

The Double Life of ‘The Mayor of Oakland’*

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There is a tradition in the semantics of definite descriptions, going back to Frege, that treats such phrases as denoting individuals, that is to say, things of type e .¹ The definite determiner ‘the’ is taken to denote a partial function of type $\langle\langle e, t \rangle, e\rangle$ with the restriction that its $\langle e, t \rangle$ type argument be uniquely instantiated:²

$$\llbracket \text{the} \rrbracket = \lambda F : \exists x(Fx) \wedge \forall x \forall y (Fx \wedge Fy \rightarrow y = x) . \iota x [Fx]$$

There is another tradition, again going back at least to Frege, that draws a distinction between equative and predicational copular sentences. Equative sentences, such as ‘Hesperus is Phosphorus’, have the structure e -be- e , and are true just in case the e type items denoted by the pre- and postcopular expressions are identical. Predicational sentences, such as ‘Venus is a planet’, on the other hand, have the structure e -be- $\langle e, t \rangle$, and are true just in case the e type item denoted by the precopular expression instantiates the $\langle e, t \rangle$ type item (property) denoted by the postcopular expression.

As it turns out, the first doctrine sits poorly with the second. If definite descriptions quite generally denote items of type e , we would expect copular sentences that contain definite descriptions in postcopular position to be uniformly equative. As Strawson (1950) already observed, however, such sentences can have a distinctly predicational character: “If I said ‘Napoleon was the greatest French soldier’, I should be using the word ‘Napoleon’ to mention a certain individual, but I should not be using the phrase, ‘the greatest French soldier’, to mention an individual, but to say something about an individual I had already mentioned” (Strawson, 1950, p. 320). If this is right, a uniform e

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¹For arguments in support of the Fregean view, see e.g. Elbourne (2010), Elbourne (2005), Heim and Kratzer (1998), and Heim (1991). The primary competitor, of course, is the quantificational analysis due to Russell (1905). On the Russellian view, ‘the’ denotes the following function of type $\langle\langle e, t \rangle, \langle\langle e, t \rangle, t\rangle\rangle$:

$$\llbracket \text{the} \rrbracket = \lambda F . \lambda G [\exists x (Fx \wedge \forall y (Fy \rightarrow y = x) \wedge Gx)]$$

A definite description like ‘the greatest French soldier’ thus denotes something of type $\langle\langle e, t \rangle, t\rangle$ (i.e. a quantifier). Besides the type difference, the Russellian view differs from the Fregean view in that existence and uniqueness are incorporated into the truth conditions of sentences containing definite descriptions rather than figuring as presuppositional requirements. I will throughout the following work under the assumption that the e type analysis is to be preferred to the Russellian analysis for non-predicative occurrences of definite descriptions.

²I use ‘ λF ’ as shorthand for ‘ $\lambda f \in D_{\langle e, t \rangle}$ ’, ‘ λx ’ as shorthand for ‘ $\lambda x \in D_e$ ’, ‘ Fx ’ as shorthand for ‘ $f(x) = 1$ ’, and ‘ ι ’ to set off presuppositional requirements, in this case, the requirement that there exist something that has the property with which the denotation of ‘the’ combines, and that there be at most one thing having that property. I use ‘ ιx ’ as shorthand for ‘the unique x such that’. So e.g. ‘ $\iota x [gfs(x)]$ ’ can be read as ‘the unique x such that x is a French soldier greater than all other French soldiers’.

type analysis of definite descriptions won't do: descriptions like 'the greatest French soldier' must be capable of denoting items of type $\langle e, t \rangle$ as well.

In fact, Strawson's view enjoys considerable support from a number of tests for predicativity that have been proposed in the literature on copular clauses. I will review some of those tests, and the support they lend to Strawson's conjecture, in the next section. I will then, in §2, move on to introduce a semantic distinction between two classes of definite descriptions that both exhibit the structure *the + N + of + Proper Name* — a distinction that is of considerable independent interest but has, to my knowledge, received no systematic treatment in the literature. As we will see, the members of one of these two classes, those I'll call "identifying definite descriptions," resist a predicative reading much in the way that certain uses of proper names do. The picture that emerges is therefore more complex: though many descriptions have an $\langle e, t \rangle$ type reading in addition to their e type reading, this doesn't hold across the board.

Having laid out the data, I then, in §3, turn to the question of how to make room for $\langle e, t \rangle$ type occurrences of definite descriptions under the umbrella of a Fregean e type analysis. I begin by considering a proposal that appeals to a type-shifting principle inspired by Partee (1986b), but argue that it overgenerates, since it predicts that predicative readings ought to be available for e type expressions quite generally. In §4 I propose that we can avoid overgenerating if, instead of appealing to unconstrained type-shifting, we countenance two definite determiners, 'the_r' and 'the_p', with 'the_r' having the usual $\langle \langle e, t \rangle, e \rangle$ type denotation (thus forming referring expressions), and 'the_p' having a $\langle \langle e, t \rangle, \langle e, t \rangle \rangle$ type denotation (thus forming predicative expressions). The bulk of §5 to §6 are then devoted to the task of motivating and filling in the details of the two-determiner proposal, and the associated semantic analysis of identifying descriptions.

A subsidiary line of inquiry concerns the semantics of proper names. In §5 I argue that the compositional semantics of identifying descriptions provides evidence that proper names have an $\langle e, t \rangle$ type meaning in the context of such constructions, and that this consideration, augmented with data from Swiss German, suggests that proper names outside identifying constructions are preceded by a definite determiner. Granted this syntax and semantics for certain uses of proper names, the two-determiner proposal then also correctly predicts that copular sentences with proper names in postcopular position fail to have a predicational reading. In §7 I defend this view of proper names against an alternative covert-description analysis inspired by Burge (1973). One potential drawback of the two-determiner proposal is that it requires us to countenance two semantically distinct definite articles where we might have thought there was just one. I conclude in §8 by suggesting a way in which we could achieve the needed results while making do with a single definite article.

1 Four Predicativity Tests

The view that at least some definite descriptions can function predicatively in copular sentences is supported by a number of diagnostics. The first test, variants of which are employed by Higgins (1979) and Heller (2005), involves coordination. According to this test, an expression is capable

of functioning predicatively in postcopular position just in case that expression can be coordinated with paradigmatically predicative expressions (such as APs) in a copular clause. The test clearly supports Strawson's claim that definite descriptions like 'the greatest French soldier' can function predicatively in copular clauses:

- (1) (a) He is clever, audacious, and [vindictive].
(b) He is clever, audacious, and [the greatest French soldier].
(c) *He is clever, audacious, and [Napoleon].

A second test, employed by Geist (2007), Mikkelsen (2005), and Williams (1983), concerns the kinds of questions different copular sentences can be used to answer. If a copular sentence involving a subject expression that denotes a human being is predicational, it can be used to answer questions introduced by the interrogative 'what'. By contrast, if such a sentence is not predicational, it cannot be used to answer questions introduced by 'what', though it may be used to answer questions introduced by 'who':

- (2) (a) What is he? He is [short].
(b) { *What/Who } is he? He is [Napoleon].

The test again yields the verdict that definite descriptions may function predicatively in postcopular position:

- (3) What is he? He is [the greatest French soldier].

As indicated, the test's applicability is limited to sentences involving subject expressions that denote human beings. Once expressions denoting non-human objects are involved, even non-predicational copular sentences can be used to answer 'what'-questions:

- (4) What is the capital of France? The capital of France is [Paris].

A related datum, noted by Higgins (1979), is that predicative expressions can appear in pseudo-cleft variants of the corresponding copular sentences like:

- (5) (a) What Joey Ramone is is [cheerfully irreverent].
(b) What Napoleon is is [the greatest French soldier].

By contrast, paradigmatically referential expressions, like proper names, cannot:

- (6) (a) *What Joey Ramone is is [Jeffrey Hyman].
(b) *What the greatest French soldier is is [Napoleon].

The test again gives a positive verdict for Strawson's description 'the greatest French soldier'. Unlike the interrogative-based test, this test also seems to give intuitively correct results in cases involving expressions that denote non-human objects:

- (7) (a) What Paris is is [sprawling].
 (b) ??What the capital of France is is [Paris].

A final test, employed by Partee (1986b) and further developed by Rothstein (1995), involves the exceptional case marking (ECM) verb ‘consider’. This verb is able to embed “small clauses” composed of the pre- and postcopular elements of paradigmatically predicational sentences, with the copula itself omitted, as in (8b) below:

- (8) (a) She considers [Joey Ramone to be cheerfully irreverent]
 (b) She considers [Joey Ramone cheerfully irreverent]

By contrast, in the case of copular clauses in which the second element is a paradigmatically non-predicative expression, such as a proper name, omission of the copula is marked:

- (9) (a) She considers [Joey Ramone to be Jeffrey Hyman]
 (b) ??She considers [Joey Ramone Jeffrey Hyman]

We can therefore test whether an expression admits of predicative occurrence in a copular sentence by seeing whether it can function as the second element of a small clause embedded under ‘consider’. We again get a positive verdict for the definite description ‘the greatest French soldier’:³

- (10) She considers [Napoleon the greatest French soldier].

2 Identifying Descriptions

Though our tests demonstrate that certain definite descriptions are indeed capable of functioning predicatively in copular sentences, I now want to call attention to an important exception. Compare the descriptions ‘the mayor of Oakland’ and ‘the city of Oakland’. Superficially, the two look strikingly similar, both having the structure *the + N + of + Proper Name*. But they differ semantically, in two related respects.

First, whereas ‘the mayor of Oakland’ has a genitive, or possessive, character, being roughly synonymous with ‘Oakland’s mayor’, ‘the city of Oakland’ does not, since it isn’t synonymous with ‘Oakland’s City’. This contrast also emerges, as one might expect, in a difference in the way that

³This last test arguably furnishes weaker evidence than our other tests. As Lasersohn (2009) observes in a different context, the verb ‘consider’ normally “does not combine with clauses expressing completely objective matters of fact,” but rather with clauses that “involve some sort of evaluative judgment or decision on the part of anyone assessing them for truth.” ‘John considers Bill six feet, two inches tall’ sounds marked, for example. Our judgments might therefore reflect less on the predicativity of the embedded clause than on the degree of objectivity involved in the matter under discussion. Both (8) and (10) involve a degree of subjectivity: I might agree that Joey Ramone is irreverent, but not find his irreverence particularly cheerful, or again, I might agree that Napoleon is a French soldier, but feel that is in the end Joan of Arc who is greater. By contrast, whether Joey Ramone is Jeffrey Hyman is a considerably more objective matter. The contrast in the acceptability of embedding the clause with, as opposed to without, the copula serves to mitigate this worry to some extent, but I admit that the judgments here are less robust than one might ideally like. Thanks to John MacFarlane for raising this concern to me.

the relevant noun and proper name interact with the verbs ‘have’ and ‘be’: Oakland *has* a mayor, but it *is* a city.⁴

This contrast between the possessive character of ‘the mayor of Oakland’ and the non-possessive character of ‘the city of Oakland’ seems to be grounded in a second contrast, having to do with the semantics of the relevant noun. Whereas ‘city’ as it occurs in ‘the city of Oakland’ seems to function as a sortal noun, the noun ‘mayor’ as it occurs in ‘the mayor of Oakland’ functions as a relational noun.⁵ ‘Mayor’ denotes a relation between a city and the unique person who is mayorally employed by that city. The definite description ‘the mayor of Oakland’ as a whole thus denotes (at least in non-predicative uses) whoever is the mayor of the object named by the proper name occurring after the ‘of’. By contrast, ‘the city of Oakland’ denotes the very same thing that is denoted by the proper name occurring after the ‘of’, and simply adds the information that it’s a city. Intuitively, possessive definite descriptions like ‘the mayor of Oakland’ indicate a role without directly identifying who or what it is that plays the relevant role. Non-possessive definites like ‘the city of Oakland’, by contrast, directly identify the unique satisfier of the descriptive material (Oakland, in this case). I’ll therefore call definites of the latter sort “identifying definite descriptions.”⁶

What is of interest for present purposes is that possessive definites like ‘the mayor of Oakland’ are, like ‘the greatest French soldier’, capable of functioning predicatively in copular sentences:

- (11) (a) She is ambitious, driven, and [the mayor of Oakland].
- (b) What is she? She’s [the mayor of Oakland].
- (c) What she is is [the mayor of Oakland].
- (d) I consider Alice [the mayor of Oakland].

Identifying definites like ‘the city of Oakland’, on the other hand, resist a predicative reading much in the way that proper names do:

- (12) (a) *It is lively, energetic, and [the city of Oakland].
- (b) ??What the largest port on the bay is is [the city of Oakland].
- (c) ??I consider [the largest port on the bay the city of Oakland]

⁴Other examples of possessive definites include e.g. ‘the author of *Waverly*’, ‘the father of Annette’, ‘the capital of France’, ‘the Duke of Cornwall’, and ‘the location of Capone’s treasure’. Other examples of non-possessive definites of the kind we’re here interested in include ‘the month of April’, ‘the sin of Pride’, ‘the town of Bedford’, ‘the county of Alameda’, and ‘the state of Wisconsin’.

⁵Compare Löbner (1985). Löbner offers the pair ‘wife’ and ‘woman’ as an illustration: ‘woman’ is “just a one place predicate” whereas ‘wife’ is “a relational concept ... A wife is always the wife of someone.” For other recent discussions of relational nouns and possessives see Löbner (2011), Barker (2011), and Barker (1995). I return to the semantics of ‘the mayor of Oakland’ and ‘the city of Oakland’ in §5 below.

⁶This distinction between possessive and (‘of’-including) identifying definites has, to my knowledge, not been discussed in any detail in the literature. One precedent in the vicinity is Teichmann (1989)’s distinction between descriptions that are “directly about” something and those that are “indirectly about” something. He offers the pair ‘the property which enables one to see’ and ‘the property of having two eyes’ as examples, the latter being directly about the same property that the former is indirectly about.

We cannot apply our interrogative-based test in this case, since ‘the city of Oakland’ denotes a non-human object. In fact, there don’t appear to be any examples of paradigmatic identifying definites that denote human beings (see n4).

We can find relevant examples if we slightly widen our net, however. The description ‘the philosopher Frege’, for example, would seem to be an identifying definite that denotes a human being. It meets both of the criteria mentioned above. First, it fails to be possessive, since Frege doesn’t *have* a philosopher but rather *is* one. And second, the description as a whole denotes the very same thing named by the proper name ‘Frege’.⁷ In this case we do not have the ‘of’ that we find in identifying definites like ‘the city of Oakland’ or ‘the Month of April’, but the need for the ‘of’ isn’t universal. In German, for example, the ‘of’ is absent in both of the latter descriptions, just as it is in ‘the philosopher Frege’:

- (13) (a) Die Stadt Oakland / Der Monat April
“The city of Oakland” / “The month of April”
(b) Der Philosoph Frege
“The philosopher Frege”

The fact that certain identifying definites lack an ‘of’ isn’t particularly surprising from a semantic point of view. In the case of possessive definites, the noun is relational, and the ‘of’ seems to have the function of marking the argument position of that noun. In the case of identifying definites, by contrast, the noun is sortal — since the ‘of’ does not serve to mark out an argument position, it is rather to be expected that it can be left out in many cases in English, and that other languages do not include it at all.⁸

If we now apply our interrogative-based test to ‘the philosopher Frege’, we do indeed get the result that it cannot function predicatively in copular sentences (in either German or English):

- (14) (a) Wer ist er? Er ist der Philosoph Frege.
Who is he? He is the Philosopher Frege.
(b) *Was ist er? Er is der Philosoph Frege.
* What is he? He is the philosopher Frege.

thus again suggesting that identifying definites, in contrast to possessive definites, lack a predicative reading.

⁷Other ‘of’-free identifying definites include ‘the number nine’, ‘the author Sir Walter Scott’, ‘the planet Venus’, ‘the coward Robert Ford’, ‘the psychiatric patient Herbert Georg Beutler’ etc.

⁸Of course, this still leaves the question of why, on the one hand, ‘the city of Oakland’ is preferred to ‘the city Oakland’, and why, on the other hand, ‘the philosopher Frege’ cannot be rendered as ‘the philosopher of Frege’ (at least not while maintaining the identifying reading). If I had to hazard a guess, I would say that the ‘of’ in ‘the city of Oakland’ serves a prosodic function, perhaps making it clear that the description is not to be understood as a (true or non-restrictive) appositive. In the literature, identifying descriptions of both the ‘of’-free and ‘of’-including variety have variously been termed “pseudo” appositives (Laserson, 1986), “close” or “restrictive” appositives (Meyer, 1989), and “integrated” appositives (Payne and Huddleston, 2002) to distinguish them from true appositives like ‘the philosopher, Frege’. Thanks to two anonymous reviewers for directing me to some of this literature. See §7 for more on apposition. I use the label “identifying descriptions” because it serves to highlight certain semantic peculiarities of these descriptions that will be of interest below.

3 A Type-Shifting Proposal

The fact that some (even if not all) definite descriptions are able to function predicatively poses a difficulty for the Fregean e type analysis. Equative and predicational copular sentences are interpreted according to the following principles:⁹

Equative: if $\llbracket \alpha \rrbracket \in D_e$ and $\llbracket \beta \rrbracket \in D_e$, then $\llbracket \alpha \text{ is } \beta \rrbracket = 1$ iff $\llbracket \alpha \rrbracket = \llbracket \beta \rrbracket$

Predicational: if $\llbracket \alpha \rrbracket \in D_e$ and $\llbracket \beta \rrbracket \in D_{\langle e,t \rangle}$, then $\llbracket \alpha \text{ is } \beta \rrbracket = 1$ iff $\llbracket \beta \rrbracket(\llbracket \alpha \rrbracket) = 1$.

The view that definite descriptions uniformly denote items of type e thus incorrectly predicts that copular sentences with definite descriptions in postcopular position are uniformly equative, and incapable of receiving a predicational interpretation. How might we amend the Fregean analysis so as to make room for the possibility of predicative definite descriptions?

One idea would be to appeal to a type-shifting principle that, given an expression having an e type denotation, generates a homonymous expression denoting something of type $\langle e,t \rangle$. We could formulate such a principle by appealing to the (total) function *ident* proposed by Partee (1986b,a), which maps e type items to corresponding $\langle e,t \rangle$ type items. Given an e type item x , *ident* yields the property of being identical to that x :

$$\textit{ident}(x) = \lambda z. \lambda y[y = z](x) = \lambda y[y = x]$$

The Partee inspired type-shifting principle is then as follows:

Ident Type-Shifting: For any expression α_1 such that $\llbracket \alpha_1 \rrbracket \in D_e$, there is an expression α_2 such that $\llbracket \alpha_2 \rrbracket \in D_{\langle e,t \rangle} = \textit{ident}(\llbracket \alpha_1 \rrbracket) = \lambda y[y = \llbracket \alpha_1 \rrbracket]$.

Given that our Fregean semantics for the definite article yields $\iota x[\textit{gfs}(x)]$ as the e type semantic value of ‘[the greatest French soldier]₁’, we get the following denotation for predicative occurrences of this description:

$$\llbracket [\textit{the greatest French soldier}]_2 \rrbracket = \textit{ident}(\iota x[\textit{gfs}(x)]) = \lambda y[y = \iota x[\textit{gfs}(x)]]$$

We then get the desired result that ‘Napoleon is the greatest French soldier’ can be interpreted predicationally as follows:

$$\begin{aligned} \llbracket [\textit{Napoleon is [the greatest French soldier]}]_2 \rrbracket &= 1 \\ \text{iff } \llbracket [\textit{the greatest French soldier}]_2 \rrbracket(\llbracket [\textit{Napoleon}] \rrbracket) &= 1 \\ \text{iff } \lambda y[y = \iota x[\textit{gfs}(x)]](\llbracket [\textit{Napoleon}] \rrbracket) &= 1 \\ \text{iff } \llbracket [\textit{Napoleon}] \rrbracket &= \iota x[\textit{gfs}(x)] \end{aligned}$$

⁹We needn’t take these principles to be primitive. We might, for example, take it that ‘be’ is ambiguous, so that we have a (semantically vacuous) “‘be’ of predication”, as well as a “‘be’ of identity” that functions to denote the identity relation $\lambda x. \lambda y[x = y]$. The principles above would then emerge as consequences of this deeper analysis. For an overview of various approaches to the semantics of ‘be’, see Mikkelsen (2011). For present purposes, any story compatible with the above principles will do. I also don’t mean to suggest that there may not be structural differences between equative and predicational sentences in addition to the semantic differences here highlighted. See e.g. Bowers (1993) and Heycock and Kroch (1999) for two different proposals about the syntax of equative and predicational sentences.

Notice that since the definite description ‘[the greatest French soldier]₁’ receives an *e* type denotation, the proposal predicts that ‘Napoleon is the greatest French soldier’ should have not just a predicational reading, but should also have an equative interpretation along the following lines:

$$\begin{aligned} \llbracket \text{Napoleon is [the greatest French soldier]}_1 \rrbracket &= 1 \\ \text{iff } \llbracket \text{Napoleon} \rrbracket &= \llbracket \text{[the greatest French soldier]}_1 \rrbracket \\ \text{iff Napoleon} &= \iota x[\text{gfs}(x)] \text{ }^{10} \end{aligned}$$

This prediction is not in conflict with the results of our predicativity tests. What those tests show is that copular sentences with definite descriptions like ‘the greatest French soldier’ in postcopular position are *capable* of receiving a predicational reading. But this leaves it quite open that such sentences may also have an equative reading in addition to their predicational reading. In fact, our interrogative-based test lends support to the prediction. For while copular clauses with definite descriptions in postcopular position can, as we saw, function as answers to questions introduced by ‘what’, suggesting that they have a predicational reading, it can’t be denied that they are also acceptable as answers to questions introduced by ‘who’:

- (15) (a) What is he? He is [the greatest French soldier].
 (b) Who is he? He is [the greatest French soldier].

suggesting that such sentences have an equative reading as well, just as the type-shifting proposal predicts.¹¹

The trouble with the type-shifting proposal isn’t that it predicts equative readings for copular sentences with definite descriptions in postcopular position, but rather that it overgenerates in the other direction, predicting predicational readings for sentences that, according to our tests, have only an equative reading. We saw that sentences with proper names in postcopular position, like ‘He is Napoleon’, are incapable of being interpreted predicationally. Our diagnostics provide evidence that sentences with identifying descriptions like ‘the city of Oakland’ and ‘the philosopher Frege’ in postcopular position likewise resist a predicational reading.

And yet the type-shifting proposal offers no explanation of why this should be so. Quite the contrary: since *ident* is a total function, and yields an $\langle e, t \rangle$ type item given any *e* type argument, our principle of Ident Type-Shifting ought to apply to any *e* type expression to yield a homonymous $\langle e, t \rangle$ type expression. In the case of proper names like ‘Napoleon’, we would for instance expect to be able to apply Ident Type-Shifting to ‘Napoleon₁’ to yield the homonym ‘Napoleon₂’, with the latter denoting the $\langle e, t \rangle$ type item $\lambda y[y = \text{Napoleon}]$, giving us the predicational copular sentence ‘He is Napoleon₂’.

¹⁰Note that the truth conditions of the equative reading of our copular sentence are the same as those of its predicational reading. The difference between them lies in the way those truth conditions are derived. I return to this feature of the proposal below.

¹¹Geist (2007), for example, draws this conclusion on the basis of the interrogative-based test, arguing that “depending on the interpretation of the DP ... the copular sentence has a predicational or an equative reading.”

One might try to rescue the type-shifting proposal by holding that although there is no *semantic* restriction that prohibits Ident Type-Shifting from applying to ‘Napoleon’, the principle can be reformulated to incorporate a *syntactic* restriction that only allows its application to definite descriptions. There are two difficulties with this attempted rescue, however. First, there is evidence to suggest that proper names are themselves preceded by a silent definite determiner. Though the determiner is silent in English, it is spelled out in e.g. certain dialects of German (the various dialects of Swiss German, for example) with names of people:¹²

- (16) Der Napoleon hat die Schlacht gewonnen.
 “Napoleon won the battle.”

Second, and more damningly, there is, as we’ve seen, a well-demarcated class of *overt* definite descriptions that pattern with proper names in resisting a predicative reading. Syntactically restricting the principle of Ident Type-Shifting to phrases involving a definite determiner therefore won’t prevent overgeneration.

In addition to the problem of overgeneration, there are two further worries about the type-shifting proposal.¹³ First, if the predicative description ‘[the greatest French soldier]₂’ denotes the property $\lambda y[y = \iota x[gfs(x)]]$, then equative and predicational readings of ‘Napoleon is the greatest French soldier’ receive truth conditions that are, as we saw above, though generated differently, in the end the same. But if we are going to take the distinction between equative and predicational copular sentences seriously — and as we’ve seen, there is evidence that we should — then we might expect truth conditions involving the relation of identity to be reserved for equative sentences.

Second, the proposal has the consequence that the predicative description ‘[the greatest French soldier]₂’ presupposes the existence of something that satisfies it. In effect, the Ident Type-Shifting proposal generates predicative descriptions via composition of the partial *iota* function, which yields an *e* type semantic value given a uniquely instantiated property, and the total *ident* function, which then yields the property of being identical to that unique individual. Thus we first apply *iota*, i.e. the function denoted by existence-presupposing Fregean definite determiner, to $\lambda y[gfs(y)]$ to get $\iota x[gfs(x)]$ as the *e* type semantic value of ‘[the greatest French soldier]₁’, and then apply *ident* to get $\lambda y[y = \iota x[gfs(x)]]$ as the $\langle e, t \rangle$ type semantic value of ‘[the greatest French soldier]₂’. The predicative description thus inherits the existence presupposition of its *e* type counterpart. Again, however, there is a certain awkwardness to this consequence. Intuitively, a distinguishing feature of predicates is that they do not presuppose the existence of a satisfier, but generally leave it open that they may be unsatisfied (or even unsatisfiable).¹⁴

¹²Other languages in which a definite article is required with at least certain proper names include European Portuguese, certain dialects of Italian and Spanish, colloquial Icelandic, Northern Norwegian, Northern Swedish, Catalan, Tagalog, Pima, Albanian, and Modern Greek. See Matushansky (2006) and references therein. In what follows, I will focus on examples from Swiss German (though using standard German spelling). For a sustained defense of the view that all intuitively referential expressions (including not just proper names but even pronouns) are in fact definite descriptions, see Elbourne (2005).

¹³Thanks to Melissa Fusco for drawing my attention to some of the worries I here discuss.

¹⁴Compare Frege’s (1997) remark that, in contrast to a proper name, “a concept word can be absolutely impeccable, logically speaking, without there being an object to which it is related.” See also Larson and Segal’s (1995, p. 127) claim

An argument in support of this worry emerges from an observation due to Fara (2001). She notes that the negated predicational copular sentence:

(17) Aristotle wasn't a philosopher.

which contains an *indefinite* description in postcopular position does not entail “the existence of a philosopher, or, for that matter, any person other than Aristotle” (Fara, 2001, p. 12). She then claims that negated copular sentences containing a *definite* description in postcopular position, such as:

(18) Napoleon isn't the greatest French soldier.

similarly do not entail the existence of someone who satisfies the descriptive material.¹⁵ If we accept that copular sentences containing definite descriptions in postcopular position have an equative reading, we cannot entirely follow Fara in this regard, since equative sentences do have the relevant existence entailment. ‘Hesperus isn't Phosphorus’, for example, does seem to entail that there is something other than Hesperus that *is* Phosphorus.

Nevertheless, it strikes me as plausible that (18) does have at least one reading on which it doesn't entail the existence of a French soldier greater than all other French soldiers. The following, for example, seem to permit of a reading on which they are not contradictory or self-undermining:

- (19) (a) Napoleon isn't the greatest French soldier. In fact, France has no soldiers.
(b) If Napoleon isn't the greatest French soldier, no one is.

The Ident Type-Shifting proposal won't let us accommodate such a reading, however, since it incorporates an existence presupposition for *e* and $\langle e, t \rangle$ type definite descriptions alike.¹⁶

Fara's (2001) own view is that definite descriptions quite *generally* function as predicates, even when they occur in subject position or as arguments to transitive verbs.¹⁷ Though her proposal avoids the existence presupposition, it faces difficulties paralleling those that beset the unconstrained

that predicates are generally associated with application conditions that are “object-independent.” I return to matters in this vicinity below when looking at the nature of identifying properties.

¹⁵Her own example is ‘Max isn't the owner’ (in the context of discussing the ownership, or lack thereof, of an apparently abandoned old car), which arguably involves an incomplete definite description. I will throughout confine my attention to “complete” descriptions like ‘the greatest French soldier’ and ‘the mayor of Oakland’, though I'll touch on the upshot our investigation may have for incomplete descriptions in the conclusion.

¹⁶Partee (1986b, p. 213), we should note, accepts that predicative definite descriptions admit of a presuppositionless reading. She proposes to account for that reading by applying the *BE* type-shifter to Russellian descriptions. As I said at the outset, I am here working under the assumption that the Fregean analysis is to be preferred to the Russellian analysis when it comes to non-predicative descriptions. Insofar as (presuppositionless) predicative descriptions involve a different definite determiner from *e* type descriptions on Partee's proposal, it bears a similarity with the two-determiner proposal I consider in the next section. However, since the *BE* type-shifter is again a total function, the proposal still suffers from the overgeneration problem with respect to identifying descriptions, which the two-determiner proposal seeks to address.

¹⁷Fara (2001) doesn't consider a type shifting approach, though she addresses it in Fara (2006). She there rejects it on grounds of theoretical economy: having argued that definite descriptions must be regarded as functioning predicatively at least some of the time, she concludes that we have reason to allow them to “uniformly take a type $\langle e, t \rangle$ interpretation” and “no good reason to adopt type-shifting” (Fara, 2006). My claim is that the data furnished by our predicativity tests give us good reason to reject views that — like both Fara's and the unconstrained type-shifting view — allow definite descriptions to *uniformly* take on an $\langle e, t \rangle$ type interpretation.

type-shifting view. Again: if proper names are covert definite descriptions, Fara’s view falsely predicts that copular sentences with proper names in postcopular position should have a predicational reading. Furthermore, the proposal leaves us unable to account for the fact that overt definite descriptions of the identifying variety likewise resist a predicative reading. We therefore cannot accept a view according to which definite descriptions are uniformly predicative, any more than we can accept an unconstrained type-shifting principle that generates an $\langle e, t \rangle$ type expression from any e type expression.

4 A Different Proposal: Two Definite Determiners

An adequate treatment of predicative definite descriptions should meet three desiderata. First, it must allow for the fact, pointed out by Strawson (1950), that certain definite descriptions, like ‘the greatest French soldier’ and ‘the mayor of Oakland’, are capable of functioning predicatively in copular sentences. Second, it must account for the fact that copular sentences with identifying definite descriptions in postcopular position have an equative, but no predicational, reading. We in other words want to predict that ‘the greatest French soldier’ and ‘the mayor of Oakland’ can take on $\langle e, t \rangle$ type semantic values in addition to their usual e type semantic values, while also predicting that proper names and identifying definites receive only e type semantic values, thus uniformly generating equative sentences. Third, the account should predict that predicative definite descriptions do not presuppose the existence of something that satisfies them.

The Ident Type-Shifting proposal meets the first desideratum at the expense of the second and third. Fara’s proposal meets the first and third, but not the second. One way to achieve all three, I want to suggest, is by appealing to two definite determiners. One determiner, ‘the_r’, yields referring descriptions (hence the subscripted ‘r’) — it combines with an expression that denotes something of type $\langle e, t \rangle$ to yield an expression that denotes something of type e . The second determiner, ‘the_p’, yields predicative descriptions (hence the subscripted ‘p’) — it combines with an expression that denotes something of type $\langle e, t \rangle$ to yield an expression that denotes something of type $\langle e, t \rangle$.

At a first pass, we can take it that these two determiners have the following denotations:

$$\llbracket \text{the}_r \rrbracket = \lambda F : \exists x(Fx) \wedge \forall x \forall y (Fx \wedge Fy \rightarrow y = x). \iota x[Fx]$$

$$\llbracket \text{the}_p \rrbracket = \lambda F : \forall x \forall y (Fx \wedge Fy \rightarrow y = x). \lambda x[Fx]$$

Our determiner ‘the_p’ then differs from the standard Fregean determiner ‘the_r’ in two respects. First, there is of course a difference in semantic type: whereas ‘the_r’ is of type $\langle \langle e, t \rangle, e \rangle$, ‘the_p’ is of type $\langle \langle e, t \rangle, \langle e, t \rangle \rangle$. Second, there is a presuppositional difference: whereas the denotation of ‘the_r’ requires of the property with which it combines that there be at most one thing that instantiates it *and* that there exist something that instantiates it, the denotation of ‘the_p’ does not incorporate the existence requirement. The denotation of ‘the_p’ essentially just runs a check on the property with which it combines, ensuring that uniqueness is satisfied. A predicative definite description ‘the_p

α^\top thus has the same denotation as its $\langle e, t \rangle$ type complement α ; it differs only in introducing a uniqueness presupposition.

With these two determiners in hand, we readily meet the first and third desiderata. We account for the predicational reading of Strawson’s ‘Napoleon is the greatest French soldier’ by taking it that it involves the predicative description ‘the_p greatest French soldier’. The equative reading of the sentence, by contrast, will involve the referring description ‘the_r greatest French soldier’. Due to the presuppositional difference between ‘the_r’ and ‘the_p’, we also get the desired result that predicative descriptions lack an existence presupposition.

The looming question, of course, is how we will meet the second desideratum, and account for the fact that identifying descriptions lack a predicative reading. Here in particular the availability of two determiners opens up a useful avenue of pursuit. The unusual features of identifying descriptions appear to be grounded in a peculiarity of the properties denoted by the complements of these descriptions. Since we now have a determiner specifically dedicated to the formation of predicative descriptions, it (or rather: the function it denotes) can inspect the property denoted by the complement with which the determiner is to combine. Given an account of what sets the properties involved in identifying descriptions apart, we can then incorporate an additional presuppositional requirement into ‘the_p’ that will prohibit it from combining with complements that express such properties. Fleshing out the two-determiner proposal along these lines will occupy us for the next two sections. I will first consider the compositional semantics of the complements of identifying descriptions, and then turn to a discussion of the nature of the properties involved, with a view towards explicating and motivating the additional restriction on ‘the_p’.

5 The Semantics of Identifying Descriptions

We noted earlier that the possessive description ‘the mayor of Oakland’ denotes (in non-predicative uses) the mayor of the object named by the proper name occurring after the ‘of’, while the identifying ‘the city of Oakland’ denotes the very same thing as is named by the proper name occurring after the ‘of’. Thus sentences involving identifying descriptions entail sentences in which the relevant proper name has been substituted for the description, whereas sentences involving possessive descriptions do not:¹⁸

- (20) (a) ‘The city of Oakland has a port.’ \models ‘Oakland has a port.’
 (b) ‘She met the mayor of Oakland.’ $\not\models$ ‘She met Oakland.’

We can capture this fact if we hold that the properties denoted by the complement with which the definite article combines in these two cases are as follows:

$$\llbracket \text{mayor of Oakland} \rrbracket = \lambda x [Mox]$$

$$\llbracket \text{city of Oakland} \rrbracket = \lambda x [Cx \wedge x = o]$$

¹⁸Compare Payne and Huddleston (2002, §14.3), who also make this observation regarding identifying descriptions.

The property denoted by ‘city of Oakland’ thus incorporates an identity requirement, in particular, the requirement that whatever instantiates the property be identical to Oakland. The property denoted by ‘mayor of Oakland’, on the other hand, does not, since the thing instantiating this property need not be identical to Oakland, but rather needs to be the mayor of Oakland. Applying the determiner ‘*the_r*’, we then get the desired result that ‘*the_r* city of Oakland’ denotes the same thing named by ‘Oakland’, whereas ‘*the_r* mayor of Oakland’ does not.

An interesting subsidiary question concerns how these semantic values are themselves compositionally generated. In the case of the possessive ‘mayor of Oakland’, the answer is relatively straightforward. We’ve already remarked that the noun ‘mayor’ is relational. It denotes the $\langle e, \langle e, t \rangle \rangle$ type item $\lambda y. \lambda x [Myx]$. If we take it that ‘of’ is semantically vacuous, and that ‘Oakland’ denotes Oakland, we get the above semantic value for ‘mayor of Oakland’.¹⁹

Matters are less straightforward in the case of ‘city of Oakland’. The noun ‘city’, as I earlier said, appears to be sortal rather than relational: it simply denotes the $\langle e, t \rangle$ type item $\lambda x [Cx]$. However, if we now again take it that ‘of’ is vacuous and that ‘Oakland’ is of type e and denotes Oakland, we predict that ‘city of Oakland’ has the saturated type t . As such, it would then be incapable of combining with the definite article, since ‘the’ requires a complement of type $\langle e, t \rangle$.

I want to consider two ways of dealing with this issue, and argue in favor of the second. The first option would be to try and assimilate ‘city of Oakland’ to the possessive ‘mayor of Oakland’ by holding that, in the identifying construction at issue, ‘city’ assumes a semantic value of type $\langle e, \langle e, t \rangle \rangle$. Combining it with the e type ‘Oakland’, we would then get the desired type $\langle e, t \rangle$ for ‘city of Oakland’. The second option is that the proper name ‘Oakland’ is, in the identifying construction at issue, of type $\langle e, t \rangle$ rather than type e . We could then combine ‘Oakland’ with the sortal noun ‘city’ via an application of Heim and Kratzer’s (1998) rule of Predicate Modification and get the desired type $\langle e, t \rangle$ for ‘city of Oakland’.

To enter in on the first suggestion a brief digression into the semantics of possessives is needed. Borrowing Barker’s (2011) terminology, note first that in addition to the kind of postnominal possessive construction that we find in cases like ‘the mayor of Oakland’, English also has prenominal possessives like ‘Oakland’s mayor’. As Barker points out, prenominal possessives systematically have a wider range of interpretations than postnominal possessives. Consider ‘Annette’s father’. On the most straightforward interpretation — what Barker calls the lexical interpretation — the phrase denotes whoever fathered Annette. The possession relation involved is the fatherhood relation, provided by the relational noun ‘father’. In appropriate contexts, this phrase can, however, also receive various “pragmatic” interpretations involving different possession relations. Suppose, for example, that we are at a birthday party at which children have been paired up with different fathers in attendance who are to keep an eye on them. In such a context, ‘Annette’s father’ needn’t denote whoever fathered Annette, but can instead be interpreted as denoting whichever father Annette has been paired up with at the party.

¹⁹Compare Heim and Kratzer (1998, §4.1), who also treat ‘of’ as semantically vacuous.

Barker (2011) proposes to account for such pragmatic readings by appeal to certain type shifting operations. The thought is that the relational noun ‘father’ is first detransitivized from type $\langle e, \langle e, t \rangle \rangle$ to type $\langle e, t \rangle$, and then re-transitivized by applying the π type shifter:

$$\pi = \lambda F. \lambda y. \lambda x [Fx \wedge Ryx]$$

The possession relation R has to be provided by context — at the birthday party, the contextually provided relation is the relevant pairing relation between children and fathers in attendance.

What is noteworthy for our purposes is that sortal nouns like ‘city’ can also appear in prenominal possessive constructions. However, in such cases the interpretation always has to be pragmatic, since the sortal noun cannot lexically provide a relation. For example, the prenominal possessive ‘Annette’s city’ can be interpreted as denoting the city Annette lives in, or the city she has been assigned to write a report on, or the city she wants to move to etc. We can account for these readings, and more generally for the ability of sortal nouns to appear in prenominal possessive constructions, by holding that sortal nouns like ‘city’ can be transitivized via an application the π type shifting operation. Since sortal nouns can evidently be transitivized to an $\langle e, \langle e, t \rangle \rangle$ type meaning, the suggestion that this is also what’s going on in the case of ‘city of Oakland’ lies close to hand. The thought would be that ‘city’ is type shifted by π to denote $\lambda y. \lambda x [Cx \wedge x = y]$ (with identity functioning as the contextually provided relation R). It can then be combined with the e type ‘Oakland’ to yield $\lambda x [Cx \wedge x = o]$ as the desired $\langle e, t \rangle$ type semantic value of ‘city of Oakland’.

There are several difficulties with this approach to the matter, however. First, as Barker (2011) notes, postnominal possessives strongly prefer a lexical interpretation over a pragmatic interpretation. It is, for instance, quite difficult to get a reading of ‘the father of Annette’ on which it denotes someone other than the person who fathered Annette. This suggests that the π type shifter can only be applied in prenominal possessive constructions. It is thus somewhat surprising that this type shifter should be applicable in the case of identifying descriptions like ‘the city of Oakland’.

Second, even if we suppose that the π type shifter can be applied in identifying constructions, one would still like to know why the contextually provided relation in the case of ‘city of Oakland’ has to be identity, rather than some other salient relation. One can’t, for instance, interpret ‘the city of Oakland’ as denoting Oakland’s sister city, even if the sister-city relation is contextually salient. Contrast the prenominal ‘Oakland’s city’, which can be so interpreted given an appropriate context. It could be suggested that the proposed $\langle e, \langle e, t \rangle \rangle$ interpretation of ‘city’ isn’t generated by π , but by a more constrained type shifter that specifically involves the identity relation, perhaps: $\pi_{=} = \lambda F. \lambda y. \lambda x [Fx \wedge y = x]$. Still, one would like to know why the $\pi_{=}$ type shifter can be applied here whereas the closely related π type shifter cannot.

Third, if sortal nouns can be type shifted to a relational meaning that involves identity, one would expect this meaning to be available in prenominal constructions involving sortal nouns as well. But this doesn’t appear to be the case. One can, for instance, interpret ‘Daisy’s flower’ as denoting the flower Daisy picked, or the flower she has been assigned to write a report on. But there doesn’t appear to be a reading of this phrase on which it denotes a particular flower that we’ve named ‘Daisy’.

A final problem with the relational strategy has to do with the way it treats the names that occur in identifying definites. When names occur in postnominal possessives like ‘the mayor of Oakland’ they seem to be of type e , and serve to saturate the first argument position of the relevant relational noun. Since the strategy we’re considering treats the noun ‘city’ as relational when it occurs in the identifying construction ‘city of Oakland’, it asks us to treat the name ‘Oakland’ as having type e , now serving to saturate the first argument of the relational ‘city’. There is, however, a serious difficulty with the proposed parallel between the function of names in possessive descriptions and identifying descriptions.

As we would expect, the argument position occupied by names in possessive descriptions allows various other expressions that have (or are capable of having) an e type meaning, such as demonstratives, prenominal possessives, and definite descriptions:²⁰

- (21) (a) The mayor of [Oakland] ordered a raid.
 (b) The mayor of [that city] ordered a raid.
 (c) The mayor of [Agadir’s sister city] ordered a raid.
 (d) The mayor of [the sister city of Agadir] ordered a raid.

By contrast, identifying descriptions don’t allow these expressions in the position occupied by the name.²¹

- (22) (a) The city of [Oakland] has a port.
 (b) *The city of [that city] has a port.
 (c) *The city of [Agadir’s sister city] has a port.
 (d) *The city of [the sister city of Agadir] has a port.

This strongly suggests that proper names in identifying constructions do not serve as arguments to a relational noun, and that the strategy of assimilating identifying to possessive constructions is off the mark.

In light of these considerations, I therefore propose that we adopt the second strategy and treat the proper names occurring in identifying constructions as having type $\langle e, t \rangle$. In particular, we can take it that ‘Oakland’ denotes the $\langle e, t \rangle$ type item $\lambda x[x = o]$. This will allow us to treat ‘city’ as a sortal noun of type $\langle e, t \rangle$, denoting $\lambda x[Cx]$. Continuing to treat ‘of’ as semantically vacuous, we can then apply the rule of Predicate Modification to get the desired $\langle e, t \rangle$ type semantic value $\lambda x[Cx \wedge x = o]$ for ‘city of Oakland’. The same story will of course work for ‘of’-free identifying descriptions like ‘the philosopher Frege’: granted that ‘Frege’ denotes $\lambda x[x = f]$ and that ‘philosopher’ denotes $\lambda x[Px]$, we get $\lambda x[Px \wedge x = f]$ as the $\langle e, t \rangle$ type semantic value of ‘philosopher Frege’.

²⁰Interestingly, pronouns don’t seem to readily occupy the argument position in possessive descriptions. ‘Oakland is a strange place. Its mayor ordered a raid.’ sounds considerably better than ‘Oakland is a strange place. The mayor of it ordered a raid.’ Pronouns in identifying descriptions (‘the city of it’) sound even worse, however.

²¹Schiffer (2003, p. 93) also makes an observation along these lines in relation to the description ‘the Italian singer Pavarotti’.

The view that proper names are of type $\langle e, t \rangle$ isn't exactly standard fare, but neither is it unheard of or unmotivated. For one thing, it gives us a particularly straightforward way to derive the appropriate semantic values for identifying constructions. Second, as I've already mentioned in passing, names are preceded by a definite article in many language, such as Swiss German. Since definite articles require a complement of type $\langle e, t \rangle$, names seem to require an $\langle e, t \rangle$ type semantics for such languages in any case. Identifying constructions give us evidence that a case for a parallel treatment can be made for English. The natural thought would be that names are always lexically of type $\langle e, t \rangle$. An e type occurrence of a name — such as when the name occurs in the argument position of a relational noun — involves a silent definite article, specifically, a silent form of our referential determiner 'the_r'.²² A possessive description like 'the mayor of Oakland' would thus have the underlying structure 'the mayor of THE_r Oakland'. Though the determiner is usually silent, it is spelled out when a sortal noun intervenes between the determiner and the name, as in 'the_r city of Oakland' and 'the_r philosopher Frege'.

Indeed, this distribution of the definite article is just what we find in Swiss German. A definite article immediately precedes a name if the name occurs "on its own", outside the context of an identifying construction, but is not (or: not immediately) preceded by a definite article when it occurs in an identifying construction:

- (23) (a) [Der Frege] hat in Jena gearbeitet.
 (b) *[Frege] hat in Jena gearbeitet.
 "Frege worked in Jena."
- (24) (a) Der philosoph [Frege] hat in Jena gearbeitet.
 (b) *Der philosoph [der Frege] hat in Jena gearbeitet.
 "The philosopher Frege worked in Jena."

By contrast, proper names are, as expected, immediately preceded by a definite article when they occur in the context of a possessive definite description:

- (25) (a) Der Vater von [der Annette] ist in Schulden geraten.
 (b) * Der Vater von [Annette] ist in Schulden geraten.
 "The father of Annette got into debt."

Names, in other words, always need to be accompanied by a definite article — the only case where a definite article does not *immediately* precede a name is when the name occurs in the context of an identifying definite description, where a sortal noun intervenes between the article and the name. This view of the matter thus not only lets us derive the correct semantic value for identifying

²²Sloat (1969), Elbourne (2005), Matushansky (2006), and (more tentatively) Larson and Segal (1995), also defend views on which proper names involve a silent definite determiner. They however adopt a different view regarding the denotation of $\langle e, t \rangle$ type occurrences of proper names. See §7 for further discussion.

constructions like ‘philosopher Frege’ and ‘city of Oakland’, but also for possessive constructions like ‘father of Annette’ and ‘mayor of Oakland’. I will come back to the semantics of names in §7. First, however, let us return to our central concern: how to account for the fact that identifying descriptions lack a predicative reading.

6 Identifying Properties

We’ve seen that what sets identifying constructions like ‘city of Oakland’ apart from possessive constructions is that they incorporate an identity requirement. The property denoted by ‘city of Oakland’ requires of whatever instantiates it that it be identical to Oakland. The property denoted by ‘mayor of Oakland’ does not, since the thing instantiating this property need not be identical to Oakland, but rather needs to be the mayor of Oakland. This suggests that the reason identifying definite descriptions cannot function as predicates is that the determiner ‘the_p’ incorporates an extra presuppositional requirement absent from ‘the_r’. In particular, ‘the_p’ not only requires that the complement with which it combines denote a property that is instantiated by at most one object, but also that that property not be identifying. Its denotation, in other words, is:

$$\llbracket \text{the}_p \rrbracket = \lambda F : \neg \text{Id}(F) \wedge \forall x \forall y (Fx \wedge Fy \rightarrow y = x). \lambda y [Fy]$$

Given our two determiners, together with this extra restriction on ‘the_p’, we are able to meet all three of our desiderata: we accommodate the possibility of predicative definite descriptions, predict that identifying descriptions like ‘the city of Oakland’ and ‘the philosopher Frege’ nevertheless lack a predicative reading, and account for the absence of an existence presupposition for predicative descriptions.

I earlier faulted the Ident-Type Shifting proposal and Fara’s (2001) view for failing to explain the absence of a predicational reading for copular sentences containing proper names in postcopular position. Granted the syntax and semantics of proper names outlined in the previous section, the two-determiner proposal makes the correct predictions in this case as well. I argued that unmodified or “bare” names like ‘Frege’ denote “minimal” identifying properties like $\lambda x[x = f]$, and are preceded by a definite determiner (silent in most cases, but overt when a sortal noun intervenes). Proper names are thus, in effect, just a limit case of identifying descriptions. The restriction on ‘the_p’ thus predicts that e.g. ‘THE_p Joey Ramone’ is inadmissible, and that we therefore do not get the predicational copular sentence ‘THE_r Jeffrey Hyman is THE_p Joey Ramone’. We can, by contrast, combine ‘the_r’ with the name to generate the equative copular sentence ‘THE_r Jeffrey Hyman is THE_r Joey Ramone’.

What exactly is it for a property to be identifying? That is: what is the check that the denotation of ‘the_p’ runs on the property F in determining whether $\text{Id}(F)$? The restriction is fairly easy to state over semantic representations: a property is identifying just in case the lambda abstractor that appears in its semantic representation binds a variable which flanks an identity sign whose other argument is a constant. One would, however, like to be able to state the restriction in terms of features of the relevant properties, rather than in terms of features of their semantic representations.

I am inclined to think that the notion of being an identifying property is fairly primitive. We seem, as speakers, to have a fairly firm grasp on the difference between identifying and non-identifying descriptions, and we can take this to show that we have a similarly firm grasp of what it is for a property to be identifying. Our semantics can thus appeal to speakers' competence with the notion.²³ That having been said, the notion does admit of some intuitive elucidation. A property, one wants to say, counts as identifying if an individual instantiates it not just in virtue of what that individual is *like*, or what *role* that individual plays, but, at least partly, in virtue of which particular individual it *is* — again, the property incorporates, *inter alia*, the requirement that anything instantiating it be identical to a certain specific individual.

It may be suggested that a more precise characterization can be given in modal terms. The notion of a rigid designator is familiar: an e type expression is rigid if it denotes the same object relative to every possible world in which that object exists (and doesn't denote anything relative to worlds in which that object fails to exist). Now an identifying description like 'the _{r} philosopher Frege' is not quite rigid, because it will fail to denote Frege (in fact, it will fail to denote at all) relative to possible worlds in which Frege exists but isn't a philosopher. Nevertheless, there is a closely related property — call it quasi-rigidity — that 'the _{r} philosopher Frege' does have: relative to any world at which 'the _{r} philosopher Frege' denotes something at all, it denotes the same thing, namely Frege. (So rigid designators are also quasi-rigid, but not vice versa.) This notion of quasi-rigidity can be extended to predicates that can apply to at most one thing: let's say that such a predicate is quasi-rigid if it applies to the same thing relative to every possible world at which it applies to anything.²⁴ Predicates like 'philosopher Frege' or 'city of Oakland' that denote identifying properties are then quasi-rigid: relative to every possible world at which 'city of Oakland' applies to something, it applies to the same thing, viz. Oakland. Similarly, we might say that a property is identifying just in case it is instantiated by the same object in every possible world in which it is instantiated at all. We might, in other words, say that $\text{Id}(F)$ just in case $\exists x \Box \forall y (Fy \rightarrow y = x)$.²⁵

As is often the case with modal characterizations, however, there is a certain difficulty with the proposal. Take 'the positive square root of nine'. This description is rigid (and thus quasi-rigid),

²³ Admittedly, some care needs to be taken here. Consider the nested possessive description 'the (immediate) successor of the (immediate) predecessor of two'. This description includes a name of the very thing that the description as a whole denotes, just like 'the number two' does. But the former, unlike the latter, is nevertheless not identifying. There is an element of indirection involved in the former case that is absent from the latter. This indirection, I suggest, has to do with the absence of an identity requirement. Thanks to Mike Martin for the example.

²⁴ I am not claiming that this is how *rigidity* ought to be understood in relation to predicates quite generally. For one, our notion of quasi-rigidity only applies to predicates that apply to at most one thing. We could extend the notion to multiply satisfiable predicates by saying that a predicate is quasi-rigid just in case it applies to the same things relative to every world at which it applies to anything. Soames (2002) considers such a definition of rigidity for predicates, but rejects it on the grounds that it classifies natural-kind predicates like 'animal' as non-rigid. See Soames (2002) and Devitt (2005) for further discussion of how rigidity might be understood in relation to predicates.

²⁵ This modal characterization would have the consequence that the $\langle e, t \rangle$ type expression $\ulcorner \text{the}_p \alpha \urcorner$ is admissible only if the corresponding e type expression $\ulcorner \text{the}_r \alpha \urcorner$ fails to be quasi-rigid (and thus also fails to be rigid). Compare Comorovski (2007), who argues that only non-rigid definite descriptions can occur in the subject position of specificational clauses. Mikkelsen (2005) argues that the subject of a specificational clause is a predicate. If we combine the proposals, we get a view of specificational clauses much like the one we're exploring for predicational clauses: a definite description may occur in the subject position of a specificational clause — that is, following Mikkelsen (2005), may function predicatively — only if the corresponding e type description fails to be rigid (or rather: fails to be quasi-rigid).

and our modal proposal would classify the property denoted by ‘positive square root of nine’ as identifying. And yet the description is possessive, and should as such be capable of functioning predicatively.²⁶ The modal proposal is thus too coarse to single out identifying properties. As I’ve said, however, I don’t think that we ultimately need a “deeper” explication of what it is for a property to be identifying. The notion has a firm enough content to do useful theoretical work, even if it resists modal characterization.

In fact, I think the extra restriction against identifying properties on ‘the_p’ not only yields the right empirical predictions, but is also fairly natural in its own right. I want to look at two considerations to this effect — considerations that may also serve to further elucidate the nature of identifying properties.

First, as Larson and Segal (1995, p. 127) point out, an intuitively distinguishing feature of predicates is that they are associated with “object-independent [application] conditions.” What they mean by this is that run-of-the-mill predicates are in general indifferent to the *identity* of the individuals to which they apply. The noun ‘philosopher’, for instance, applies to an individual just in case that individual is a philosopher — it places no conditions on the identity of that individual. The expression ‘philosopher Frege’, by contrast, has object-dependent conditions of application, in the sense that it applies to an individual only if that individual is (identical to) Frege. If object-independence is indeed a characteristic feature of predicates, it isn’t surprising that we would resist combining ‘the_p’ with identifying constructions since doing so would produce object-dependent predicates, and correlatively, that we should prefer to combine ‘the_r’ with such constructions, since the function of a referring expression is precisely to pick out a certain specific individual.

Object-dependence is relevant in another respect as well. Hofweber (2005b) points out that the notion of object-dependence can also be thought of as concerning existence. In particular, he calls a property object-dependent (in the existence-involving sense) if it exists only if a particular individual exists. He offers the property of being (Bill) Clinton and the property of being Clinton’s mother as examples of object-dependent properties. To this we could add such properties as the property of having met Clinton and the property of having seen Clinton give a speech. These properties, so the thought goes, exist only if Bill Clinton exists. As Hofweber nicely puts it elsewhere, “what objects there are matters for what properties ... there are” (Hofweber, 2005a). Suppose we accept this claim. Identifying properties — in particular, the minimal identifying properties denoted by (bare) proper names — will then count as object-dependent in the relevant sense. Indeed, Hofweber’s own example of the property of being Clinton, viz. $\lambda x[x = c]$, is a minimal identifying property. These properties distinguish themselves from other object-dependent properties in an important respect, however. They don’t just depend on the existence of a particular individual, but on the existence of the very individual that is alone able to instantiate the property. Contrast the property of having met Clinton: it depends on the existence of Clinton, but Clinton presumably isn’t himself among the individuals that have this property.

²⁶As an anonymous reviewer points out, the coordination test supports the prediction that this description has a predicative reading: ‘three is odd and the positive square root of nine’ sounds remarkably better than ‘the positive square root of nine is odd and three.’

This brings us to a second reason why one might think it natural for ‘the_p’ to incorporate the extra restriction against identifying properties. As we’ve seen, the function denoted by the standard Fregean determiner ‘the_r’ has the presuppositional requirement that there exist an individual that has the property to which this function is to be applied. Given the special form of object-dependence exhibited by minimal identifying properties, these properties meet the presuppositional requirement trivially: if the property exists, so does the thing that instantiates it. It is therefore to be expected that ‘the_r’ should readily accept complements which denote minimal identifying properties like $\lambda x[x = c]$. On the other hand, we have seen evidence that predicative definite descriptions lack an existence presupposition, and therefore dropped this presupposition from our determiner ‘the_p’. The restriction against identifying properties can then be seen as a complementary feature of ‘the_p’ that, so to speak, fills the gap left by the existence presupposition: ‘the_p’ doesn’t just lack an existence presupposition, but rejects properties that, like minimal identifying properties, trivially meet the existence presupposition had by ‘the_r’.

There is a complication that we need to take note of here.²⁷ The minimal identifying property of being Clinton depends on the existence of the very individual that is alone able to instantiate it — if the property is available to be expressed at all, it is guaranteed to be instantiated (at least in the world of the context of use). The complex identifying property denoted by ‘philosopher Frege’ (viz. $\lambda x[Px \wedge x = f]$) also depends on the existence of the very individual that is alone able to instantiate it, but it isn’t guaranteed to be instantiated by that individual, since it imposes the additional requirement that the individual which instantiates it be a philosopher. (The complex identifying property denoted by the complement in ‘the novelist Frege’, for example, depends on the existence of Frege, but isn’t instantiated by Frege, since he wasn’t a novelist.) Nevertheless, complex identifying properties form a fairly natural class with minimal identifying properties. So if ‘the_p’ resists combining with complements that denote minimal identifying properties, it is again not particularly surprising that it should resist combining with complements that denote identifying properties more generally.

7 Proper Names and Common Nouns

I have suggested that proper names are of type $\langle e, t \rangle$, and that when they occur in an unmodified context, they are preceded by a silent definite determiner. In this respect, I follow a number of other theorists (see the references in n22). My treatment however differs from most in the particular $\langle e, t \rangle$ type denotation I assign to names: whereas I’ve assigned e.g. ‘Frege’ the semantic value $\lambda x[x = f]$, many others follow Burge (1973) in assigning names semantic values like $\lambda x[\text{Called-}$

²⁷Another complication has to do with what one might call “inherited” object-dependence. Consider Hofweber’s example of the property of being Clinton’s mother. This property is dependent on Bill Clinton, but Bill Clinton himself depends for his existence on the existence of his mother. The property then “inherits” a dependence on Clinton’s mother, who is alone able to instantiate the property. Identifying properties are distinguished from such cases by being, in some sense, directly dependent on the existence of the individual that is alone able to instantiate them, rather than inheriting that dependence from a direct dependence on some other individual.

‘Frege’(x)].²⁸ On such a view, names function as *common* nouns that are (at least potentially) *multiply*-satisfiable. By contrast, on the proposal I favor, names denote properties that incorporate an identity requirement, and are, as such, capable of being satisfied by at most one thing. This difference is of course crucial to the explanation I have sought to give for the fact that names like ‘THE Frege’, and identifying definites like ‘the philosopher Frege’, are incapable of functioning predicatively in copular sentences.

Since my proposal departs from a more dominant view, let me say something about why one might be willing to accept the identifying view of names despite its less orthodox nature, though without pretending to an exhaustive treatment of the issue. The ‘called N’ view derives its strongest support from examples like the following, noted by Burge (1973):

- (26) (a) An Alfred Russell joined the club today.
 (b) Some Alfreds are crazy; some are sane.
 (c) Every Alfred I’ve met has been crazy.

As in the case of ‘THE Frege’, these constructions also involve a name preceded by a determiner. But in these cases, it seems quite clear that the name is interpreted as potentially multiply-satisfiable, and likely does have the denotation Burge proposes. Thus, since names at least sometimes function in the ‘called N’ manner, theoretical economy would appear to favor a view on which names quite generally receive these non-identifying properties as their semantic values.

There are, I think, two things to be said about this point. First, it is clear that names have uses that aren’t directly captured by *either* the identifying view *or* by the ‘called N’ view. We can, for instance, say things like the following:

- (27) (a) He’s a real Napoleon.
 (b) That’s so Oakland.

In these cases, the names seem to denote neither identifying properties nor ‘called N’ properties (someone can e.g. be a real Napoleon without being called ‘Napoleon’), but rather seem to denote properties capturing certain characteristic features of the thing that, as we might say, the name in question ordinarily names.²⁹ Being a real Napoleon, for instance, might involve being unusually

²⁸Elbourne (2005) ends up adopting something of an intermediate view, on which e.g. ‘THE Frege’ denotes $\lambda x[\text{Called-Frege}'(x) \wedge x = f]$. Interestingly, Quine at one point adopted a view of names broadly in line with the present proposal, though for rather different reasons. (Grinding “the old ontological axe,” as he once put it, though I’m suspicious of the ontological benefits Quine claims for his proposal.) He e.g. writes that “what suggests itself is that ‘= Pegasus’, ‘= mama’, ‘= Socrates’, etc. be parsed anew as indissoluble general terms, no separate recognition of singular terms ‘Pegasus’, ‘mama’, ‘Socrates’, etc. being needed ... ‘Socrates’ as singular term can be defined as ‘(λx)(x is Socrates)’ on the basis of ‘Socrates’ as general term” (Quine, 1960, §37 and §39; one difference being that Quine construes the t -operator in a Russellian fashion.).

²⁹Payne and Huddleston (2002, §20.4) point out further “secondary uses” of proper names: in addition to called-N uses and characteristic-property uses, there are uses on which the name seems to denote a property of time slices of the named individual (‘This isn’t the Paris I used to know’), a property of products created by the named individual (‘The museum acquired a Rembrandt’), and a property of tokens of a type (‘The review is in yesterday’s *Herald Tribune*’).

short and suffering from a certain psychological complex as a result of this. Burge (1973) brushes off such uses as merely metaphorical, but it isn't clear to me that these uses are more marginal than the ones Burge offers in support of his own proposal. The point, at any rate, is that since the 'called N' view is no more capable of capturing *all* the uses to which names can be put than the identifying view is, the argument from theoretical economy bears less weight than it may initially appear to.

Second, there are data involving identifying constructions that support the view that names sometimes *are* subject to an identifying interpretation rather than a 'called N' interpretation. Consider the identifying definite 'the philosopher Russell'. On the 'called N' view, the complement to the definite article denotes $\lambda x[\text{Philosopher}(x) \wedge \text{Called-}'\text{Russell}'(x)]$. Since there are many philosophers called 'Russell'³⁰, the 'called N' view predicts that the noun phrase 'philosopher Russell' should be multiply satisfiable. Multiply-satisfiable noun phrases are, however, usually capable of being preceded by an indefinite article. And yet (28a) sounds remarkably better than (28b):

- (28) (a) I once met the philosopher Russell.
(b) ??I once met a philosopher Russell.
(c) I once met a philosopher called 'Russell'.

The 'called N' view furthermore gives us no explanation of why (28b) sounds worse than (28c). The identifying view, by contrast, predicts that (28a) should sound acceptable, but that (28b) should sound just as unacceptable as (29b)

- (29) (a) I once met the greatest French soldier.
(b) *I once met a greatest French soldier.

which also involves a complement that is satisfiable by at most one person. This suggests that in contexts like 'philosopher Frege', names function in an identifying manner rather than in the 'called N' manner. Given that superficially bare proper names in postcopular position resist a predicative reading much in the way that identifying descriptions do, this suggests that proper names function in the identifying way in these cases as well, as I've proposed.

As Jackendoff (1984) notes, this observation about indefinites also serves to distinguish identifying descriptions like 'the philosopher Russell' from explicit appositives like 'the philosopher, Russell'. (Descriptions of the latter sort have been called "true," "non-restrictive," or "supplemental appositives," in contrast to identifying or "pseudo-appositive" descriptions; see the references in n8.) In the case of appositives, an indefinite article *is* acceptable:

- (30) I once met a philosopher, Russell, and found him quite amiable.

Another observation due to Jackendoff (1984) is that in appositive constructions, the complement to 'the' can be modified by a superlative, but that such modification is unacceptable in the case of identifying definites:

³⁰PhilPapers lists no fewer than twenty people who have published under this last name.

- (31) (a) I once met the most famous philosopher, Russell, and found him quite amiable.
 (b) *I once met the most famous philosopher Russell and found him quite amiable.

Identifying definites that (at least in English) include an ‘of’ exhibit the same behavior:

- (32) (a) I once visited the city of Shanghai.
 (b) I once visited the most populous city, Shanghai.
 (c) *I once visited the most populous city of Shanghai.³¹

Jackendoff has it exactly right, I think, when he comments that “the function of an appositive is to add information about an *already* specified individual; it can never itself be the specification in virtue of which the NP in which it occurs is definite. ... By contrast, in [definites of the form *the + N + E*], *E* has the function of *uniquely specifying some individual in the category named by N*.”³² It is precisely this fact that the ‘called N’ view fails to respect: since on this view, proper names are multiply satisfiable, the view cannot account for the fact that the proper name in an identifying description has the semantic function of specifying (indeed, I would say, of *identifying*) which *particular* individual among those satisfying the relevant sortal noun the description as a whole denotes.

Again, this is not to say that names do not on occasion function in the manner proposed by the ‘called N’ view. When a name occurs in combination with a non-definite determiner as in (33a) or is directly preceded by an explicit restrictor as in (33b):

- (33) (a) I have met every Russell.
 (b) The most famous Russell wrote ‘On Denoting’.

the name must be interpreted as multiply satisfiable. It is just to say that names don’t always function like this, and in particular, that this is not how they function in the context of identifying definites. In the description ‘the most famous Russell’, the AP ‘most famous’ functions to restrict down to the most famous among the Russells; in the identifying description ‘the philosopher Russell’, by contrast, the noun ‘philosopher’ does not serve (or is not most naturally interpreted as serving) to restrict down to the philosopher among the Russells — rather, the proper name ‘Russell’ serves to identify which particular philosopher the description as a whole denotes.

The same point can be made by observing that descriptions involving adjectival modification exhibit a peculiar ambiguity. Take the following example, cited by Matushansky (2006) and Sloat (1969) and originally due to Chomsky (1965):

³¹Interestingly, one is inclined to try and coerce a halfway acceptable reading of this by construing the description as a postnominal possessive, i.e. by construing it on the model of ‘the most populous neighborhood of Shanghai’. I tend to think this reading is not genuinely available. It would presumably require shifting the sortal ‘city’ into a relational meaning, which, as we observed in our discussion of Barker (2011), doesn’t seem to be possible in the context of identifying definites (in contrast to prenominal possessive constructions). Thanks to an anonymous reviewer for directing me to Barker’s article.

³²Jackendoff (1984, emphasis added). By *E*, Jackendoff means the expression that functions as the proper names do in the identifying definites we have been concerned with here.

(34) The industrious Chinese built the Great Wall.

The definite description ‘the industrious Chinese’ exhibits an ambiguity: it can be understood either as picking out the industrious among Chinese nationals, or as picking out the Chinese (or their “sum”) and placing them in the category of the industrious. This example involves a plural description, but it can be replicated in the singular:

(35) The prolific Russell wrote many books.

Again, the description can intuitively be interpreted as picking out the prolific one among the Russells, or as picking out Bertrand Russell among the category of the prolific. These two readings can, I want to suggest, be understood as arising according to whether or not the proper name functions in an identifying manner. We get the restrictive reading by interpreting the name as having a ‘called N’ meaning, yielding the semantic value given in (36a) for ‘prolific Russell’, and we get the identifying reading by interpreting the name as denoting an identifying property, yielding the semantic value given in (36b) for ‘prolific Russell’:³³

- (36) (a) $\llbracket \text{prolific Russell} \rrbracket = \lambda x [\text{Prolific}(x) \wedge \text{Called-‘Russell’}(x)]$
 (b) $\llbracket \text{prolific Russell} \rrbracket = \lambda x [\text{Prolific}(x) \wedge x = r]$

The ‘called N’ view does not make sense of the felt ambiguity in such cases, since it again doesn’t account for the reading on which the name ‘Russell’ serves to identify which particular individual among the prolific is at issue.

8 Throwing Away the Ladder: a Single Definite Determiner

Let me end by turning to one potential drawback of the two-determiner view, namely, that it requires us to postulate the existence of two semantically distinct definite articles. This feature of the proposal might be thought implausible, because if there really are two definite determiners of the proposed sort, then we might expect this to be phonologically realized in other languages. There aren’t any languages that (to my knowledge) phonologically or morphologically distinguished ‘the_p’ and ‘the_r’, however.³⁴

³³I do not, in this paper, seek to give an account of plural definite descriptions. Having mentioned the ‘industrious Chinese’ example, however, let me nevertheless hazard a suggestion about how the ambiguity might be generated in this case. Plurals are often treated as denoting pluralities or “sums” of individuals. Using ‘ $x \prec xx$ ’ to say that x is one of the xx ’s, we could take it that the two readings arise according to whether the plural ‘Chinese’ is interpreted along the lines of (a) or (b):

- (a) $\llbracket \text{Chinese} \rrbracket = \lambda x [x \prec \text{Chinese}]$
 (b) $\llbracket \text{Chinese} \rrbracket = \lambda x [x = \text{Chinese}]$

On the (a) reading, ‘Chinese’ is multiply satisfiable, and gives rise to the restrictive reading of ‘the industrious Chinese’, whereas on the (b) reading, ‘Chinese’ is uniquely satisfied (by the “plurality” or “sum” of the Chinese), and gives rise to the identifying reading.

³⁴There are languages that distinguish different definite determiners. In fact, as an anonymous reviewer helpfully points out, Swiss German has both a “strong” and a “weak” definite article. See Schwarz (2009) and references therein. This

The objection isn't devastating. It rests on a point Kripke (1977) famously made in relation to the referential/attributive distinction, namely, that if an expression is ambiguous in English, "we would expect the ambiguity to be disambiguated by separate and unrelated words in some other languages." This objection however only carries full force if the ambiguity in question is, in some sense, accidental, as it is in the case of the ambiguity of 'bank' or the different meanings of 'know' (respectively expressed by e.g. 'wissen' and 'kennen' in German).³⁵ Compare, for instance, the ambiguity that is often thought to be involved in the case of connectives like 'or' and 'and'. These connectives can have meanings of type $\langle t, \langle t, t \rangle \rangle$ — as in 'Frege is a philosopher and Russell is too', where 'and' connects two sentences — or meanings of type $\langle \langle e, t \rangle, \langle \langle e, t \rangle, \langle e, t \rangle \rangle \rangle$ — as in 'Frege is a philosopher and a mathematician', where 'and' connects two predicates. In this kind of case, the objection carries little weight: the two meanings of the connectives are systematically related via a simple type-shifting principle, so that once speakers have learned one of the meanings, they can easily derive the other.³⁶ There is therefore comparatively less reason to expect the ambiguity to be phonologically realized crosslinguistically in this case.

Our case of 'the_r' and 'the_p' is somewhat less clear-cut, since there doesn't appear to be a simple type-shifting principle that would generate one meaning from the other. All the same, the meanings of 'the_r' and 'the_p' are clearly not as accidentally related as the various meanings of 'bank'. The Kripkean objection therefore isn't decisive. That having been said, let me nevertheless briefly suggest one way in which we might learn our lessons from the two-determiner proposal while at the same time making do with a single definite determiner.

In Rieppel (2013), I have argued that the kind of type-theoretic framework in which we've been conducting this investigation is ultimately deeply problematic. I there argue that, rather than understand the semantic difference between referential and predicative expressions in terms of a fundamental difference in the *kinds of things* that those expressions denote (*e* type items [individuals] and $\langle e, t \rangle$ type items [properties], respectively), we instead understand that difference in terms of a difference in the *semantic relation* that those expressions bear to their semantic values: whereas predicative expressions *ascribe* things (specifically, properties), referring expressions *refer* to things.³⁷ Granted that proposal, we can then replace the type-theoretic principles for the

contrast doesn't map onto the one we're here interested in, however. As Schwarz observes, the strong article is typically used with various kinds of "incomplete" descriptions whereas the weak article is used with "complete" descriptions where uniqueness is guaranteed by the descriptive material. The weak article is thus used with both possessive descriptions like 'the father of Annette' and identifying descriptions like 'the philosopher Frege', as well as with proper names: "given the connection of the weak article to uniqueness, it comes as no surprise that in cases where a proper name can appear with a definite article, the weak article is used, since proper names by definition pick out a unique individual" (Schwarz, 2009, §2.2.5).

³⁵This point is made by Szabó (2000, n21).

³⁶Compare Heim and Kratzer (1998, §7.2.1 and §7.2.2).

³⁷Briefly, one virtue of the view is that it allows us to grant that predicative expressions like 'happy' and referring expressions like the (identifying, it seems!) definite description 'the property of being happy' have the same semantic value. Where they differ is in the semantic relation they bear to that semantic value: whereas 'happy' ascribes the property of being happy, 'the property of being happy' refers to it. This difference in the semantic relations involved, together with the principles governing the interpretation of copular clauses given below, then lets us account for the truth-conditional difference between pairs like 'Annette is happy' and 'Annette is the property of being happy' (the latter requires that she have the property, the former that she be identical to it). Compare Wright (1998) and Searle (1969), who reach similar

interpretation of equative and predicational clauses (see §3 above) with the following:³⁸

Equative: if $\exists x(\llbracket \alpha \rrbracket_R = x)$ and $\exists x(\llbracket \beta \rrbracket_R = x)$, then $\ulcorner \alpha \text{ is } \beta \urcorner$ is true iff $\llbracket \alpha \rrbracket_R = \llbracket \beta \rrbracket_R$

Predicational: if $\exists x(\llbracket \alpha \rrbracket_R = x)$ and $\exists x(\llbracket \beta \rrbracket_A = x)$, then $\ulcorner \alpha \text{ is } \beta \urcorner$ is true iff $\llbracket \beta \rrbracket_A(\llbracket \alpha \rrbracket_R) = 1$

How will this view let us make do with a single determiner? Simply: instead of distinguishing e.g. the referring description ‘the_r mayor of Oakland’ and the predicative description ‘the_p mayor of Oakland’ by appeal to a difference in the determiner involved, we can say that there is only a *single* definite description ‘the mayor of Oakland’ involving a single determiner, but that this description is in the domain of *both* the reference relation *and* the ascription relation, each relating the description to the appropriate semantic value:

$$\llbracket \text{the mayor of Oakland} \rrbracket_R = \lambda x[\text{M(o)}(x)]$$

$$\llbracket \text{the mayor of Oakland} \rrbracket_A = \lambda x[\text{M(o)}(x)]$$

We can get this result by holding that definite descriptions receive their semantic values in accordance with the following principles:

Referential Interpretation: if $\exists x(\llbracket \alpha \rrbracket_A(x) = 1)$ and $\forall x \forall y(\llbracket \alpha \rrbracket_A(x) = 1 \wedge \llbracket \alpha \rrbracket_A(y) = 1 \rightarrow x = y)$, then $\llbracket \text{the } \alpha \rrbracket_R = \lambda x[\llbracket \alpha \rrbracket_A(x)]$

Ascriptive Interpretation: if $\neg \text{Id}(\llbracket \alpha \rrbracket_A)$ and $\forall x \forall y(\llbracket \alpha \rrbracket_A(x) = 1 \wedge \llbracket \alpha \rrbracket_A(y) = 1 \rightarrow x = y)$, then $\llbracket \text{the } \alpha \rrbracket_A = \lambda x[\llbracket \alpha \rrbracket_A(x)]$

This proposal doesn’t just provide for a predicative interpretation of ‘the mayor of Oakland’, but will also correctly predict that since the properties denoted by e.g. ‘philosopher Frege’ and ‘Joey Ramone’ are identifying, definite descriptions like ‘the philosopher Frege’ and ‘THE Joey Ramone’ cannot function as predicates, i.e. cannot be interpreted ascriptively, meaning that copular sentences like ‘he is the philosopher Frege’ and ‘THE Jeffry Hyman is THE Joey Ramone’ are only capable of receiving an equative reading, as desired. By going this route, we would thus be able to achieve all of our desiderata, but without having to postulate distinct descriptions involving distinct definite determiners.

conclusions, albeit via a slightly different route.

³⁸I use the subscripts ‘A’ and ‘R’ on the double brackets to distinguish the semantic relation of reference from that of ascription. $\exists x[\llbracket \alpha \rrbracket_R = x]$ thus means that α is in the domain of the reference function, i.e. that it refers to something, or is a referring expression; similarly, $\exists x[\llbracket \beta \rrbracket_A = x]$ means that β is in the domain of the ascription function, i.e. that β ascribes something or is an ascriptive (i.e. predicative) expression. $\llbracket \beta \rrbracket_A(\llbracket \alpha \rrbracket_R) = 1$ can be read as saying that $\llbracket \alpha \rrbracket_R$ instantiates $\llbracket \beta \rrbracket_A$, i.e. that the item referred to by α has the property ascribed by β . On this view, predicational and equative copular sentences differ in terms of the semantic relation involved: predicational sentences contain an ascriptive expression in postcopular position, whereas equative sentences contain referring expressions in that position. I should say that I use the terminology of ascription with some reservation: ascription is naturally understood as a three-place relation (x ascribes y to z), whereas I intend as a two-place relation (between an expression and a semantic value). I trust the reader won’t be misled. As in the case of the type-theoretic principles of §3, we needn’t take these principles to be primitive, rather than the result of a deeper analysis, and needn’t deny that there may also be structural differences between predicational and equative sentences.

9 Conclusion

To sum up, I've argued that an adequate treatment of predicative descriptions should meet three desiderata: first, it must allow that descriptions like 'the greatest French soldier' and 'the mayor of Oakland' are capable of functioning predicatively in copular sentences; second, it must account for the fact that identifying definite descriptions pattern with proper names in resisting a predicative reading; and third, it should predict that predicative definite descriptions do not presuppose the existence of something that satisfies them. I argued that the Ident-Type-Shifting proposal overgenerates since it allows us to uniformly generate $\langle e, t \rangle$ type meanings for descriptions, and furthermore fails to account for the lack of an existence presupposition for predicative descriptions. We can, on the other hand, capture the data by appealing to a predicative determiner 'the_p', which lacks an existence presupposition and incorporates a restriction against the kind of "identifying" properties denoted by the complements in identifying descriptions.

A subsidiary line of inquiry in the paper has concerned the semantics of proper names. I argued that the compositional semantics of identifying descriptions provide evidence that proper names have an $\langle e, t \rangle$ type meaning in the context of such constructions, and that this consideration, augmented with data from Swiss German, suggests that proper names outside identifying constructions are preceded by a definite determiner. Granted that the properties denoted by names are of the identifying sort, the two-determiner proposal then also correctly predicts that copular sentences with proper names in postcopular position fail to have a predicational reading. I then concluded by defending the identifying semantics of names against an alternative view inspired by Burge (1973), and suggested a way in which we could retain the positive features of the two-determiner proposal without having to postulate two distinct definite articles.

Let me close by mentioning a more general issue, a full investigation of which lies beyond the scope of this paper, but which our discussion may have a bearing on. The descriptions I've here focused on, both of the identifying and non-identifying sort, have all been "complete" descriptions, for which uniqueness is plausibly guaranteed by the descriptive material alone. We have seen that certain of these complete descriptions — the identifying ones — resemble proper names in having a strongly referential character. I hope to have made it plausible that this referential character has to do with the involvement of identifying properties in the semantics of both names and identifying descriptions.

But there are of course also many instances of incomplete descriptions, where uniqueness is not guaranteed by the descriptive material alone. Examples include discourse-anaphoric descriptions, and descriptions that rely on the salience in the immediate utterance context of some particular individual that satisfies the descriptive material — 'the book', say, uttered in a context where a certain book was previously mentioned or is otherwise salient. One traditional approach to the problem posed by incomplete descriptions has been to appeal to implicit domain restrictions. The foregoing discussion suggests a potential alternative. Consider that, intuitively, incomplete descriptions have a fairly strong referential character as well, since they seem to pick out a specific salient individual. Our predicativity diagnostics are more difficult to apply to incomplete descriptions, in part

because the contextual set-up that's needed to make such descriptions felicitous will often make the diagnostic sentences rather awkward. Nevertheless, it strikes me as plausible that it is often fairly difficult to get a predicative reading for incomplete descriptions like 'the book'. If that's right, and the proposal laid out in this paper is on the right track, it suggests that the semantics of (at least certain) incomplete descriptions may also involve identifying properties — the relevant identifying property would now be supplied by context, as the value of a covert variable, rather than through the overt appearance of a proper name in the description.³⁹

The issues associated with incomplete descriptions are varied and highly complex. As I've said, I won't here attempt to develop the idea, but leave it as a suggestion for future work. I only want to point out that although the arguments in this paper have been focused on problems raised by a fairly narrow class of descriptions, they may well end up having a bearing on a broader range of questions about the semantics of descriptions than those I have here aimed to address.

³⁹Elbourne (2005) defends a proposal broadly along such lines. It isn't clear to me that identifying properties need be involved in all cases of incomplete descriptions. Fara (2001), for example, judges that 'Max isn't the owner' (uttered in the presence of an abandoned car) has a predicational reading. This example involves a relational noun rather than a sortal noun, as in 'the book'. It could be that in such cases, the description is completed by a contextually provided individual (the abandoned car, in Fara's example) that serves as the argument to the relation denoted by the noun, rather than by a contextually provided identifying property (or some other mechanism).

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