# On the Asymmetry Between Names and Count Nouns

# : Syntactic Arguments Against Predicativism

Junhyo Lee

# University of Southern California

### Forthcoming in *Linguistics and Philosophy*

Abstract: The standard versions of predicativism (Bach 2015; Burge 1973; Elbourne 2005; Fara 2015a, b) are committed to the following two theses: 1) proper names are count nouns in all their (literal) occurrences (the syntactic aspect of predicativism), and 2) names do not refer to objects but express (non-relational) name-bearing properties (the semantic aspect of predicativism). The main motivation for predicativism is to provide a uniform explanation of referential names and predicative names. According to predicativism, predicative names are fundamental and referential names are explained by appealing to a null determiner functioning like "the" or "that." This paper has two goals. The first is to reject the predicativists' explanation of the two types of names (Section 2). I present three syntactic counterexamples to the predicativists' account of referential names: incorporation, modification, and measure phrase uses. The second goal is to present a novel strategy to explain the two types of names (Section 3). I propose that referential names are fundamental but that there are null morphemes available for transforming a name into a count noun (and possibly into other syntactic categories).

#### 1. Predicativism and Hidden Determiners

In the semantics of proper names, 1 predicativism is the view that names are count nouns in all

.

<sup>&</sup>lt;sup>1</sup> I'll generally drop "proper" from now on.

their (literal) occurrences. Predicativism is mainly aimed at providing a uniform account<sup>2</sup> (that is, one without appealing to lexical ambiguity) of the following two types of names (Jeshion 2015a):

- (1) Stella is inside the museum. (Referential Names)
- (2) Two Stellas are inside the museum. (Predicative Names)

Predicativists generally claim that names express name-bearing (or meta-linguistic) properties. For example, according to predicativists, "Stella" expresses the property of *being called* "Stella," being named "Stella," bearing the name "Stella," or being given the name "Stella" by a certain naming convention, etc. Referential uses like (1) are explained by positing a covert determiner that functions like "the" (e.g. Fara 2015b), "that" (e.g. Burge 1973), or an idiosyncratic one<sup>3</sup> (e.g. Gray 2017). Using "Stella" to refer to a particular Stella is just like using "the cat" or "that cat" to refer to a particular cat. So, the logical form of (1) is like (3): (3) [ $\emptyset_{the/that}$  Stella] is inside the museum.

However, the predicativists' account cannot be extended to other data because it is not

<sup>&</sup>lt;sup>2</sup> Fara (2015a) says that the uniformity principle that she is guided by is Grice's "Modified Occam's Razor."

Modified Occam's Razor: Do not multiply senses beyond necessity (Fara 2015a, p.273).

But Fara does not specify when multiplying senses is necessary. Without further qualification on when it is necessary, this principle gives rise to a counter-intuitive consequence.

According to the standard versions of referentialism in which names are treated like individual constants in logic, a name (e.g. "Stella") is ambiguous in as many ways as it has bearers. Is it desirable to avoid this kind of ambiguity? Bach (2015) and Schoubye (2017) seem to think so. Also, Modified Occam's Razor seems to say so. But this is not quite obvious. It is generally accepted in philosophy and linguistics that "bank" is ambiguous between financial institution and the land adjoining a river. That is, "bank" is represented in the lexicon as two separate lexical items. But there is an alternative to represent the two different meanings of "bank." That is, we can assign a property variable to the word "bank" with the presupposition that the value of the variable is either a financial institution or a riverbank, and then have it receive an interpretation by an assignment function. It seems that Modified Occam's Razor should say that this way of representation is preferable. But few philosophers and linguists would prefer the alternative way to the traditional way. This is because it is just a coincidence that the two properties *financial institution bank* and *river bank* share the same name. In a similar vein, predicativism and variablilism are not more unified than the constant view of names just because they can avoid the kind of ambiguity that the constant view of names is committed to. This is because, given that the meaning of a proper name is just an individual it refers to, it is just a coincidence that multiple individuals (that is, the meanings of proper names) share a certain name.

<sup>&</sup>lt;sup>3</sup> Gray (2017) claims that "the" is divided into two kinds (i.e. anaphoric and non-anaphoric) and names come with the non-anaphoric "the."

always syntactically possible to posit a covert determiner. In this paper, I consider three kinds of constructions: incorporated names, modified names, and names as measure phrases. In those constructions, names are *bare* in the sense that they don't carry any determiners such as "the" or "that." The predicativist account predicts that bare names do not have any referential readings. But this prediction is wrong because bare names *do* have referential readings. More generally, there are asymmetries in available readings between bare names and bare count nouns. That is, bare count nouns have only general readings, while bare names have both referential and general readings. I argue that predicativism cannot explain these asymmetries without appealing to arbitrary and empirically inadequate stipulations.

# 2. Three Syntactic Arguments Against Predicativism

The standard versions of predicativism (Bach 2015; Burge 1973; Elbourne 2005; Fara 2015a, b) argue that referential names are just count nouns with hidden determiners like "the" or "that." The predicativists' account predicts that names and count nouns behave similarly in bare constructions (bare in the sense that nouns do not carry any determiners). However, in such constructions, names and count nouns behave differently. I consider three kinds of bare constructions: 1) incorporation, 2) modification, and 3) measure phrase uses.

There is strong syntactic evidence to believe that count nouns do not carry any determiners in the following constructions:

(4) a. John is a [bike owner].

(incorporation)

b. \*John is a [[the/that/this bike] owner].4

<sup>&</sup>lt;sup>4</sup> The logical form of (4a) should be understood as (4c), rather than (4d).

<sup>(4</sup>c) John is [a [bike owner]].

<sup>(4</sup>d) John is [[a bike] owner].

If (4d) is the logical form of (4a), the expression "a bike owner" must be a single noun or noun phrase. Then, it must be legitimate to add a determiner to "a bike owner." But such constructions (e.g. "the [a bike owner]," "that [a bike owner]," etc.) are ungrammatical. Furthermore, if (4d) is the logical form of (4a), (4a) must be ungrammatical. This is because "a bike owner" must be a count noun and a count noun cannot stand alone in English. That is, a count noun must come with a determiner. But (4a) is

(5) a. Robert loves [book collecting].

(incorporation)

b. \*Robert loves [[the/that/this book] collecting].

(6) a. There is a [fake gun] in the drawer.

(modification)

b. \*There is a [fake [the/that/this gun]] in the drawer.

(7) a. I am fast, but not [cheetah fast].

(measure phrases)

b. \*I am fast, but not [[the/that/this cheetah] fast].

(4) and (5) are instances of noun incorporation.<sup>5</sup> (6) is a case in which a noun is modified by a non-intersective adjective. (7) is a case in which a noun functions as a measure phrase such as "5 feet." In all three constructions, adding a determiner to the count noun in question (that is, the incorporated noun or modified noun) leads to ungrammaticality. We thus have strong syntactic evidence to believe that count nouns are bare in those constructions.

# 2.1. Incorporation

### 2.1.1. Names and Count Nouns in Incorporation

Let's first start with the differences between incorporated names and incorporated count nouns. Compare (4) and (5) (= incorporated count nouns) with the following examples (= incorporated names):

- (8) John is a Donald Trump supporter.
- (9) Nixon loved Kennedy bashing.<sup>6</sup>

If predicativism is correct, then proper names are a kind of count noun and so the logical forms

grammatical. This suggests that the logical form of (4a) is (4c), according to which it is the bare noun "bike" that is incorporated.

<sup>&</sup>lt;sup>5</sup> Noun incorporation refers to a linguistic phenomenon in which a head noun or a whole noun phrase is incorporated into another word, resulting in a new complex word. In (4) and (5), "bike" and "book" are each incorporated into "owner" and "collecting," and result in new complex expressions "bike owner" and "book collecting." It is generally accepted in the literature that incorporated nouns (or noun phrases) are bare in the sense that they do not carry any determiners (Baker 1988; Harley 2011; Borik and Gehrke 2015).

<sup>&</sup>lt;sup>6</sup> I owe this Kennedy example to Barry Schein.

of "Donald Trump supporter" and "Kennedy bashing" should be in parallel to those of "bike owner" and "book collecting." If so, the occurrences of the proper names "Donald Trump" and "Kennedy" in (8) and (9) should be bare in the sense that they do not carry any implicit determiners. If incorporated proper names are bare and they express general properties, the only available reading of (8) and (9) should be non-referential. That is, (8) cannot mean that John supports a particular Donald Trump. (9) cannot mean that Nixon loved bashing a particular Kennedy. However, contrary to what predicativism predicts, the incorporated proper names can have referential readings. That is, they can refer to a particular Donald Trump and a particular Kennedy.

# 2.1.2. Possible Response 1: Predicativism with a Domain Restriction Theory

Predicativists might respond by claiming that predicativism with a certain version of a domain restriction theory can explain the referential readings of (8) and (9). A predicativist might adopt the nominal restriction theory as her preferred theory of domain restriction (Fara 2015c; Stanley and Szabo 2000).<sup>7</sup> If that is the case, the logical forms of (8) and (9) will be:

(10) John is a [Donald Trump & F] supporter.

# (11) Nixon loved [Kennedy & F] bashing

According to the nominal restriction theory, there is an unpronounced variable which comes with a noun. The linguistic contribution of the variable is to provide a contextually salient property, and the meaning of the whole noun phrase, which includes both the overt noun and the covert variable, is the intersection of the set contributed by the noun and the set contributed

\_

<sup>&</sup>lt;sup>7</sup> There are broadly three kinds of views on the location of the domain variable: 1) the domain variable is associated with a determiner (= the determiner restriction theory), 2) it is associated with a noun (= the nominal restriction theory), and 3) it appears as an adjunct (= the adjunct restriction theory). The determiner restriction theory is not helpful in saving predicativism from my objection because incorporated nouns do not carry any determiners. The adjunct restriction theory is more flexible than the nominal restriction theory, but they are on a par with respect to my data. So, I'll just focus on the nominal restriction theory.

by the hidden variable. Given the above picture, predicativists can say that the referential readings are derived from the interaction of the conventional meaning of the noun and the contextually contributed meaning of the variable. That is, a referential reading is derived when the intersection of the two sets contributed by the noun and the variable is a singleton set. A predicative reading is derived when the intersection of the two sets contributed by the noun and the variable is a non-singleton set.

The main problem with this suggestion is that predicativism with a domain restriction theory might be able to explain the positive evidence, but it still fails to explain the negative evidence that incorporated count nouns do not have referential readings. Let's compare (4) and (8) again.

- (4) John is a bike owner.
- (8) John is a Donald Trump supporter.

If predicativists accept the nominal restriction theory, then a count noun as well as a proper name should carry a domain variable and so the incorporated count noun in (4) should have a referential reading. However, "bike" in (4) does not have such a reading. Suppose that John owned two bikes: one that he bought and the other that he received from his father. He cherished the latter so much that he named it "Lucy." Unfortunately, it has been stolen recently, but he still has another one. In this situation, let's suppose that one says:

(12) John loved Lucy, but he lost it. So, he is not a bike-owner now.

The second sentence of (12) sounds false. That is, there is no available reading in which "bike" in "bike owner" refers to Lucy.

On the other hand, let's suppose that John supported both Bill and Hilary Clinton. But he has recently lost faith in Hilary Clinton, but he still supports Bill Clinton. In this situation, let's suppose that one says:

(13) John used to support Hilary Clinton, but not anymore. So, he is not a Clinton supporter

now.

It might be misleading to say (13) because the second sentence of (13) has both referential and general readings. However, in contrast to (12), (13) has a reading in which "Clinton" refers to Hilary Clinton. Predicativism fails to explain this asymmetry between incorporated names and incorporated count nouns. While incorporated count nouns have only general readings, incorporated names have both referential and general readings. If nominal restriction is available to derive the referential readings of incorporated names, the same linguistic mechanism must be available to derive the referential readings of incorporated count nouns. However, incorporated count nouns do not have such readings.

# 2.1.3. Possible Response 2: Two Kinds of Count Nouns

The other possible response for predicativism is to say that names and common count nouns

<sup>8</sup> (13a)–(13d) are all possible readings of the second sentence of (13).

- b. John supports Bill Clinton (referential reading).
- c. John supports any politician named Clinton (metalinguistic reading).
- d. John supports the Clinton family (family reading).

The second sentence of (13) has two general readings: one roughly equivalent to (13c) and the other roughly equivalent to (13d). I briefly discuss family examples like (13d) in footnote 16. In this paper, I put those examples aside because both referentialists and predicativists (Fara 2015a; Jeshion 2015c; Matushansky 2015) agree that when (13) has a family reading, the occurrence of "Clinton" is not a proper name. It seems to be either a common count noun or an elliptical form of a more complex count noun phrase such as "Clinton family member."

A reviewer asked whether (13) really can have a reading like (13c). My answer to this question is two-fold: i) there is some scenario in which it is natural to say that an incorporated name has a metalinguistic reading. ii) Even if incorporated names lack metalinguistic readings, this does not undermine my argument.

- i) Consider the following scenario (I borrowed this scenario from Jeshion (2017) and she credits it to Green (2006)): Colin Singleton is an eighteen-year-old child prodigy who is unusual in one respect. When it comes to girls, everyone has a type. Colin Singleton's type is not physical, but linguistic. He likes Katherines. (i) He is a Katherine-lover. In the above scenario, the most natural reading of (i) is that he likes women named Katherine.
- ii) Even if one is not persuaded by the above example, it does not undermine my argument against predicativism because we can still observe an asymmetry between incorporated names and incorporated count nouns. Incorporated names like "Clinton" in (13) have referential readings, but incorporated count nouns like "bike" in (12) do not have such readings. Furthermore, if an incorporated name lacks a metalinguistic reading, it is more problematic for predicativists, because predicativists claim that the basic meanings of names are metalinguistic and so they give a prediction that (13c) is the most basic reading of (13).

<sup>(13)</sup> a. John supports Hilary Clinton (referential reading).

constitute two different sub-categories of count nouns and so they are constrained by two different syntactic restrictions on incorporation. Predicativists might say that common count nouns are mandatorily bare in incorporation whereas name count nouns are merely optionally bare in incorporation.

However, this move is theoretically and empirically inadequate. Since there is no independent motivation for such syntactic restrictions, this move will require predicativists to posit an arbitrary stipulation and so this move is theoretically inadequate. Furthermore, this move is empirically inadequate. Let's consider the following German and English data.

(14) a. Er ist ein Trump-Unterstützer.

He is a Trump supporter

b. \*Er ist ein der Trump-Unterstützer.

He is a the Trump supporter

In German, the definite article accompanying a name is optional. For example, "der Trump" (= "the Trump" in English) and "Trump" are both legitimate in normal contexts. If names are merely optionally bare in incorporation, both (14a) and (14b) must be legitimate. However, (14b) is ungrammatical in German. The definite article must be dropped when a name is incorporated. This suggests that names are mandatorily, not merely optionally, bare in incorporation.

The claim that names are optionally bare in incorporation faces counterexamples in English, too. Some English names normally carry an overt determiner (e.g. "The Beatles," "The Bronx," "The Empire State Building," etc.). However, as we can see in (15)–(17), those names must drop the determiner "the" when they are incorporated. This English data also suggests that names are mandatorily bare in incorporation.

(15) a. I am a Beatles fan.

\_

<sup>&</sup>lt;sup>9</sup> Thanks to an anonymous reviewer for calling my attention to these interesting examples.

- b. \*I am a [[the Beatles] fan].
- (16) a. I am a Bronx resident.
  - b. \*I am a [[the Bronx] resident].
- (17) a. I have two Empire State Building tickets.
  - b. \*I have two [[the Empire State Building] tickets].

### 2.1.4. Two Caveats

Before moving on to the next section, I'd like to discuss two caveats to consider. <sup>10</sup> Let's consider the following examples. They appear to constitute counterexamples to my argument that incorporated count nouns do not have referential readings.

- (18) Jo is an ex-wife stalker.
- (19) Jo is a government supporter.
- (20) Jo is the property owner.

The incorporated nouns (that is, "ex-wife" in (18), "government" in (19), and "property" in (20)) in the above examples seem to have referential readings at least in some contexts. Depending on context, each sentence may express roughly the same propositions as that Jo stalks his ex-wife, that Jo supports the Spanish government, and that Jo owns Wellington Mansions.

(18) is not a concern in my view because "ex-wife" is a relational noun and its logical form is like "x is an ex-wife of y," so the incorporated noun "ex-wife" carries a variable whose semantic effect is similar to that of domain variables. Expressions such as "president," "princess," "brother," "friend," "enemy," "wife," "home," "local," etc. are generally taken as relational. (19) shouldn't be of concern for the same reason. "Government" doesn't seem to be much different from "president" and "princess." If "president" and "princess" require a

<sup>&</sup>lt;sup>10</sup> Thanks to an anonymous reviewer for pressing this issue and for providing (18)-(20) as examples.

variable for countries, it seems reasonable to think that "government" also requires the same type of variable. Furthermore, according to Barker's (2011) diagnostic for relational nouns, "government" should be classified as a relational noun. In English, only relational nouns can take the post-nominal genitive possessive construction.<sup>11</sup>

### (21) Relational nouns

- a. The brother of Mary
- b. A pet of someone
- c. A child of someone
- d. A birthday of someone

### (22) Non-relational noun

- a. \*The cloud of Mary
- b. \*An animal of someone
- c. \*A person of someone
- d. \*A day of someone

# (23) Ex-wife/Government

- a. The ex-wife of Jo
- b. An ex-wife of someone
- c. The government of Japan
- d. A government of some country

# (24) Name

- a. \*The Stella of Jo/the naming convention
- b. \*A Stella of someone/some naming convention

"Ex-wife" and "government" show the same pattern as the relational nouns in (21), suggesting that they are relational. On the other hand, the name "Stella" patterns like the non-relational

<sup>&</sup>lt;sup>11</sup> The examples in (21) and (22) are from Barker (2011).

nouns in (22), suggesting that names are non-relational even when they are used as count nouns. Here is the first caveat: we must avoid using relational count nouns when comparing names and count nouns, because names are non-relational even when they are used as count nouns.

Now let's consider (20). Suppose that in the context in question "the property owner" conveys something like "the one who owns Wellington Mansions." I agree that there could be such a context. However, this is not because the logical form of (20) is like "Jo is [the [the property] owner]," according to which it is the determiner phrase that is incorporated. Consider the contrast between the following two sentences:

- (20) Jo is the property owner.
- (25) Jo is a property owner.

Whereas "the property owner" can convey the one who owns Wellington Mansions, "a property owner" cannot. The suggested logical form fails to explain this contrast. If it is the determiner phrase that is incorporated in (20), why can't it be incorporated in (25)? An alternative explanation is that this contrast arises from the differences between "the" and "a." The indefinite article "a" is semantically null (Heim and Kratzer 1998) and does not carry its own domain variable, whereas the definite article "the" is semantically effective and carries its own domain variable or something equivalent. Because of the domain variable attached to the determiner "the," "the property owner" in (20) can convey the property owner who owns Wellington Mansions. The underlined content is contributed by the domain variable accompanied by the definite article "the," not by the implicit determiner attached to the incorporated noun. Here is the second caveat: when comparing names and count nouns, we must avoid putting incorporated names in the scope of a semantically effective determiner that carries their own domain variable. It can mislead us to believe that a determiner phrase can be incorporated because of the semantic effect of the domain variable attached to the determiner.

#### 2.2. Modified Names

In this section, I consider another kind of bare construction: modified names. As can be seen in (6), we have strong syntactic evidence to believe that count nouns as the argument of a non-intersective adjective are bare.

- (6) a. There is a [fake gun] in the drawer.
  - b. \*There is a [fake [the/that/this gun]] in the drawer.
- (26) Since the breakdown of Imperial Russia, there have been many fake Anastasias.

In (26), the name "Anastasia" appears as the argument of "fake." If names are in parallel with common count nouns, "Anastasia" in (26) must carry no determiner and so modified names and modified count nouns are expected to behave in the same way. But there are important differences between modified names and modified count nouns. In this section, I present two types of asymmetries between modified names and modified count nouns. The first is the asymmetry in available readings. The second is the asymmetry in inference patterns.

Let's first look into the asymmetry in available readings. Consider the following pair:

- (27) Ms AA is a fake American.
- (28) Ms AA is a fake Anastasia.

Whereas the modified name in (28) (= "Anastasia") has both referential and general readings, the modified count noun in (27) (= "American") has only a general reading. That is, "Anastasia" in (28) can refer to a particular Anastasia whereas "American" in (27) cannot refer to a particular American.

Predicativists might try to derive the referential readings of modified names by appealing to one of the following two strategies. First, predicativists might appeal to a version of domain restriction theory to explain the referential readings of modified names. Second, predicativists might argue that "fake" is an intensional operator and thus carries its own domain variable or something equivalent. However, as pointed out in Section 2, even if these moves may explain

the positive evidence that bare names have referential readings, they still fail to explain the negative evidence that bare count nouns (e.g. "American" in (27)) do not have referential readings. 12

Secondly, the asymmetry in available readings leads to a difference in inference patterns between names and common count nouns. They show a different inference pattern with respect to "fake."

- (29) Ms AA is a fake American.  $\rightarrow$  Ms AA is not an American.
- (30) Ms AA is a fake Anastasia.  $\rightarrow$  Ms AA is not called Anastasia.

Whereas (29) is valid in normal contexts, (30) is not. It is easy to imagine a situation in which the first sentence of (30) is true but the second is false. This is so in a context in which Ms AA pretends to be Anastasia but happens to have the name "Anastasia."

Predicativists might try to avoid this objection by positing an arbitrary syntactic rule saying that modified names are optionally bare while modified count nouns are mandatorily bare. But this claim faces counter-examples. As we have seen in Section 2.1.3, some English names normally carry an overt determiner (e.g. "The Beatles," "The Bronx," "The Empire State

\_

<sup>&</sup>lt;sup>12</sup> The other concern I have for the combination of predicativism and the nominal restriction theory is that it produces wrong truth conditions regarding the referential readings of modified names. Let's consider (26) again.

<sup>(26)</sup> Since the breakdown of Imperial Russia, there have been many fake Anastasias.

<sup>(26\*)</sup> Since the breakdown of Imperial Russia, there have been many fake [Anastasias & F].

According to the predicativism combined with the nominal restriction theory, the logical form of (26) would be like (26\*), and thus both the name "Anastasia" and the domain variable "F" would be in the scope of "fake." This then leads us to the wrong truth condition of (26). Let's consider the expression "fake Russian princess." For simplicity, I assume that the meaning of "Russian princess" is determined in the conjunctive way. The adjective "fake" takes the value of an adjacent node as an argument as a whole. That is, the adjective "fake" in the phrase "fake Russian princess" takes the value of the adjacent node "Russian princess" as a whole. In order to be a fake F G (when "F" is an intersective adjective and "G" is a noun) one should 1) present oneself, or be presented, as F and G but 2) be not (F & G). (Being a fake F G does not imply being a fake F and a fake G (when "F" is an intersective adjective). Instead, being a fake F G implies being a fake F or a fake G. But being a fake F G is not equivalent to being a fake F or a fake G, because if this is true, then it follows that being a fake princess implies being a fake Russian princess, which is a counterintuitive result.) For example, a fake Russian princess is a person who presents herself (or is presented) as a Russian princess but is either not Russian or not a princess. Thus, if predicativism is correct, in order to be a fake Anastasia, she should present herself (or be presented) as being called Anastasia. However, this does not sound right because a fake Anastasia can present herself (or be presented) as an Anastasia who lost any memory of her name for some reason.

Building," etc.). If modified names are optionally bare, (31b) and (32b) must be grammatical. However, they are not. Even the names that normally come with a determiner must drop their determiner when they are modified by "fake."

- (31) a. They are fake Beatles.
  - b. \*They are fake [the Beatles].
- (32) a. This building is a fake Empire State Building.
  - b. \*This building is a fake [the Empire State Building].

### 2.3. Names as Measure Phrases

In this section, I present a new type of names and argue that there is an asymmetry between names and count nouns that is similar to the one discussed in Sections 2.1 and 2.2. The measure phrase uses of names and count nouns show differences in available readings. That is, while names have both referential and general readings in their measure phrase uses, count nouns do not. After presenting the data, I'll discuss two implications of this data on the debate between predicativism and referentialism. Let's consider the following pair:

- (7) a. I am fast, but not [cheetah fast]. 13
  - b. \*I am fast, but not [[the/that/this cheetah] fast].
- (33) I am rich, but not Donald Trump rich.

(7a) roughly means that I am fast but not as fast as cheetahs are. (33) roughly means that I am rich but not as rich as Donald Trump is (alternatively, I am not as rich as people named Donald

<sup>-</sup>

<sup>&</sup>lt;sup>13</sup> The measure phrase uses may be considered a subtype of incorporation. But not all cases of incorporation into an adjective function as measure phrases. Consider "zebra-striped," "Minnesota nice," "nerd cute," etc. Incorporated nouns in those examples do not function as measure phrases. I am neutral on whether measure phrase uses are a subtype of incorporation or constitute their own category.

Trump are). 14 The important thing to note is that whereas "Donald Trump" in (33) can refer to a particular Trump, "cheetah" in (7) cannot refer to any particular cheetah. 15

The first implication of this data is that it undermines the main motivation for predicativism. The main motivation for predicativism is to give a uniform explanation of referential names and predicative names. Predicativists argue that predicative names are fundamental and referential names are derived through predicative names and hidden determiners. Since names as measure phrases are a new type of name, predicativists need to say that there is some way to derive names as measure phrases from predicative names. But they don't seem to have enough resources to explain names as measure phrases.

I am not the first who has raised this type of objection against predicativism. Jeshion (2015a, b, c) expands the data and presents various uses of names which seem literal but do not belong to either the referential use or the meta-linguistic use. Consider the following examples (Jeshion, 2015c):16

(34) a. Two Stellas are inside the museum. (Producer Example)

b. There are two paintings by the artist Frank Stella inside the museum.

<sup>&</sup>lt;sup>14</sup> The name "Donald Trump" in (33) seems to appear as a measure phrase like "7 feet" in "I am 7 feet tall." If measure phrases are modifiers of adjectives (e.g. extremely/too/very tall) (Schwarzschild 2005), (33) is an example of adverbial uses of proper names.

<sup>&</sup>lt;sup>15</sup> Incorporation sometimes does allow a noun phrase with a superlative adjective as in (R).

<sup>(</sup>R) I am rich but not richest man rich.

One might argue that the referential reading of (33) is due to an unpronounced superlative adjective, the function of which is to restrict the extension of the noun to a singleton set. According to this suggestion, the logical form of (33) would be like (33\*):

<sup>(33\*)</sup> I am rich, but not (richest/most famous) Donald Trump rich.

This may explain why (33) has a referential reading. However, this does not explain why (7) lacks a referential reading. If there is an unspoken adjective in (33), it should be able to occur in (7), making a referential reading available. But (7) does not have any referential readings. My thanks to \*\*\* for raising this issue.

<sup>&</sup>lt;sup>16</sup> Jeshion (2015c) discusses another type of example: family examples.

<sup>(</sup>R) Joe Romanov is not a Romanov.

<sup>(</sup>R) expresses roughly the same proposition as that Joe Romanov is not a member of the Romanov dynastic family. But I will put them aside in this paper. This is because both referentialists and predicativists seem to agree that "Romanov" in (R) is not a proper name (Fara 2015a; Jeshion 2015c; Matushansky 2015). It seems to be either a common count noun or an elliptical form of more complex count noun phrases such as "Romanov family member."

- (35) a. Two Obamas came to the Halloween party. (Representation Example)
  - b. Two people dressed as Obama came to the Halloween party.
- (36) a. Two little Lenas just arrived. (Resemblance Example)
  - b. Two children (of Lena) who resemble Lena just arrived.
- (37) a. Lenny reads too much Heidegger and not enough Frege. (Mass noun)
  - b. Lenny reads too much of Heidegger's philosophy and not enough of Frege's.
- (38) a. We'll need to google directions to the university. (Verb)
- b. We'll need to search for directions to the university using the Google search engine. The a-sentences in (34)–(38) can be used to express roughly the same propositions as the b-sentences. Examples (34)–(38) show that names can be used not only as count nouns that express individual-related properties (rather than meta-linguistic properties) but also as mass nouns and verbs. Fara (2015a) tries to explain away the examples (34)–(36) in terms of deferred interpretation (Nunberg 1995). However, even if her explanations of (34)–(36) are correct, <sup>17</sup> it is not clear how they can generalize to other cases such as proper names as mass nouns, verbs, and measure phrases (that is, (33), (37) and (38)).

It is not clear whether deferred interpretation can generalize to other cases such as names as mass nouns, verbs and measure phrases, because Nunberg's examples in "Transfers of Meaning" (e.g. "I am parked out back," "The ham sandwich is at table 7," etc.) include only transfers across the same grammatical category. For example, "be parked out" is a transfer from a verb to another verb. Similarly, "ham sandwich" is a transfer from a count noun to another count noun. There is no guarantee that cross-categorical meaning transfer is possible. Also, Nunberg himself says that the standard examples of deferred interpretation do not involve

<sup>&</sup>lt;sup>17</sup> As Jeshion (2015c) has pointed out, there is an important difference in the process of deriving deferred interpretation between proper names and count nouns. Whereas the meaning of a name should be restricted to a particular individual before the deferred interpretation is applied, the meaning of a count noun is not. So names are not in exact parallel with count nouns with respect to the derivation process of deferred interpretation.

any change in semantic type (Nunberg 1995, ft.20). Provided that a change in grammatical category sometimes requires a change in semantic type (for example, meaning transfers to verbs may require an introduction of an event variable, which leads to a different semantic type), it is unlikely that deferred interpretation allows cross-categorical transfer. I have no general argument that cross-categorical meaning transfer is impossible, but the onus is on predicativists because cross-categorical meaning transfer requires more deviation from Nunberg's original theory of deferred interpretation than what the standard examples of meaning transfer allow.

The second implication is that names as measure phrases undermine not only predicativism but also some versions of referentialism. In particular, they undermine Schoubye's view on proper names. Schoubye (2017) attempts to build the semantics of proper names on the model of pronouns such as "he" or "she." He notes that pronouns as well as proper names have count noun uses (Schoubye 2017).

(39) a. My kitten, she loves music.

b. Oh, your kitten is a she?

He argues that count noun uses of pronouns are derived from the gender features of pronouns through morphological null derivations. A morphological derivation is a lexico-syntactic process that turns one expression into another with a distinct but related meaning. The morphological derivations are sometimes marked with an overt affix such as "-s" for plural nouns. However, not all derivations are marked with overt affixes. When a derivation is marked with no overt affix, it is called a null-derivation. Since there is no overt morphological change in the process of converting referential pronouns to predicative pronouns, he takes this process as an instance of null-derivation. He argues that since proper names are a kind of pronoun, their predicative meanings are derived through morphological null-derivations. Since for Schoubye

proper names are a kind of pronoun, he seems to be committed to the claim that if there is a morphological null-derivation that applies to pronouns, then the same process can apply to proper names and vice versa. However, the contrast between (33) and (40) suggests that even though there is a morphological null-derivation that turns proper names into measure phrases, it does not apply to pronouns.

- (33) I am rich, but not Donald Trump rich.
- (40) \*I am rich, but not him/her rich.

Schoubye might claim that proper names are a special kind of pronoun. But still the onus is on him to provide a non-ad hoc explanation of the asymmetry between proper names and pronouns.

# 3. Morphological Null-Derivations of Proper Names

Thus far, I have presented three kinds of bare constructions as counter-examples to the predicativists' account of referential names and predicative names. In this section, I provide an alternative account of various types of names. My proposal is that names are primarily referential and other types of names are morphologically derived from the referential names. 18,19

# 3.1. Referentialism and Hidden Morphemes

<sup>&</sup>lt;sup>18</sup> Jeshion (2015c) and Schoubye (2017) have a similar idea. Jeshion (2015c) appeals to deferred interpretation (rather than morphological derivation) to explain predicative names. Schoubye (2017) appeals to a morphological derivation on the model of pronouns. For Schoubye, names are a kind of pronoun and they carry being-called conditions as a feature. As predicative pronouns are derived from the gender features of pronouns through morphological null derivations, predicative names are derived through morphological derivations from the being-called conditions that referential names have as a feature.

<sup>&</sup>lt;sup>19</sup> There are many views on the semantics of names on the market. Broadly, they can be classified by the following two standards: change in semantic type and change in content. For example, type-shifting rules involve only the first kind of change. The standard cases of deferred interpretation involve only the second kind of change (Nunberg 1995, ft.20). Both my proposal and Leckie's (2013) involve both kinds of changes.

A morphological derivation is a lexico-syntactic process which transforms one expression into another one which has a distinct but related meaning. Some morphological derivations are marked with overt affixes, but not all derivations are marked with overt affixes. When a derivation is marked with no overt affix, it is called a null-derivation (Bauer & Valera 2005; Matthews 1991). Since no overt morpheme is added in the various types of proper names, these names can be understood as instances of null-derivations.<sup>20</sup>

My model case is the affix "-ian." The affix "-ian" usually combines with a proper name and turns it into an adjective the meaning of which is a property related to the referent of the name. For example, "-ian" can combine with the name "Kripke" and produce a new adjective "Kripkean," the meaning of which is roughly a property related to the particular person Saul Kripke. When the affix "-ian" combines with a name, it plays at least two roles. One is to change the semantic type of proper names (e-type) into the predicative semantic type (<e,t>type). The other is to introduce a relation into the meaning of the resulting adjective. For example, depending on context, "Kripkean idea" can have a variety of meanings: ideas claimed by Kripke, ideas which conform to the philosophy of Kripke, ideas originated by Kripke and so on.

\_

<sup>&</sup>lt;sup>20</sup> De Clercq (2008) also posits an unpronounced morpheme. But the motivations for, and functions of, those morphemes are different. I posit a silent morpheme in order to derive predicative names from referential names. On the other hand, she discusses two kinds of predicative names in Belgian Dutch and German: person denoting predicative names and object- or event-denoting predicative names. Her main concern is to explain the differences between them and she posits an empty morpheme to derive object- or event-denoting predicative names from person-denoting ones.

Furthermore, there is another big difference between the two views. In her analysis, a root word should move up to D to get a referential interpretation. But incorporated names provide counter-evidence to this claim. Determiners are stripped off in incorporation, but bare names still have referential readings. This suggests that a name doesn't have to move up to D to get a referential interpretation.

<sup>&</sup>lt;sup>21</sup> I am not arguing that the meaning of the null-morpheme that is responsible for predicative names is exactly the same as that of "-ian." I use "-ian" as a model case just because "-ian" and the null-morpheme posited for predicative names have a very similar semantic function. Potential differences between them will be discussed in Section 3.2.

There are at least two ways to understand the semantic contribution of "-ian." One is to say that the two functions of "-ian" are encoded in its lexical meaning. According to this way of understanding, the lexical entries of "-ian" and "Kripke" can be given as follows:

(41) 
$$\llbracket -ian \rrbracket = \lambda.R \in D_{\langle e \langle e,t \rangle}. \lambda.x \in D_e. \lambda.y \in D_e. Ryx.$$

(42) [Kripke] = Kripke.

According to (41), "-ian" takes a relation R and an individual x, and then produces the property of being in the relationship R with x. Since "-ian" has to take a relation before combining with a proper name, it should be understood as carrying the relation variable R, the value of which should be assigned by a context. The compositional meaning of "Kripkean" can then be given as follows:

(43) [Kripke [R -ian]] =  $\lambda$ .y  $\in$  D<sub>e</sub>. y is in the relationship R with Kripke.

According to (43), "Kripkean" expresses a property of *being in some contextually provided relationship R with Kripke*. Since the value of the relation variable R is determined by a context, the meaning of "Kripkean" is context-dependent.

The other way to understand the semantic contribution of "-ian" is to say that the first function of "-ian" is encoded in its lexical meaning, but the second function requires the process of pragmatic enrichment. In this view, the lexical entry of "-ian" can be given as follows:

(44)  $[-ian] = \lambda x \in D_e$ .  $\lambda y \in D_e$ . y is in some relationship with x.

(45) [Kripke -ian] =  $\lambda \cdot y \in D_e$ . y is in some relationship with Kripke.<sup>22</sup>

According to (44), "-ian" takes an individual, and then produces the property of being in some relationship with the individual. Since the relation variable is bound by an existential quantifier in the meta-language, "-ian" does not need an additional argument position for relations. Thus,

restriction operating at the discourse level.

-

<sup>&</sup>lt;sup>22</sup> One might object to this idea on the grounds that everything is related to everything. If this metaphysical principle is true, the property of *Being in some relationship with Kripke* will be just the set of everything. I believe this concern can be somewhat relieved by noting that there could be a domain

it can directly combine with the proper name "Kripke," and the compositional meaning of "Kripkean" can be given as in (45).

In either way, the meaning of "Kripkean" is compositionally computed from the meanings of "Kripke" and "-ian." However, there are several differences between these two ways of understanding. First, according to (41), "-ian" carries a relation variable whereas according to (44) it does not. Second, since there is no overt relation variable in the natural language expression "Kripkean," (41) is committed to the existence of an unarticulated element. That is, there is some element (that is, the relation variable R) which is not pronounced but syntactically real. However, according to (44), there is no such element. Third, since the value of the relation variable should be given by the assignment function, according to (41), "Kripkean" is a context-dependent expression. On the other hand, according to (44), what is semantically expressed by "Kripkean" is the same across every context. That is, it expresses the property of *Being in some relationship with Kripke*. But what is pragmatically expressed can change depending on contexts. That is, it can pragmatically express more enriched contents such as *Being claimed by Kripke* or *Being originated by Kripke* and so on.

My suggestion is that there is a null-morpheme the semantic function of which is similar to that of "-ian." I argue that positing such a null-morpheme provides the best explanation for count noun uses of proper names. As with "-ian," the function of the null-morpheme is twofold: i) changing the lexical category of a proper name, and ii) mapping an individual to a property that is related to the individual. I am neutral on which version between (41) and (44) is ultimately correct, so the meaning of "-Ø" can be given in one of the following two ways:<sup>23</sup>

\_

<sup>&</sup>lt;sup>23</sup> According to the lexical entries of "-ian" and "Ø," the meanings of "-ian" and "Ø" appear to be exactly the same. However, their semantic functions are not exactly the same, because "-ian" is an operation producing adjectives whereas "Ø" is an operation producing count nouns. The result of "-ian" can be modified by degree modifiers such as "too" or "very" (e.g. too/very Kripkean), whereas the result of "Ø" cannot (e.g. \*too/\*very Kripke). This difference can be explained by the availability of a degree variable. As an action verb carries an event variable, gradable adjectives are usually considered to carry a degree variable. Also, as an adverb modifying a verb (e.g. "quickly," "slowly") is analyzed

- (46)  $[\![-\emptyset]\!] = \lambda.R \subseteq D_{e,e,t>>}. \lambda.x \subseteq D_e. \lambda.y \subseteq D_e. Ryx.$
- (47)  $[\![-\emptyset]\!] = \lambda . x \in D_e$ .  $\lambda . y \in D_e$ . y is in some relationship with x.

The referential meanings of proper names, together with "-Ø," provide enough resources to explain the count noun uses of proper names.

- (2) a. Two Stellas are inside the museum. (Meta-Linguistic Example)
  - b. Two [people whose name is Stella] are inside the museum.
  - c. Two [Stella-Ø]s are inside the museum.
- (34) a. Two Stellas are inside the museum. (Producer Example)
  - b. There are two [paintings by the artist Frank Stella] inside the museum.
  - c. Two [Stella-Ø] are inside the museum.
- (35) a. Two Obamas came to the Halloween party. (Representation Example)
  - b. Two [people dressed as Obama] came to the Halloween party.
  - c. Two [Obama-Ø] came to the Halloween Party.
- (36) a. Two little Lenas just arrived. (Resemblance Example)
  - b. Two [children (of Lena) who resemble Lena] just arrived.
  - c. Two little [Lena-Ø] just arrived.

The a-sentences in the above examples can be used to mean roughly the same propositions as the b-sentences. The count noun uses of names can be divided into two kinds: ones that express name-bearing properties (e.g. (2)) and ones that express individual-related properties (e.g. (34)–(36)) This difference arises from the kind of object the hidden morpheme "- $\emptyset$ " takes as its argument. If "- $\emptyset$ " takes a worldly object such as a person, it produces an individual-related property. For example, we can get the intended reading of (34) when it takes the artist Frank Stella as an argument and the relation of *being painted by* is given as the value of the relation

as a predicate of the event variable, an adverb modifying a gradable adjective can be analyzed as a predicate of the degree variable.

variable (or this relation is pragmatically enriched). On the other hand, if "-Ø" takes a linguistic object such as a generic name or a meta-linguistic name, it produces a name-bearing property.<sup>24</sup> For example, we can get the intended reading of (2) when it takes the generic name or meta-linguistic name Stella as an argument and the relation of *bearing* is given as the value of the relation variable (or this relation is pragmatically enriched).

# 3.2. Possible Objections

In this section, I discuss three potential objections against my proposal. The first is that my view is committed to the ambiguity of referential names. The second is that my view is committed to the ambiguity of referential and predicative names and so it fails to explain the Hornsby entailment. The last is that "-ian" and "Ø" do not have the same semantic effect.

Objection 1: One might object to my proposal because it is committed to the ambiguity of referential names. That is, according to my proposal, referential names can refer to linguistic objects (e.g. generic names, metalinguistic names) as well as worldly objects (e.g. persons). However, this is not problematic for referentialists because referential names are in fact ambiguous. Consider the following examples:

- (48) My name is Stella (or Stella is my name).
- (49) Stella is quite popular these days (with expectant parents). (Jeshion 2015c)

\_

<sup>&</sup>lt;sup>24</sup> Jeshion (2015c) discusses two ways to derive the interpretations of meta-linguistic examples. One is to appeal to Kaplan's generic names. The other is to appeal to meta-linguistic names. Generic names are social artifacts and are primarily individuated by historical and social properties. For example, the Korean surname "Lee" originated from an old Chinese word meaning *plum*. It has been translated in many ways in English. For example, Chinese people usually translate it as "Li," North Koreans as "Rhee," and South Koreans as "Lee" or "Yi". But they can count as the same generic name because they all have the same historical origin. On the other hand, meta-linguistic names are the names of linguistic expressions and individuated by phonological and orthographical properties. For example, a river bank and a financial bank have the same meta-linguistic name because they have the same sound and orthography. Philosophers have used quotation marks as a device to refer to meta-linguistic names. Both approaches work equally well when it comes to deriving the interpretations of meta-linguistic examples.

"Stella" in (48) and (49) appears in the argument position, and the two occurrences of "Stella" clearly do not refer to any worldly objects. A natural explanation of (48) and (49) is that they involve referential names that refer to linguistic objects.<sup>25</sup>

I have mentioned that there are two ways to derive the interpretations of the meta-linguistic examples: applying "- $\emptyset$ " to a generic name and applying it to a meta-linguistic name. Both approaches work equally well when it comes to the derivation of meta-linguistic examples. But one might wonder whether there is any way to tell which one is ultimately correct, and the following consideration seems to support the first approach:<sup>26</sup>

(50) # I visited two banks today – a river bank and a financial one.

(51) I visited two Alfreds today.

Whereas (51) sounds fine, (50) sounds zeugmatic. If meta-linguistic examples are derived by applying "Ø" to metalinguistic names, it seems hard to understand why this contrast arises because a river bank and a financial bank have the same meta-linguistic name.

The first approach is also supported by the following zeugma test:

(52) # Jaegwon Kim and Kim Kardashian are Kims.

In (52), the first occurrence of "Kim" is a Korean surname while the second occurrence of "Kim" is a diminutive form of the American first name "Kimberly." They just happen to have the same sound and orthography in English. So, they sound zeugmatic. While it seems hard for the second approach to explain this intuition, the first approach fares well with this data. This is because, according to the first approach, the two occurrences of "Kim" in (52) can count as occurrences of two different generic names.

2

<sup>&</sup>lt;sup>25</sup> The examples like (48) and (49) have not received much attention in the literature. I am not sure what predicativists would say of these examples, but it seems that they cannot give a natural interpretation of them.

<sup>(48)</sup> a. My name is Stella.

b. ? My name is the one that is called/named Stella.

<sup>(49)</sup> a. Stella is quite popular these days (with expectant parents)

b. ? The one that is called/named Stella is quite popular these days (with expectant parents)

<sup>&</sup>lt;sup>26</sup> Thanks to an anonymous reviewer for calling my attention to this example.

Objection 2: My view is committed to the ambiguity of referential and predicative names. One might object to my view by claiming that if there is such an ambiguity we cannot explain the Hornsby entailment (i.e. the entailment relations between referential names and predicative names). Consider the following arguments:<sup>27</sup>

(53) P1. Frieda is a famous painter.

C. At least one Frieda is a famous painter.

(54) P1. No Friedas are Iranian.

C. Frieda is not Iranian.

I'll focus on (53), but my point generalizes to (54) as well. Predicativists believe that P1 logically entails the conclusion (Fara 2015b). But P1 does not *logically* entail C. We can imagine a situation in which P1 is true but C is false. That is, there can be worlds in which Frieda is a famous painter but she is not called Frieda and no one who is called Frieda is a famous painter (or worlds in which Frieda is a famous painter but no one is called Frieda). "Frieda" is a rigid designator, so it is not difficult to imagine a world in which she is called something other than Frieda.

The puzzle is that even though (53) and (54) are not logically valid arguments, they appear to be good reasoning. Why is that? I basically follow Leckie's solution to this puzzle.

(53\*) P1. Frieda is a famous painter.

P2. Frieda is a Frieda (= Frieda is called Frieda).

C. At least one Frieda is a famous painter.

(54\*) P1. No Friedas are Iranian.

P2. Frieda is a Frieda (= Frieda is called Frieda).

C. Frieda is not Iranian.

<sup>27</sup> This type of argument was first devised by Hornsby (1976). I borrowed (51) and (52) from Leckie (2013).

Leckie argues that (53) and (54) appear to be good reasoning because we implicitly employ a hidden premise (= P2). (53\*) and (54\*) are logically valid arguments. We tend to confuse (53) (which is an invalid argument) with (53\*) (which is a valid argument). This thus provides an error-theoretic explanation for why we are inclined to accept (53) and (54) even though they are not logically valid.

I agree with her solution to the puzzle. The remaining question is how P2 is supplied. Leckie claims that P2 is somehow derived from the lexical rule (55), but it is not clear how P2 is derived from (55).

- (55) APUs (= apparent predicate uses) of "N" mean "person called "N"" where the second occurrence of "N" is an ARU(= apparent referential uses) (Leckie 2013).
- (55) explains why "Frieda" in the conclusion of (53) is interpreted as meaning *being called* "*Frieda*," but it does not explain why P2 in (53\*) is true or why P2 in (53\*) is available to us in almost any context.

I prefer a more pragmatic explanation. As Stalnaker (1974, 1978) has pointed out, when an agent  $\mathcal{A}$  utters a sentence  $\mathcal{S}$  with the content  $\Phi$ , what is added to the common ground is not just  $\Phi$  but also multiple propositions encoding the information about the utterance context (e.g. " $\mathcal{A}$  uttered  $\mathcal{S}$ ," " $\mathcal{A}$  asserted  $\Phi$ ," " $\mathcal{A}$  believes  $\Phi$ ," " $\mathcal{A}$  believes  $\mathcal{S}$  means  $\Phi$ ," etc.). Similarly, when an agent  $\mathcal{A}$  uses a name  $\mathcal{N}$  to refer to an object  $\mathcal{O}$ , participants can infer from  $\mathcal{A}$ 's use of  $\mathcal{N}$  that, provided that  $\mathcal{N}$  is not an empty name, the object  $\mathcal{O}$ , which is the referent of  $\mathcal{N}$ , has the name  $\mathcal{N}$ . Participants might subconsciously go through the following inference:  $\mathcal{A}$  used "Frieda" to refer to someone. I have no reason to believe that "Frieda" is an empty name (e.g. I have no reason to believe that  $\mathcal{A}$  is making up a story about a non-existent person Frieda), so the referent of "Frieda," whatever it is, has the name "Frieda." That is, Frieda is called Frieda.

Objection 3: One might object to my proposal about the existence of "Ø" on the grounds that "-ian" and "Ø" do not have the same semantic effect. Consider the following examples:<sup>28</sup> (56) a. Taylor and Jonathan are both Swifts.

b. Taylor and Jonathan are Swift-Øs.

(57) # Taylor and Jonathan are both Swiftian.

Whereas (56) sounds fine, (57) does not. On my view, the logical form of (56a) is like (56b). If "Ø" has the same semantic effect as "-ian", it seems hard to explain this contrast. So I do not argue that "Ø" has the same semantic effect as "-ian." The difference between (56) and (57) can be explained in terms of the availability of a degree variable.<sup>29</sup> On my view, "-ian" is primarily an operation converting a proper name into a gradable adjective (e.g. too/very Kripkean) whereas "Ø" is an operation converting a proper name into a count noun (e.g.

<sup>28</sup> Thanks to an anonymous reviewer for pressing this issue and for providing the examples.

(3) This problem is more time-consuming than it is difficult (categorizing comparative).

<sup>&</sup>lt;sup>29</sup> My proposal is based on the premise that while "Kripkean" carries a degree variable, "Kripke-Ø" does not. An anonymous reviewer raised an objection against my proposal by claiming that predicative names can be modified by "more":

<sup>(1)</sup> The Greek Ioannis is *more of a Yehohanan* than the American John. I am well aware of the origins of their names.

I have two comments on the above example. First, in (1), "more" does not directly modify the name "Yehohanan." So, strictly speaking, we're not grading the name "Yehohanan." What we are grading is a partitive "of an X" with a name in place of X. This doesn't show that names are gradable. What it shows is that partitive phrases are gradable (Wellwood forthcoming).

Second, even if we ignore the first point, (1) doesn't sound like a regular comparative. We should distinguish between two kinds of comparative constructions: regular comparatives and categorizing comparatives (or meta-linguistic comparatives) (Bartsch & Vennemann 1972; Giannakidou & Yoon 2011; McCawley 1988; Morzycki 2011; Wellwood forthcoming):

<sup>(2)</sup> Al is taller than Bill is (regular comparative).

<sup>(4)</sup> It is more of a guess than a hypothesis (categorizing comparative).

<sup>(5)</sup> This statement is more of a guess than the previous three (categorizing comparative).

Regular comparatives are those comparing two degrees on a common scale. On the other hand, categorizing comparatives are not comparisons between two degrees on a scale that is conventionally associated with a word (e.g. "tall" is associated with the scale of height). They compare how well an entity fits a category. For example, (2) compares two degrees of Al and Bill in the dimension of height. But (3)–(5) do not compare two degrees on a scale that is lexically encoded in a word. What (3) says is roughly that it is more appropriate to categorize this problem as time-consuming than as difficult. What (4) says is roughly that it better fits the category of a guess than it does a hypothesis. What (5) says is roughly that this statement better fits the category of a guess than the previous three statements do. To my ear, (1) sounds like a categorizing comparative. The intuitive meaning of (1) is that the Greek Ioannis better fits the category of a Yehohanan than the American John does.

\*too/very Kripke). Following the standard approaches to gradable adjectives, I postulate that the result of "-ian" should carry a degree variable. But it seems that the property of being called something is not a property that allows degrees. It doesn't make much sense to talk about how much or how strong Taylor is called Taylor/Taylor is named Taylor/Taylor bears the name "Taylor"/Taylor was given the name "Taylor" by a certain naming convention. Similarly, the following examples do not make much sense.

(58) ??David Kaplan is called David/is named David/bears the name "David"/was given the name "David" by a certain naming convention as much as David Lewis is/does/was. (Equative) (59) ??David Kaplan is called David/is named David/bears the name "David"/was given the name "David" by a certain naming convention more than David Lewis is/does/was. (Comparative)

Given that the semantic type of gradable adjectives (e.g. "tall," "great," etc.) is <d<e,t>> and the combination of a name and "-ian" is a degree adjective, the lexical entries of "-ian" can be revised as follows:

(41\*) [[-ian]] =  $\lambda$ .R $\in$ D $_{<d<e,<e,t>>>></sub>. <math>\lambda$ .z $\in$ D $_{d}$ .  $\lambda$ .x $\in$ D $_{e}$ .  $\lambda$ .y $\in$ D $_{e}$ . Ryxz. (y is in the relationship R with x to the degree z)

(44\*)  $[-ian] = \lambda .z \in D_d$ .  $\lambda .x \in D_e$ .  $\lambda .y \in D_e$ . y is in some relationship with x to the degree z.

To summarize, "Ø" and "-ian" have a very similar meaning but do not have exactly the same semantic effect, and their semantic difference can be explained by the difference in the availability of the degree variable. Also, this explains and predicts the difference between "-ian" and "Ø" in the distribution of degree adverbs such as "too" and "very."

Lastly, I'd like to point out that we should distinguish the following two questions:

- Q1) Can "Kripkean" express a name-related property?
- Q2) Can "Kripkean" express a name-bearing property?

Whereas the answer to Q2 seems to be no, my answer to Q1 is yes. Let's suppose that there is a group of people who worship the philosopher Kripke. They believe that Kripke is the perfect philosopher, and that his words will lead them to ultimate salvation. They make songs for him and praise him. Paul belongs to this group. I say "Paul is Kripkean." In my utterance "Kripkean" roughly means worshiper of the philosopher Kripke. Now, let's suppose that there is a group of people who worship the name "Kripke." They believe that "Kripke" is the perfect name and that the key to their ultimate salvation is in the name. They make songs for the name and praise it. Frank belongs to this group. I say "Frank is Kripkean." In my utterance "Kripkean" roughly means worshiper of the name "Kripke."

# 3.3. Comparison

I'll finish this section by comparing my view with the views displayed in Leckie (2013) and Matushansky (2015).

### 3.3.1. Leckie's Account

Leckie and I agree in that referential names are fundamental and there is some linguistic mechanism that transforms referential names into predicative names. But there are three main differences between our views. I'll first explain the differences between our views and then discuss why I prefer my own view.

First, we use different mechanisms for transforming referential names into predicative names. While I posit a silent morpheme (= (46)), she posits a lexical rule (= (55)).

$$(46) \llbracket -\emptyset \rrbracket = \lambda.R \in D_{\langle e < e, t \rangle}. \ \lambda.x \in D_e. \ \lambda.y \in D_e. \ Ryx.$$

(55) APUs (=apparent predicate uses) of "N" mean "person called "N"" where the second occurrence of "N" is an ARU (Leckie 2013).

Leckie's rule is a *lexical* rule, so it transforms one lexical item into another. This thus implies

that the resultant lexical item (that is, a predicative name) is not syntactically complex. But on my view, the silent morpheme "Ø" introduces the relational variable R, so I am committed to syntactically structured predicative names. Also, the silent morpheme "Ø" targets syntactically simple names (that is, bare names without any determiners), so "Ø" does not apply to syntactically complex names such as "the Thames," "the Beatles," "the Empire State Building," etc. On the other hand, Leckie's rule targets proper names, so it is an open question whether this rule applies to syntactically complex names. (Leckie herself prefers to see the determiner in a complex name as not a part of the name. For example, in "the Thames," "Thames" is the complete name and "the" is not a part of it.)

The second difference lies in whether predicative names are derived from generic names or meta-linguistic names. While I argue that predicative names are primarily derived from generic names, Leckie argues that they are derived from meta-linguistic names. The main reason for my choice has to do with the zeugma test (I discussed this test in Section 3.2.): (50) # I visited two banks today – a river bank and a financial one.

(51) I visited two Alfreds today.

There is a contrast between (50) and (51). Whereas (51) sounds natural, (50) sounds zeugmatic. If predicative names are derived by applying a hidden morpheme or a lexical rule to metalinguistic names, it seems hard to understand why this contrast arises because a river bank and a financial bank have the same meta-linguistic name "bank."

The last difference is how flexible the transformation mechanism is. Whereas I posit a relational variable, Leckie posits a specific relation between referential names and predicative names. I prefer positing a relational variable, because it can be easily generalized to other count noun uses of names: ones in which names express individual-related properties (that is, producer, representation, and resemblance examples). If the silent morpheme takes a generic name, it expresses a name-bearing property. If it takes an individual, it expresses an individual-

related property. On the other hand, in order to derive individual-related properties, Leckie would need to posit additional lexical rules.

### 3.3.2. Matushansky's Account

According to Matushansky (2015), a proper name takes two arguments: an individual and a naming convention. For example, in her view, the lexical entry of "Alice" is as follows:

(60) ["Alice"] = λ.R∈D<sub><e<n,t>></sub>. λ.x∈D<sub>e</sub>. R(x)(/ælis/), where n is a sort of the type e (a phonological string or some other PF output representation) (Matushansky 2015, p.340).
"R" is a relational variable over naming conventions. She claims that both referential and predicative names can be derived from this common meaning.

(61) a. Referential Use: ["'the Alice"] =  $\iota x$ .  $R_0(x)(/\alpha lis/)$ , where  $R_0$  is the naming convention in force between the speaker and the hearer.

b. Predicative Use:  $\llbracket \text{``Alice''} \rrbracket = \lambda.x \in D_e$ .  $\exists R(R(x)(/\&ls/))$ 

There are two ways in which the value of the relational variable can be given. First, it can be assigned a contextually salient naming relation by an assignment function. (61a) exemplifies this case. After the value of the variable is assigned, the name "Alice" combines with the null "the" to be a referential name. Second, the relational variable can be quantified by an existential quantifier. (62b) exemplifies this case and expresses the property of *being called /ælis/ by virtue* of some naming convention.

I have two comments on her view. First, as we can see from the lexical entry of (60), she is implicitly assuming that there is a one-to-one relation between a name and its sound. But this is not true. One name can have multiple sounds. For example, "Limoncello' is an Italian surname but, evidently, many Italian-Americans belonging to the Limoncello family spell their name 'Lemongello,' and pronounce it differently as well" (Jeshion 2015c. ft 26). Also, multiple names can share the same sound. For example, "Kim" in "Jaegwon Kim" and "Kim" in "Kim

Kardashian" sound the same, but they are different names. "Kim" in "Jaegwon Kim" is a Korean surname. "Kim" in "Kim Kardashian" is a diminutive form of the American given name "Kimberly." They just happen to have the same sound and spelling.

Second, Matushansky's view is committed to an arbitrary syntactic rule on the distribution of the covert and overt "the." In her view, a name carries a relational variable. It can be either saturated by an assignment function or bound by a quantifier. When it is saturated by an assignment function, the name takes the covert "the" (e.g., (61a)). When it is bound by an implicit quantifier, the name takes the overt "the" (e.g., Katherine sentences in Jeshion (2017)). But it seems hard for her to explain this phenomenon without postulating an arbitrary stipulation on the distribution of the covert and overt "the."

# 4. Conclusion

I set two goals in this paper. The first was to reject the predicativists' explanation of referential names and predicative names. I presented, as counter-examples to the predicativists' account, three constructions in which the projection of determiners is prohibited: incorporation, modification, and measure phrase uses. If names are in parallel with count nouns, they are expected to behave like count nouns in those constructions. But there are asymmetries in available readings between names and count nouns in those constructions. Names in those constructions can have referential readings, but count nouns cannot. The second goal was to provide an alternative explanation for the two types of names: referential and predicative names. I explained the two types of names by positing a hidden morpheme, rather than by positing a hidden determiner. The semantic function of the hidden morpheme is similar to that of the English morpheme "-ian," but not exactly the same as that of "-ian." The main difference between them lies in whether they carry a degree variable or not.

#### References

- Anderson, J. (2004). On the grammatical status of names, *Language*, 80(3), 435–474.
- Bach, K. (1981). What's in a name. Australasian Journal of Philosophy, 59(4), 371–386.
- Bach, K. (2002). Giorgione was so-called because of his Name. *Philosophical Perspectives*, 16, 73–103.
- Bach, K. (2015). The predicate view of proper names. *Philosophy Compass*, 10, 772–784.
- Baker, M. (1988). *Incorporation: A theory of grammatical function changing*, University of Chicago Press.
- Barker, C. (2011). Possessives and Relational Nouns. In C. Maienborn et al. (Eds.), Semantics: An international handbook of natural language meaning. Berlin: De Gruyter Mouton.
- Bartsch, R & Vennemann, T. (1972). Semantic structures: A study in the relation between semantics and syntax. Frankfurt am Main: Athenaum.
- Bauer, L. & Valera, S. (Eds.) (2005). Approaches to conversion/zero-Derivation. Waxmann.
- Borik, O. & Gehrke, B. (2015). An Introduction to the syntax and semantics of pseudo-incorporation. In O. Borik, & B. Gehrke (Eds.), *The syntax and semantics of pseudo-incorporation* (pp. 1–43). Brill.
- Burge, T. (1973). Reference and proper names. *Journal of Philosophy*, 70, 425–39.
- De Clercq, K. (2008). Proper names used as common nouns in belgian dutch and german. In B. Botma, & M. van Koppen (Eds.), *Linguistics in the Netherlands* (Vol. 25, pp. 63–74). Amsterdam: John Benjamins.
- Delgado, L. (2019). Between singularity and generality: the semantic life of proper names. *Linguistics and Philosophy* (in press). https://doi.org/10.1007/s10988-018-9251-1.
- Elbourne, P. (2005). Situations and individuals. MIT Press.
- Fara, D. G. (2011), You can call me 'stupid',... just don't call me stupid. Analysis, 71,

- 492-501.
- Fara, D. G. (2015a), "Literal" uses of proper names. In A. Bianchi (Eds.), *On reference*, Oxford University Press.
- Fara, D. G. (2015b), Names are predicates. *Philosophical Review*, 124(1), 59–117.
- Fara, D. G. (2015c), A problem for predicativism solved by predicativism. *Analysis*, 75(3), 362–71.
- Giannakidou, A. & Yoon, S. (2011). The subjective mode of comparison: Metalinguistic comparatives in Greek and Korean. *Natural Language and Linguistic Theory*, 29, 621–655.
- Gray, A. (2015). Lexical individuation and predicativism about names. *Thought*, 4(2), 113–123.
- Gray, A. (2017). Names in strange places. *Linguistics and Philosophy*, 40(5), 429–472.
- Gray, A. (2018). Lexical-rule predicativism about names. Synthese, 195(12), 5549–69.
- Green, J. (2006). An abundance of Katherines. Dutton Books.
- Harley, H. (2011), Compounding in distributed morphology. In R. Lieber, & P. Stekauer (Eds), *The oxford handbook of compounding*. Oxford University Press.
- Heim, I., & Kratzer, A. (1998). Semantics in generative grammar. Blackwell.
- Hornsby, J. (1976). Proper names: a defense of burge. *Philosophical Studies*, 30, 227–34.
- Jeshion, R. (2015a). Names not predicates. In A. Bianchi (Eds.), *On reference*, Oxford University Press.
- Jeshion, R. (2015b). A rejoinder to Fara's "literal" uses of proper names.' In A. Bianchi (Eds.), *On reference*, Oxford University Press.
- Jeshion, R. (2015c). Referentialism and predicativism about proper names. *Erkenntnis*, 80(2), 363–404.
- Jeshion, R. (2017). 'The' problem for the-predicativism. *The Philosophical Review*,

- 126(2), 219–240.
- King, J. (2006). Singular terms, reference, and methodology in semantics. *Philosophical Issues*, 16, 141–61.
- Leckie, G. (2013). The double life of names. *Philosophical Studies*, 165(3), 1139–60.
- Matthews, P. H. (1991). Morphology. Cambridge: Cambridge University Press.
- Matushansky, O. (2006a), Head-movement in linguistic theory. *Linguistic Inquiry*, 37, 69–109.
- Matushansky, O. (2006b). Why rose is the rose: On the use of definite articles in proper Names. *Empirical issues in syntax and semantics*, 6, 285–307.
- Matushansky, O. (2008), On the linguistic complexity of proper names. *Linguistics and Philosophy*, 31(5), 573–627.
- Matushansky, O. (2015). The other Francis Bacon: On non-bare proper names. *Erkenntnis*, 80(2), 335–362.
- McCawley, J. D. (1988). *The syntactic phenomena of English*. Chicago: University of Chicago.
- Morzycki, M. (2011). Metalinguistic comparison in an alternative semantics for imprecision. *Natural Language Semantics*, 19, 39–86.
- Nunberg, G. (1995). Transfers of Meaning. *Journal of Semantics*, 12, 109–132.
- Partee, B. H. (1986). Noun phrase interpretation and type-shifting principles. In J. Groenendijk, D. de Jongh, & M. Stokhof (Eds.), *Studies in discourse representation theory and the theory of generalized quantifiers* (pp. 115-143). Dordrecht: Foris.
- Partee, B. (1989). Binding implicit variables in quantified contexts. *Proceedings of the Chicago Linguistics Society*, 25, 342–65.
- Schoubye, A. J. (2016). A problem for predicativism not solved by predicativism.

Semantics & Pragmatics, 9, 1–11.

Schoubye, A. J. (2017). Type-ambiguous names. *Mind*, 126, 715–767.

Schwarzschild, R. (2005). Measure phrases as modifiers of adjectives. *Recherches Linguistiques de Vincennes*, 34, 207–228.

Stalnaker, R. (1974). Pragmatic presuppositions. In M. Munitz & P. Unger (Eds.), Semantics and philosophy (pp. 197–213). New York: New York University Press.

Stalnaker, R. (1978). Assertion. Syntax and Semantics, 9, 315–332.

Stanley, J., and Szabo, Z. (2000). On quantifier domain restriction. *Mind & Language*, 15, 219–61.

Wellwood, A. (forthcoming), The meaning of 'more.' Oxford University Press.