

## The Linguistic Approach to Ontology

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What are the prospects for a linguistic approach to ontology? Given that it seems that there are true subject-predicate sentences containing empty names, traditional linguistic approaches to ontology appear to be flawed. I argue that in order to determine what there is we need to determine which sentences ascribe properties (and relations) to objects, and that there does not appear to be any formal criterion for this. This view is then committed to giving an account of what predicates do in sentences when they do not ascribe properties. I sketch an approach to the varieties of predication.

I.

*Introduction.* Following Quine (1948), and more recently Hofweber (2016), I take the central ontological question to be *what is there?* in a sense to be precisified in §3. This contrasts with some recent approaches to ontology that take the central ontological question to be *what is fundamental?* It is, of course, interesting to explore relations of dependence between different sorts of entity, but this endeavour, is an investigation of relations within our ontology, and in order to fully explore these relations we need to determine what our ontology consists of, namely what there is. In any case, there is room for both projects. What I aim to do in this paper is explore the linguistic approach to (meta)ontology which says that we determine what there is by appeal to natural languages.

I will argue that in order to determine what there is we need to determine which sentences ascribe properties (and relations) to objects, and that there does not appear to be any formal

criterion for this. In §§2-3, I outline two linguistic approaches to ontology due to Frege and Hofweber, respectively. I reject such approaches (§4) for the familiar reason that empty names can figure in true sentences. Still there is a kernel of truth in both approaches. The truth that these approaches encapsulate is often thought to be the claim that true subject-predicate sentences are ontologically committing. This thought is appealing, but it is ultimately untenable. Rather, it is true property ascriptions that are ontologically committing. In §§4-5, I pull apart these two claims, defending the latter and rejecting the former. The view I advocate faces two related challenges: what are predicates doing in true subject-predicate sentences that contain empty names, if not ascribing properties? and what accounts for the semantic profile of empty names in the absence of a referent. §5 makes a start on answering these questions. §6 briefly mirrors the previous debates concerning first-order ontology in the second-order case.

This paper is wide-ranging and rests on controversial claims at many points, claims that cannot be defended in detail in the space available. I make no apology for this. No one paper could deal with all of them adequately, but to treat them separately would be to miss the bigger picture. I offer here a general approach to these issues that seeks to save appearances and I provide a possibility proof of meaningful empty names.

## II.

*Fregeanism.* A particularly influential approach to ontology, inspired by Frege (1953), can be characterised as the conjunction of two claims (cf. MacBride 2003, p. 108). First,

*Syntactic Decisiveness:* if an expression exhibits the characteristic syntactic features of a singular term, then the expression in question has the semantic function of referring to a single object.

Following Hofweber (2016, pp. 24-26), let's call expressions that exhibit the relevant syntactic features, *syntactically singular terms*, and expressions that have the function of referring to a single object, whether or not they carry out that function, *semantically singular terms*. *Syntactic Decisiveness* claims that all syntactically singular terms are semantically singular terms.

The second Fregean claim is

*Referential Minimalism*: that a semantically singular term features in a true sentence (of a certain sort) ensures that this expression refers to a single object.<sup>1</sup>

Together these two claims entail that true sentences (of a certain sort)<sup>2</sup> containing syntactically singular terms are ontologically committing, since they commit us to the objects referred to by the syntactically singular terms in these sentences. Relatedly, existential quantification into (syntactically) singular term position – nominal quantification – is also ontologically committing, since such sentences can be true, only if there is an object that is a witness of the quantificational claim.

So, a central task for the Fregean is to determine the true sentences containing syntactically singular terms or an existential nominal quantifier. Once we have done this, our first-order ontological commitments follow.

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<sup>1</sup> I am using 'reference' to pick out a relation between a term and some entities. On the assumption that 'Pegasus' is an empty name, we cannot refer to Pegasus. Nevertheless, there are myths *about* Pegasus, and I can think *about* Pegasus, or so it seems. Here I follow Crane (2013, pp.8-10); see also Hofweber (2016, p.104) and Sainsbury (2018, §1.5).

<sup>2</sup> I shall ignore this qualification for the time being and consider *Referential Minimalism* as an unrestricted claim in §3, before returning to the qualification in §4.

### III.

Hofweber. Hofweber (2016) offers an interesting variant of Fregeanism, arguing that not all syntactically singular terms are semantically singular terms. Hofweber thus departs from Fregeanism by rejecting Syntactic Decisiveness.<sup>3</sup> For example, Hofweber argues that the best explanation of the fact that ‘four’ can occur both as a determiner and in singular term position is that even in singular term position, ‘four’ functions as a (displaced) determiner rather than as a referring term.

Furthermore, just as Hofweber distinguishes between two sorts of syntactically singular term, he also distinguishes between two readings of nominal quantifiers

External quantification: nominal quantifiers range over a domain of objects.

Internal quantification: nominal quantifiers generalize into syntactic position and so have an inferential role reading. The inferential role of the internal existential and universal quantifiers are given by (i)  $\underline{t}$  is  $\underline{F}$  implies something is  $\underline{F}$  and (ii) everything is  $\underline{F}$  implies  $\underline{t}$  is  $\underline{F}$ .<sup>4</sup>

If Hofweber is right about number words, then generalizations about numbers, e.g.

1. Some numbers are larger than ten,

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<sup>3</sup> Hofweber himself doesn’t compare his approach with Fregeanism, but he rejects Syntactic Decisiveness on an intuitive understanding of it. See n8.

<sup>4</sup> Care needs to be taken when specifying which expressions can feature as ‘ $\underline{t}$ ’ in ‘ $\underline{t}$  is  $\underline{F}$ ’. See Forbes (2006, pp.152-153), Hofweber (2016, p.74), and Sainsbury (2018, §2.4).

cannot be accounted for in terms of external quantification because none of the objects that external quantifiers range over are identical to eleven, twelve, and the rest, since these number words are not referring terms. As a result, on Hofweber's picture we need an internal reading of the quantifier to account for (1).

Hofweber (2016: 81) denies that we can make do with only internal quantifiers, since

2. There are some objects that will never be referred to

is not true on an internal reading.<sup>5</sup>

If Hofweber is correct that there are merely syntactically singular terms and that there is an internal reading of nominal quantifiers, then Fregeanism is flawed. Determining which sentences containing syntactically singular terms and nominal quantifiers are true, does not settle which objects we are committed to. Rather, Hofweber argues that we need to examine the semantic function of the singular terms and quantifiers of a discourse to establish which of the following is true of it

*Externalism*: Nominal quantifiers are to be read externally and syntactically singular terms are semantically singular.

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<sup>5</sup> An internal account of (2) can be given in terms of arbitrary extensions of our language, so perhaps we don't need an external reading - see Sainsbury (2018, §2.7). Moreover, prima facie evidence against the polysemy of quantifier expressions comes from the truth of 'some things are unnamed whereas others do not exist', but perhaps Hofweber could say that there is a third reading of the quantifier. Hofweber (2016, chapter 3) offers further arguments for an external reading, but I can't consider them here. Even if there is no external reading of the quantifiers in 'ordinary' English, an external reading may be needed in the metalanguage to specify the truth conditions of the internal reading. I proceed below as if we need both internal and external readings.

Internalism: Nominal quantifiers are to be read internally and syntactically singular terms are not semantically singular.

Externalist discourse is ontologically committing, *a la* Fregeanism, internalist discourse is not so committed *contra* Fregeanism.<sup>6</sup> For Hofweber, then, Fregeanism is an overgeneralization: Fregeanism assumes externalism across the board, but by carefully examining the function of linguistic expressions, Hofweber argues, we can determine that there are internalist discourses, such as our everyday talk about numbers. In order to answer the central ontological question, *what is there?*, in the *externalist* sense, Hofweber argues we need to establish which discourses are externalist (Hofweber 2016, 102, 306).<sup>7</sup>

I agree with Hofweber that we need to investigate the semantic function of expressions of the same syntactic type in order to determine our ontological commitments – Syntactic Decisiveness is a substantive empirical matter.<sup>8</sup> But here I want to leave to one side the question of whether there are merely syntactically singular terms and/or internalist discourses, and explore what follows when we focus instead on semantically singular terms and, as we shall see, predicates.<sup>9</sup> Even given this restriction, however, we can see that Hofweber’s approach to ontology is incorrect because it is incomplete. We apparently need an internal reading of the

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<sup>6</sup> Indeed, Hofweber argues that internalism is committed to the absence of the relevant objects.

<sup>7</sup> As Hofweber (2016, pp.57-58) rightly notes ‘there is’ is not a quantifier, but nevertheless ‘there are Fs’ is an existentially quantified statement which, on the external reading of the quantifier, commits us to Fs. See also Crane (2013, §2.6).

<sup>8</sup> Hofweber relies on an intuitive notion of syntactically singular termhood. The Fregean could defend Syntactic Decisiveness by relying on some other notion of syntactically singular termhood (see Schwartzkopff, 2016 for recent discussion). Indeed, the Fregean could take the data that Hofweber (2016, pp.27-28) takes to show ‘the number of moons of Jupiter’ is not a paradigmatic description, to thereby show that it is not a syntactically singular term. Still, noting this does nothing to diminish Hofweber’s case for claiming that some intuitively singular terms are not semantically singular. My focus below will be on proper names which are paradigmatic syntactically singular terms.

<sup>9</sup> Or at least focus on terms that Hofweber takes to be semantically singular. It is not clear that *fictional* names do have the function of referring rather than the function of pretend reference instead.

nominal quantifier since we generalize from sentences containing empty *semantically* singular terms, as illustrated by

3. Leverrier thought that Vulcan lay between Mercury and the Sun, so there is something Leverrier thought lay between Mercury and the Sun, namely Vulcan.<sup>10</sup>

Of course, there are philosophers who claim that empty names cannot be used in true sentences. But such a position seems counterintuitive in the extreme and I'm not aware of any good argument for the claim; it does not follow from the rejection of descriptivism or Fregean senses, or from the acceptance of object-dependent thought (Sainsbury, 2005a). Just as there can be a picture of a dog, even when there is no dog it is a picture of, there can be thoughts about horses, even when there is no horse it is a thought about. And what is to stop us characterising this thought about a horse as a thought about Pegasus, if the thought has the requisite causal/intentional connection to the myth (see §5)? In what follows, I assume that empty names can figure in true sentences, as seems to be the case.<sup>11</sup>

So, even without considering merely syntactically singular terms, we can see that we need an internal reading of nominal quantifiers.<sup>12</sup> But this shows that Hofweber's Externalism/Internalism distinction is not exhaustive, because in (3) the quantifier is to be read internally, whereas 'Vulcan' is a semantically singular term, albeit one that fails to refer.<sup>13</sup>

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<sup>10</sup> Hofweber (2016, pp. 68-72) claims we need an internal reading because there are empty semantically singular terms, but this alone is insufficient. Rather we need examples such as (3). Hofweber (2016, pp.71-72) also uses unspecific readings of hyperintensional transitives to motivate the internal quantifier: from 'I want a sloop, though no sloop in particular', it follows that there is something I want, namely a sloop, though not of course, that there is a sloop I want. See also Sainsbury (2018, p.42), and §5 below.

<sup>11</sup> Hofweber himself accepts this, but is reluctant to rest weight on particular examples, although see (2016, pp.98-99).

<sup>12</sup> Cf. Crane (2013, chapter 2) and Sainsbury (2018, chapter 2).

<sup>13</sup> Could one deny that 'Vulcan' in (3) is semantically singular? Perhaps, but names are considered paradigmatic singular terms. Moreover, the considerations that Hofweber adduces in favour of merely syntactically singular

Moreover, given that some discourses that use empty names also talk about unnamed objects, we have discourses that use semantically singular terms and have both internal and external readings of the nominal quantifier. For example, whereas (3) requires the quantifier to be read internally, (4) requires that it be read externally.

4. Some planets have not been named.

Hofweber (2016, p.107) does consider discourses that are neither internal nor external but dismisses them as unstable. Hofweber rightly notes that if our syntactically singular terms are not used with the aim of referring, then it would be strange for us to employ quantifiers on their external reading, since there would be no objects corresponding to the singular terms for us to quantify over. Hofweber, however, does not argue against the other ‘unstable’ option where semantically singular terms combine with internal quantifiers. But as we have seen, ordinary discourse is mixed in this way: singular terms are used with the aim of referring, but sometimes this aim is not fulfilled and so an internal reading of the quantifiers is needed to account for the generalizations we make from true sentences containing empty names.

Hofweber might reply as follows. If a speaker intends to refer with ‘N’, then why does she employ the internal reading of the quantifier, rather than the external one? It is not incoherent to restrict oneself to only the internal reading, but by the speaker’s lights, both the internal and the external generalization should follow. So, anyone who restricts themselves to only the internal one is making, by their own lights, an unreasonable restriction. This reply, however, rests on the speaker believing ‘N’ refers and not merely intending to refer with ‘N’. But is it

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terms don’t apply in this case, and Hofweber himself concedes that names such as ‘Vulcan’ are semantically singular.

not incoherent to intend to refer with 'N' and not believe that 'N' refers? No, since when I use the name 'Vulcan' I intend to use it in the way that Leverrier did (cf. Kripke, 1980), which is to refer to a planet, but unlike Leverrier, I know that his intention was thwarted. There is nothing unstable about this.

Moreover, given the ubiquity of empty singular terms, it is unclear whether any discourses are externalist. In order to determine whether a discourse is ontologically committing, it is not sufficient to determine whether its singular terms are *semantically* singular, since some discourses are neither internal nor external. As a result, we must also determine whether these semantically singular terms successfully refer (and/or which quantifiers are to be read externally).<sup>14</sup> That is, *Referential Minimalism*, as an unrestricted claim, appears to be false, regardless of whether *Syntactic Decisiveness* is true. And because of this we should reject that either Fregeanism or Hofweber provide fully general answers. Nevertheless, we can agree with the Fregean and Hofweber that *what is there?*, when this is read externally, remains the central ontological question.

#### IV.

*Property Ascriptions.* Given the falsity of unrestricted *Referential Minimalism* how should we determine whether a semantically singular term refers? Is there a linguistic test for whether such a term refers? Fregeanism sometimes limits the scope of *Referential Minimalism* to subject-predicate sentences, which given *Syntactic Decisiveness* yields

*The First-Order Existence Principle (IEP):*  $a \text{ is } F \rightarrow \exists x \underline{x=a}$

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<sup>14</sup> Hofweber (2017, p. 490) agrees that whether a putative empty name such as 'santa' is an empty semantically singular term depends both on the claim that 'santa' is semantically singular and also on the claim that it fails to refer. I agree with Hofweber that whilst the former is a linguistic question, the latter is a non-linguistic question.

where 'a is F' is a sentence formed by combining a name with a verb phrase.<sup>15</sup>

But why should we accept *IEP* and *Referential Minimalism* even so circumscribed? Classical logic would license *IEP*, but given truths containing empty names, the external quantifier,  $(\exists x)$ , is free, not classical. We can, however, discern two arguments in favour of *IEP* in Williamson (2013). First, Williamson (2013: 151-152) asks how does a putatively meaningful empty name differ in its contribution to the truth conditions of subject-predicate sentences from a meaningless empty name? Let us accept that there are meaningless names (or pseudo-names) such as the name hereby introduced, 'Qwerty'. In virtue of what can 'Pegasus' feature in true (subject-predicate) sentences whereas 'Qwerty' cannot? We might add, in virtue of what do different meaningful empty names combine with the same predicate to produce different truth-values, as many of those who reject *IEP* claim? Those who reject *IEP* owe us a hyperintensional semantics for names that allows them to draw the distinctions they make. I'll return to this in the next section.

A second line of argument to be found in Williamson for *IEP* starts with the rhetorical question '[h]ow could a thing be propertied were there no such thing to be propertied?' (2013: 148).<sup>16</sup>

But note that this question supports not *IEP*, but

*Property Ascription IEP*: if 'a is F' is a property ascription, then a is F  $\rightarrow \exists x$  a=x.

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<sup>15</sup> *IEP* and related principles below are formulated in terms of monadic predicates, but more generally the issue is whether true sentences with n-place predicates entail that the singular terms in those sentences refer.

<sup>16</sup> Williamson asks this question in a discussion of related principle, but it is illuminating to ask it here.

We only get from *Property Ascription IEP* to *IEP*, if we assume, that true subject-predicate sentences ascribe properties to objects. This assumption is true if we accept a Fregean picture of predicates

*Syntactic Decisiveness\**: if an expression exhibits the characteristic syntactic features of a predicate, then the expression in question has the semantic function of ascribing a property to the object referred to by the singular term it is combined with (when it combines with a singular term).<sup>17</sup>

Let's call expressions that exhibit the syntactic features of a predicate, *syntactic predicates*, and expressions that have the function of ascribing properties, whether or not they carry out that function, *semantic predicates*. *Syntactic Decisiveness\** claims that all syntactic predicates are semantic predicates.

I will not here provide a criterion of syntactic predicatehood, but I do not assume that all verb phrases are syntactic predicates. Following Higgins (1973), linguists usually distinguish between different copula clauses. Here are three: predicative, as in 'Donald is orange'; equative as in 'Donald is Trump'; and specificational as in 'the thing/what I don't like about Donald is his hair'. We could limit syntactic predicates to predicational copula clauses and non-copula clauses however these are delimited (see Mikkelsen, 2011 and Rieppel, 2016: for discussion). As Mikkelsen puts it

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<sup>17</sup> Predicates also form sentences when combined with quantified noun phrases, but in such cases they are not always ascribing a property to something, even if they are picking out a property. We could distinguish between *ascription* as dyadic relation between a predicate and a property, and *ascription to* as a triadic relation between a predicate, a property and an object. See Rieppel (2016, §5.2)

The intuition about predicational [copula] clauses is that they predicate a property of the subject referent. In this respect they are like non-copular clauses [e.g. Donald cheats] ... Intuitively, the other ... kinds of copular clauses do not involve predication. Equatives, as the name suggests, equate the referents of the two expressions flanking the copula. Neither is predicated of the other. Specificational clauses involve valuing of a variable: the subject expression sets up a variable ... and the post-copular expression provides the value for that variable. Mikkelsen (2011, p.1807).<sup>18</sup>

Syntactic Decisiveness\* bridges the gap between Property Ascription IEP and a version of IEP limited to syntactic predicates and so we have our linguistic test for reference and with it a Fregean approach to ontology. Views like Syntactic Decisiveness\* are commonplace (e.g. see Mikkelsen above and also Rieppel, 2016, p.667), but why should we accept Syntactic Decisiveness\*? I think this is a key question in helping us determine our first-order ontology, and this can be brought out by noting the following inconsistent triad (in what follows ‘predicate’ means syntactic predicate):

5. Subject-predicate sentences express property ascriptions (Syntactic Decisiveness\*).
6. There are true subject-predicate sentences containing empty names (denial of IEP).
7. A property ascription cannot be true, if there is no object ascribed the property (Property Ascription IEP).

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<sup>18</sup> Even focusing only on predicational copula clauses, we have to be careful, since ‘is so called because of his size’ is a predicational copula, but ‘someone is so called because of his size’ appears not to make sense. But is not the notion of a predicate tied as much to quantification as to combining with singular terms? Of course, if we interpret the ‘so called’ in context as meaning, for example, called Giordano, then the problem disappears.

Only someone in the grip of a philosophical theory would deny (6), maintaining IEP, given the truth of singular negative existentials such as

8. Pegasus does not exist.

So IEP is to be rejected, meaning that either Property Ascription IEP or Syntactic Decisiveness\* has to go.

I share Williamson's puzzlement as to how (7) could be false: very plausibly a property ascription is true iff there is a referent of the singular term and this has the property ascribed by the predicate, otherwise what is it to truly ascribe a property to an object? Crane (2013, §3.4) maintains that property ascriptions can be true even when there is no thing to be propertied. This is because Crane thinks that property talk is pleonastic and accepts the inference from (i) Vladimir is F to (ii) there is a property Vladimir has, namely F-ness. But the inference from (i) to (ii) is prima facie invalid – where does talk of properties appear from? What follows from (i) is (iii) There is something Vladimir is. (And we can add, namely F, as long as we are careful to interpret F in cases like 'so-called because of his size' see n18.). In any case, Williamson and I could instead put the point in terms of describing objects rather than ascribing properties.

What has to go, is Syntactic Decisiveness\*: true subject-predicate sentences containing empty singular terms are not property ascriptions (or true descriptions of objects). (Similarly, true sentences containing transitive verbs and empty names are not relation ascriptions, see below). This allows us to answer Williamson's question satisfactorily; a property ascription can't be

true if there is no thing to be propertied, but counterexamples to IEP are not property ascriptions.

If we reject IEP, as suggested here, do we have a linguistic test for when a singular term refers? Negative free logicians, such as Burge and Sainsbury, reject IEP in full generality, instead claiming that simple sentences are ontologically committing. But what is a simple sentence and why think such sentences are committing? Sainsbury (2005b, p.67n2) defines a simple sentence as “one consisting of a non-complex n-place predicate concatenated with n referring expressions” (see also Burge 1974, pp. 312-313).<sup>19</sup> The idea, then, is that the predicates in any counterexamples to IEP contain complex predicates.<sup>20</sup>

But why think simple sentences are ontologically committing? Well, because they are property ascriptions: “a true simple predication refers to something and predicates a property which that object possesses (the idea extends to any n-ary simple sentence)” (Sainsbury 2005a, p.66), that is, a true n-ary simple sentence refers to some things and predicates a relation that holds between those things See also Burge (1974: 313). The idea, then, must be that true subject-predicate sentences containing empty names are not property ascriptions.

The approach taken here, then, is similar to that of Burge and Sainsbury, but I dispense with the notion of a simple sentence. First, if simple sentences are ontologically committing in virtue

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<sup>19</sup> Evans (1982, p.49) formulates a similar claim in terms of atomic sentences, but Evans’ formulation rules out sentences containing complex referring terms, but these may be ontologically committing too, and Sainsbury wants to capture this. As we shall see, I want to allow for (some) complex predicates too.

<sup>20</sup> Elsewhere, (Sainsbury 2005a, p.66n9) simple sentences are not restricted to sentences containing non-complex predicates. On this reading, Sainsbury’s claim is *prima facie* equivalent to IEP and hence false. However, Sainsbury himself accepts that there are counterexamples to IEP, so must think that the relevant VPs are not predicates. Indeed, Sainsbury (2005a, p.69) claims that ‘is not identical to’ is not a predicate. I think Sainsbury has in mind the notion of a predicate at the level of logical form rather than surface grammatical form (see §5 below). Presumably, then, Sainsbury thinks non-complex predicates are logical predicates, and so his 2005a and 2005b views are equivalent.

of being property ascriptions, we can simply frame the discussion directly in terms of property ascriptions. The notion of a simple sentence is explanatorily redundant. Things would be different, if simple sentences corresponded to surface grammatical forms, but they do not.<sup>21</sup> As Crane puts it

The mere idea of a sentence free of truth-functional operators, and of ‘intensional’ operators ... is clear enough, but ... these restrictions do not on their own determine a kind of expression which always determines a falsehood when combined with a non-referring term. There does not seem to be a syntactic or formal criterion of simplicity (2013, p.55).

To see this, consider sentences containing hyperintensional transitive verbs and empty names:

9. Leverrier is thinking about Vulcan.

On an intuitive notion of simplicity, (9) is a two-place simple sentence containing an empty name and so should be false by Sainsbury’s (2005a) lights, but it seems as though it could be true.<sup>22</sup> Moreover, there appear to be even one-place grammatically simple sentences containing empty names that are true: Crane (2013, p.55) offers ‘Pegasus is mythical’ and ‘Holmes is fictional’ to which we might add ‘Vulcan is contemplated/thought about’.

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<sup>21</sup> Burge and Sainsbury in effect concede this: we should “count an expression an atomic predicate in natural language only if one is prepared to count simple singular sentences containing it untrue whenever they also contain non-denoting singular term” (Burge, 1974, p.313); and “what is to count as a simple sentence is to be moulded by the theory” (Sainsbury, 2005a, p.69), see also n20.

<sup>22</sup> Sainsbury’s (2018) view allows for the truth of (9).

Second, there are subject-predicate sentences containing complex predicates that are ontologically committing, since they are property ascriptions:

10. Eliud is extremely fast.

11. Eliud is slim and fast.

Better, then, to jettison the notion of a simple sentence and theorise instead in terms of property ascriptions directly.

Pulling apart subject-predicate sentences from property ascriptions allows us to give an illuminating gloss of the free logician's distinction between existence-entailing predicates and predicates that are not existence-entailing; existence-entailing predicates have as their function the ascription of properties, whereas predicates that do not entail existence do not have this function. This, then, raises the question of what do predicates that are not existence-entailing do, if they do not ascribe properties? As well as answering this question, those who reject *IEP* face Williamson's challenge to provide a hyperintensional semantics for empty names. As we shall see, these two issues are interrelated.<sup>23</sup>

V.

*The Varieties of Predication.* Property Ascription IEP rules out true property ascriptions involving empty names. This is the truth in negative free logic. But there appear to be true subject-predicate sentences containing empty names, so, what are the predicates doing in such sentences, if not ascribing properties? There is no reason to expect a uniform answer to this

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<sup>23</sup> I am sympathetic to a lot of Crane's (2013). But as I argue (Walters, 2015), Crane's metaphysical reduction of truths about the non-existent leaves untouched these residual semantic challenges.

question. If some predicates ascribe properties and others do not, there may well be further divisions among the predicates that do not ascribe properties. Indeed, that is what I shall suggest is the case.

There are at least two sorts of existence-entailing predicate. First, there are predicates that succeed in ascribing properties, such as ‘is red’ and ‘runs’. Second, there are predicates that have the semantic function of ascribing properties, but which fail to do so, because there is no property in question.<sup>24</sup> Such predicates are akin to empty names, and plausible examples include ‘is a unicorn’, and ‘is a Hobbit’.<sup>25</sup> Of course, there are no unicorns or Hobbits, and so there are no true subject-predicate sentences of the form ‘*n* is a unicorn’ and so the corresponding instance of *IEP* is vacuously true.<sup>26</sup>

The more interesting case is that of predicates that do not entail existence. On the view advocated here, there are at least three sorts of subject-predicate truth containing empty names: singular negative existentials, notional readings of hyperintensional transitives, and monadic claims that characterise a representation.<sup>27</sup> Let us take these in turn.

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<sup>24</sup> I am not endorsing an Aristotelian view of properties, since properties can be tethered to the concrete world in ways other than by being instantiated - see (Stalnaker 2012, p.133 n3) and Walters (2013, pp.476-477) for discussion. Rather, ‘is a unicorn’ fails to ascribe a property is motivated by claim that in the absence of unicorns, there is no condition something would have to meet to be a unicorn: no qualitative condition is sufficient and there is no relevant non-qualitative condition (cf. Kripke 1980, p.24). An alternative would be to say that predicates such as ‘is a unicorn’ picks out a vacuous property, a property true of nothing. I prefer the Kripkean picture.

<sup>25</sup> Perhaps the function of ‘is a Hobbit’ is not to ascribe a property, but to pretend to ascribe one.

<sup>26</sup> Are there predicates that are existence-entailing, but which do not function to ascribe properties? Perhaps ‘Eliud is known to be fast’ is making a knowledge claim about a property ascription, rather than ascribing a complex property.

<sup>27</sup> Cf. Crane (2013, §1.4). To these Crane (2013, p.165) adds identity claims of the form  $\underline{a}=\underline{a}$ , but his reason for doing so is not convincing (see Walters 2015, p.234). Hofweber (2016, pp.98-99) allows some identity claims of the form  $\underline{a}=\underline{b}$  to be true when both terms are empty, and his semantics for the internal quantifier turns on this, but not essentially so. We can account both for our intuitions of sameness and the semantics of the internal quantifier by appealing to the co-identification relation between empty names rather than identity. See Salis (2013) for discussion.

What role does ‘does not exist’ play, if not to ascribe the property of nonexistence to an object? Negative free logicians, such as Burge (1974) and Sainsbury (2005a, §6.1), suggest that rather than ascribing a property of nonexistence ‘does not exist’ denies the ascription of the property of existence.<sup>28</sup> So, at the level of logical form

12. Holmes does not exist

is treated as (13) rather than (14), with ‘not’ taking wide scope

13. Not [ $\lambda x.x$  exists (Holmes)]

14.  $\lambda x.x$  not exists (Holmes).

This treatment vindicates the thought attributed to Sainsbury (n20) that some grammatical predicates are not predicates at the level of logical form.

A second type of true predication involving empty names contain hyperintensional transitive verbs such as

15. Leverrier is thinking about Vulcan

16. Oedipus seeks Jocasta

17. Corin admires Hera.

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<sup>28</sup> See also Crane (2013, p.74). What about sentences such as ‘Holmes is not detective’? If this sentence is true, then this too is a denial of a property ascription. If it is false, then it may be a property ascription.

Those who take (15)-(17) to be true sentences containing empty names, have to deny that these sentences ascribe relations between the subject and object of the verb; verbs in such sentences have a notional rather than relational reading. This is independently plausible, since some such verbs allow for unspecific readings - I may be seeking a policeman over 8ft without there being a particular policeman that I am seeking, indeed without there being any policemen over 8ft at all, and so have to be read notionally. Similarly, 'that is a picture of a dog' can be true even when there is no dog it is a picture of. Goodman (1976) distinguishes between pictures of dogs, pictures that stand in the requisite intentional-causal relationship to a particular dog, and dog-pictures, pictures that are classified a certain way. Building on this proposal, Forbes (2006) analyses the notional readings of hyperintensional transitive verbs as characterizing some entity, usually an event or a state, but it could be a painting or other representation. For instance, (15) is given the following semantics

18. There is an event, *e*, such that *e* is a thinking, Leverrier is the agent of *e*, and *e* is characterised by [[Vulcan]].

Forbes himself appears to think that there are no meaningful empty names, and instead appeals to an ontology of abstract fictional and mythical objects. Such an ontology is not implausible, and indeed I endorse it. But what semantic work such an ontology does is a further question. That Matt Groening drew a picture of an abstract object when he first drew Homer Simpson seems incredible. Rather, Groening drew a picture that was not relationally of anything and thereby created a fictional character.<sup>29</sup> In any case, an account like Forbes's can accommodate empty names if we assign them appropriate semantic values. Of course, such semantic values will have to be hyperintensional in the sense that a Homer-picture need not be a Holmes-

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<sup>29</sup> See my (MS) for the view I have in mind.

picture, even though neither Homer nor Holmes exist (as a matter of necessity). In order to account for failures of substitution more generally, Forbes appeals to modes of presentation or guises, and these can be co-opted by those who think there are true dyadic predications containing empty names, such as (15)-(17), to account for the hyperintensionality of characterization.<sup>30</sup>

It is not clear, however, how to extend the above treatment to monadic representation-dependent truths such as

19. Holmes is a fictional detective.

20. Holmes is fictional.

since there is no obvious entity to be characterized.

The semantics of ‘fictional’ is complicated since the term plausibly has many meanings. For instance, it seems that there is a reading of ‘fictional’ as in (19), that allows for real things to be fictional *F*s – 221b Baker Street is the fictional abode of Holmes – and so marks the contrast between what is really true and what is fictionally true. This might encourage us to believe that (19) can be treated as making a comment on a property ascription, namely that it is fictional that Holmes is a detective. I think this approach is implausible, but establishing this would take

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<sup>30</sup> One might worry that it “is really not clear how there can be a mode of presentation associated with a term when there is no object to be presented. ... it certainly does not appear that there can be a way of thinking about something unless there is something to be thought about in that way” Evans (1982, p.22). But it looks like Evans is simply wrong about this – we can think about Vulcan even though, externally speaking, there is no Vulcan. If ‘presentation’ expresses a relation, then let us appeal to modes of representation instead, since ‘representation’ is not relational.

us too far afield, so I will concentrate on (20) instead, but the approach below can be extended to treat (19) as well.<sup>31</sup>

An account of (20) cannot be given by appealing to a sentential operator, for what sentence would it operate on? ‘fictional’ in (20) does not mark the contrast between what is really true and what is fictionally true, rather it marks the distinction between the nonexistent entities of fiction on the one hand, and existents and other nonexistents on the other. We can see this, since although Napoleon appears in *War and Peace*, he is not fictional. Relatedly,

21. Some of the characters in *War and Peace* are real, but most are fictional.

requires the fictional nonexistent/other reading not the fictionally true/really true reading.

Further, the use of ‘fictional’ to mark the fictional/really distinction is a plain nonsubsecutive adjective in the sense that a fictional *F* may or may not be an *F* – Holmes is not (really) a detective, but Napoleon is (really) an Emperor. But such adjectives need to be supplemented with a noun phrase and cannot stand alone as in (20). That is, it makes no sense to say that Lee is potential, alleged, arguable, likely, predicted, putative, or disputed, even though Lee could be a potential, alleged, arguable, likely, predicted, putative, or disputed winner.<sup>32</sup>

So, if ‘is fictional’ in (20) isn’t ascribing a property to its subject or being used to say something about a property ascription, what is it doing when it marks the fictional nonexistent/other

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<sup>31</sup> My discussion here is indebted to Everett’s (2013, §3.4) illuminating discussion of ‘fictional’, albeit one couched in a fictionalist framework that I reject.

<sup>32</sup> There are putative counterexamples to this claim, but they all invoke a shift in meaning. For example, I can be a believed winner and I can be believed, but what is believed in the former case is something about me, whereas what is believed in the latter case is me (and the things I say).

distinction? I propose that 'is fictional' is used to characterise the use of a name or other term that can be used to refer. In particular, I propose the following truth conditions:

22. N is fictional iff (i) N does not exist, and either (ii) 'N' was introduced in fictionalising and 'N' does not co-identify with any term introduced outside of a fiction, prior to 'N''s introduction or 'N' co-identifies with a term, 'T', previously introduced in fictionalising where 'T' does not co-identify with any term introduced outside of a fiction, prior to 'T''s introduction,

where co-identification is the relation that co-referring names and some pairs of empty names such as 'Holmes' and 'Sherlock', stand in.

Let me elaborate on (22). Either (i) or (ii) is sufficient to get the result that Napoleon is not fictional, since Napoleon does exist and this use of 'Napoleon' was not introduced in a fictionalising context.<sup>33</sup> We need both conditions, however, since (ii) alone does not rule out previously unnamed objects counting as fictional, and (i) alone is not sufficient as without (ii) Vulcan would be fictional. Also, including (i) has the welcome consequence that if N is fictional, N does not exist. The complexity of (ii) is accounted for by the following two cases. First, suppose I write a novel concerning Vulcan, but that I use the name 'Hephaestus' instead of 'Vulcan'. Should we say that Hephaestus is a fictional character. My inclination is to say not.<sup>34</sup> If that's right, then introducing a non-referring name, 'N', in a fiction is not sufficient for N to be fictional – 'N' must not co-identify with any earlier empty but non-fictional term. The

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<sup>33</sup> I am here avoiding the individuation of names and simply assuming that the uses of 'Napoleon' to refer to Bonapart are different from the uses of 'Napoleon' employed by Orwell in *Animal Farm*, regardless of whether these are the same name.

<sup>34</sup> What about Marvel's Thor, is he not a fictional superhero? According to Wikipedia, Marvel's Thor is based on the mythological figure.

need for (iii) is given by the opposite sort of case, where we introduce a new term for a fictional nonexistent outside of a fictionalising context, as perhaps with ‘Frankenstein’s Monster’.<sup>35</sup> I think (22) is correct for the reasons given, but something like (22) must be right, and so we can amend (22) accordingly, if you disagree with my judgements on particular cases. Similar treatments can be given for ‘is mythical’ and ‘is imaginary’.

To show that (22) is semantically adequate, and to start to address the challenges left at the end of §5, I provide a toy compositional semantics for a fragment of English. This rests on two ideas. First, Rami (2020) shows that there is a semantics for empty names that is adequate up to intensional contexts that identifies the semantic value of a name with the singleton of its referent, if it has one, and otherwise with the empty set.<sup>36</sup> That is,  $[[\underline{N}]] = \{\underline{N}\}$ . This is not to say that ‘ $\underline{N}$ ’ refers to  $\{\underline{N}\}$ ; it does not. ‘ $\underline{N}$ ’ refers to  $\underline{N}$ , if  $\underline{N}$  exists, and otherwise does not refer to anything. Rather, we depart from Frege’s identification of the semantic value of a name with its referent.<sup>37</sup>

In order to account for hyperintensional contexts such as (20) we need to enrich this picture. So, second, I suggest that we associate a name not with a single semantic value, but with (for our purposes) two semantic values, so that  $[[\underline{N}]]$  are  $\{\underline{N}\}$ , and  $\{\underline{N}'\}$ .<sup>38</sup> (This second semantic value allows, but does not force, us to say that ‘ $\underline{N}$ ’ *refers* to itself.) More generally, all expressions will be associated with two semantic values, one of which will be the singleton of itself.<sup>39</sup> This claim is not ad hoc.

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<sup>35</sup> Whether this is a case of the required sort depends on what counts as a fictionalising context. But clearly cases of the sort I have in mind are possible, for example, when someone introduces a new name for a fictional character when they mistakenly took the fiction for fact.

<sup>36</sup> For ease of presentation, I’ll ignore issues of modality below.

<sup>37</sup> See Evans (1982, §1.7) on departing from Frege and  $[[\underline{N}]] = \{\underline{N}\}$ . See also Hofweber (2016, §5.3 and §8.3) on distinguishing between semantic value and referent.

<sup>38</sup> Why  $\{\underline{N}'\}$  and not  $\underline{N}'$ ? Because ‘Holmes has six letters’ is false rather than uninterpretable.

<sup>39</sup> Instead of using multiple semantic values, we could instead employ a single, complex semantic value.

First, quotation is a systematic productive device that allows us to move from any linguistic item to its quotation and from any quotation, to the material quoted. This is because the relation between a quotation and the material quoted is more intimate than between a non-quote name and its referent. In our framework, this is reflected by the fact that (i) every linguistic item has itself as part of one of its semantic values and (ii) quotation marks signal that the relevant semantic value is { 'N' } rather than { N }.

Second, quoted words can be simultaneously used and mentioned in mixed quotation as in

23. Quine said that quotation 'is weird'.

As (23) attributes the use of a certain phrase to Quine, the quoted words are mentioned. But the words are also being used as a predicate rather than a noun phrase to complete the sentence. A simple explanation of this fact is that 'is weird' has two semantic values, one that accounts for its use, the other accounting for its mention.

Third, even when a term is only being used, it still provides access to itself as in 'Giorgione was so called because of his size'; a simple explanation of this is that one of 'Giorgione's semantic values determines 'Giorgione'.<sup>40</sup>

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<sup>40</sup> See Saka (1998) for discussion of these issues and for account of quotation that is amenable to the view here. On Saka's view a word has a host of entities associated with it, including word tokens, word types, extensions, intensions, and, we could add, modes of (re)presentation. Could linguistic entities be used as modes of (re)presentation? Perhaps not, if modes of (re)presentation are to be used in thought as well as the semantics of natural languages. Paderewski cases cast doubt on whether names can replace modes of (re)presentation, even limited to natural language semantics.

The semantic values of predicates are functions from sets to truth-values, and the singleton of the predicate itself. So, for our fragment, where  $\underline{x}$  is a variable that takes  $\{\underline{N}\}$  as its value,  $\underline{y}$  a variable that takes  $\{\underline{N}\}$  as its value, and '+' is string concatenation, we have

24. [[Holmes]] are

(a) {}

(b) {'Holmes'}

25. [[exists]] are

(a)  $\lambda \underline{x}$ . there is an element of  $\underline{x}$

(b) {'exists'}

26. [[is fictional]] are

(a)  $\lambda \underline{x}, \underline{y}$  (i) there is no element of  $\underline{x}$ , and the element of  $\underline{y}$  meets (22) (ii) above.

(b) {'is fictional'}

From the above, we have a compositional account of the truth of 'Holmes is fictional' and the falsity of 'Holmes exists'.

Such an approach allows us to start to answer both of the challenges at the end of §5 for those who reject IEP. First, we have started to address Williamson's challenge to provide a semantics for (necessarily) empty names that allows for failure of substitutivity of empty names. Meaningful empty names, but not names like 'Qwerty', have as one of their semantic values the empty set, so when 'Qwerty' is used to combine with 'exists' the result is undefined rather

than false. Nevertheless, ‘Qwerty’ does have a semantic value since ‘Qwerty’ has six letters.<sup>41</sup> Moreover, all empty names have as one of their semantic values the singleton of themselves, and since different empty names are introduced in different contexts, this allows for different empty names to combine with the same predicate (e.g. ‘is fictional’) to produce different truth-values. Second, we have said what it is that predicates that do not ascribe properties do, although the answer is not uniform.<sup>42</sup>

The above is a sketch of the picture of predication that I recommend. Such a picture is not forced on us. For one thing, it depends on claims about which sentences are (really) true and which terms are empty. For all three types of putative truth containing empty names discussed above, philosophers have denied that the singular terms in question are empty or that the claims are really true. Such manoeuvres are theoretically driven and strike me as desperate, but as highlighted, there are challenges for those who maintain that such claims are true and contain empty names, challenges that have only begun to be addressed. A package of views on these matters needs to be assessed in the round and it is only by considering particular semantic proposals in detail that we can determine whether they are correct, which sentences are true, and which terms refer. There is, then, no quick general route from linguistic form to our ontological commitments.

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<sup>41</sup> Does not Williamson’s worry reappear at the metasemantic level: in virtue of what does ‘Holmes’ but not ‘Qwerty’ have {} as a semantic value? Yes, but an answer can be given in terms of how ‘Holmes’ was introduced and the uses to which it was put.

<sup>42</sup> There are other candidate subject-predicate truths containing empty names that the above discussion does not directly treat. But those who deny *IEP* disagree over which truths containing empty names there are. My own view of fictional names is that they have a use on which they are empty and a use on which they refer, so I can account for sentences such as ‘Conan Doyle created Holmes’ by appeal to the referring use (see my (MS) for more details). Another sort of case is presented by ‘Vulcan was thought by Leverrier to lie between Mercury and the Sun’ and this is not directly dealt with above.

## VI.

Second-Order Ontology. The above discussion focussed on first-order order ontology – what objects are there, externally speaking? But there is a related question in second-order ontology, what properties are there, again externally speaking?<sup>43</sup> As I noted, there is a Fregean picture of predicates as well as names. Above, we focused on

Syntactic Decisiveness\*: if an expression exhibits the characteristic syntactic features of a predicate, then the expression in question has the semantic function of ascribing a property to the object referred to by the singular term it is combined with (when it combines with a singular term).

The other part of the package is

Ascription Minimalism: that an ascribing expression features in a true sentence (of a certain sort) ensures that the ascribing expression ascribes a property to its subject.

So, for the Fregean, second-order ontology, just like first-order ontology, consists in identifying which sentences (of a certain sort) are true. But just as

27. Lee thinks that Pegasus is a unicorn

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<sup>43</sup> Some philosophers think that questions of second-order ontology just are questions of first-order ontology, since properties are objects. Others, inspired by Frege (1892), take objects and properties to be nonoverlapping ontological categories. I take no stand on the issue here, but because of the existence of debate, and the variety of syntactic positions we can quantify into, I treat the questions separately. For recent discussions of these issues see Williamson (2013) and Rieppel (2016).

show that unrestricted *Referential Minimalism* is false, it also shows that *Ascription Minimalism* is false since ‘is a unicorn’ does not succeed in ascribing a property. If this is right, then we need to admit an internal reading of the second-order quantifier to account for

28. There is something that Lee thinks Pegasus is, namely a unicorn.

In order to decide whether a second-order discourse is ontologically committing, then, we need to determine which predicates ascribe properties. If we limit *Ascription Minimalism* to subject-predicate sentences, we get

*The Second-Order Existence Principle (2EP):* ‘ $a$  is  $F$ ’  $\rightarrow \exists Y Y \approx F$

where  $\approx$  is the second-order analogue of identity.

That unrestricted *Ascription Minimalism* is false does not show that *2EP* is false, since there are no true sentences of the form ‘ $a$  is a unicorn’, but that does not give us reason to endorse *2EP*. *2EP* is a theorem of classical second-order logic, but given the presence of empty predicates, such as ‘is a unicorn’ and ‘is fictional’ the logic of the second-order external quantifier is free. Just as with *IEP*, we might motivate *2EP* by appeal to a rhetorical question – how could a thing be propertyed were there no such property for the thing to exemplify? But what this question supports in the first instance is not *2EP*, but rather

*Property Ascription 2EP:* if ‘ $a$  is  $F$ ’ is a property ascription, then  $a$  is  $F \rightarrow \exists Y Y \approx F$ .

We only get from Property Ascription 2EP to 2EP, if we assume, that true subject-predicate sentences ascribe properties to objects. Now this is what Ascription Minimalism claims, but I have argued against this in the previous two sections. For example, if I am correct that Holmes is fictional, then ‘there is something Holmes is, namely fictional’, provides a counterexample to 2EP. So, as in the first-order case, in the second-order case we need to determine which property ascriptions are true, and this requires us to ascertain which predicates have the function of ascribing properties.

2EP and Property Ascription 2EP focus on the case where syntactic (first-order) predicates combine with singular terms, but such predicates can also combine with quantified noun phrases. This might lead us to reflect on

The Higher-Order Second-Order Existence Principle (HO2EP): ‘QNP is F’  $\rightarrow \exists Y Y \approx F$

And

Higher-Order Property Ascription 2EP: if ‘QNP is F’ is a (higher-order) property ascription, then QNP is F  $\rightarrow \exists Y Y \approx F$ .

. where ‘QNP’ stands for a quantified noun phrase.

If we want to hold on to Higher-Order Property Ascription 2EP, as we might following a similar line of thought motivating Property Ascription 2EP, then counterexamples to HO2EP such as

## 29. Nothing is a Hobbit

would need to be not treated as higher-order property ascriptions, But just as the (first-order) negative free logician treats singular negative existentials as denials of property ascriptions, we can treat (29) not as claiming a first-order property has the property of being uninstantiated, but rather as the denial of the higher-order property ascription that the property of being a Hobbit is instantiated.

As I noted above, though, we can characterise existence-entailing predicates in terms of describing objects rather than property ascriptions, and so we need not, absent further argument, conceive of any quantification into predicate position as ontologically committing. Perhaps there are good arguments for thinking that not all predicative quantification can be conceived of internally, but even so there is no quick route from *Property Ascription 2EP*, let alone *2EP*, to second-order ontological commitments.<sup>44</sup>

## VII.

*Conclusion.* Both the Fregean and Hofweber think we can settle ontological questions by examining language. I am sympathetic to this approach, but I have suggested here that neither approach can be embraced even leaving to one side merely syntactically singular terms, and even when we focus on subject-predicate sentences and generalizations from them. The truth that both approaches approximate is that there cannot be a true ascription of *being F* to *a*, in the absence of *being F* or *a*. But it is doubtful that which sentences ascribe properties can be read-off from surface syntax: that a sentence has subject-predicate form does not settle the

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<sup>44</sup> For instance, one might take inexpressibility considerations to require external quantification over properties (see Williamson, 2013 and Hofweber, 2016 chapter 9 for discussion). The point here is that accepting that some predicates do not express properties, rules out *2EP*, so we need to determine which sentences, if any, are property ascriptions.

issue, since syntactic predicates don't form a uniform semantic class. To decide whether a true sentence is a property ascription requires, in part, reflecting on whether the singular terms in that sentence refer, and on what story we can tell about the role of the predicates in that sentence.

We start with judgments about the truth of some sentences.<sup>45</sup> Then we might have reason to think some such sentences contain empty terms because of (i) hyperintensionality, (ii) negative existentials, (iii) there was no intention to refer (fiction), or (iv) there was plausibly no object to be referred to (Vulcan). If the terms are really empty, then we need to both supply an adequate hyperintensional semantics for such terms and an account of the role that predicates play in such sentences. It is only by considering semantic proposals in detail that we can determine whether they are correct, which sentences are true, and which terms refer. There is, then, no quick route from linguistic form to ontological commitment.<sup>46</sup>

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<sup>45</sup> This is not Hofweber's starting point. Rather, Hofweber thinks that ontological questions that do not concern linguistic entities can be answered simply by reflecting on our own language independently of the judgements about the truth of certain sentences. But even if this is correct for merely syntactically singular terms, if there are any, I have argued it is not correct for semantically singular terms.

<sup>46</sup> I presented distant ancestors of this paper in Aarhus and Hamburg, and a more up-to-date version to online audiences of the Bochum workshop on empty names and the Aristotelian Society. My thanks to the audiences on those occasions and in particular to Karl Egerton, Manuel García-Carpintero, Thomas Kroedel, Eliot Michaelson, Dolf Rami, Roope Ryymin, and Arthur Schipper. For comments on a written version of the paper, special thanks to Giulia Felappi, Alex Grzankowski, Thomas Hofweber, Nick Jones, Guy Longworth, Mark Sainsbury, and Daniel Whiting.

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