insight only (at best) in cases where this co-reference is known to all those whose attitudes are under discussion.
It was, of course, considerations of this sort which led Frege to propose his distinction between Sense and Reference. According to Frege the cognitive significance of a term is determined by its Sense rather than by its Reference, where the Sense is the mode of presentation of the Reference. For this reason it is the Sense which must be grasped if the term is to be understood. Sense thus has an intimate connection with language, and it is common grasp of objective Sense which is the basis of mutual understanding between users of the same language. This intimate connection is also structural, since the Sense of a complex linguistic expression is a function of the Senses of its constituents. Finally, Frege identifies the Sense of a sentence with the Thought which it expresses (and therefore with the sentence’s Reference in oratio obliqua), which is in turn the primary bearer of truth and of logical relations such an entailment.

The Fregean picture has considerable appeal, since it provides an elegant and simple framework which promises a unified treatment of logic, language and thought. But although this framework is certainly more sophisticated than one based only on transparent propositions, and is indeed able to deal reasonably convincingly with many of the problems raised by the propositional attitudes, I believe that it is ultimately far too crude to perform the tasks required of it.

I cannot here discuss all of the tensions which threaten to pull apart the jack-of-all-trades which is Frege’s notion of Sense. So I shall focus on just one, namely the conflict between Sense as what is objectively expressed by language (and is a function of the words used to express it), and Sense as cognitive significance. The problem is easily illustrated: a single referring expression, with an unambiguous ‘character’ and occurring within an unambiguous sentence, can be used twice by a single speaker to refer to the same object, without that speaker being aware of this co-reference. In such a case, the two token sentences can have a very different cognitive significance (as

28 Frege (1892) pp. 56-57. I have throughout this paper used capitals to distinguish Frege’s terms ‘Sense’, ‘Reference’ and ‘Thought’.
30 See Dummett (1981) chapter 6 for an extensive discussion of those tensions which arise in connection with indexicals and oratio obliqua. See also Burge (1977) section IV and Burge (1979).
judged by Frege’s ‘Intuitive Criterion of Difference’—the speaker can coherently take different attitudes towards the two sentences). As an example, suppose that I look at a large building, the middle of which is obscured by another, and then say, pointing to each visible part in turn, ‘That building is a factory’. Clearly these sentences can have different cognitive significance for me, and I can change my mind about one of them without changing my mind about the other.

Examples of this sort show that an adequate treatment of cognitive significance requires resources beyond those provided by propositional content and character. But then it seems to follow that if Fregean Sense is to provide the basis for such a treatment, its connection with language must be significantly looser than is commonly supposed, and its ready public availability becomes open to doubt. These two points are related, for in so far as cognitive significance is tied closely to linguistic understanding, it must be publicly accessible to all competent users of that language. Competence in the use of referring expressions is plausibly constituted, however, by a grasp of their character, and we have seen that an expression’s character is insufficient to determine its full cognitive significance even when supplemented by the propositional content on a particular occasion of use (which would also, presumably, be public). As Frege was well aware, an account of cognitive significance requires some recognition of the subject’s perspective on the world: not only the objects of which he thinks, nor only the referring expressions which he may use to identify them in his thought, but also the way in which he thinks about them—their mode of presentation to him. But contrary to Frege, there are compelling reasons for maintaining that such modes of

31 The name coined by Evans (1982, pp. 18–19). Evans correctly notes (p. 21) that this criterion provides a direct constraint only (at most) on the identity of thoughts entertained by a single subject at a single time. But he does not point out that doubts about the value of the criterion can arise even in this case, since to apply it requires a model judgement, concerning the possibility of some combination of attitudes, which in turn requires a prior criterion of identity for thoughts in counterfactual situations.

32 A similar example is presented by McCulloch (1989, pp. 199–202). Kripke (1979, pp. 130–3) gives an example involving the proper name ‘Paderewski’, which I adapt below.

33 They also refute Perry’s interesting suggestion (1977, pp. 493 ff.), developed by Kaplan (1977, pp. 530 ff.), that what we have called ‘character’ can account for cognitive significance. See Wettstein (1986) pp. 189–196 for a detailed discussion of this.
presentation cannot be straightforwardly objective and public. The central point here is a very simple one. We live in a public world, and we experience, in general, the same worldly objects. But each of us experiences them in different contexts and in different combinations, so that our mental pictures of them will inevitably differ. The world as it appears to me—let us call this my ‘notional world’—will therefore correspond only very inexact to yours, and indeed some of the apparent objects in my notional world—let us call these ‘notional objects’—may fail to correspond in any clear way to any of yours. The most obvious instance of this is if you are totally unacquainted with some thing which I have encountered, so that whereas I have a notional object which (let us say) ‘presents’ that thing, you have none whatever. In other cases we may be acquainted with the same thing, but in entirely disjoint and dissimilar contexts—in such a case our notional objects which in fact ‘present’ the same thing may have virtually nothing in common. The converse can also occur, for if what are in fact two different things appear to us in similar ways, then our notional objects can also be similar despite the distinctness of what they present. In between these two extremes lies a spectrum of partial overlap in the composition of our notional objects, which may or may not be reflected in the identity of the things which they present. The picture can be complicated still further if either of us has confused two or more (worldly) things, taking them to be one, and therefore has a notional object whose relationship even to the external world is very unclear. Again the converse can also occur: a single thing may seem to me to be more than one, and may therefore be presented by more than one of my notional objects—here too there will be no clear correspondence between your notional world and mine, unless you are subject to the very same mistake.

The philosophical literature has tended to focus on relatively straightforward examples of these confusions, such as that of

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34 Notional objects can be thought of roughly as subjective modes of presentation, or else as bundles of information which the subject takes to relate to a single worldly object (but see note 37). I borrow the term ‘notional world’ from Dennett (1982) pp. 36 ff., although unlike him I see no reason to restrict this apparatus to the characterisation of psychological states ‘in the narrow sense’ (pp. 36-37). Most of the following ideas, expressed in somewhat different terminology, appear in Millican (1982), together with a ‘broad’ account of belief identity based on them (see note 38).
Hesperus and Phosphorus, where the situation is clearly statable in public terms because the ‘modes of presentation’ involved have a clearly defined descriptive content, and are identifiable through their conventionally associated proper names. In such a case, where there is agreement on the principal information associated with each name, we can indeed speak fairly problematically of a single, public, notional object corresponding to each of them. Things are far more difficult in cases where the objects concerned are identified demonstratively, or where a single name is used by members of a community for what many of them (perhaps mistakenly) believe to be more than one individual. Suppose, for example, that there is a single person named ‘Paderewski’, but that because of his wide variety of administrative roles, many people who have no personal contact with him believe that the name applies to many different officials. Suppose that he has ten clearly defined roles, of approximately equal importance, and suppose for simplicity that any notional object which ‘presents’ him can be specified completely in terms of the roles which it assigns to him. Even with this simplifying assumption we have more than one thousand possible notional objects corresponding to one man! In many cases such fine distinctions can be ignored: if I intend to speak of Paderewski-who-occupies-roles-one-to-five, and you understand me as speaking of Paderewski-who-occupies-roles-two-to-six, then our conversation might proceed quite straightforwardly as long as neither of roles one or six is mentioned. But a simple Sorites argument shows that even this four-fifths overlap cannot suffice to qualify our respective notional objects as instances of a single, public, mode of presentation (at least if we wish to distinguish, as we surely do, my notional objects Paderewski-one-to-five and Paderewski-six-to-ten): four-fifths overlap is not transitive, whereas identity, even of notional objects or modes of presentation, ought to be.35

The upshot of this discussion is that a satisfactory account of cognitive significance must have the resources to be far more fine-grained than is suggested by Fregean talk about the Sense of an expression. Such talk of Sense, with its ineradicable

35 Examples of Sorites arguments can also be constructed in the case of demonstratives, for example where a large queue or circle of people see a number of objects from perspectives which differ very slightly from one to the next, but very significantly overall.
I-PETER MILLICAN

connotations of objectivity and public language, might well be better replaced with talk about notional objects, making more explicit the relativity of cognitive significance to the individual whose cognitive world is under discussion. It is, I contend, highly misleading to talk of the cognitive significance of an utterance, as though it were, or ought to be, unique. For even where all of those who hear and believe some statement correctly understand it, and correctly identify the object which it describes, the impact of this new belief upon their notional worlds may be subtly different, since all may think of the object thus described in a different way. Notional worlds are composed of a massively complicated network of interconnected beliefs and other ‘information’, and we should not expect any simple correspondence between the notional world of one person and that of another (or even that of the same person at a different time). All this does not imply that we should give up any attempt to provide an account of cognitive significance that is applicable intersubjectively (thus yielding, for example, an account of intersubjective belief identity): it simply implies that any such account should build on the fine-grained foundation of notional psychology, abstracting the coarser-grained intersubjective structures in a principled and well-defined way rather than by appealing to folk-psychological ‘intuitions’ which are ill-adapted for dealing with any but the most straightforward problem cases. I believe that this can be done, but cannot, of

36 Nothing I have said here implies that any element of cognitive significance need be private and incommunicable in any mysterious sense—notional worlds can differ from one person to another not because the elements from which they are composed are different, but just because these are combined differently. I shall not attempt to address here the significant complications which would be added if we were to treat not only notional objects, but also ‘notional properties’, in the holistic way suggested by this account.

37 A crude analysis of notional objects as bundles of beliefs (or as simple ‘files’ of information, in the way suggested by Lockwood (1971) pp. 208–211) will be inadequate, since it will fail to allow for internal structure, or for a distinction between beliefs which are tightly bound to the bundle (and perhaps even constitutive of it) and those which are loosely attached or separable. Lockwood’s basic idea is a good one, since notional objects indeed help to explain how statements of identity (and particular existence) are informative. But learning that Hesperus is Phosphorus does not require me to combine my information about them in a single undifferentiated bundle: the information may remain grouped into two parts within the bundle, so that I can still make sense of the possibility of changing my mind about the identity statement. In this paper I ignore all complications of this sort, and treat notional objects as though they were straightforward bundles of information.
content, thoughts and definite descriptions

Of course, attempt it here. I shall, however, briefly sketch some possible consequences of this approach for the analysis of belief ascriptions.

Perhaps the principal reason for ascribing beliefs is to explain behaviour, and for this purpose it is clearly useful to have some means of representing the position that those beliefs occupy in the thought-world of the believer—this is precisely what an analysis in terms of notional objects is intended to provide. For other purposes, however, a different account may be appropriate: if we have good grounds for thinking that another’s beliefs are true, then we may wish to know the content of those beliefs in our own terms, but have no further interest at all in their notional context. Naturally these two perspectives are not mutually exclusive, since most of the time our notional world will correspond fairly closely with that of the relevant believer, and therefore it is not surprising that our ‘folk-psychological’ belief ascriptions tend to conflate the two perspectives. Such ascriptions usually seem to function in something like the way suggested by Stich (1982 chapter 5): we ‘map’ the belief in question onto the most closely corresponding ‘thought’ in our own notional world, and then ascribe the belief using the very terms that we would use ourselves in expressing that thought. There are, however, at least two degrees of freedom here. First, the criteria of similarity that we use to determine which ‘thought’ of our own most closely corresponds to the belief in question may vary, sometimes depending purely on (worldly) objects, sometimes more on ‘modes on presentation’. But secondly, even when that thought has been identified, the terms in which we express it ourselves can also vary, depending for example upon the assumed knowledge or beliefs of our audience (in which case another ‘mapping’ between notional worlds may

38 Millican (1982) provides a rudimentary account of intersubjective belief identity based on the idea of dominant ‘aspects’, where an aspect is a subset of the information associated with a notional object, and is dominant if it is sufficient by itself to determine which thing, if any, the notional object presents. Then two structurally similar beliefs of different believers can be counted as identical if the corresponding notional objects have a dominant aspect in common (i.e. they have sufficient in common to guarantee that both present the same thing, if any). An account is also given of why a dominant aspect will usually involve information either associated with a proper name or derived from personal acquaintance (the latter typically being identified, at least for folk-psychological purposes, in ‘broad’ terms).
be required). All this implies a considerable amount of indeterminacy, especially in the well-known puzzle cases where the simple mappings on which we usually rely break down, and where we may thus be quite unable to find any satisfactory and non-misleading way of ascribing the belief. Such indeterminacy, however, need not force us in the direction that Stich suggests, towards the abandonment of folk-psychology: if we can develop a satisfactory analysis of notional worlds, then this might enable us to account systematically for the indeterminacy of belief ascriptions in terms of mappings between these worlds, without being required to conclude that the beliefs thus ascribed are themselves indeterminate in any disastrous sense.39

One important corollary of this position is that the analysis of beliefs can be separated to a large extent from the analysis of their ascriptions: beliefs can have some determinacy, and can be analysed in terms of notional objects, independently of the particular sentences with which they are ascribed. This in turn has implications for the role of singular terms in the analysis of beliefs: a singular term in a belief ascription can be seen (at least for some purposes) as a way of identifying an already-existing notional object that the belief concerns (and hence identifying an already-determinate belief), rather than as a means of partially defining the belief in question. As an example, consider a Roman to whom Marcus Tullius Cicero is introduced twice, first as 'Tully' and then as 'Cicero'. Their first meeting takes place at the public baths, where our Roman (whom we can call 'Erronius') takes Tully to be the bath attendant, and he fails to recognise him when introduced later, since the orator is then garbed in his ceremonial robes. The following week Erronius returns to the baths, where he is informed that Tully (whom he still fails to recognise as Cicero) is, in fact, an orator. Erronius then frames the following beliefs:

39 One way of appreciating the importance of a fine-grained analysis in terms of notional objects rather than Senses is to consider how one would program a pair of sophisticated robots that are intended to work together, and must therefore have some representation of how things seem from the other's perspective (let us suppose that the environment in which they operate gives plenty of scope for misidentification of objects and so on). I am confident that something like the idea of a notional world is indispensable to a fully adequate computational treatment of beliefs about objects.
(5) Tully is an orator.
(6) That man whom I took to be the bath attendant is an orator.
(7) Cicero is an orator.

Now in these circumstances there is at least one plausible sense in which the belief ascribed by (5) can be exactly the same belief as that ascribed by (6), and yet this belief can be distinct from that ascribed by (7). This is because from Erronius’ point of view (5) and (6) appear to ‘say the same’, but to differ from (7): in this sense they are identical because they have, so to speak, the same ‘notional content’. This is not the same as their propositional content, which they share with (7), but is instead content expressed in terms of notional objects. It is significant that this notional sense of ‘same belief’, which seems to be a very natural one, cannot easily be captured by any account which fails to recognise notional objects. For here (5) and (6) must be classed together and alike distinguished from (7), though all three have the same propositional content, while all apparently differ in both character and Sense.40

VI

Although I believe that the general idea of notional content has a considerable intuitive appeal, as do the related concepts of a subject’s notional world and notional objects, there is no doubt that many difficult problems must be addressed if a satisfactory theory of notional content is to be developed. Here, unfortunately, I have time to mention only one, which is however very central and which may also have important consequences for the theory of definite descriptions.

As I have described them above, notional objects are constituted by sets of ‘information’ which the subject takes to relate to a single worldly thing. But in practice this information will often relate to a number of different things, and when this is the case, it may be no easy matter to decide which of these things (if any) is ‘presented’ by the notional object concerned. Thus suppose that Erronius sees a man in the street whom he wrongly

40 Here a Fregean might argue that (5) and (6) have the same dynamic Sense (see note 22), but again this seems a long way from any idea of Sense which respects compositionality, and very close indeed to ‘mode of presentation’ of the notional (and far less public) kind.
takes to be Tully, the man who was denounced by Cicero and author of *The Republic*: when Erronius’ thoughts involve the notional object which combines all this (mis-) information, then of which actual man (if any) is he thinking? Four different men correspond respectively to the four items of information which Erronius, so to speak, stores in this particular mental file: the man he actually saw, Marcus Tullius Cicero, Catiline, and Plato. Perhaps we should conclude in this case that Erronius is simply too confused to be thinking of any of them, or else that the man presented by this notional object will be context-relative (so that if Erronius thinks ‘He is very tall’ this may be a thought about the man he saw, whereas ‘He is a great philosopher’ may be a thought about Plato).  

In less complicated cases, no doubt, we do distinguish ‘intuitively’ between that information which is ‘dominant’ with regard to the identification of the thing presented (see note 38), and that which is merely incidental—causal relationships seem to play a large role here, so that personal acquaintance and proper names often decide the issue. But it is surely desirable to have some principled reason for this choice: intuitions may provide data, but not explanations.

Now it is sometimes claimed (for example by Over and Devitt) that this sort of issue is intimately bound up with Donnellan’s distinction between referential and attributive uses of definite descriptions and Over (in his reply to this paper) argues that this distinction is itself closely related to the idea of *knowing which* (roughly—I can use a definite description referentially only if I have ‘constructive’ knowledge of the intended referent, and this requires *knowing which* thing that is). I am inclined to agree with Over that there are these connections, but not, perhaps, for quite the same reasons.

My own account of Donnellan’s distinction would go

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41 The latter choice would particularly highlight the importance of notional content for the psychological understanding of Erronius—as far as he is concerned, both thoughts are about exactly the same individual, and he will readily deduce, for example, (and not enthymematically) that some great philosopher is tall. For related reasons, notional content may provide a solution to some of the notorious problems of ‘opacity’ raised by Quine (1953) and discussed at length by the other articles in Linsky’s collection. The example involving Erronius was suggested by Quine’s paper.

42 Much of the fashionable talk about *de re* attitudes seems to be based on no more than this intuitive dominance of certain types of information. But without some theoretical underpinning, such as Over hopes to provide, it seems very dubious to derive any major conclusions from such intuitions.
something like this. In the extended quotation given earlier, Donnellan makes clear that a description is used referentially when the speaker has some thing ‘in mind’ and uses the description as an ‘inessential’ means of picking out that thing. This suggests that what is going on ‘notionally’ is that the speaker is expressing a thought involving a particular notional object, and that the description concerned, though associated with that notional object, is somehow inessential to its identity. This last condition suggests in turn that in such a case the description cannot by itself be ‘dominant’—that is, it cannot be sufficient by itself to determine completely which thing (if any) the notional object ‘presents’. But this implies, as in Donnellan’s well-known examples, that a wedge can be driven between the ‘semantic’ referent of the description (i.e. the thing which it actually denotes) and the thing presented by the notional object (i.e. the thing which the speaker ‘has in mind’): if the description is not dominant, then the notional object must be associated with other information besides the description, such that if the two come apart, and in fact relate to different things, then this other information will overrule the description in determining which thing is presented by the notional object (I shall ignore the possibility that the two exactly balance).

So far, I believe, nothing in this account is contrary to the spirit of Over’s position. For it is extremely tempting to say that I can know which thing satisfies some description only if I associate that description (correctly, of course)\(^{43}\) with a notional object which it does not ‘dominate’ (this rules out any case where someone claims to know which object is the F simply in virtue of knowing that the F is the F). Now in the majority of realistic examples the information which dominates the description will derive causally from the thing presented, and will satisfy Over’s requirement that such information be ‘constructive’. But this need not always be so. I see no reason in principle why a notional object should not be associated purely with descriptive information (and thus dominated by it), as in the example I gave earlier involving the F, the G and the H. To repeat that example in notional terms: if I believe that these three definite descriptions uniquely denote a single thing, and I thus have a

\(^{43}\)Obviously knowledge requires correctness, which here means simply that the thing presented by the notional object must in fact satisfy the associated description.
notional object with which they, and only they, are associated, then I can use ‘the $F$’ to express a thought involving that notional object, even though the thing presented by it is determined by (what we can suppose to be) the dominant descriptions ‘the $G$’ and ‘the $H$’. The connection with knowing which can also plausibly be made here: if I know that the three descriptions denote a single thing, then I know which thing is the $F$—namely, the $G$ and $H$.

VII

By now one moral of our story should be very clear. The analysis of definite descriptions is a far from simple business, and raises deep and fundamental issues concerning the relationships between language, thought, and the world. These issues will also, of course, arise in connection with the analysis of other referring expressions, but definite descriptions provide perhaps the best illustration of why they must be faced, and some of the difficulties which they involve.

This paper cannot pretend to have given any straightforward answer to the simple question with which it began, concerning the choice between a quantificational analysis of definite descriptions and one which treats them as ‘genuine singular terms’. But it has, I hope, provided some good reasons for concluding that this simple question is misconceived: that we cannot expect a single correct analysis of definite descriptions which treats them universally in the same way, let alone one which ‘translates’ them all unproblematically into the syntactic structures of the predicate calculus. The central point here has nothing to do with any superficial verbal ambiguity—the account sketched in Section III of how definite descriptions are used to refer (in place of the quantificational account dismissed in Section II) is entirely unitary, taking them to be unambiguous but highly versatile indexicals, which identify their referent using a combination of context and descriptive content which can mix in any proportion from almost pure context (as in ‘the thing’) to undiluted content (as in ‘the square of 2’). The central point lies much deeper than a mere ambiguity, and is inherent in the complex relationship between language and what it expresses: propositions and thoughts.

Language is by its nature structured and rule-governed, and
it is therefore amenable to relatively straightforward formalisation. But what is expressed using language is typically far less clear-cut, since it usually involves facts about the world and about our thoughts which cannot be fully captured in any formal calculus. Abstraction and regimentation are therefore necessary when representing 'what is said', and the features on which we focus will be determined by the purpose which our representation is intended to fulfil. Referring expressions furnish a very clear illustration here, since in any successful use of such an expression one can distinguish two quite different aspects of 'propositional content'—the object referred to and the means of reference—and as we saw in Section IV, it is not difficult to devise examples where for different philosophical purposes we might wish to focus on one of these aspects to the exclusion of the other. This point applies to referring expressions in general, and does not depend on any special feature of definite descriptions, while even the examples in Section IV do not depend on any particular theory about the character of such descriptions.

In Section V we moved on to consider the analysis of propositional attitudes, introducing another degree of complexity because of the need to take account of an object's 'mode of presentation'. We saw how even Frege's framework of Sense and Reference is far too crude to handle these complexities, and a sketch was presented of an alternative account based on 'notional content', broadly Fregean in spirit except in its insistence that a very firm wedge should be driven between cognitive significance and language, between thoughts and the words in which they are expressed. Although intended to be of quite general relevance, the main point of the discussion in Section V was to demonstrate how an analysis of thoughts about objects, and hence of thoughts expressed using definite descriptions, can require a far more sophisticated treatment than is available using only the resources of propositional content. The new apparatus of notional content was then applied in Section

Though the fact that descriptions are descriptive undoubtedly makes the point easier to illustrate (see note 24). In the case of demonstratives it is far less 'intuitive' to treat the 'route to the referent' as semantically relevant, though examples similar in spirit to (4) can be constructed to modify our intuitions here. Consider the sentence: 'If that is a table, then there is a table over there'—it is plausible that such a sentence, uttered in an appropriate context, could be seen as a sort of necessary truth.
VI to throw light on Donnellan's controversial distinction between referential and attributive uses of descriptions: an outline account was given of the thoughts involved in referential uses, illustrating the extent to which such an analysis can differ from that which would be appropriate if one were concerned only with the character of such descriptions, or with their propositional content.\(^\text{45}\)

The overall conclusion, therefore, is that there is no one correct analysis of definite descriptions, but a wide variety of different analyses with contrasting virtues reflecting their different purposes. Only at the level of character is it reasonable to hope for a uniquely correct account, and here perhaps one can be given. At the level of propositional content things are far less simple: many analyses are possible, ranging from the crude but often perfectly adequate representation of definite descriptions as 'proper names', to far more sophisticated representations which include within the structure of 'what is said' many of the details about the context of utterance that can play a part in determining reference (as might be included in the formalisation of demonstratives, for example). At the level of notional content even more complications arise, though again it is likely that a relatively crude representation, in terms of 'what is said about which notional objects', may be quite adequate for many philosophical purposes.\(^\text{46}\)

One final point. It has become common practice in the philosophy of language to appeal frequently to what are called 'intuitions'. No doubt some of these are respectable, deriving

\(^{45}\) I have not even addressed the issue of how we should view the propositional content of a referential description which fails to describe its intended referent. Here no answer is adequate to all our 'intuitions', though at least in cases where communication is successful, it might well be best to treat such a description as a 'proper name' of its intended referent, especially in the analysis of an argument or conversation in which the description initiates an anaphoric chain (see Donnellan (1978)).

\(^{46}\) My account has the consequence that there are at least three ways in which a sentence's content can be seen as 'object-dependent' or 'singular'. First, its propositional content might be analysed as containing an external object (as in the 'proper name' account of Section IV); secondly, its notional content might be analysed as containing a 'narrow' notional object (individuated independently of the external object presented); thirdly, its notional content might be analysed as containing a 'broad' notional object (whose identity itself depends on the identity of the object presented, so that the 'thought' is dependent both on the notional and on the external object). For folk-psychological purposes the last of these three options is perhaps the most appropriate, but obviously I would not wish to suggest that there is one 'correct' analysis.
their authority from the relatively uncontentious implicit knowledge which we have as competent users of language. Such authority is considerable with regard to the correctness or otherwise of concrete token utterances—roughly, at the level of character. But it diminishes considerably beyond these bounds, where ‘intuitions’ purport to decide on issues of ‘content’ which depend not only on the operations of language, but also on the identity conditions of the various abstractions such as ‘statements’, ‘propositions’ and ‘Thoughts’, with which we endeavour to theorise about those operations. If the conclusions of this paper are correct, all such ‘intuitions’ must be viewed with extreme suspicion, since we have seen that there are many different possible accounts of ‘content’, all of which will yield different identity conditions for ‘what is said’, and none of which can claim any automatic authority. An account of ‘content’ must be justified by demonstrating its utility in understanding the problems of logic and language, and different accounts will be needed for different purposes. Any pre-theoretical grasp that we have on the notion of content quickly becomes vague and confused when applied to any other than the most straightforward examples, and indeed it is these very confusions in our ‘intuitive’ notion that give rise to many of the most vexing problems of philosophical logic. Appeal to intuition may get us started, and may even impose some check on where we go, but beyond this it is quite unreliable. No doubt the method’s popularity shows that it has some advantage, but as Russell himself might have said (1919, p. 71), these are the advantages of theft over honest toil!

47 The same applies even to intuitions about ‘truth value gaps’ (e.g. Strawson (1950) pp. 11 ff.) and about ‘truth conditions’, at least where the latter phrase is understood to mean something other than the conditions of utterance under which a particular sentence type expresses a truth (in the actual world). This seems to be the most natural interpretation of a sentence’s truth conditions, but is apparently far less common than the very misleading alternative interpretation, according to which the truth conditions in question are not those of a sentence at all, but rather those of the proposition expressed by a sentence token. Obviously the truth conditions of a sentence token or type, and those of a proposition or thought, will be determined by, and thus vary with, their respective identity conditions.

48 Our pre-theoretical grasp of such notions as ‘understanding’ and ‘meaning’ (and even ‘reference’) is also vague and confused. For example, understanding an utterance such as ‘Amo Ciceronem’ can require merely knowing its character (i.e. understanding the Latin words), or knowing in addition its propositional content (i.e. who is speaking about whom), or knowing its notional content (i.e. the relevant modes of presentation),
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or even having a sympathetic comprehension of its psychological significance! To found any theory on 'intuitions' about such a slippery notion (e.g. Evans (1982) pp. 71, 321) is surely unsatisfactory. A similar ambiguity, in the notion of 'meaning', appears to lie behind Russell's principal argument for the theory of descriptions (1905, pp. 45-47). A description which fails to refer is clearly meaningful in one sense (since it has a character), whereas Russell seems to assume that the meaning of a genuine singular term can reside only in its referent (i.e. its content). The separation of character from content is, in effect, the basis of Strawson's main criticism of Russell (1950, pp. 6-11).
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CONTENT, THOUGHTS AND DEFINITE DESCRIPTIONS

Peter Millican and David Over

II—David Over

THE OBJECT OF DEFINITE DESCRIPTIONS

Much has recently been made in semantics of ‘object-dependent’ propositions. These are usually called singular propositions: each one contains, in some sense, a particular object and would not exist without it. The reason these propositions are needed, it is often held, is to be the contents of certain propositional attitudes. Peter Millican takes another path to them in section IV of his paper before going on to the distinction between referential and attributive uses of definite descriptions. I have a very different way of arriving at this distinction, one which from the start refers to propositional attitudes. Here I shall mainly outline my own path, with the addition of a few words about how it might be related to Millican’s.

Singular propositions appeared in David Kaplan’s seminal theory of demonstratives (Kaplan, 1977 and 1989), and some would argue that they are required in any such theory primarily because of what it is to understand the use of a demonstrative. Consider the following statement made while pointing someone out in court:

(1) That man is the judge.

To understand this statement we must know which man the speaker is referring to by using ‘that man’. Our knowledge which man was being picked out would bring with it de re propositional attitudes. There would be a particular man whom we believed the speaker was referring to, and in some cases in which we had good reason for believing what the speaker said, a

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*This paper was originally intended to be more of an explicit reply to Millican’s, but a pressing deadline has meant that the papers had finally to be written at the same time. I should like to thank Peter Millican and E. J. Lowe for many stimulating discussions about the topic of the symposium, and Kit Fine for helping me in the past to clarify my general views.
particular man we knew to be the judge. These *de re* attitudes would have to have contents, and some would claim that these could only be singular propositions, containing the man in question. This is the sense in which the use of a demonstrative would be ‘object-invoking’.

There is an extended argument broadly like this in Gareth Evans (1982), although he generally speaks of what he calls Russellian thoughts rather than singular propositions. His terminology is in line with his emphasis on the propositional attitudes and his attempt to combine the views of Frege and Russell in his own way, but a Russellian thought is apparently an object-dependent, propositional-type entity which could not be expressed if its object did not exist. (Evans, 1982, p. 64) Evans supports what he calls Russell’s principle, which is supposed to state that we cannot make a judgement about something if we do not know which object our judgement is about. (Evans, 1982, p. 89) He infers from this that we must know which objects demonstratives refer to in order to use them properly and understand them fully. When we have this knowledge which, he holds that we have Russellian thoughts about the appropriate objects. To understand a proper use of (1), for example, we would need, according to Evans, to have a Russellian thought about a particular man in the court.

Using more standard terminology, we can say that this knowledge which would enable us to have *de re* beliefs about that man. Some might only have the purely *de dicto* belief that some man or other in the court, they know not which, is the judge; but accepting what the speaker states, we would have the *de re* belief that that man was the judge. The concept of knowing which is much to be preferred to that of knowing who for the purpose of making this distinction. Many philosophers have pointed out how easy it is to interpret ‘know who’ in a wide variety of ways. Quine (1981, p. 121) concludes:

The notion of knowing who or what someone is, is utterly dependent on context. Sometimes, when we ask who someone is, we see the face and want the name; sometimes the reverse. Sometimes we want to know his role in the community. Of itself the notion in empty.

Knowing which is far less flexible than this, and in fact we often
use it to fix on a clear interpretation for knowing who. Suppose that someone asks us if we know who the judge is. We might reply, ‘Are you asking whether we know which of these people we can see is the judge, or whether we know which member of this list of court roles is the one taken by the judge?’ In this kind of case, we have a construction of the general form ‘know which X is Y’, in which X specifies a set of objects and Y is a singular term referring to a member of X. There is a great deal to be said about this sort of construction, and its relation to similar ones, such as ‘decide which’ and ‘know whether’, but what is most relevant here are cases in which X specifies a set of objects we can observe and we do know which of these is Y. Then there are very clear grounds for holding that we may have de re beliefs about Y. Let us call these the basic cases in which we may have de re beliefs about physical objects. One point these can be used to illustrate quickly is that truth value is not necessarily preserved even when co-referential proper names are substituted for each other in the Y-position. Someone may have known which of the people he could see in a pub was Eric Blair without knowing which of them was George Orwell. There have been attempts to explain away such substitution failures in ‘believe that’ and ‘know that’ constructions (most interestingly in Salmon, 1986), but these arguments lose whatever force they have when they are applied to statements about knowledge which in the basic cases.

One of the sufficient conditions Evans (1982, p. 89) lays down for knowing which object we are making a judgement about is that we are able to use any definite description referring to it. (Using any such description would express what he calls discriminating knowledge.) Perhaps there is some sense in which we may claim, for example, to know which man lived longer than any other merely because we can construct and use the definite description ‘the longest-lived of men’. But this, I would say, is doubtful, and anyway it is certainly not a basic case. (See Over, 1987, for more on Evans’s views.) No sane witness to a crime would claim in court that she knew which man present was the guilty one, if she could only use the description ‘the guilty one’, or some proper name the reference of which was fixed by the police with just this description, and do no more in the way of pointing its referent out. Suetonius tells a story of how
Claudius once tried to settle a court case, in which two parties were contradicting each other, by proclaiming, 'I decide in favour of the party which has told the truth.' Just by using 'the party which is telling the truth', Claudius could hardly claim to know which, and to decide which, of those present were doing so. The point can also be made using examples which do not concern physical objects. Surely I cannot display knowledge of which theory we ought to adopt at the end of this symposium merely by using 'the best theory of definite descriptions', nor by using some proper name with a reference fixed by this description.

When we know which in a basic case, we have a general ability to point out an object as the referent of a singular term, to observe it more closely, and perhaps to affect it in certain ways, as when a particular man in court is sent out to be hanged. Knowing which is no more empty in itself than this notion of ability is. (By speaking of a general ability, I mean to rule out examples in which we only succeed by luck in pointing at the referent, and in which we do not get the opportunity to observe the object further or to affect it. This ability must also be interpreted widely in cases of paralysis. It is true of people with this ability that, given the opportunity, they could observe the object further or affect it in some way, and given the use of their limbs, they could point it out.) From the point of view of the computational theory of the mind, what we have here are effective procedures for observing objects and moving one's body so as to continue to observe them and perhaps to point at them, grab them, push them, or whatever. Knowledge which based on such procedures is a fundamental state of mind, without which we could not even learn the most elementary parts of language. At an even more fundamental level, when we know and decide which action we ought to try to perform, there must be more than a description of the form 'the best action' in our minds: there must be an effective procedure there for trying to carry out the action. (Of course, we may be unable to describe this procedure in any interesting way, before we discover in detail a good computational theory of the mind.)

These effective procedures can be used to clarify an intuitive notion of the constructive justification of statements about observable objects. First of all, we do have intuitions about the
difference between constructive and non-constructive justifications in these cases. Earlier, I used one of Russell’s examples of a definite description, ‘the longest-lived of men’. About its referent, he says, ‘. . . we know nothing beyond what is logically deducible from the definition of the man’. (Russell, 1912, p. 58). He is, in effect, thinking of an extreme form of non-constructive justification, the conclusion of which would be that the longest-lived of men lived longer than any other man. This would be inferred ‘from above’ on almost totally general, purely logical grounds. (We would obviously need as well some general non-logical reasons for holding that some one man lived longer than any other.) It may well be that Russell is too pessimistic about what may be inferred from general considerations in this instance. Perhaps we may, for example, infer on good non-constructive grounds—those to do with what generally contributes to longevity—that the longest-lived of men, whoever he was, had a good heart. However that may be, a completely contrasting case is one in which a doctor knows which man he is examining in a hospital ward and concludes, after using his stethoscope, that that man has a good heart. The doctor has constructive grounds for his conclusion.

In this example, the doctor knows which patient in the hospital ward is the man being examined; and let us assume further that he can recognize that patient as the bearer of a certain proper name. (In Russell’s terms, he is acquainted with that man as the bearer of the name.) I shall say that the doctor can use ‘the man being examined’ and the proper name with effective reference. Because he uses these singular terms with effective reference, he may employ them in constructive justifications of his view that some man has a good heart. (Notice that effective reference is not a purely semantic relation, but is defined relative to some speaker or justifier.) He might have had merely a non-constructive justification that some man or other, somewhere or other, has a good heart. This justification would not supply as much information as the constructive one could to one of his colleagues. Given the latter, the colleague could receive sufficient information for him also to acquire the knowledge which patient was one with a good heart. The doctor could transmit this information to his colleague just by pointing out the patient; that should enable the colleague to acquire
effective procedures which would embody that knowledge.

As a result of Michael Dummett's influence, there has been much discussion in recent years of anti-realism. Dummett (1978, p. 24) claims that the anti-realist is committed to the position that '... a realist interpretation is possible only for those statements which are in principle effectively decidable ...'. When is a statement $A$ effectively decidable? The answer to this is that $A$ has that property if there is a constructive justification of '$A$ or not-$A$'. (See Dummett, 1977, p. 35. He is referring there specifically to decidability in arithmetic and constructive proofs, and so what he says has to be extended to cover anti-realism in general.) Any discussion of anti-realism must, therefore, depend on some clear notion of constructive justification, which requires in turn some account of which singular terms are acceptable in justifications of this type. One would have thought anyway that this debate about anti-realism would give much attention to singular terms, and yet this is not what has tended to happen. Constructive proof has been discussed more often than the wider notion of constructive justification, and it has been assumed that quantification is over natural numbers and implicitly that the only acceptable singular terms are standard numerals. (Dummett, 1977, p. 9 makes these assumptions, as have his followers in the debate.) This is a good way to simplify an initial exposition, but since no one disputes that standard numerals are acceptable for this purpose, the result is to avoid serious discussion of which singular terms, in general, are acceptable in constructive justifications.

Another point which has been missed in this debate is that constructive justifications yield justified de re beliefs. In order to prove constructively that some natural number has a certain property, we must have an effective means of specifying a number (using an acceptable singular term) and proving (in the right way) that it has the property. After constructing a de re proof like this, we have a justified de re belief that that number has that property. (I would say that we have this de re belief even if we do not actually carry out the effective procedure for finding a standard numeral referring to a number with the property, but certainly we have such a belief if we do follow that procedure.) Constructive justifications of statements about
physical objects are similarly de re, and equally yield de re beliefs about them. Thus anyone with an interest in constructive justifications, whether or not making a contribution to the arguments about anti-realism, is obliged to investigate singular terms and their relation to de re constructions. Which singular terms are acceptable in constructive justifications? Which singular terms can be used to express de re beliefs? Answering one of these questions will lead to an answer to the other.

An extreme constructivist and anti-realist would only find acceptable singular terms referring to mental entities. Similarly, philosophers with a very restricted view of de re belief would hold that such a belief can only concern mental objects. These views are related but not by any means equivalent. Some could adopt the latter position and not be an anti-realist in Dummett’s sense: they might claim that non-constructive means could be used to gain justified de dicto beliefs about ordinary physical objects. (It could be argued that Russell essentially took this view by holding that we could have knowledge ‘by description’ of these objects, founded on ‘knowledge by acquaintance’ of sense data.) A less extreme constructivist and anti-realist would contend that only singular terms referring to observable physical objects were acceptable: the result would be an anti-realist interpretation of statements about the past or about theoretical entities. The related, but not equivalent, doctrine would be that de re beliefs about physical objects are restricted to what I have called the basic cases—those in which we can observe some objects and know which one is the referent of a singular term.

Those of us with a classical realist point of view, at least about ordinary physical objects, should reject all this extremism. Not only should we hold that justified belief and knowledge may be acquired by non-constructive means, but we should also operate with a wider notion of constructive justification and de re belief. There is really no reason to be pessimistic about clarifying concepts of knowing which and effective reference which go beyond the basic cases. In those cases, we know which observable object is the referent of a singular term when we possess effective procedures for pointing it out as the referent of that term and possibly for affecting it in some way. (It should again be noted that we could possess these procedures although we did not ‘run’ them and perhaps, in a limited sense, could not
do so, say, because of a weakness in our limbs. We might also be completely unable to describe, as yet, how we ‘run’ or ‘implement’ those procedures, which might be the embodiment of general recognitional abilities we simply exercise without following any conscious steps.) We do have some helpful intuitions in more general cases. There is obviously a difference between hearing that some horse or other, we know not which, has been given a stimulant and will probably win the race, and receiving so much information from an inside source on the drugged horse that we can actually place a bet on it. This difference exists even if we cannot observe the horse ourselves, and even if the race took place in the distant past and the bet is to be settled by looking up the result in a reference book. Only in the latter case do we know which horse will probably win (or probably won) and have constructively justified de re beliefs about it. (The singular term which allows us to place the bet is acceptable!)

What is required is a generalization of the notion of a source of information, and of the idea that information can sometimes be passed from one person to another almost as reliably as from our eyes to our brains. Evans (1982) has a very stimulating discussion of the transfer of information from one person to another, of how this information can be ultimately grounded in the observation of the referent of a singular term, and of how such a relationship can track the properties of the referent. Evans seems to be unaware that particularly his concept of grounding is constructive in nature. A proper name would not be grounded in his (constructive) sense if we fixed its reference using ‘the longest-lived of men’. But it could be said to be classically grounded in that it does (let us suppose) refer to a man, although no information has been passed to us about him. In contrast, the name would not even be classically grounded if we tried to fix its reference in a circular way, the most blatant of which would be by using ‘the object this definite description refers to’. (Classical grounding would be used for certain ways of treating names and descriptions in theories of truth like that of Kripke, 1975, with its classical notion of grounding for sentences. For more on this, see Over, 1987.) Much more, admittedly, needs to be said about how concepts like these can generalize de re justification and belief, but what I would like to
do now is to turn to a much discussed distinction Millican tries to throw light on in his paper: that between referential and attributive uses of definite descriptions. I hold that this distinction is related to that between constructive and non-constructive justification.

Let us recall how Donnellan (1966) first introduced his distinction between referential and attributive uses of definite descriptions. One of his examples is of a comment on a gruesome murder:

\[(2) \text{ Smith's murderer is insane.}\]

It is important to see that Donnellan makes his distinction by referring to two different sorts of reasons a speaker might have for asserting (2). His referential/attributive distinction rests, in fact, on a deeper distinction he relies on, throughout his paper, between specific grounds or reasons for an assertion and general ones. Taking the latter first, he points out that a speaker might support (2) by giving '... reasons for thinking that anyone who murdered poor Smith in that particularly horrible way must be insane.' (Donnellan’s emphasis, p. 290) He says little more than this about general reasons, but speakers would tend to have this sort of reason if they had not witnessed the murder but had seen, or read a description of, the mutilated corpse. They would then appeal to what they took to be a general truth, of the form that anyone who behaves in a certain way has a certain property, presumably derived itself by induction from what they had seen or read about in the past. They do not know which member of the community is Smith’s murderer, and have no effective way of finding that out, and so they have no choice but to infer (2) ‘from above’, using the general truth supplemented by what they take to be other truths, such as that only one person murdered Smith. In more technical terms, they have a non-constructive justification for (2), which expresses a \textit{de dicto} belief they possess.

Donnellan contrasts a general reason the speaker might have for asserting (2) with ‘... a more specific presumption that he believes Jones or Robinson or someone else he can name or identify is Smith’s murderer’. (p. 291) Donnellan assumes implicitly here that a specific reason for the assertion would be grounded in the use of an acceptable singular term. He seems to
take it for granted that an ordinary proper name would generally be acceptable, but appears to acknowledge that there are other acceptable ways in which Smith’s murderer could be identified. It is again a pity that he says little more than this as an example of what a specific reason is like. We can go farther by showing how the example could be fleshed out. After Smith’s murderer is caught, psychiatrists can examine him and try to find out whether he is sane, not on purely general grounds, but on the specific basis of his answers to their questions. They will know which man in the cells they are examining, using with effective reference his real name, if they know it, or some other singular term at their disposal, such as ‘the man in cell number 5’ or just ‘Smith’s murderer’. (I assume that there is no question that the police have got the right man.) Thus the psychiatrists have a constructive justification for asserting (2), which could be used to express one of their de re beliefs.

It might be charged that even the psychiatrists must appeal to some general principles, using non-constructive means, to have confidence in their conclusions or even their observations. This is true, but someone with a classical position does not have to hold that constructive procedures must be totally separated from non-constructive ones. Extreme constructivists and anti-realists do have to try to make this separation, and indeed it constitutes one of the greatest difficulties for their point of view. They find non-constructive procedures unacceptable, and wish to banish these from our reasoning. Their theory of meaning must be founded only on constructive justifications, and their epistemology can have no place for the non-constructive. But it remains to be seen how even the simplest facts can be established by some highly restricted and pure form of constructive procedure alone. From the point of view of classical semantics, however, the distinction is a clear one in epistemology, and yet there is no need to deny that much of our actual reasoning has to combine constructive and non-constructive elements. (More on this distinction may be found in Over, 1987.)

Pragmatic factors do affect whether we should effectively pick out the referent of a singular term, or give a more or less constructive justification for what we assert, in some contexts. Naturally, we should often be guided in settling these matters by Grice’s maxim of Quantity, which is about how informative a
contribution to a conversation should be. If we are taking a revision class for a short test with a single question on it, then we shall not achieve our purpose by effectively specifying the referent of 'the question on the test'. What we should do is to give a suitable list of important topics and say simply that the question will be about one of these; that is to convey more or less the right amount of information in this context. If we are talking to people who doubt that the police have really caught Smith's murderer, then to achieve the purpose of convincing them of what we say, we shall be well advised to argue non-constructively that Smith's murderer is insane. Much more also needs to be said about this epistemological distinction between different types of justification, and about how the difference in information conveyed interacts with pragmatic considerations. But I hope that Millican agrees that the distinction is a principled one, since I think that he needs it to supplement what he says about the semantics and pragmatics of definite descriptions.

Millican realizes that, in a short paper, he cannot conclusively establish that, according to some analyses for some purposes, there is an object-invoking use of definite descriptions; he knows that his challenging programme needs further development. The position I have sketched in this paper certainly does not require the existence of any such use. Effective reference, as I have defined it, is not a semantic relation, and nothing in its definition implies the existence of an object-invoking use of any singular term. What I have said altogether needs only slight modification if Russell's theory is applied and existentially quantified statements replace those containing definite descriptions. In that case, it would still be necessary to say which of the remaining singular terms could be used with effective reference and appear in constructive justifications. A Donnellan-like distinction could even be made for existential statements, depending on whether or not these were justified constructively. (I shall, however, continue to assume, as I have throughout this paper, that definite descriptions are singular terms.) Moreover, constructive justifications using acceptable definite descriptions still lead to de re beliefs, even if the sentences in the justifications containing those descriptions do not express singular propositions. We can have an account of effective reference, constructive justification, and de re belief
without Millican's view of definite descriptions and of the propositions which can be expressed by sentences containing them. But I do not think that Millican can do without the distinction between constructive and non-constructive justification.

For simplicity, let us put a well known example in a sentence without a proper name in it:

(3) The shortest spy is a woman.

Millican's position implies that (3) can sometimes be interpreted, for some purposes, as expressing a singular proposition. If this were so, the definite description in (3) would serve to invoke its referent, which would then become part of the object-dependent proposition expression. But how could Millican ever tell that (3) in a particular context should be interpreted in this way and not as stating an object-independent proposition? Suppose that we utter (3) when we are looking directly at a group of spies. What grounds could Millican have for holding that we had expressed a singular proposition? To answer this question, I think that he would have to consider the kind of justification we would try to give for our assertion. We might point out the shortest spy in the group and, by doing so, try to give a constructive justification for (3). Then Millican could conclude that we had expressed an object-dependent proposition. On the other hand, if we argued non-constructively that the shortest person in any large, mixed sex group is probably a woman, then Millican could hold that we had expressed an object-independent proposition. (Notice that we would tend not to give both kinds of justification for the same utterance. But if we did, I suppose Millican could interpret us as expressing both types of proposition.)

Millican may be right, though I remain to be convinced, that sentences like (3) could sometimes be interpreted as expressing singular propositions. However, I do not see how our use of a definite description like the one in (3) could possibly be object-invoking if we did not know which object it referred to. Consider all the spies in the Ministry of Defence—I do not know which one of these is the shortest. In fact, I have only non-constructive grounds for believing that spies are present there: I reason that there must be at least a couple of spies in that large Ministry containing so many secrets of interest to so many other
countries. That being so, I can only use the definite description in (3) with non-effective reference, and I could only justify (3) non-constructively. But then there does not appear to be any way I can indicate that I am using a definite description referentially, rather than attributively, in (3) and expressing a singular proposition. If I cannot indicate this, how can I do it? What relevance would it have to communication? Apparently, there would no difference in the amount of information I could convey; and so to me, this seems to be a case in which the description can only be used attributively.

Millican does not himself relate his view of object-invoking uses of definite descriptions to any way of justifying propositional attitudes. His account of attitudes about physical objects is in terms of their appearances. Rather than singular propositions containing merely external objects, he refers to what he calls notional objects, which give rise to a concept of notional content, apparently like, in some interpretations, what is usually called narrow content (although Millican does not wish to identify his view with anyone else's). I find these notional concepts very interesting, but wish to make a couple of points about them.

First, all the distinctions I have made here still apply even if we restrict ourselves to narrow notional, or any other type of internal or mental, objects. To develop an example I have already introduced, suppose that I have a mental formulation of all the semantic theories of definite descriptions which have ever been put forward, and that I have a conclusive argument that only one of these is correct. This argument may or may not be constructive. If it is constructive, then I shall know which one of these formulations is correct, have de re knowledge that it is correct, and be able to use 'the correct one' referentially. If the argument is exclusively non-constructive, then I shall merely have de dicto knowledge that one or other of these formulations is correct, and only be able to use 'the correct one' attributively. (My information is quite limited in the latter case—the correct semantic theory of descriptions is surely already in the literature.)

The second point is that we should not limit ourselves only to the study of notional, or any other narrow, concepts because of Quinean type doubts about knowing which and de re attitudes to physical objects. Quine's points about these attitudes should be
compared to what he says about dispositional operators (in Quine, 1960 and 1974). These operators, like ‘-ble’ or ‘has the disposition to’, allow us to construct dispositional terms freely, such as ‘water soluble’ or ‘has the disposition to dissolve in water’. Quine does not like the fact that these terms then commit us to what he thinks of as obscure intensional conditionals—for to say that an object is water soluble is to say what would happen to it if it were immersed in water. He proposes that these operators not be allowed in a strict scientific language, which in his view should only contain descriptions of the physical mechanisms or structures which underlie what we ordinarily call dispositions, e.g. the molecular structure of salt. In other words, he does not want science to be committed to what might be called wide dispositional content, but only to a narrow concept of dispositional content given by internal mechanisms or structures. He must, of course, extend this position to ability in general and recognitional ability in particular. This is the point at which his stand on dispositions meets his stand on de re attitudes.

In the basic cases, recognitional ability and de re belief are found inseparably together. (The general ability to recognize, say, a particular person as the referent of ‘Cicero’ or ‘the shortest spy’ would not ordinarily be called a propositional attitude, but perhaps it should be. Its content must clearly reach from the narrow to the wide.) We can ascribe a wide content to one if we can to the other. There is the difficult problem of stating how such ascriptions are related to counterfactual or subjunctive conditionals, as they must be in some way, and there is the controversial matter of specifying a semantics for these conditionals. However, there is no reason to think that these problems cannot be solved, and at the same time, it is hard to see how science could do without dispositional operators and wide content for dispositions, capacities, and abilities. (See Manktelow and Over, 1990, Ch. 9., for more on Quine’s attitude to dispositions and how it relates to issues in cognitive science.)

It is equally true that we should not neglect to study concepts of narrow content. Recall the use of the form ‘know which X is Y’ in a basic case (when X specifies a set of observed objects and Y is a singular term referring to one of these). We cannot assume that the sole function of Y in this linguistic context is merely to
label, or to have direct reference to, some object, even if $Y$ is a
proper name. This is the implication of my earlier example
about Eric Blair and George Orwell. For this reason, I would
agree with Kaplan (1989, p. 605) that ‘... de dicto attitudes,
even those toward propositions expressed using directly referential
terms, cannot easily be translated into de re attitudes’. In my
view, whether the subject has a de re attitude depends on
whether the subject knows which object the directly referential
term refers to. But this may not be so if a proper name is a
directly referential term—we do not always know which object
is the referent of a proper name we use.

Perhaps Millican’s notional objects are what we need for the
$Y$-position in the form ‘know which $X$ is $Y$’. On the other hand,
one might point out, for example, that knowing which man in a
pub is George Orwell is also inseparable from having the ability
to recognize a man there as the referent of ‘George Orwell’. (It
could be held that the function of knowing which, like that of
recognitional ability, is precisely to establish a link between an
internal object and an external one, i.e. between the narrow and
the wide.) The suggestion would be that we need an extremely
narrow concept for the $Y$-position, possibly even one of
quotation, and the question would be whether Millican’s
concept can be sufficiently narrow. To settle finally what is needed
in that position, we must get clearer about knowing which. We
might, for a start, consider examples like the following. I ask you
to look round at a group of people you can see clearly, and then I
point at one of them and say, ‘Do you know which one of these
people is that one?’. Now a demonstrative appears at the $Y$-
position in a question about a basic case. Is it really absurd for
some reason, or does it just have an obvious answer if you
understand it? What is the significance of the fact that the
question becomes perfectly normal if a proper name with the
same referent is substituted for the use of the demonstrative?
Further discussion is certainly called for.

REFERENCES

Donnellan, K. S. (1966), ‘Reference and definite descriptions’, Philosophical Review,
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