Proper Names Properly Situated

Eno Agolli

September 12, 2019

1 Introduction

Philosophers have debated vigorously over the correct semantic analysis of proper names in natural language. One reason might be that settling this issue might give us an insight into the very nature of linguistic meaning. *Millianism* (Mill, 1843; Kripke, 1980) treats names as paradigmatic cases of meaning externalism, the view that meaning is determined by speakers' social and natural environments, rather than their mental states. According to millianism, names are mere tags that speakers attach to individuals in the world via some initial act of baptism; thereafter, names refer to individuals directly, without the mediation of any cognitive contents of speakers. So, proper names mean nothing over and above their referents. Opposed to this line is an internalist conception of meaning, according to which names refer to individuals via cognitive contents. In this spirit, *descriptivism* (Russell, 1905; Searle, 1958; Kneale, 1960) identifies the meaning of a proper name with a definite description.

In what follows, I work within the following formal framework. I start with a model $\mathscr{M}$ = $\langle$D, W, $\{0, 1\}$, F$\rangle$, where D is a non-empty domain of individual entities (to be symbolized by the metavariable "e"), W is a non-empty set of possible worlds, $\{0, 1\}$ is the set of truth-values, and function F : $\mathbf{L} \mapsto \mathrm{D}_x$ maps every expression ϵ of $\mathbf{L}$, our language, to its denotation in some defined domain D_x. I adopt the usual type hierarchy:

D_e := D; D_t := $\{0, 1\}$

If D_σ and D_τ are defined domains, then so it $\mathrm{D}_{\langle\sigma\tau\rangle}$.

Nothing else is a defined domain.

Every ϵ in $\mathbf{L}$ is interpreted by the interpretation function, $[\![\cdot]\!]^{\mathscr{M},g,w}$, as follows:

$$[\![\epsilon]\!]^{\mathscr{M},g,w} = \begin{cases} \mathrm{F}(\epsilon), & \text{otherwise.} \\ \mathrm{g}(\epsilon), & \epsilon \in \text{Var, where g} : \text{Var} \times \mathbb{N} \mapsto \mathrm{D}_e. \end{cases}$$

Here, "Var" is a countably infinite set of variables. So far, I have said nothing about how the interpretation function interprets names–that is the question. Millians say that the denotation of a name N is some individual entity in D:

$[\![\text{N}]\!]^{\mathscr{M},g,w} = \text{e}$

Descriptivists say that the extension of a name is that of a definite description:

$$[\![\text{N}]\!]^{\mathscr{M},g,w} = \begin{cases} \iota\text{x. } [\![\text{P(x)}]\!]^{\mathscr{M},g,w} = 1, & \text{if } |[\![\text{P}]\!]^{\mathscr{M},g,w}| = 1. \\ \text{undefined}, & \text{otherwise.} \end{cases}$$

"P" here may be any relevant predicate, typically denoting a famous property of the bearer of the name or a conjunction of a cluster of properties, or even the meta-linguistic property of bearing the name (cf. Katz, 2001).

Both views face serious problems. Millianism faces Frege's puzzle, viz. inability to derive the apparent difference in truth value that results from embedding different co-referential names under an attitude verb. For example, it seems that 1. and 2. differ in truth-value:

1. Mary believes that Mark Twain is a great writer.
2. Mary believes that Samuel Clemens is a great writer.

Since $[\![\text{Samuel Clemens}]\!]^{\mathscr{M},g,w} = [\![\text{Mark Twain}]\!]^{\mathscr{M},g,w} = \text{Mark Twain}$, we should have:

3. $[\![\text{Mary believes that Mark Twain is a great writer.}]\!]^{\mathscr{M},g,w} = [\![\text{Mary believes that Samuel Clemens is a great writer.}]\!]^{\mathscr{M},g,w}$

But if Mary doesn't know that Mark Twain was Samuel Clemens, then 2. seems false.

On the other hand, descriptivism cannot derive the modal behavior of names. Intuitively, we want to say that 4. is true, while 5. is not:

4. Barack Obama might not have been the bearer of 'Barack Obama'.
5. The bearer of 'Barack Obama' might not have been the bearer of 'Barack Obama'.

If $[\![\text{Barack Obama}]\!]^{\mathscr{M},g,w} = [\![\text{the bearer of 'Barack Obama'}]\!]^{\mathscr{M},g,w}$ according to (one version of) descriptivism, then 4. and 5. should have the same truth-value–but that is not the case. Millians argue that our intuitions tell the following story: while the denotations of definite descriptions vary across worlds, those of names do not; they are, terminology has it, *rigid designators*. Formally, we can put this requirement as follows:

$\forall$ w, w'$\in$ W: $[\![\text{ N }]\!]^{\mathscr{M},g,w} = [\![\text{ N }]\!]^{\mathscr{M},g,w'}$ [1]

[1] This requirement resolves the problem just mentioned, since, though $[\![\text{ Barack Obama }]\!]^{\mathscr{M},g,w} = [\![\text{ the bearer of 'Barack Obama' }]\!]^{\mathscr{M},g,w} = \text{Barack Obama}$ when w = @ (viz. the actual world), it might be that 'might' shifts the world of evaluation to a world w' $\neq$ @, so that: $[\![\text{ Barack Obama }]\!]^{\mathscr{M},g,w'} = \text{Barack Obama}$, by rigidity, but: $[\![\text{ the bearer of 'Barack Obama' }]\!]^{\mathscr{M},g,w'} = \iota\text{x. P(x) in w'} \neq \text{Barack Obama}$.

Solutions have been proposed for these problems. I will not pursue further the problems or their proposed solutions. My reason for briefly presenting these problems is to use them as motivation for moving forward, toward an alternative. This alternative, known as *predicativism*, is also broadly internalist, like descriptivism, but claims that names are not descriptions, but common nouns – that is, predicates. Odd as it might seem at first, predicativism not only avoids problems that both millianism and descriptivism have faced traditionally, but it possesses virtues of its own.

Specifically, in section 2, I will sketch the view more precisely, I will provide a further, independent motivation for it from the syntax of several natural languages, including English. In section 3, I will point out difficulties afflicting predicativism, mainly to do with its syntactic postulations. In sections 4 and 5, I will return to resolve these difficulties, using situation semantics and offering a new syntactic generalization that accommodates all allegedly problematic data. Finally, in section 6, I will attempt some rebuttals against certain alternatives to and criticisms of predicativism.

2 The-virtues of the-predicativism

Names are often used non-referentially in natural language. The single most important virtue of predicativism is that it can explain precisely this datum for free, when both millians and descriptivists alike struggle to accommodate it. In fact, if we attend to the syntactic distribution of proper names in English, it is striking how closely it resembles that of common count nouns. Such non-referential, predicative uses of names, first noted by Sloat (1969), Burge (1973) and Geurts (1997), have long been considered peripheral or idiomatic, but recent work (Elbourne, 2005; Matushansky, 2006, 2008; Izumi, 2013; Gray, 2014; Fara, 2015) has rendered them respectable data points. The resemblance in distribution is shown in Sloat's chart below (improved by Schoubye, 2018):

(MODIFIED) SLOAT CHART	
COMMON COUNT NOUNS	NAMES
A man stopped by	Smith stopped by
Some men stopped by	Some Smiths stopped by
Men must breathe	Smiths must breathe
Every man stopped by	Every Smith stopped by
No man stopped by	No Smith stopped by
Three men stopped by	Three Smiths stopped by
The clever man stopped by	The clever Smith stopped by
The man who is clever stopped by	The Smith who is clever stopped by
A clever man stopped by	A clever Smith stopped by
The men stopped by	The Smiths stopped by
THE president stopped by	THE Obama stopped by
The man stopped by	*** The Smith stopped by**
*** Man stopped by**	Smith stopped by

Given this syntactic kinship, predicativists propose that names just *are* common count nouns. Accordingly, a name N denotes a function from individuals to truth-values:

$[\![\text{N}]\!]^{\mathscr{M},g,w} = \text{F(N)} = f \in \text{D}_{\langle et \rangle}$

What the precise lexical entry for a name predicate should be is a matter of debate.[2] Here, I will follow Fara (Ibid.), who argues that names obey the being-called condition:

$[\![\text{N(x)}]\!]^{\mathscr{M},g,w} = 1$ iff g(x) is called N

This should not strike us as viciously circular, Fara argues, because the second occurrence of the name-variable, N, is used, not mentioned. It is used in a so-called small clause construction, such as those in the italicized portions below:

6. My parents made *me angry*.

7. My parents called *me Eno*.

The idea is that 'called' is akin to the copulative 'made' in that it is not a di-transitive verb relating my parents, myself and the linguistic entity denoted by a quoted version of the name 'Eno', but rather it is a transitive verb relating my parents to a small clause where 'me' denotes a subject, myself, and 'Eno' attributes a property to the subject, much as 'angry' does in 6. If all this is granted, the lexical entry for a name N should be the following:

$[\![\text{N}]\!]^{\mathscr{M},g,w} = \lambda$ x. x is called N in w

This reduction is theoretically elegant. It explains trivially the syntactic similarity between names and common count nouns. More important, the view is parsimonious. Both millians and descriptivists must accommodate predicative uses by means of two lexical entries for names, one for names as ⟨et⟩-type expression and one for names as e-type or ⟨et, e⟩-type expressions, respectively. What is worse, millians and descriptivists must posit some type-shifting mechanism that will explain the semantic connection between referential and predicative names, as shown in the following entailments:

John stopped by.
$\therefore$ A John stopped by.

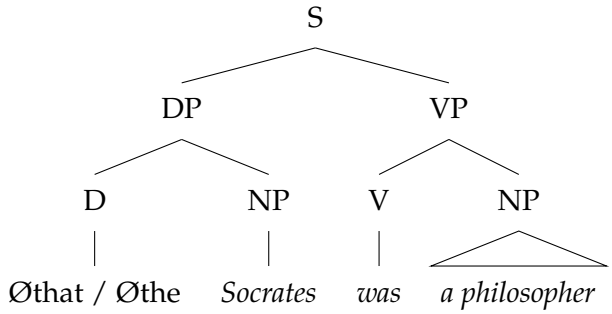
Every John (I know) stopped by.
$\therefore$ John stopped by.

Finally, it tells a simpler, uniform story about the acquisition of proper names: since they are common count nouns, no acquisition mechanism special to names is required.

[2] For instance, Matushansky (2006, 2008) has extensively argued that names are individuated in the lexicon by reference to their phonology, hence the lexical entry should incorporate that reference. Gray (2014, 2017) begs to differ. According to the running example, inspired from Katz (2001), the lexical entry should mention the name in quotation marks, whereas according to Fara (2011, 2015) this is exactly what needs to be avoided.

Naturally, one will balk at bare occurrences of singular names in argument position of a predicate. How are predicativists to explain the fact that names are, as a matter of fact, used referentially in such occurrences? Moreover, Sloat's chart shows that bare singular names in argument position are grammatical, but bare singular common count nouns are not. Is that not enough evidence against predicativism? The answer to the first question is easy: names are used referentially via whatever linguistic construction allows other common nouns to be so used, i.e. via DPs. Here, we have two options: a sentence like 8. below can be analyzed in two ways, involving an unpronounced (a.k.a. null) determiner, either Øthat or Øthe:

8. Socrates was a philosopher.



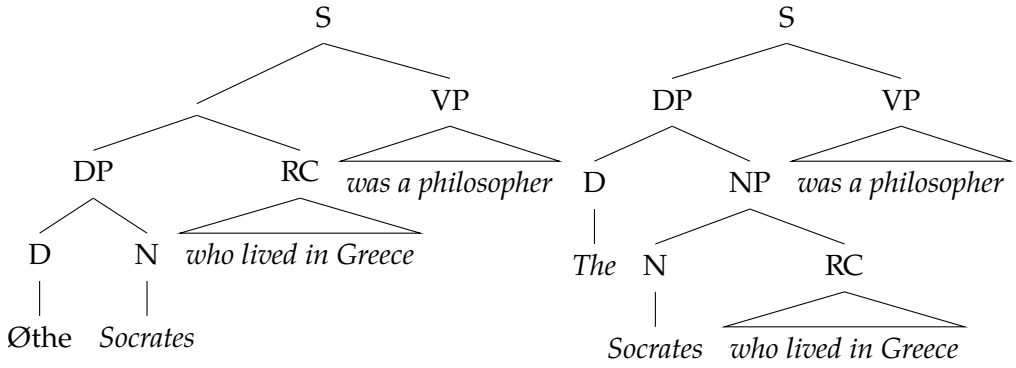
Names can be used to refer by being the predicative component of complex determiner phrases. But which determiner is involved? Positing a null determiner is not really problematic given that both in English and, especially, cross-linguistically (e.g. Mod. Greek, Albanian, Catalan, dialects of German, Pima, Portuguese) names do occur with either determiner, or even both, though the definite article is the most common one. In what follows, I will adopt "Øthe" as the correct analysis of 8., both because of the cross-linguistic evidence and thanks to independent semantic and pragmatic arguments due to Higginbotham (1988) and King (2006) against "Øthat". This is *the-predicativism*.

The-predicativism, of course, owes a principled story about the syntax and phonology of the determiner for, otherwise, one might argue that those cases where there is an overt determiner involve a predicate, whereas bare occurrences involve a referential term. The syntactic data are messy. After a careful review, Fara proposes that modifiers which precede singular names must always appear with an overt article, and her argument for that turns on the conjecture that all Øthe-permissive modifiers are also the-permissive while admitting a non-restrictive interpretation. The tendency seems to be that restrictive modifiers trigger phonological surfacing of the article. Fara's generalization is simple:

Where-Øthe : Unless stressed, the definite article must appear as Øthe when its syntactic sister is a name.

Crucially, this explains the apparent divergence seen in Sloat's chart. The-predicativists

can now claim that, just like common count nouns, singular names never occur bare – they only *seem* to, due to a phonological peculiarity of English. **Where-Øthe** also fares well with the other relevant data.[3] To see how **Where-Øthe** works, consider the two trees below, where the syntactic sister is the name (left) and where the syntactic sister is a noun phrase (right) branching into a name and a relative clause:



3 The-vices of the-predicativism

At this point, one might worry about the two problems that motivated our flight away from millianism and descriptivism: how does the-predicativism deal with Frege's puzzle and how does it ensure rigidity? Given its kinship with descriptivism, we expect that the-predicativism will reply to Frege's puzzle along the same lines: 1. and 2. are equivalent, semantically, to:

9. Mary believes that the person called Mark Twain is a great writer.

10. Mary believes that the person called Samuel Clemens is a great writer.

9. and 10. do differ in truth value since the definite descriptions involved do not (necessarily) pick out the same individual in Mary's belief-worlds, i.e. $\exists$ w' $\in$ R(w) s.t. $[\![\text{Samuel Clemens}]\!]^{\mathscr{M},g,w'} \neq [\![\text{Mark Twain}]\!]^{\mathscr{M},g,w'}$, where R(w) is the set of Mary's belief worlds in w.

It is less straightforward how to ensure rigidity, however, and inability to ensure it is, as such, a potential vice. Yet I claim that there is an elegant solution, though I defer that to the next section, as it will arise as natural by-product of a single, general solution to problems raised in this section. This section then is concerned with purported counterexamples Fara's **Where-Øthe** rule.

[3]Specifically, **Basic Case**: Socrates was a philosopher. **Null-permissive modifiers**: Young Socrates was not a philosopher. **The-permissive modifiers**: The inimitable Socrates was a philosopher. **Null-permissive RCs**: The Socrates who lived in Greece was a philosopher. **The-permissive RCs**: Socrates, who lived in Greece, was a philosopher. **Phonological Stress**: THE Socrates appeared in my dream.

Where-Øthe says that singular names in argument position occur with a definite determiner which is phonologically null. It is important for the-predicativists that sentences with names in argument position in which the definite determiner is overt (except when **Where-Øthe** permits) are ungrammatical: such ungrammaticality *justifies* the postulation of the covert article. But are such sentences really ungrammatical? I will review data against the ungrammaticality of these sentences.

One data point is based on an asymmetry between the following:

11. In every race, the colt won.

12. In every race, John won.

Hawthorne and Manley (2012) observe that 11. has two readings, one in which "the colt" co-varies with "every race" and one in which it does not. However, the co-variation reading is not available for 12. According to the-Predicativism, there is a definite article in the LF of 12. and whether it is pronounced or not should not make a difference as to what readings are available. More important, when the article is pronounced, we do get the co-variation reading. Consider:

13. In every race, the John won.

This is problematic because, even though it yields the co-variation reading, it is a counterexample to **Where-Øthe**: the article does not seem to be stressed and it has a name as its syntactic sister, so it should occur as Øthe.

Another data point of my own, though adapted from Gray (2017), is that an overt definite article can front singular names grammatically under donkey-type anaphora:

14. Every person (I know) who has dated an Alfred ended up hating the Alfred.

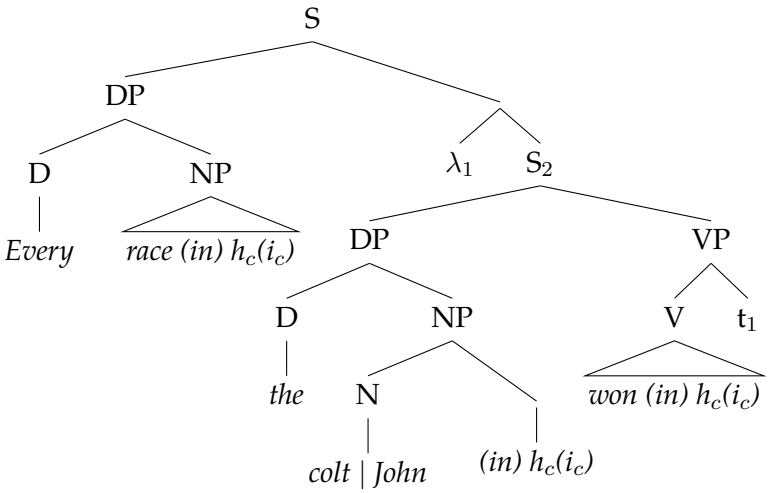
14. strikes us as felicitous and grammatical.[4] And, again, **Where-Øthe** is satisfied since the article is not stressed and its sister is a name, yet the article is not null. Counterexample.

Regarding co-variation cases (12., 13.), Fara posits a bindable variable as part of a nominal restriction on the name, which is what Stanley and Szabó (2000), according to whom natural language quantifiers always come with covert variables which restrict their domains. Specifically, the variable has the form h(i), where "the value of 'i' is an individual provided by the context and the value of 'h' is a function provided by the context that maps objects onto quantifier domains", i.e. $h(\mathrm{i}) = \mathrm{D}_Q \subseteq \mathrm{D}$ (Ibid., p. 253). Inside a nominal phrase, this variable intersects the set of individuals defined by the predicate: if α is a node with daughters β and γ, where $\gamma = h$(i), then we get the compositional rule:

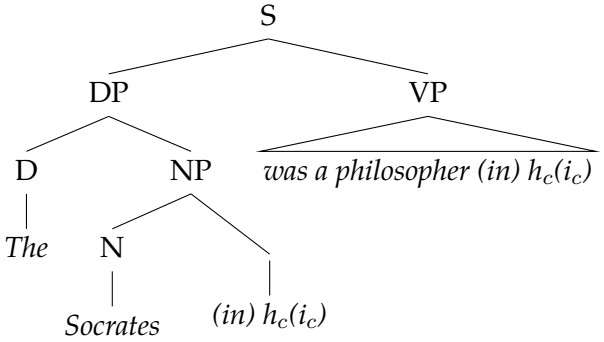
$[\![\alpha]\!]^{\mathscr{M},g,c,w} = \lambda\, \mathrm{x} \in h_c(\mathrm{i}_c) \subseteq \mathrm{D}\, .\, [\![\beta]\!]^{\mathscr{M},g,c,w}(\mathrm{x}) = 1$

[4] Notably, there are contexts where using the article seems genuinely (and felicitously) optional: E.g. "Two Katherines and an Alfred came to the party yesterday. (The) Alfred was a famous philosopher."

What matters for us is that the *h*(i) variable is sprinkled over and intersects all predicates of the sentence, which makes a syntactic difference. Hence, we get this syntactic structure:



This respects **Where-Øthe** because the definite article does not have a name, N, as its sister, but a branching NP, thereby being pronounced. Yet Fara does not discuss in detail how cases without co-variated are to be treated. Schoubye (2017) points out that these domain variables cannot just spring into existence whenever they are needed. They must be part and parcel with the noun in the nominal phrase in all cases, and indeed this is how Stanley and Szabó intend the mechanism to work. But, if so, then we cannot account for basic cases, which, given **Where-Øthe**, would be incorrectly analyzed like 8. below:



To my knowledge, no predicativist has accounted for donkey-type anaphora with names, except for Gray (2017). However, Gray supports *idiosyncratic* predicativism, which postulates that the determiner sister of bare names is neither a demonstrative nor a definite article, but a *sui generis* determiner that functions as a signal of a restriction on the, more or less anaphoric, discourse role of its overt form (which looks like a definite article, but in fact is not). He finds a precedent in the weak (contracted) and strong (uncontracted)

forms that the definite article can assume under prepositions in German. I will bypass this proposal because it is not a *the*-predicativist account and because I do not see how it can deal with quantifier co-variation as in 13.

To sum up, I reviewed the explanatory burdens of the-Predicativism. First, we need an account of how it predicts that bare singular names in argument position are rigid designators. Second, why and how quantifier co-variation readings involving names lead to the phonological surfacing of the definite article. Third, why and how donkey-type anaphora involving names leads to the same result. In the next section, I shoulder these burdens, trying to preserve as much of **Where-Øthe** as possible.

4 Situations to the-rescue

I will start by countenancing situations. I will not attempt to offer a serious metaphysical theory of situations. I want to highlight, however, that our conception of situations can piggyback on that of possible worlds: a situation is just like a possible world, except that it is not complete: not every proposition can be evaluated true or false at a situation. In fact, a situation may be such that only a single proposition is true or false at it. According to the earliest account (Armstrong, 1978), a situation is one or more individuals having one or more properties. A situation s consisting merely in individual x with property P may be extended to a situation s' consisting in x with properties P and Q, or s'' consisting in x and y both of which have P. A possible world w is just a set S of situations which is complete, in that, for every proposition p, there is an s in S such that p is either true or false at s. In what follows, I will try to make this rough picture a little more precise.

We upgrade our $\mathscr{M}$ with situations, so that we get $\mathscr{M}^+ = \langle D, S, \preceq, \{0, 1\}, F\rangle$.

Here, S is the set of all situations and $\preceq$ a reflexive and transitive relation on S such that $s \preceq s'$ iff s' contains all individuals, with all their properties, as in s. The relation $\preceq$ can be read intuitively as "extends" in that if $s \preceq s'$, then s' contains all individuals with all the same properties as s, but perhaps more too. Based on $\preceq$, we can define the following:

- A situation s is *maximal* iff for all s' in S : if $s \preceq s'$, then $s = s'$. We require that $\preceq$ be such that for all s' in S there is s_{max} in S which is maximal and $s \preceq s_{max}$.
- A situation s is *minimal relative to p*, a proposition, iff $F_s(p) = 1$and there is no s' in S such that $F_{s'}(p) = 1$ and $s' \preceq s$. This is to be contrasted with the related, but not pertinent here, notion of an *absolutely minimal* situation s: s is absolutely minimal if there is a unique atomic p such that $F_s(p) = 1$.
- The set of possible worlds W is the set of all s_{max} for all s in S, and hence $W \subseteq S$.
- A proposition p is a subset of S.

Following this, our lexical entries ought to be upgraded accordingly. I will follow a minimally invasive procedure and preserve the standard entries for all predicates. For instance:

$[\![\text{ cat }]\!]^g = \lambda\, \text{x} \in \text{D}_e\, .\, \lambda\, s\, .\, \text{x is a cat in } s$; $[\![\text{ love }]\!]^g = \lambda\, \text{y} \in \text{D}_e .\, \lambda\, \text{x} \in \text{D}_e\, .\, \lambda\, s\, .\, \text{x loves y in } s$

However, quantificational determiners will need special treatment due to the nature of situations. Recall that adding an individual to, or subtracting it from, a situation yields a different situation. Hence, while in standard intensional semantics quantifiers always quantify over the domain of a world they are interpreted in, in situation semantics, the interpretation of quantifiers even within a world will require quantification over situations too, in the meta-language. To see the point, consider the entries most relevant to our purposes (I follow Elbourne (2005) here):

$[\![\text{ every }]\!]^{\mathscr{M},g,w} = \lambda f \in \text{D}_{e,st}\, .\, g \in \text{D}_{e,st}\, .\, \lambda\, s.$ for every individual x: for every minimal s' s.t. $s' \preceq s$ and $f(\text{x})(s') = 1$, there is a minimal s'' s.t. $s' \preceq s'' \preceq s$ and $g(\text{x})(s'') = 1$

$[\![\text{ the }]\!]^{\mathscr{M},g,w} = \lambda f \in \text{D}_{e,st}\, .\, \lambda\, s$: $\exists!\, \text{x}\, f(\text{x})(s) = 1\, .\, \iota\, \text{x}\, f(\text{x})(s) = 1$

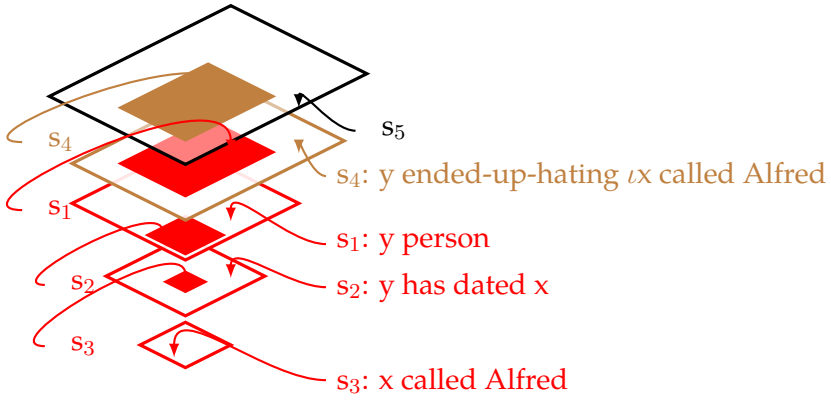
I will start by considering 14., reproduced here:

15. Every person (I know) who has dated an Alfred ended up hating the Alfred.

Though the indefinite occurrence of "Alfred" cannot syntactically bind the definite occurrence, situation semantics can capture the connection between the two occurrences, while deriving the truth-conditions compositionally. Here is the end-result of such a derivation (below, "min" stands for "minimal situation"):

$\lambda\, s_1\, .\, \forall$ y: $\forall$ min s_2: $s_2 \preceq s_1 \wedge$ y is a person in $s_2 \wedge \exists$ x $\exists$ min s_4: $s_4 \preceq s_2 \wedge$ x is called Alfred in s_4, s.t. $\exists$ min s_5: $s_4 \preceq s_5 \preceq s_2$: y has dated x in s_5: $\exists$ min s_3: $s_2 \preceq s_3 \preceq s_1$ and y ended up hating hating in s_3 ι x called Alfred in s_4

The picture below offers a more reader-friendly gloss of these truth-conditions:



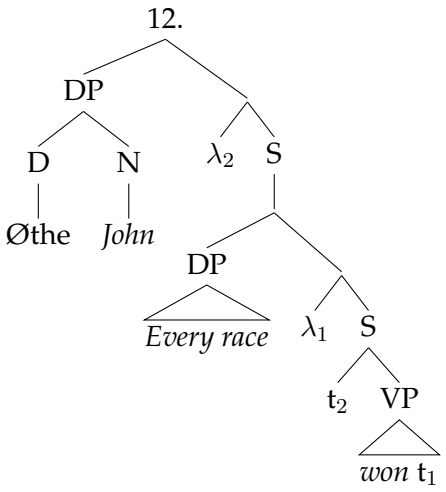
Red rectangles represent situations introduced universally, whereas brown rectangles situations introduced existentially. The intuitive idea is actually simple: for every s_1 which contains a person (I know) and which minimally extends a situation s_2 where an Alfred is dated, there exists an s_4 which minimally extends s_1 and in which the person who dated the Alfred in s_1 is such that he or she ends up hating the Alfred in it (i.e. in s_4). All these minimally extended by **a single, bigger situation, s_5**.

Here is the crux of my thesis. Notice the iota-term in s_4: what guarantees that there is a unique x called Alfred in s_4? It is our situation-based construction: each subsequent situation is a *minimal extension* of a previous one. This guarantees that, at s_4, we have neither added nor lost any Alfreds: for each extending s_4, we have the unique Alfred of the extended s_1. This, I will say, is a *situational satisfaction* of the uniqueness presupposition.

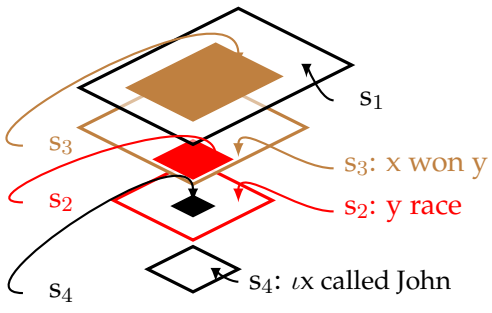
I contrast the situational satisfaction with *contextual satisfaction*. We find this in run-of-the mill utterances, when both speaker and addressee know that there exists, in their context, a unique (salient) thing of the kind referred to. In such cases, I rely on contextual information to make my utterance felicitous, typically modeled as a proposition in the common ground, viz. that there exists a unique (salient) thing of the relevant kind in the context. Canonical occurrences of names are no different. A felicitous utterance of 8. (above) relies on there being in the common ground the proposition that there is a unique (salient) person called John in the context of utterance. But what is in the common ground, as well as what is salient to interlocutors, is a contextual matter and, therefore, whether the presupposition of such utterances is satisfied is a contextual matter too.

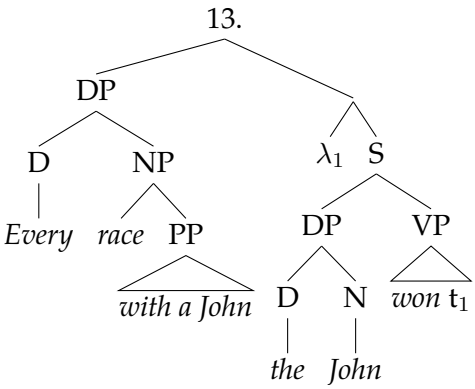
My hypothesis is that the definite article in front of names in English is sensitive to this fact: whether the presupposition is satisfied situationally or contextually, or, more abstractly, semantically or pragmatically. The race-cases 12. and 13. seem to confirm this hypothesis:

12.

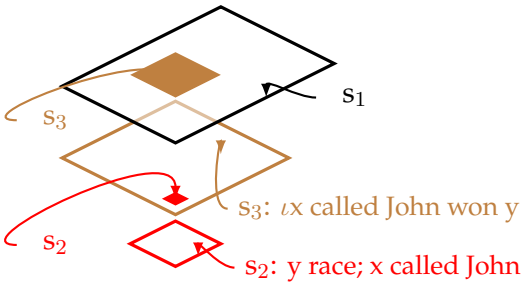


$\lambda\, s_1$. $\exists!$ min $s_4 \preceq s_1$ s.t. ι x called John in s_4 is s.t.
$\forall$ y: $\forall$ min s_2 s.t. $s_4 \preceq s_2 \preceq s_1$ and y is a race in s_2
$\exists$ min s_3 s.t. $s_2 \preceq s_3 \preceq s_1$ and x won y in s_3





$\lambda\, s_1$. ∀ y: ∀ min s_2 s.t. $s_2 \preceq s_1$ and y is a race with and x is called John in s_2 ∃ min s_3 s.t. $s_2 \preceq s_3 \preceq s_1$ and ι x called John in s_3 won y in s_3



I represent 13. with the covert PP "with a John" to explain the different presuppositions carried by the two sentences and also the different ways in which they are satisfied. Notice that 12. and 13. carry different presuppositions, even though the subject DP is the same:

12. Presupposition: There is a unique John in the context of utterance.

13. Presupposition: There is a unique John in each race.

The covert PP explains this divergence: in 13. it is it, the PP, and not the definite itself, as in 12., that triggers the relevant presupposition, which then projects to the matrix level.

Given this, we see exactly what is predicted: in 13., the presupposition is satisfied situationally; in 12., it is satisfied contextually. In 13., we start with multiple s_2 situations each of which consists of just a race y and a John, and we extend each s_2 minimally into an s_3 so that the unique John of each s_2 wins y in each s_3. As with 15., the **single, bigger situation s_1** includes many Johns. On the other hand, **s_1 in 12. includes a unique John**. In fact, we start with **a single situation s_4 consisting in that unique John** and we extend s_1 into multiple situations s_3, where John wins the race in each s_3. No situation is such that it satisfies the uniqueness presupposition of the iota-term in s_4, since s_4 extends no situation–the satisfaction must be contextual, pragmatic. The article seems sensitive to this difference: it surfaces in situational satisfaction, it stays null in contextual satisfaction.

5 Where-Øthe + and rigidity

Are we now in a position to defend **Where-Øthe**? Not yet. Here is where we need to talk about co-variation and binding. Elbourne (2005) has already noted the existence of bound (c-commanded) definite descriptions, such as "the senator" in:

17. Mary talked to no senator before the senator was lobbied.

We can easily construct similar examples with names: e.g., in a context in which Mary – perhaps comically – has found herself in a room with three people called John:

18. Mary talked to no John before the John spoke first.

Here, we are facing a general phenomenon, therefore, of which definites involving names are only a sub-class. Given this, I will adopt the apparatus Elbourne uses to explain the general phenomenon. Of note, this apparatus is consistent with the-predicativism, and indeed allows a uniform semantic and syntactic treatment of bound names, pronouns, and definite descriptions.

Elbourne thinks that the best way to account for such bound occurrences of definites is to posit an bindable index *i* somewhere in the syntactic vicinity of the definite. He concludes that it is best analyzed as a sister to the article: [DP [D the *i*] [NP F]], for a predicate F, which will then yield the following syntactic structure for 17.:

[no senator] [λ2 [Mary talked to [THE 2] before [the 2 senator] was lobbied]][5]

Elbourne thinks that this index is attached to the article at all times, even when there is no binding. In such cases, the value of the index is specified by the variable assignment function *g*, which is determined contextually. This is a principled choice, yet the lexical entry that Elbourne provides for the index complicates the semantics, requiring a non-standard entry for the definite article.[6]

To avoid this inelegant result, and with an eye to rigidity, I propose that indices be analyzed as $\langle\langle$et, e$\rangle$,$\langle$et, e$\rangle\rangle$-type expressions:

$[\![i]\!]^{w,g} = \lambda$ f $\in$ $D_{et,e}$. λ h $\in$ D_{et} : $\exists!$ x s.t. h(x) = 1 in w_c. g(i),

provided $i \in$ dom(g). Here, w_c is the world of the context of utterance. The semantic value of a definite then is an individual of which it is asserted that it is identical to the individual g assigns to the index. That the individual referred to has the property expressed by the predicate in w_c is merely presupposed. To appreciate this point, consider the example:

19. The guy drinking a martini has been looking at you strangely.

20. I am not sure if he is drinking a martini, but yes, I suppose he is a little strange.

Since Donnellan (1966), 19. is known as a referential reading of the definite, in which the only thing the definite contributes an individual to the proposition in 19. My contention is that the individual is all that the definite contributes. The speaker of 20. may accept the

[5]We follow the predicate abstraction rule: for α with daughters β, γ and $\beta = \lambda_i$: $[\![\alpha]\!]^g = \lambda$x. $[\![\gamma]\!]^{i \to x}$.

[6]Elbourne's TRACES AND PRONOUNS rule is: For all *i* and g s.t. $i \in$ dom(g): $[\![i]\!]^g$ = [λx. x = g(*i*)]. Since *i* is now a sister of the article and also an et-type expression, the entry for the article is:

$[\![$ **the** $]\!]^{\mathscr{M},g,w} = \lambda f_{et}.\lambda\, g \in D_{et}$: $\exists!$ x f(x) = g(x) = 1.ι x f(x) = g(x) = 1

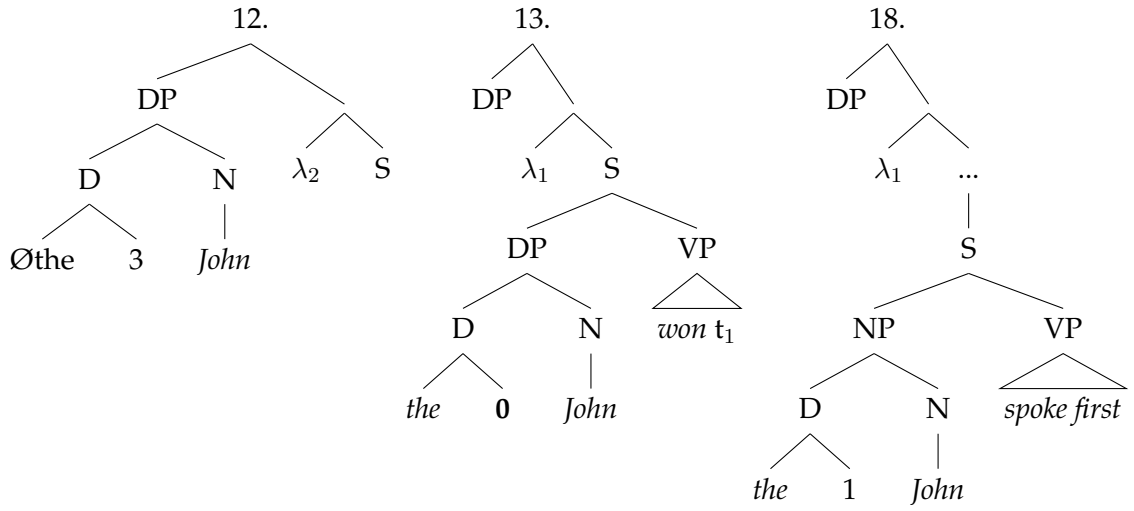
proposition in 19. into the common ground by accommodating the presupposition. So, we seem to get a referential, *de re* reading when the index is free. And, given that no single, specific individual is referred to in cases like 18., a bound index seems to yield an attributive, *de dicto* reading. But there are unbound and non-referential readings of definites, e.g. donkey-type anaphora. To predict this, Elbourne posits a special **0** index which eliminates the role of the variable assignment in determining a referent for the definite. This strikes me as a correct move, but my implementation is different:

$$[\![i]\!]^{w,g} = \begin{cases} \lambda\, f \in D_{et,e} \,.\, \lambda\, h \in D_{et} : \exists!\, x \text{ s.t. } h(x) = 1 \text{ in } w_c.\ g(i), \text{ if } i > \mathbf{0}. \\ \lambda\, f \in D_{et,e} \,.\, \lambda\, h \in D_{et} : \exists!\, x \text{ s.t. } h(x) = 1 \text{ in } w.\ \iota\, y \text{ s.t. } h(y) = 1 \text{ in } w, \text{ if } i = \mathbf{0}. \end{cases}$$

Again, provided that $i \in$ dom(g). This two-fold entry accommodates the data and bodes well with our intuitions. Under so-called attributive uses of definites, we pick out a referrent via the predicative content – we may not, and typically do not, know the which individual the definite fixes. Under referential uses, we typically have a specific referrent in mind, often independently of the definite used to pick it out. Note well that, as desired, referential indices can be bound or free.

A free and positive index is then associated with contextual satisfaction of the presupposition of the definite, while a bound (and positive) or null index is associated with situational satisfaction. The free positive index receives its semantic value from the variable assignment, which is determined pragmatically; a bound index receives its semantic value according to its c-commanding quantifier, that is, semantically, whereas a null index is semantically vacuous, yielding standard semantics for the definite.

We can now re-analyze the syntax of our data points more appropriately:



Finally, we are in a position to vindicate the spirit of **Where-Øthe**:

Where-Øthe + : Unless stressed, the definite article must appear as Øthe when its sister is a free positive index and its aunt a name.

One may here rightly point out that donkey-type anaphoric (hence, **0**-marked) names may also appear with a null article, as in:

21. If a child is christened 'Bambi', Disney will sue Bambi's parents. (Geurts, 1997)
22. Every woman who has a husband called John and a lover called Gerontius takes only Gerontius to the Rare Names Convention. (Elbourne, 2005)

However, **Where-Øthe +** underdetermines how the article interacts with a **0** index. Notice that an overt article *is* grammatical for donkey-type anaphoric names:

23. Every woman who has a husband called John and a lover called Gerontius takes only the Gerontius to the Rare Names Convention.

Hence, **Where-Øthe +** stands, but we may specify it further it as follows:

Where-Øthe + + : Unless stressed, the definite article may appear as Øthe when its sister is a free index and its aunt a name and must appear as Øthe when that index is positive.

I will conclude by discussing rigidity, as promised. The-predicativists predict that the sentences below have the same truth-value, when in fact one is true and the other false:

24. John might not have been called John.
25. The person called John might not have been called John.

Yet my analysis does not face this problem. If, as I suggest, we analyze bare singular names like this: [[Øthe [i]] N], we have two options. When $i > 0$ and free, the semantic value is an individual that has the property of being identical to g(i):

$[\![\text{ [Øthe [}i\text{]] N }]\!]^{c,w,g} = \iota$ y s.t. y = g(i) in w_c, if $\exists!$ x s.t. N(x) = 1 in w_c

But what individual g assigns to i is invariable across worlds because interpreting the index does not depend on the world of evaluation or w_c. Hence, if $i > \mathbf{0}$ and $\exists!$ x s.t. N(x) = 1 w_c:

$[\![\text{ [Øthe [}i\text{]] N }]\!]^{c,w,g} = [\![\text{ [Øthe [}i\text{]] N }]\!]^{c,w',g}$ = g(i), for all w, w′ ∈ W

When, on the other hand, $i = \mathbf{0}$, the value of the definite is whoever bears the name:

$[\![\text{ [Øthe [}i\text{]] N }]\!]^{c,w,g} = \iota$ y N(y) = 1 in w, if $\exists!$ x s.t. N(x) = 1 in w

then, if individual A is called N in w and B is called N in w′, the extension of a **0**-marked definite will vary by world: if $i = \mathbf{0}$ and $\exists!$ x s.t. N(x) = 1 in w and $\exists!$ x s.t. N(x) = 1 in w′,

$[\![\text{ [Øthe [}i\text{]] N }]\!]^{c,w,g} = \iota$ y N(y) = 1 in w = A $\neq [\![\text{ [Øthe [}i\text{]] N }]\!]^{c,w',g} = \iota$ y N(y) = 1 in w′ = B

This predicts the correct truth conditions for 21. and 22. The subject in 21. is marked by a free positive index *i* and its semantic value is simply an individual identical to g(i). This semantic value will remain unchanged in any world. 22., on the other hand, involves a **0**-marked subject–on its *de dicto* reading. The modal, which shifts the world of interpretation, will shift the semantic value of the definite to that unique individual called N in that that world. Crucially, this analysis also predicts correctly that, on a *de re* reading, marked by a free positive index, 22. is true (it has the same truth-conditions as 21.), and that 21. does not have a *de dicto* reading: if it did, according to **Where-Øthe +**, the article would be overt.

In last two sections, I have defended the-predicativism against two syntactic challenges. The initially proposed **Where-Øthe** could not accommodate cases of grammatical overtness of the definite article in front of names. In such cases, the overtness of the article seemed to be caused semantically, since it was associated with a unique reading inaccessible under a null article. I suggested that there are in fact pragmatic, semantic, and syntactic facts that such overtness traces. Semantically and pragmatically, it seems that when the presupposition associated with a name-involving definite description is satisfied contextually, the article is null, whereas in the rarer cases when it is satisfied situationally (e.g. donkey-type anaphora, binding) the article is overt. This difference is reflected syntactically in the index that attaches, as a syntactic sister, to the article. This syntactic postulation, and all relevant data, is captured in an improved generalization, **Where-Øthe ++**. The use of such an index in the syntax has a precedent (Elbourne, 2005), explains binding phenomena, and, crucially, ensures rigidity on the cheap.

6 The referentialists and *the*

In this section, I respond to alternatives to and criticisms of the-predicativism. First, I will consider another purported counterexample to **Where-Øthe** due to Jeshion (2017). I will offer the rudiments of a reply based on my account and I will point out another example showing that Jeshion's millian explanation of the counterexample is not adequate. Second, I will criticize a recent alternative to the-predicativism, namely Schoubye's (2019) *variabilism*, the view that names are variables. I will first sketch out the view and then I will highlight its inability to explain both semantic and syntactic data about names.

The attentive reader may have noticed that my account is silent on whether there can be cases in which a name-involving definite is **0**-marked when there is no donkey-type anaphora. My account seems to allow for this, but it seems that it never happens. If, intuitively, a definite with a null or bound positive index is to be associated with an attributive reading and one with a free positive index with a referential reading, then the issue may be put in Schoubye's (2018) words as follows:

> [If] referential names are covert definite descriptions, it should thus be possible to use these names attributively. For example, suppose that the speaker knows that the uniqueness presupposition associated with 'Øthe Bob' is satisfied in the context and that she asserts 26.:
>
> 26. Bob could have escaped through the window.
>
> There should be a natural reading of 26. where the speaker has no particular individual in mind and "Bob" refers to different individuals across different possible worlds. The problem is that it is very difficult (if possible at all) to understand the sentence in 26. this way [...] the only plausible interpretation of [26.] [...] is as a singular proposition about a specific individual.

Schoubye is right in two ways here. He is right that an attributive reading does not exist for 26. But this is predicted by **Where-Øthe +** and my proposed semantics for indices. Yet Schoubye is also right that is should be possible to have such readings for unbound, non-anaphoric bare singular names too, since all other count-noun-involving definites do receive such readings too. Yet there are such examples, and they have been pointed out, surprisingly, by millians themselves.

Jeshion (2017) cites a story by John Green (2006) about a Colin Singleton, a teen with a predilection for girls called Katherine. After being dumped by his last Katherine:

> [Colin] is desperate for another girlfriend. His friend, Hassan, aware of Colin's Katherine proclivities, hosts a party, [...] Knowing that Hassan has not directly invited any Katherines, Colin initially declines [...] Midway into the party, Hassan calls him, saying, "You'll for sure want to come now. There's someone here you need to meet." Walking in the door and wasting no time, Colin asks:
>
> 27. Where is the Katherine?

Such examples are not isolated exceptions. Jeshion goes to great lengths to provide many more examples where "the count noun category [is] salient without resorting to unusual proclivities but context." (Ibid.) These are purported counterexamples to **Where-Øthe** because the article is not stressed and its syntactic sister is a name.

My response to Jeshion is two-fold. First, it does not seem that 27. is a counterexample to my **Where-Øthe ++**. If such an example is one in which the definite is **0**-marked, as it seems to be since Colin has no particular individual in mind, then **Where-Øthe ++** predicts exactly that the article can be overt, as it is, but also that a null article would also be felicitous and grammatical, as it is. Second, Jeshion's explanation, that, when ''the count noun category [is] salient", speakers use the et-type "Katherine" (and, so, the article) rather than the e-type "Katherine" is inadequate since there are contexts in which the count noun

category *is* salient, yet using the article is infelicitous.

For example, suppose A is teaching a class in which B is one of the students. Both A and B know all students in the class and, of course, their names too. Of note, many of the students in this class happen to have rare or strange names. In this context, the following utterances are felicitous:

28. A: Who do you think has the strangest name in our class?

29. B: No doubt, Andalucia does.

This context is tailor-made for "salience of the count noun category". Yet not only is 29., with its null article, felicitous, but also 30., below, is *in*felicitous, despite such salience:

30. B: # No doubt, the Andalucia does.

In sum, 27. shows that the-predicativism makes no lopsided predictions, since it turns out that there exist **0**-indexed definites outside donkey-type anaphoric environments. 30. shows that the pragmatic millian explanation of the data in terms of salience of the count noun falls short.

Next, I will briefly consider certain inadequacies of the variabilist view. With significant precedents in Fiengo and May (2006), Cumming (2008), Rami (2014), and Schoubye (2016), Schoubye (2019) thinks names are, essentially, pronouns, i.e. e-type expressions (and so I count him as a referentialist, along with millians) with the following lexical entry:

$$[\![\mathrm{N}_i]\!]^{\mathscr{M},g,c,w} = \begin{cases} \mathrm{g(i)}, & \text{if g(i) is called N in } \mathrm{w}_c \\ \text{undefined}, & \text{otherwise} \end{cases}$$

This analysis explains bound uses of names just as my analysis does, since bound singular names in argument position are assigned a bound index.Yet, though variabilism explains bound names, it fails to explain donkey-type anaphoric names. This objection is inspired by Capraru's (2016) response to Cumming (2008), where he compares:

31. Every time a gentleman named 'Ernest' walks into a bar, Ernest tells a joke.

32. Every time a gentleman named 'Ernest' walks into a bar, he tells a joke.

If names were pronouns, 31. should have a reading where the name is anaphoric and one in which it refers to a specific individual, just like the pronoun in 32. But an anaphoric reading seems inaccessible in 31. Worse, it becomes clearly accessible when the article is overt, as in 33. below, a data point that, as far as I can see, variabilism cannot explain:

33. Every time a gentleman named 'Ernest' walks into a bar, the Ernest tells a joke.

I will conclude by pointing out the serious morpho-syntactic difficulties that variabilism faces. First, there are indeed predicative uses of third-person pronouns in English, as in:

34. Is your dog a he or a she?

However, this is exceptionally rare in other languages. Moreover, while names occur grammatically with all determiners, this is not true of pronouns. For instance:

35. # Some/No/The he came by this morning.

Such dissimilarity in syntactic distribution between predicative names and predicative third-person pronouns is a point against variabilism.

A second problem is that, in languages with vocative case-markings, names, like all count nouns, receive a vocative case-marking, whereas third-person pronouns never do. Consider Modern Greek:

36. Marie, ela edo!
    Marios.VOC come.2SG.IMP here
    Marios, come here!

37. # Afti, ela edo!
    She.VOC come.2SG.IMP here
    # She, come here!

Third, no language with morphologically distinct logophoric pronouns has a morphologically distinct logiphoric version of names. A pronoun is logophoric when it is anaphoric on an antecedent, typically when it occurs within the scope of an attitude verb. So, for example, in Ewe (Clements 1975), we see:

38. Kofi be yè-dzo
    say LOG-leave
    Kofi$_i$ said that he$_i$ left.

39. Kofi be e-dzo
    say pro-leave
    Kofi$_i$ said that he/she$_j$ left.'

But no e/yé-type distinction exists in Ewe for names.

Finally, in many languages (e.g. Greek, Albanian, Spanish, Italian, Persian), pronouns lend themselves to clitic redoubling, i.e. the appearance of a syntactic argument in two different positions in a tree, in one of which as a pronoun. However, names never lend themselves to redoubling. Again, consider Modern Greek:

40. Ton agapo ton Gianni.
    Him love.1SG.PRES John.ACC
    I love John.

41. # Ton Gianni agapo ton.
    John.ACC love.1SG.PRES him
    # John I love him.

7 Conclusion

I conclude that the-Predicativism is the best theory of the semantic nature of proper names in natural language. The-predicativism is the view that names are common count nouns

which, in bare singular occurrences in argument position, constitute the predicative component of definite descriptions with a null determiner. I have proposed **Where-Øthe ++** as a response to serious syntactic and semantic challenges to the-predicativism.

The main innovation of the rule is the postulation of a bindable index as a sister of the definite article. This preserves the standard semantics for the definite article as well as the standard predicativist semantics for names. It also delivers the desired results for cases of bound names (and descriptions), donkey-type anaphoric names (and descriptions), attributive uses of names (and descriptions), and, rigidity. The phonological surfacing or suppression of the definite article in English, is explained by deeper semantic and pragmatic facts, which I hope to have made perspicuous by using situation semantics.

Finally, I have pointed out that referentialist analyses of proper names, whether millian or variabilist, need to grapple with semantic and syntactic data points about names, as expounded in section 6, before they can reclaim the correct semantic analysis of names.