

Singular referential names as nonrigid designators and bound variables*

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1. Introduction

In the literature on reference, the semantic type of names is subject to ongoing debate. The predominant view, known as referentialism, is that names rigidly designate individuals, meaning that they refer to the same individual in all possible worlds in which the individual exists (Kripke 1972; Abbott 2002; Leckie 2013; Jeshion 2015; Schoubye 2017, 2018). An alternative view, known as predicativism, is that names designate properties of individuals (Sloat 1969, Burge 1973, Geurts 1997, Thomsen 1997, Bach 2002, Elbourne 2005, Matushansky 2008, Izumi 2012, Fara 2015, Matushansky 2015, Gray 2017, Muñoz 2019). This paper explores the strengths and weaknesses of each perspective in capturing the semantic behavior of names as singular referential arguments and determines that only predicativism can account for the full range of data.

The literature on both sides of the debate focuses primarily on English, but singular referential names do not have the same syntactic distribution in all languages. This work broadens the empirical domain by incorporating data from Greek, where names in argument position obligatorily appear with the definite article. The rest of this section presents the general distributional facts in English and Greek, the predicativist approach to bare singular names in English that treats them as covert definite descriptions, and two environments where bare singular names do not behave like definite descriptions.

In English, unmodified singular referential names can occur as bare arguments, while singular count nouns cannot.¹

- | | | | | | |
|-----|----|-----------------------|-----|----|---------------------------|
| (1) | a. | Helen plays the lyre. | (2) | a. | *Musician plays the lyre. |
| | b. | I admire Helen. | | b. | *I admire musician. |

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¹See Borer 2005 for evidence that bare names are singular and nonmass.

However, unmodified singular referential names cannot typically appear with the definite article, unlike singular count nouns.²

- (3) a. (#The) Helen plays the lyre. (4) a. The musician plays the lyre.
 b. I admire (#the) Helen. b. I admire the musician.

In Greek, neither singular referential names nor definite singular count nouns can occur as bare arguments.³

- (5) a. *(I) Eléni paízei lýra.
 the.F Eléni plays lyre
 ‘Eléni plays the lyre.’
 b. Thaumázo *(tin) Eléni.
 admire.1SG the.F Eléni
 ‘I admire Eléni.’
 (6) a. *(I) mousikós paízei lýra.
 the.F musician plays lyre
 ‘The musician plays the lyre.’
 b. Thaumázo *(ti) mousikó.
 admire.1SG the.F musician
 ‘I admire the musician.’

In other words, the distributional contrast between singular referential names and singular count nouns in English is largely neutralized in Greek.

Based in part on languages like Greek, many predicativist accounts propose that singular referential names in English appear with a phonologically null definite article in argument position (Sloat 1969, Geurts 1997, Thomsen 1997, Elbourne 2005, Matushansky 2008, Izumi 2012, Fara 2015, Matushansky 2015). This approach is often referred to as *the*-predicativism, according to which the sentences in (1) have the logical form in (7).

- (7) a. [S [DP ~~the~~ Helen] [VP plays [DP the lyre]]]
 b. [S [DP I] [VP admire [DP ~~the~~ Helen]]]

Building on the discussion in Schoubye 2017 and Muñoz 2019, the computation of *Helen* as a bare singular argument is modeled in (8). By functional application, the definite article in (8a) combines with the name predicate *Helen* in (8b), resulting in (8c).⁴

- (8) a. $[[\text{the}]]^w = \lambda P : P \in D_{\langle e, t \rangle} . \iota x . P(x)$
 b. $[[\text{Helen}]]^w = \lambda x : x \in D_e . x \text{ bears } /h\epsilon l\omicron n/ \text{ in } w$
 c. $[[\text{the}]]^w ([[\text{Helen}]]^w) = \iota x . x \text{ bears } /h\epsilon l\omicron n/ \text{ in } w$

²Jeshion (2015) and Gray (2017) show that there are contexts in English where unmodified singular names can be preceded by an unstressed definite article, hence the use of # rather than * in (3).

³I am grateful to Phoebos Panagiotidis, Michail Paraskevopoulos, Marios Simos, and Thanasis Soultatis for providing their judgments of the Greek data in this paper. All errors are my own.

⁴As Izumi (2012) observes, using a phonological string instead of a quotation addresses the circularity objection to predicativism.

That is, *Helen* as an argument refers to the (contextually) unique individual x who bears the phonological string /hɛlən/ in world w . In short, *the*-predicativism claims that singular referential names are covert definite descriptions.

One of the criticisms of *the*-predicativism is that singular referential names behave differently than definite descriptions in modal environments (Kripke 1972; Abbott 2002; Hawthorne and Manley 2012; Schoubye 2017, 2018; Muñoz 2019).⁵ Ostensibly, singular referential names take only wide scope with respect to modals, whereas definite descriptions can take either narrow or wide scope.

- (9) a. Helen may win the scholarship.
b. The musician may win the scholarship.

In (9a), only a rigid interpretation of *Helen* seems to be available, where the name denotes the same individual in all possible worlds in which this individual exists. In (9b), however, there are two interpretations of *the musician*. In one, the definite description refers to the same individual across possible worlds, and in the other, the definite description refers to different individuals in different possible worlds, as in (10).

- (10) a. In world w , Dorothy is a musician, and George is a dancer. Both are nominated for the scholarship, and Dorothy wins.
b. In world w' , Helen is a musician, and Nicholas is a painter. Both are nominated for the scholarship, and Helen wins.
c. In world w'' , Peter is a musician, and Sophia is a writer. Both are nominated for the scholarship, and Sophia wins.

If names appear with the definite article, they seem to be able to take narrow scope with respect to modals, in which case they denote different individuals in different possible worlds and therefore are not rigid designators (Schoubye 2017, Muñoz 2019).⁶

- (11) The Helen may win the scholarship.

The semantic contrast between (9a) and (11) suggests that *Helen* as a bare singular argument does not occur with a silent definite article, challenging *the*-predicativism.

Quantifiers are responsible for another environment that is problematic for *the*-predicativism (Abbott 2002; Hawthorne and Manley 2012; Schoubye 2016; Gray 2017; Schoubye 2017, 2018; Muñoz 2019). Singular referential names, but not definite descriptions, resist being bound by quantifiers.

- (12) a. In every competition, Helen wins the scholarship.
b. In every competition, the musician wins the scholarship.

⁵See Geurts 1997, Bach 2002, Elbourne 2005, Matushansky 2008, Izumi 2012, and Fara 2015 for discussion from the perspective of *the*-predicativism and Rothschild 2007 for arguments that not all definite descriptions display uniform behavior in these contexts.

⁶Muñoz (2019) uses family names to improve the narrow scope interpretation.

The most salient reading of *Helen* in (12a) is one in which the same individual wins in all of the competitions. On the other hand, there are two readings of *the musician* in (12b), one in which the same individual wins in all of the competitions and another in which different individuals win in different competitions. According to the different individual reading, *the musician* behaves as a bound variable in that its referent covaries with the quantified element.⁷ If, however, names appear with the definite article, covariation is more accessible (Schoubye 2016, Muñoz 2019).

(13) In every competition, the Helen wins the scholarship.

The contrast between (12a) and (13), like that between (9a) and (11), undermines the claim that *Helen* occurs with a null definite article as a bare argument.⁸ To address this issue, recent work in predicativism explores the possibility that bare singular names in English occur with a null proprial article instead.

2. The proprial article

In some languages, singular referential names appear with a morphologically distinct element known as the proprial article. In the following data from Balearic Catalan, the proprial article (glossed as PROP) occurs with nominal expressions that are interpreted as names rather than as nouns (Caro Reina 2014:180).

- (14) a. Na Rosa és molt maca.
 PROP.F Rose is very beautiful
 ‘Rose is very beautiful.’
- b. Sa rosa és molt maca.
 the.F rose is very beautiful
 ‘The rose is very beautiful.’
- (15) a. En Ferrer té molta feina.
 PROP.M Ferrer has much work
 ‘Ferrer has a lot of work.’
- b. Es ferrer té molta feina.
 the.M smith has much work
 ‘The smith has a lot of work.’

Ghomeshi and Massam (2009), Muñoz (2019), and Izumi and Erickson (2021) assume a predicativist approach to the semantics of names and argue that singular referential names

⁷Although this phenomenon is frequently discussed in the literature, it is rarely accompanied by a formal analysis of how binding is established (Hawthorne and Manley 2012; Schoubye 2016, 2017; Muñoz 2019). Due to space limitations, I do not attempt to do so here.

⁸One question that merits further investigation is whether these contrasts are observed in languages that optionally use the definite article with singular referential names.

in English appear with a silent form of the proprial article instead of the definite article. In Ghomeshi and Massam's system, the proprial article is distinguished from the definite article by [PROP], an additional feature on D.⁹

(16) Balearic Catalan

- a. [D_[DEF, SG, F, PROP] *na* [NP_[NAME] *Rosa*]]
 b. [D_[DEF, SG, F] *sa* [NP *rosa*]]

(17) English

- a. [D_[DEF, SG, PROP] \emptyset [NP_[NAME] *Rose*]]
 b. [D_[DEF, SG] *the* [NP *rose*]]

For Muñoz as well as Izumi and Erickson, the source of rigidity is the proprial article. If bare singular names in English are covert proprial descriptions, there is no reason to expect that they would behave like definite descriptions, potentially resolving the primary weakness of *the*-predicativism. Still, many languages use the definite article with singular referential names.

As Izumi and Erickson (2021) remark, languages like Greek are crucial to future work on predicativism. If rigidity stems from the proprial article, there seems to be an implicit prediction that singular names that occur with the definite article are not rigid designators, as observed with *the Helen* in (11) and (13). In essence, since *i Eléni* 'the Eléni' has the form of a definite description in Greek, it should behave like one. Apart from Italian, where Longobardi (1994, 2005) claims that the definite article is an expletive when it appears with singular referential names in argument position, this prediction remains largely untested.

Given that the definite article obligatorily introduces singular referential names as arguments in Greek, the equivalents of (9) and (12) both consist of minimal pairs.

- (18) a. I Eléni mporeí na kerdísei tin ypotrofía.
 the.F Eléni may SBJV win the.F scholarship
 'Eléni may win the scholarship.'
 b. I mousikós mporeí na kerdísei tin ypotrofía.
 the.F musician may SBJV win the.F scholarship
 'The musician may win the scholarship.'
- (19) a. Se káthe diagonismó, i Eléni kerdízei tin ypotrofía.
 in every competition the.F Eléni wins the.F scholarship
 'In every competition, Eléni wins the scholarship.'
 b. Se káthe diagonismó, i mousikós kerdízei tin ypotrofía.
 in every competition the.F musician wins the.F scholarship
 'In every competition, the musician wins the scholarship.'

⁹In Jambrović to appear, I argue that name predicates minimally involve two nominalizing heads, one that generates the name itself and another that converts the name into a predicate.

In (18a), *i Eléni* ‘Eléni’ seems to rigidly designate the same individual in all possible worlds in which this individual exists, while in (18b), *i mousikós* ‘the musician’ can either designate the same individual across possible worlds or different individuals in different possible worlds. In other words, the singular referential name appears to take only wide scope with respect to the modal, but the definite description can take either wide or narrow scope. Similarly, in (19a), *i Eléni* refers to the same individual in all of the competitions, whereas in (19b), *i mousikós* can refer to the same individual in all of the competitions or to different individuals in different competitions. As in English, singular referential names, but not definite descriptions, resist being bound in Greek, presenting a significant obstacle for *the*-predicativism.

The semantic behavior of singular referential names in Greek apparently confirms Longobardi’s (1994, 2005) view that the definite article is an expletive when it occurs with unmodified singular names in argument position. If so, referentialists may be justified in their claim that namehood itself is responsible both for the rigidity of singular referential names and their resistance to being bound. However, Muñoz (2019) identifies a potential solution for predicativism by suggesting that the definite article is homophonous with the proprial article in languages like Greek. The structures in (20) demonstrate this proposal, where the name *Eléni* appears with the proprial article and the noun *mousikós* ‘musician’ appears with the definite article; both have singular feminine forms that are realized as /i/.

- (20) a. [D_[DEF, SG, F, PROP] i [NP_[NAME] *Eléni*]]
 b. [D_[DEF, SG, F] i [NP *mousikós*]]

Some may find Muñoz’s account stipulative, but it warrants consideration. In a diachronic analysis of the Greek definite article, Manolissou and Horrocks (2007) report that it was obligatory with count nouns in pragmatically definite contexts by the Classical Greek period (ca. 500–300 BCE) but remained optional with singular referential names until the Early Modern Greek period (ca. 1500–1800 CE).¹⁰ These findings echo Lyons’s (1999) observation that the use of the definite article with singular referential names is generally a late innovation. Even in languages where the proprial article is morphologically distinct from the definite article, it still evolved from an existing lexical or functional element. For instance, the Catalan proprial article is derived from the Latin noun *dominus* ‘lord, ruler’, and the proprial article in many North Germanic languages is identical in form to a personal pronoun (Delsing 1993, Stausland Johnsen 2016, Kokkermans 2018, Bernstein et al. 2019). In light of these facts, it is plausible that the definite article may also serve as a diachronic source of the proprial article in a given language.

Regardless of where future research on the proprial article may lead, the fate of predicativism does not rest solely on the possibility that singular referential names occur with a determiner other than the definite article. The remainder of this paper presents English and Greek data that shift the burden of explanation to referentialism. Section 3 discusses cases of singular referential names that can be interpreted nonrigidly, and section 4 introduces contexts in which any singular referential name can be bound.

¹⁰The names and date ranges of these periods are based on Ralli 2012.

3. Modals and nonrigid names

Names that are associated with famous individuals are commonly used to illustrate rigidity, yet these same names can also be nonrigid designators.

- (21) a. Aristotle may teach Socrates.
 b. Euripides may live next to Sophocles.
 c. Leonidas may compete with Pericles.

For example, in one interpretation of (21a), *Aristotle* denotes the same individual in all possible worlds in which this individual exists, as does *Socrates*. In another interpretation, each name denotes different individuals in different possible worlds, as in (22).

- (22) a. In world w , Aristotle (Carter) teaches Socrates (Evans).
 b. In world w' , Aristotle (Jones) teaches Socrates (Miller).
 c. In world w'' , Aristotle (Smith) does not teach Socrates (Wilson).

The use of two names in (21) is intentional because it underscores how the referent of one name may be arbitrary in relation to the referent of the other.

Before turning to the Greek data, there are three points to address. First, unlike with *the Helen* in (11) above, using an unstressed definite article with each name in (21) does not seem to improve the nonrigid readings, possibly because these are already accessible.

- (23) a. (The) Aristotle may teach (the) Socrates.
 b. (The) Euripides may live next to (the) Sophocles.
 c. (The) Leonidas may compete with (the) Pericles.

Second, nonrigidity in (21) does not depend on the technicality of different individuals having different family names. In fact, different individuals may have the same family name, middle name, date of birth, place of birth, and so forth.

- (24) a. In world w , Aristotle John Carter of Los Angeles, born to Barbara and Dennis Carter on September 22, 2021, teaches Socrates Philip Evans of New York, born to Catherine and Gregory Evans on March 20, 2022.
 b. In world w' , Aristotle John Carter of Los Angeles, born to Irene and Lucas Carter on September 22, 2021, teaches Socrates Philip Evans of New York, born to Melissa and Nicholas Evans on March 20, 2022.
 c. In world w'' , Aristotle John Carter of Los Angeles, born to Ophelia and Stephen Carter on September 22, 2021, does not teach Socrates Philip Evans of New York, born to Penelope and Thomas Evans on March 20, 2022.

Based on the circumstances in (24), both (21a) and (25) can be interpreted nonrigidly.

- (25) Aristotle John Carter may teach Socrates Philip Evans.

Third, analogous examples in the past tense show that singular referential names and definite descriptions can result in judgments contrary to those that are generally assigned to each type of expression in modal environments.

- (26) a. In world w , Aristotle (Carter) taught Socrates (Evans) how to play the lyre.
 b. In world w' , Aristotle (Jones) taught Socrates (Miller) how to play the lyre.
 c. In world w'' , Aristotle (Smith) taught Socrates (Wilson) how to play the lyre.

Given the context in (26), one may interpret (27a) as false and (27b) as true.

- (27) a. The person who taught Socrates how to play the lyre might not have been Aristotle.
 b. Aristotle might not have been Aristotle.

If, however, both occurrences of *Aristotle* in (27b) are coindexed, the sentence is unambiguously false.

- (28) #Aristotle_i might not have been Aristotle_i.

The contrast between (27b) and (28) suggests that what is rigid is the identity of an individual, not the linguistic expression that establishes reference.

The Greek equivalents of the sentences in (21) are semantically ambiguous as well.

- (29) a. O Aristotélis mporeí na didáxei ton Sokráti.
 the.M Aristotélis may SBJV teach the.M Sokrátis
 'Aristotélis may teach Sokrátis.'
 b. O Euripídis mporeí na ménei dípla ston Sofoklí.
 the.M Euripídis may SBJV live next to.the.M Sofoklís
 'Euripídis may live next to Sofoklís.'
 c. O Leonídas mporeí na synagonisteí ton Periklí.
 the.M Leonídas may SBJV compete.with the.M Periklís
 'Leonídas may compete with Periklís.'

As in English, each name in (29) can either refer to the same individual across possible worlds or to different individuals in different possible worlds. For the different-individual reading of (29b), consider (30).

- (30) a. In world w , Euripídis (Bláchos) lives next to Sofoklís (Georgíou).
 b. In world w' , Euripídis (Karagiánnis) lives next to Sofoklís (Makrís).
 c. In world w'' , Euripídis (Oikonómou) does not live next to Sofoklís (Papadóπουλος).

The nonrigid interpretations of (29a) and (29c) can be illustrated in the same way.

Importantly, nonrigidity extends to sentences with only one occurrence of a name.

- (31) a. Michelle Williams may appear on the red carpet.
b. Roger Taylor may perform with his old bandmates.

In one interpretation of (31a), the same individual either appears or does not appear on the red carpet depending on the world of evaluation. In another interpretation, different individuals, such as Michelle Williams the actor and Michelle Williams the singer, either appear or do not appear on the red carpet depending on the world of evaluation. If the event is related to the music industry, the more likely referent is Michelle Williams the singer, but if Michelle Williams the actor appears on the red carpet instead, it is still the case that Michelle Williams has appeared on the red carpet. Similar observations apply to (31b) with the drummers Roger Taylor of Duran Duran and Roger Taylor of Queen. Furthermore, in the context of (31) and the discussion in this paragraph, the truth conditions of the sentences in (32) are ambiguous.

- (32) a. Michelle Williams might not have been Michelle Williams.
b. Roger Taylor might not have been Roger Taylor.

As before, if the names are coindexed, the same sentences are false.

- (33) a. #Michelle Williams_i might not have been Michelle Williams_i.
b. #Roger Taylor_i might not have been Roger Taylor_i.

These data reinforce the view that rigidity is ultimately a notion of identity.

In summary, singular referential names can be interpreted nonrigidly in modal environments, destabilizing one of the putative contrasts between names and definite descriptions. These findings support predicativism and challenge referentialism.

4. Quantifiers and bound names

This section begins with the names that were shown to allow for nonrigid readings under modal operators. In sentences with two names, both can be bound by a higher quantifier.

- (34) In every contest, Leonidas competes with Pericles.

For the bound reading of (34), consider the situation in (35) where different individuals compete with each other in different contests.

- (35) a. In bowling, Leonidas (Baker) competes with Pericles (Davis).
b. In golf, Leonidas (Hall) competes with Pericles (Lewis).
c. In tennis, Leonidas (Scott) competes with Pericles (Young).

Since covariation is already possible in (34), one may predict that the addition of unstressed definite articles does not improve this interpretation, which is borne out.

(36) In every contest, (the) Leonidas competes with (the) Pericles.

In Greek, occurrences of two different names can also be bound by a quantifier.

(37) Se káthe agónisma, o Leonídas synagonízetai ton Periklí.
 in every contest the.M Leonídas competes.with the.M Periklís
 ‘In every contest, Leonídas competes with Periklís.’

The bound reading of (37) could correspond to the circumstances in (38).

(38) a. In cycling, Leonídas (Antoníou) competes with Periklís (Dimópoulos).
 b. In running, Leonídas (Ioannídis) competes with Periklís (Nikoláou).
 c. In swimming, Leonídas (Ráptis) competes with Periklís (Tsoukalás).

As in the modal environments above, the use of two names highlights the arbitrary relation that the referents may have to each other, making covariation more salient. In addition, bound interpretations are possible in sentences where there is only one name.

(39) a. Before every event, Michelle Williams appears on the red carpet.
 b. At every music festival, Roger Taylor performs with his old bandmates.

For instance, (39b) could describe the situation in (40).

(40) a. At Glastonbury, Roger Taylor of Duran Duran performs with his old bandmates.
 b. At Rock in Rio, Roger Taylor of Queen performs with his old bandmates.
 c. At Summerfest, Roger Taylor of Queen performs with his old bandmates.

One reason to suspect that covariation is available in (39) is that the bound interpretation of each name does not benefit from an unstressed definite article.

(41) a. Before every event, (the) Michelle Williams appears on the red carpet.
 b. At every music festival, (the) Roger Taylor performs with his old bandmates.

In short, the same names that behave like definite descriptions under modal operators also do so under quantifiers.

The second part of this section establishes that virtually any singular referential name can be interpreted as a bound variable. One way to make covariation with singular referential names accessible is to manipulate the restrictor of the quantifier. For example, expressions like *(monogamous) couple*, *set of triplets*, and *(nuclear) family* denote “exclusive” sets in the sense that an individual cannot simultaneously belong to more than one such

set. That is, an individual cannot be in more than one monogamous relationship, belong to more than one set of triplets, or be a member of more than one nuclear family at a time. If one of these expressions occurs as the restrictor of a quantifier, it is possible to bind a singular referential name.

- (42) a. In every couple, Dorothy (is the one who) works from home.
 b. In every set of triplets, Nicholas (is the one who) studies Greek.
 c. In every family, Sophia (is the one who) reads the most.

In (42a), different individuals in different couples work from home, in (42b), different individuals in different sets of triplets study Greek, and in (42c), different individuals in different families read the most. Moreover, the inclusion of the definite article does not necessarily improve covariation.

- (43) a. In every couple, (the) Dorothy (is the one who) works from home.
 b. In every set of triplets, (the) Nicholas (is the one who) studies Greek.
 c. In every family, (the) Sophia (is the one who) reads the most.

In Greek, singular referential names are also interpreted as bound variables in the presence of such restrictors.

- (44) a. Se káthe zeugári, i Dorotheá (eínai autí pou) douleúei apó to spíti.
 in every couple the.F Dorotheá is she who works from the.N house
 ‘In every couple, Dorotheá (is the one who) works from home.’
 b. Se káthe set tridymon, o Nikólaos (eínai autós pou) spoudázei elliniká.
 in every set triplets.GEN the.M Nikólaos is he who studies Greek
 ‘In every set of triplets, Nikólaos (is the one who) studies Greek.’
 c. Se káthe oikogéneia, i Sofía (eínai autí pou) diavázei perissótero.
 in every family the.F Sofía is she who reads more
 ‘In every family, Sofía (is the one who) reads the most.’

In these sentences as well, the most salient reading is the one in which the referent of each name covaries with the quantified element.

Lastly, if one restricts the set of possible names in a given society, bound interpretations of singular referential names are available in both English and Greek. For simplicity, I use familiar sets of names in (45) and (46), but randomized sets would have the same effect.

- (45) a. In every city where the only possible names are from Greek mythology, Poseidon runs the fire department.
 b. In every village where the only possible names are from Shakespeare’s plays, Juliet questions the status quo.
 c. In every community where the only possible names are from Middle-earth, Merry and Pippin never miss a party.

- (46) a. Se káthe póli ópou ta móna pithaná onómata éinai apó tin
 in every city where the.N only.N possible.N names are from the.F
 ellinikí mythología, o Poseidónas dieuthúnei tin pyrosvestikí.
 Greek.F mythology the.M Poseidónas runs the.F fire.department
 ‘In every city where the only possible names are from Greek mythology,
 Poseidónas runs the fire department.’
- b. Se káthe chorió ópou ta móna pithaná onómata éinai apó ta
 in every village where the.N only.N possible.N names are from the.N
 érga tou Saíxpir, i Iouliéta amfisviteí to katestiméno.
 plays the.M.GEN Shakespeare the.F Iouliéta questions the.N status.quo
 ‘In every village where the only possible names are from Shakespeare’s plays,
 Iouliéta questions the status quo.’
- c. Se káthe koinótita ópou ta móna pithaná onómata éinai apó ti
 in every community where the.N only.N possible.N names are from the.F
 Mési Gi, o Méri ki o Pípin de chánoun poté kanéna párti.
 Middle.F Earth the.M Méri and the.M Pípin not miss ever a.N party
 ‘In every community where the only possible names are from Middle-earth,
 Méri and Pípin never miss a party.’

Referentialists have objected to similar examples in Geurts 1997, Elbourne 2005, and Matushansky 2008 on the grounds that they rely on metalinguistic occurrences of names to enable binding, but (45) and (46) are not subject to this criticism.

5. Conclusion

The initial goal of this paper was to determine whether the semantic theory of predicativism is compatible with Greek, one of the languages that is often used to motivate the argument that bare singular names in English occur with a phonologically null definite article. From the limited set of examples in the first two sections, singular referential names in English and Greek seemed to behave differently than definite descriptions in the presence of modals and quantifiers, casting doubt on the tenability of *the*-predicativism. Next, a solution inspired by the notion of a proprial article was explored, which is viable for English and can be extended to Greek if one allows for the possibility that the proprial article evolved from, and is still homophonous with, the definite article.

A more comprehensive set of data revealed that singular referential names in both languages can be nonrigid designators under modal operators and bound variables under quantifiers. The fact that the same judgments apply to bare singular names in English and singular names that appear with the definite article in Greek suggests that whatever is ultimately the correct analysis, it is grounded in predicativism rather than referentialism.

Many avenues remain for future research. First, more languages that use articles and other elements with unmodified singular names should be considered to evaluate whether the judgments based on English and Greek hold in these languages as well. Second, bare argument status and other syntactic contrasts between singular referential names and sin-

gular count nouns may contribute to the phenomenon of rigidity in ways that have yet to be investigated in depth.¹¹ Finally, the role of number in the interpretation of singular referential names warrants a closer look. For instance, both Ghomeshi and Massam (2020) and Saab and Lo Guercio (2020) raise the possibility that number is different in singular referential names and singular count nouns. What is evident is that the debate over the semantic type of names is far from over.

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¹¹See Jambrović 2021 for discussion of proper names versus proper nouns, both of which appear as bare singular arguments in English.

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