

THE PREDICATE NOMINAL ANALYSIS OF ENGLISH *THERE*-SENTENCES

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Abstract: In this article, I argue against the predicate nominal analysis of English *there*-sentences (especially Williams 1994, 2006 and Hazout 2004, 2008). The present analysis has several advantages, mainly because it takes into account the similarities of *there*-sentences with copula structures containing a predicate nominal. However, I will show that the two structures also differ in important respects. I propose an alternative analysis, in which the subject of predication is the pro-form *there*. However, in contrast to the predicate nominal analysis, I argue that the noun phrase projects an empty D-layer that introduces a variable. This variable is bound by existential closure giving rise to the existential interpretation of the structure. The whole predication structure is interpreted as locating an entity of the type and amount specified in the noun phrase at a given location to which the pro-form *there* refers.

Keywords: *there*-sentences, existentials, predicate nominal, predication, copula

1. Introduction

In this article, I argue against the predicate nominal analysis of English *there*-sentences¹ (cf. especially Williams 1994, 2006 and Hazout 2004, 2008). I will show that the noun phrase does not behave like a predicate nominal in all relevant respects. Alternatively, I propose an analysis of English existential *there*-sentences in which the post-copular noun phrase is indeed in a predicate position, however, it does not have the syntax and semantics of a predicate nominal. Instead, the whole predication structure is interpreted as locating an individual of the kind specified in the noun phrase. In the first part of the article, I illustrate the predicate nominal analysis of English *there*-sentences, discuss its advantages and problems. Then, I will sketch what I call the predicate dilemma: neither of the three core elements of the structure, *there*, the copula and the noun phrase seems to function as a predicate. I will propose a solution to this problem relying on a syntactic predication configuration (Bowers 1993), which is interpreted as locating an entity of the type and amount specified in the noun phrase at a given location to which the pro-form *there* refers. I conclude the paper with a short summary.

2. The predicate nominal analysis

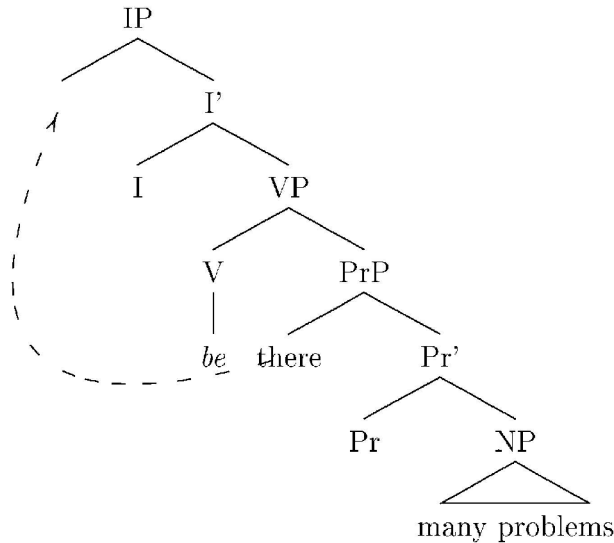
2.1 Overview

The predicate nominal analysis of English *there*-sentences goes back to at least Jenkins (1975). The same core idea is adopted in Williams (1980, 1994, 2006), McNally (1997), Zamparelli (2000) and Hazout (2004, 2008). In these analyses, *there* is the subject and the noun phrase is the predicate in the structure. Thus, *there*-sentences are seen in parallel to

¹ In this article, I look only at *there*-sentences with the copula as main verb. *There*-sentences with an unaccusative verb behave differently (Aissen 1975, Hartmann 2008) and are not discussed here.

regular copula constructions in which the post-copular noun phrase is the predicate of the structure. The most recent analysis implements this idea in terms of a predicate phrase (PrP, Bowers 1993 and follow-up work, Hazout 2004). Hazout's analysis is given in (1).

(1) Hazout (2004: 411)



Independently of the details of the syntactic structure (including a PrP or not) the important aspect of this analysis is that the post-copular noun phrase behaves like a predicate nominal. This is more or less independent of the question whether the material following the noun phrase belongs to the noun phrase, as proposed by Jenkins (1975) and Williams (1980, 1994, 2006) or is a separate constituent, as proposed by McNally (1997), Zamparelli (2000), Hazout (2004). In the following, I will report arguments from the literature in favour of such an analysis, and discuss new arguments against this position afterwards.

2.2 Arguments for the predicate nominal analysis

Jenkins (1975) supports his analysis mostly with the observation that the only elements that have to be present in existential *there*-sentences are the pro-form *there* and the noun phrase. The PP that often turns up with *there*-sentences is optional, as in (2):

- (2)
- a. There are dinosaurs.
 - b. But there are a number of treatments which can make an enormous difference to the quality of people's lives. (BNC, text="CF5" n= "10")
 - c. Some months before each series, there is a frantic period of preparation. (BNC, text="CH8" n= "2").
 - d. There was medical evidence that her life could have been saved had she arrived at hospital earlier. (BNC, text= "FCT" n= "14")

Jenkins takes this to mean that the PP cannot be the predicate of the structure. Instead, he proposes that the noun phrase has to be the predicate. Further support for this analysis of the noun phrase as predicate comes from studies that show that the post-copular noun phrase behaves like a predicate nominal. Williams (1994) provides the following arguments for such

an analysis. First of all, he observes that predicates are much more difficult to extract from *wh*-islands than arguments are, as shown in (3) - (4):

- (3) a. ?What do you wonder who fixed?
 b. ?Who do you wonder why Bill likes?
 c. ?What do you wonder who believes handy?
 (adapted from Williams 1994: 137)
- (4) a. *How tall do you wonder who became?
 b. *How foolish do you wonder why Bill considers anyone t?
 (adapted from Williams 1994: 137)

The post-copular noun phrase in *there*-constructions behaves on a par with predicates (5), being just as degraded as extraction of predicates.²

- (5) a. *Who do you wonder why there was at the party?
 b. *How many people do you wonder why there were?

A second argument in favour of the analysis of the post-copular noun phrase as a predicate is that it exhibits narrow scope, just like predicate nominals in other copular constructions (Williams 1994 and McNally 1997; for the observation that noun phrases in *there*-constructions obligatorily exhibit narrow scope, see Milsark 1977).

- (6) a. There weren't two people drunk. Neg > 2, *2 > Neg
 b. John and Mary aren't two students I know. Neg > 2, *2 > Neg

In her dissertation, McNally (1997) provides two further examples in which the post-copular noun phrase behaves on a par with predicate nominals in predicative copular structures. It is not possible (for most speakers) to relativize a predicate nominal with a *wh*-relative pronoun (for more details on amount relatives of this type see Carlson 1977, Cornilescu 1996, Grosu and Landman 1998, McNally 2008).

- (7) a. The people *who/that/Ø there were at the party were drunk.
 b. They dressed like the eccentric women *who/that/Ø they were.
 (McNally 1997: 85)

Finally, both in *there*-structures and in other copula structures, strong quantifiers can only occur if they range over kinds (McNally 1997):

- (8) a. There was every kind of wine available for tasting.
 b. ??There was every worker ready.
- (9) a. John has been every kind of doctor.
 b. *John has been every doctor.

2.3 Arguments against the predicate nominal status

There is also a set of data that are unexpected under the predicative noun phrase analysis.

² In Williams' analysis the PP can be part of the noun phrase itself. It can be stranded due to an independent process of (PP) extraposition. The same holds for adjectives or other elements that can be stranded.

(i) *Other predicates*

If *there* can be the subject of a predicate nominal, it is not obvious why it is restricted to nominals and cannot occur with predicative adjectives (or PPs) (see Jenkins 1975 for the observation).³

- (10) a. *There is red. (Jenkins 1975: 39)
 b. *There is in the garden.

(ii) *Tests for predicatehood*

A more problematic set of data for the predicative noun phrase approaches is that the noun phrase in *there*-sentences does not behave as a predicate nominal under the available tests for predicatehood (Heggie 1988, Zamparelli 2000, Rothstein 1983, 2001 among others). Let me go through the applicable tests:

(A) Complement of *consider*-type verbs

Usually predicate nominals can be the predicate after *consider*-type verbs (11). If *there* were a typical subject of *there*-sentences and the noun phrase a predicate nominal, the two elements should be available as a small clause without *be*, contrary to fact:

- (11) a. I believe there to be a picture of the wall in the room.
 b. *I believe there a picture of the wall in the room.
 (Moro 1997: 119)

(B) Relativization by *which*

It has been established that *which*-clauses can relativize predicates (Rothstein 2001: 257) as illustrated in (12a). However, the post-copular noun phrase of an existential construction cannot be relativized in this way (12b):

- (12) a. John is a murderer, which is a horrible thing to be.
 b. *There's a murderer, which is a horrible thing to be.

The sentence can be improved to the extent that some native speakers consider it acceptable as in (13) (thanks to Henk van Riemsdijk p.c. for suggesting the example). I suspect that this improvement is related to the possibility for *which* to refer back to a situation as in (14) under the interpretation "It is good that Mary got a job".

- (13) There's a murderer, which is a horrible thing for there to be.
 (14) Mary got a job, which is good.

(C) Non-restrictive relative clause with *who*

Another test for predicate nominals vs. argumental noun phrases is that the former cannot be modified by a non-restrictive relative clause with *who* (Rapoport 1987: 135 and Doron 1988: 289):

- (15) *Rebecca is a good eater_i, who_i has been there for quite a while.
 (Rapoport 1987: 135)

³ Hazout (2004) suggests a possible solution to this problem. He proposes that *there* needs to inherit the phi-features from a noun phrase, and neither adjectives nor PPs can provide these features.

- (16) *I consider Rina the duty nurse, who is very efficient.
(Heycock and Kroch 1999: 374)
- (17) ?John is a man, who I was telling you about. (Doron 1988: 289)

In *there*-sentences these non-restrictive relative clauses are possible:

- (18) And there was one girl, who fancied herself in love with a naval cadet, who could actually produce real tears during the singing of . . . (BNC, text="EFP" n="68")
- (19) There was another visitor, who was as discreet - and just as vital to the Shah as Dr Flandrin. (BNC, text="G3R" n="1190")

Note that the restriction is not about the unavailability of non-restrictive relative clauses with predicate nominals in general, but about the restriction on *who* with a (potentially human) predicate nominal. Non-restrictive relative clauses are possible with *which* as the following examples show (thanks to Henk van Riemsdijk for suggesting the examples).

- (20) a. Bush is president of the United States, which is the most powerful position in the world.
b. *Bush is president of the United States, who is the most powerful person in the world.

Furthermore, when the second nominal in the structure is definite, non-restrictive relative clauses become available again. Note, however, that it is difficult to exclude an identity or equative reading here. In this case, we are not dealing with a predicate nominal.

- (21) a. Bush is the president of the United States, who is the most powerful person in the world.
b. In this movie, Belmondo is Beaumont, who escaped from a prison in Africa.

(iii) *Types of noun phrases*

Apart from the fact that the tests on predicatehood fail with the predicate nominal in *there*-sentences, Higginbotham (1987) provides another piece of evidence against the predicatehood of the noun phrase in *there*-sentences. Not all noun phrases that can be predicates can occur in the *there*-construction (22):

- (22) a. Everything I respect, John is.
b. *There is everything I respect.
(Higginbotham 1987: 54)

Similarly, Kallulli (2008) shows that bare singular noun phrases can be predicates, but they are not possible with *there*-sentences, though they are with copula structures:

- (23) a. She is professor of philosophy at Yale.
b. *There is professor of philosophy at Yale.
(Kallulli 2008)

(iv) *Contrast to other predicate nominals*

The final piece of evidence against the analysis of *there*-sentences in terms of standard copula structures is that *there*-sentences are not fully equivalent to copula structures of the NP be NP

type. The class of quantifiers that occur with *there* is bigger than the class of quantifiers that are available with predicate nominals. *Several/many/few* are certainly available in the *there*-construction, but not as readily in copula constructions:

- (24) a. *We consider the boys several/many idiots.
 b. *They believed the men a few soldiers. (Rothstein 1983: 103)

2.4 Conclusion

The data discussed so far show that the analysis of the post-copular noun phrase in English existential *there*-sentences has similarities to predicate nominals with respect to (i) the extraction out of *wh*-islands, (ii) narrow scope, (iii) the prohibition of relativisation with *who*, (iv) the occurrence with strong quantifiers. However, there are also differences to regular copula constructions: (i) the impossibility of other predicates, (ii) embedding under *consider*-type verbs, (iii) relativisation of the post-copular noun-phrase with *which*, (iv) the possibility of different types of quantifiers like *several*, *few*. I conclude from these data that the predicate nominal analysis is not fully adequate for *there*-sentences.

3. The predication dilemma and its solution

3.1 The problem

We have seen above that the noun phrase in *there*-sentences is not the predicate. So what else could be the predicate in the structure? Two candidates are possible: the so-called expletive *there* (Moro 1991, 1997) or the copula verb *be*. I have argued in detail elsewhere, that *there* cannot be the predicate (Hartmann 2008, submitted). If *there* was the predicate, the existential construction would be expected to behave like a predicate inversion structure. However, the crucial criterion for predicate inversion in English is the restriction on extraction of and sub-extraction from the post-copular noun phrase (25). However, extraction is perfectly natural with extraction from *there*-sentences (26). Note that the restriction on extraction with *which* is due to an independent reason - the definiteness restriction (see Heim 1987).

- (25) a. *[Which picture]_i do you think [the cause of the riot]_j was [_{sc} t_i t_j]?
 b. *[Which wall]_i do you think [the cause of the riot]_j was [_{sc} [a picture of t_i] t_j]
 (Moro 1997: 45,49)
- (26) a. ??Which actors were there in the room? (Heim 1987: 27)
 b. What is there in the refrigerator? (Aissen 1975: 7)
 c. How many men do you think that there were t in the room? (Moro 1997: 126)
 d. Which wall do you think there was a picture of t? (Moro 1997: 124)

The final possibility is to assume that the copula in the *there*-sentences is the main predicate, selecting for a subject (the expletive *there*) and a complement (the post-copular noun phrase). This is a very old analysis, which also assumes that the copula in existential sentences is different from the copula in regular copula clauses. This approach has several short comings as well: (i) we would need to assume two different verbs *be*: a predicative copula and an existential copula. The fact that the same word is used in many different languages for both purposes has to be understood as mere coincidence; (ii) if *there* can be the subject of *be*, it remains unclear why *there* cannot appear as the subject of other verbs. If existential *be*

selected only the noun phrase as an argument, with *there* being a mere expletive element, it remains unclear why *there* cannot be left out in existential sentences (*A number of treatments are); (iii) if we assume an existential verb *be*, the list reading with *there*-sentences remains an odd phenomenon, unlinked to the existential construction. In the analysis proposed below, the list reading can be naturally derived; (iv) if we dealt with a typical verb-argument structure, the contrast in extraction out of *wh*-islands remains unclear, see (27) vs. (28) (repeated here for convenience):

- (27) a. ?What do you wonder who fixed?
 b. ?Who do you wonder why Bill likes?
 (28) a. *Who do you wonder why there was at the party?
 b. *How many people do you wonder why there were?

Finally, if the existential verb is a separate verb, it remains unclear why German exhibits a similar existential reading with da+copula+noun phrase (illustrated in 29) even though German has a different existential verb (*geben* ‘give’), which is usually used in existential contexts.

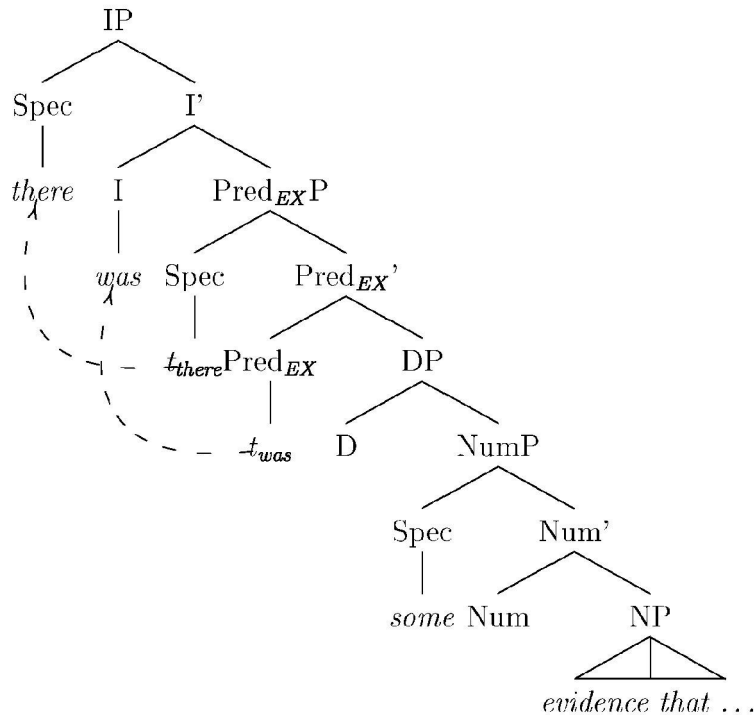
- (29) a. Ändert sich das jetzt? Ich glaube schon, denn da ist eine ganze
 changes REFL that now? I think already, because DA is a whole
 Generation, nämlich die meine, die arbeiten will.
 generation, namely the mine, that work_{INF} wants.
 ‘Will that change now? I think so, because there is a whole generation, namely
 mine, that wants to work.’
 (COSMAS II, R97/SEP.73106 Frankfurter Rundschau, 18.09.1997)
 b. . . . denn es gibt eine ganze Generation, nämlich die meine, die arbeiten will.
 c. *eine ganze Generation ist, die arbeiten will
 d. * . . . denn da ist jede Generation, die arbeiten will.
 e. * . . . denn da sind alle Generationen, die arbeiten wollen.

Thus, the third option seems not feasible either. We are left with a dilemma: the existential *there*-sentences contain three core elements, the expletive *there*, the copula *be* and the noun phrase, but neither of them seems to be a predicate. This dilemma leads me to a different proposal sketched in the next sections.

3.2 The proposal

The starting point of my analysis is the claim that *there* is the (true) subject in English *there*-sentences as proposed by Jenkins (1975), Williams (1994, 2006), Zamparelli (2000) and Hazout (2004) (among others). It is hosted in the subject position of a Pred head that establishes a syntactic configuration of predication (see Bowers 1993 and follow up work) – a Relator in the sense of den Dikken (2006) – that takes as its complement a complex DP structure. The proposal that I will defend here is that there is a syntactic requirement for (at least) one sentential predication configuration (Rothstein 1983: 2001). This predication relationship in *there*-sentences is interpreted similarly tothetic statements presenting an entity as part of a given situation. The syntactic structure I argue for is given in (30):

- (30) There was some medical evidence that her life could have been saved had she arrived at hospital earlier. (BNC, text=“FCT” n=“14”, adapted)



The structure contains two important aspects: a separate PredP which I label $\text{Pred}_{\text{EX}P}$, and a complex DP structure with an empty D-head. They both contribute to the existential semantics of the structure. The head of Pred_{EX} has the function to make some kind of predicate in the sense of an unsaturated function out of the complement of its head. This seems to be the function of different Pred heads in general: in regular copula structures the Pred head makes a predicate out of the property in its complement position (in the sense of Chierchia's 1985 U-operator). In existential *there*-sentences the Pred head states about its subject location expressed by *there* that it contains an individual of the type and number/amount specified by the noun phrase in the complement position. This kind of predication structure is the same as the one which Maleczki (2004) proposes for the meaning ofthetic sentences.

The second crucial part of the analysis presented in (30) is that the lexical noun phrase and the layer that hosts the weak quantifiers, NumP, are embedded under an empty D-layer. The D-layer has been argued to provide a noun phrase with referentiality (Higginbotham 1985) and host for strong quantifiers (Bowers 1988, Zamparelli 2000, Borer 2005a, among others). Following Borer (2005a: 30), I assume that any layer in the noun phrase needs to be licensed, or, as she puts it, be assigned a value. This can be obtained by either merging (or moving) a head (in head position) or a phrase (in specifier position). A third option is licensing by an unselective binder, e.g. an operator like *always*, a generic operator or existential closure. With this approach, Borer can account for the various different readings of (non-specific) indefinite noun phrases (among many other observations). She suggests that these indefinites have an empty D-layer that needs to be bound DP-externally; depending on the operator present, different readings arise for the noun phrase. If no other operator is present, the indefinite noun phrase is bound by existential closure. My claim is that we find the same type of DP in *there*-sentences.

This layer introduces a variable into the discourse that has to be bound by existential closure for the existential meaning to arise.⁴ This proposal provides a formal syntactic implementation for Higginbotham's (1987) claim that the core of the existential meaning lies in the noun phrase in the structure. Existential closure gives rise to an existential reading of the noun phrase (in line with Heim 1982) as suggested by Borer (2005a: 137). Additional support for this suggestion comes from the fact that DPs in which the D-layer is filled are not ungrammatical with *there* per se but they give rise to a different, the so-called list reading, as shown in (31) and (32). With the highest D-layer filled, the existential reading does not arise. Instead, the DP species an element of a list specified in the context.

- (31) A: Did we call everyone?
 B: No, There's still John and Bill.
- (32) Is there anything worth seeing around here? Well, there is the Necco factory.
 (Milsark 1974: 208)

Another argument for the presence of this empty D-layer comes from existential sentences in Serbian. The noun phrase in existential sentences in Serbian is (usually) marked with genitive case (33):

- (33) Ima knjiga (ovde).
 has books_{GEN} F PL here
 'There are (some) books (here).' Serbian

Genitive case also turns up on noun phrases that are in the scope of a quantifier, as seen in (34) (the so-called genitive of quantification):

- (34) a. Vidim pet prijatelja
 see_{1SG} five friends_{GEN}
 'I see ve friends.'
- b. Ivan uze nekoliko cvetova.
 Ivan took several flowers_{GEN}
 'Ivan took several (of the) owers.'
- c. Većina knjiga je dosadna.
 most_{NOM} books_{GEN} is boring.
 'Most books are boring.' Serbian

As we can clearly see in (34c), genitive case is assigned DP-internally: the full DP receives nominative in subject position, which is spelled out on the quantifier (numerals do not show (structural) case morphology).⁵ Following Bošković (2003, 2006) the head that hosts the (strong) quantifiers is responsible for case-assignment to its complement. In existential structures, the appearance of the genitive in turn means that the noun phrase is quantified by an element higher in the structure, and that the respective head assigns the case to its complement. A similar case can be made for French existential structures as Henk van

⁴ Alternatively, one can imagine that an existential quantifier is present in the specifier of the D-layer as proposed by Hartmann and Milićević (2009). It seems to me that the two proposals are notational variants, so that it is hard to decide which version is essentially correct.

⁵ I put aside some more complicated matters with the numerals from one to four. See Bošković (2003) for discussion.

Riemsdijk (p.c.) and Ian Roberts (p.c.) pointed out independently. In its existential reading, *il y a* requires the determiner *de* to be present for the existential reading to arise with mass nouns.

- (35) Il y a de l'eau sur la table.
 EXPL CL has DE the-water on the table
 'There is some water on the table.' French

3.3 Accounting for the similarities to predicate nominals

The similarities between the noun phrase in existential sentences and predicate nominals fall into place by following several syntactic analyses of predicate nominals as being smaller than DP (Hudson 1989, Bowers 1988, 1991, Holmberg 1993, Mandelbaum 1994, Kallulli 1997, 1999, Zamparelli 2000, Borer 2005a, among others), but projecting up to the level of NumP. In effect this means that the 'visible' part of the noun phrase in *there*-sentences is the same; they differ in the invisible part of an empty D-layer in existential sentences and the absence of this layer with predicate nominals. Additionally, regular copula constructions and existential *there*-sentences are similar because they both involve a PredP even though of different sorts. In what follows I will discuss the respective similarities of predicate nominals and existential *there*-sentences and show how they derive from the proposed structural similarities.

(i) *Narrow scope*

The noun phrase in *there*-sentences and the predicate nominal in copula structures cannot take wide scope with respect to modals or negation, as seen in (6). Wide-scope of a quantifier is only possible with the quantifier appearing in the D-layer (Zamparelli 2000). In existential sentences, the numerals cannot appear in the D-layer because it needs to be empty for existential closure to apply. With the copula structures, this D-layer is simply not present. It follows that numerals are coned to narrow scope in both structures.

(ii) *Strong quantifiers with kind-readings*

As we have seen above, both the *there*-sentences and copula structures allow strong quantifiers with kind-readings.

- (36) a. There was every kind of wine available for tasting.
 b. ??There was every worker ready.
 (37) a. John has been every kind of doctor.
 b. *John has been every doctor.

This fact is unexpected as *every* is a strong quantifier and as such it should be merged in the specifier of the D-head, a position that I claimed to be necessarily empty or absent. However, these phrases are special, because they seem to behave more like indefinites than like quantifiers. Zamparelli (2000) argues that the full DP *every kind* is base generated lower in the structure in parallel to the structures NP of D kind. Crucially, the site where the DP ends up is NumP (or PDP – Predicate Determiner Phrase – in Zamparelli's phrasing). Following this analysis, it becomes clear why these strong quantifiers that range over kinds can occur in both *there*- and copula structures. They do not modify the head noun of the structure (i.e. *wine* in 36a or *doctor* in 37a), but the quantifier modifies the noun *kind* and this phrase ends up in the specifier of NumP.

(iii) *The restriction on the relative pronoun*

The noun phrase cannot be relativized by *who* either in copula structures or in *there*-sentences.

- (38) a. The people **who/that/Ø* there were at the party were drunk.
 b. They dressed like the eccentric women **who/that/Ø* they were.
 (McNally 1997: 85)

This follows on the assumption that *who* pronominalizes a full DP. As predicate nominals are smaller than that, *who* cannot pronominalize a predicative NP. Independent support for this claim comes from regular copula structures. Predicate nominals are questioned by *what*, while extraction with *who* is used when the DP is extracted from an argument position.

- (39) Q: What did you say that John is?
 A1: A teacher./A fool./Intelligent.
 A2: #That man over there./#Mr. Smith.
 (40) Q: Who did you say is intelligent?
 A1: #A teacher./#A fool./#Intelligent.
 A2: That man over there./Mr. Smith.

Thus, *who* is a pronominal for a full DP, and it cannot stand for a predicate nominal, which is smaller than this. The explanation is similar for the restriction on *there*-sentences. When *who* pronominalizes the full DP, existential closure over the empty D-layer is no longer possible, an existential reading cannot arise. Thus, relativization of the noun phrase in *there*-sentences with *who* is impossible.

(iv) *Extraction from wh-islands*

Arguments differ from predicates with respect to *wh*-extraction out of *wh*-islands. The noun phrase in existential sentences patterns with predicates. If we take the distinction not to be predicates vs. arguments, but marked vs. non-marked elements, the facts fall out under this analysis as well.

3.4 Accounting for the differences to predicate nominals

So far we have seen that the similarities between *there*-sentences and other copula constructions can be derived from the syntactic structure proposed here. Let me now turn my attention to the differences between the two structures, and show how they follow from the present proposal.

(i) *Embedding under consider*

Pred_{EX}P cannot be embedded as a small clause complement to *consider*-type verbs in contrast to other PredPs:

- (41) a. I believe there to be a picture of the wall in the room.
 b. *I believe there a picture of the wall in the room. (Moro 1997: 119)

This falls out immediately from the analysis presented here. *There*-sentences contain a Pred_{EX}P that needs to be overtly expressed by the copula *be*. Furthermore, existential closure is necessary to derive the existential meaning, and the domain of existential closure is at least

VP (Diesing 1992) or even TP (Borer 2005b). Thus, the presence of Pred_{EX}P is not enough for an existential reading to arise. *There*-sentences need to project at least a VP/TP, and therefore, Pred_{EX}P cannot be embedded under *consider*-type verbs.

(ii) *Non-restrictive relative clauses*

We have seen above that [+human] predicate nominals cannot be modified by a non-restrictive relative clause with *who*. The noun phrase in *there*-sentences allows such a modification. The structure provided here explains the difference. Syntactically, the structure in *there*-sentences includes a D-layer. Thus, the category is available for a non-restrictive relative clause to adjoin to (for analyses of non-restrictive relative clauses see de Vries 2006 and references therein). Semantically, existential sentences state about a situation that an individual (of a certain amount, number) of the type specified by the NP is part of this situation. Hence there is an individual in the discourse that can be further specified by a non-restrictive relative clause.

(iii) *Bare singulars*

As Kallulli (2008) points out, *there*-sentences do not allow bare singulars, while predicative copula structures do. As has been argued repeatedly, bare singulars do not project a DP (Longobardi 1994, Kallulli 1997, 1999 among others); therefore, they are not expected to occur within *there*-sentences under the analysis presented above. Support for this line of reasoning comes from examples like *There was dog on the street*, in which a bare singular can occur, but only in a special interpretation: it states that there are pieces of dog on the street. The only way to accommodate the bare singular in this structure is to divide it into quantities. This divisive function is usually taken to be located in the Num head. Thus, the structure must be expanded at least as far as NumP, and in that case, the projection of DP is also available.

(iv) *Other predicates*

We have seen above that copula structures typically occur with other predicates such as adjectives, or prepositional phrases. This is not possible with *there*-structures. In the analysis proposed here, this type of structure is not expected for two reasons. First, the complement of Pred_{EX} is not a predicate but a DP, hence we do not expect predicates of the category AP/PP to occur. Second, predicates assign a theta-role to their subjects, but *there* cannot bear a theta-role. For these two reasons, the sentences with AP/PP predicates are predicted to be ungrammatical.

In sum, the proposed analysis in (30) accounts both for the similarities and differences between regular copula structures and English *there*-sentences with the copula *be*.

4. Conclusion

In this article I have argued against the predicate nominal analysis of English *there*-sentences. I have shown that despite the similarities to regular copula structures with predicate nominals, *there*-sentences behave differently in important respects. Alternatively, I have proposed that, in principle, the syntactic analysis with *there* being the subject of predication is essentially correct; however, the structure and interpretation of the post-copular noun phrase is different from predicate nominals: whereas predicate nominals do not project up to a DP-layer, the noun phrase in *there*-sentences does. This DP-layer introduces a variable that is bound by existential closure, so that the existential meaning arises. This analysis explains both

the similarities and the differences between *there*-sentences and regular copula structures with a predicate nominal.

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References

- Aissen, J. 1975. Presentational *there*-insertion: A cyclic root transformation. In R. E. Grossman, J. L. San, and T. J. Vance (eds.), *Papers from the 11th Regional Meeting of the Chicago Linguistic Society*, 1-14. Chicago, IL: CLS.
- Borer, H. 2005a. *Structuring Sense I: In Name Only*. Oxford: Oxford University Press.
- Borer, H. 2005b. *Structuring Sense II: The Normal Course of Events*. Oxford: Oxford University Press.
- Boskovic, Z. 2003. A minimalist account of genitive of quantification. Paper presented at the 5th European Conference on Formal Description of Slavic Languages, University of Leipzig.
- Boskovic, Z. 2006. Case and agreement with genitive of quantification in Russian. In C. Boeckx (ed.), *Agreement Systems*, 99-121. Amsterdam/Philadelphia: John Benjamins.
- Bowers, J. 1988. Extended X-bar theory, the ECP and the Left Branch Condition. In H. Borer (ed.), *Proceedings of WCCFL 7*, 46-62. Stanford, CA: CSLI.
- Bowers, J. 1991. The syntax and semantics of nominals. *Cornell University Working Papers in Linguistics* 10: 1-30 (*Proceedings of the First Semantics and Linguistic Theory Conference*, Department of Modern Languages and Linguistics, Cornell University, Ithaca, NY, 1991).
- Bowers, J. 1993. The syntax of predication. *Linguistic Inquiry* 24: 591-656.
- Carlson, G. 1977. Amount relatives. *Language* 53: 520-542.
- Chierchia, G. 1985. Formal semantics and the grammar of predication. *Linguistic Inquiry* 16: 417-443.
- Cornilescu, A. 1996. *Montague Grammar and the Analysis of Relative Clauses*. Bucharest: Editura Universității din București.
- Diesing, M. 1992. *Indefinites*. Cambridge, MA: MIT Press.
- Dikken, M. den. 2006. *Relators and Linkers: The Syntax of Predication, Predicate Inversion and Copulas*. Cambridge, MA: MIT Press.
- Doron, E. 1988. The semantics of predicate nominals. *Linguistics* 26: 281-303.
- Grosu, A. and Landman, F. 1998. Strange relatives of the third kind. *Natural Language Semantics* 6: 125-170.
- Hartmann, J. M. 2008. *Expletives in Existentials: English there and German da*. LOT Dissertation Series 181. Utrecht: LOT.
- Hartmann, J. M. submitted. Predicate inversion and English *there*-sentences. In B. Suranyi (ed.), *Proceedings of Budapest Generative Syntax Workshop 2*.
- Hartmann, J. M. and Miličević, N. 2009. The syntax of existential sentences in Serbian. In A. Antonenko, J. F. Bailyn, and C. Y. Bethin (eds.), *Formal Approaches to Slavic Linguistics 16: The Stony Brook Meeting 2007*, 168-184. Ann Arbor, MI: Michigan Slavic Publications.
- Hazout, I. 2004. The syntax of existential constructions. *Linguistic Inquiry* 35: 393-430.
- Hazout, I. 2008. On the relation between expletive *there* and its associate: A reply to Williams. *Linguistic Inquiry* 39: 117-128.
- Heggie, L. 1988. The Syntax of Copular Constructions. PhD Dissertation, University of Southern California.
- Heim, I. 1982. The semantics of definite and indefinite noun phrases. PhD Dissertation, University of Massachusetts at Amherst.
- Heim, I. 1987. Where does the definiteness restriction apply? Evidence from the definiteness of variables. In E. Reuland and A. G. B. ter Meulen (eds.), *The Representation of (In)definiteness*, 21-42. Cambridge, MA/London: MIT Press.
- Heycock, C. and Kroch, A. 1999. Pseudocleft connectedness: Implications for the LF interface level. *Linguistic Inquiry* 30: 365-398.

- Higginbotham, J. 1985. On semantics. *Linguistic Inquiry* 16: 547-594.
- Higginbotham, J. 1987. Indefiniteness and predication. In E. Reuland and A. G. B. ter Meulen (eds.), *The Representation of (In)definiteness*, 43-70. Cambridge, MA/London: MIT Press.
- Holmberg, A. 1993. On the structure of predicate NP. *Studia Linguistica* 47: 126-138.
- Hudson, W. 1989. Functional categories and the saturation of noun phrases. In J. Carter and R.-M. Déchaine (eds.), *Proceedings of NELS 19*, 207-222. Amherst MA: University of Massachusetts, GLSA.
- Jenkins, L. 1975. *The English Existential*. Tübingen: Max Niemeyer.
- Kallulli, D. 1997. Bare singulars and bare plurals: Mapping syntax and semantics. In T. Cambier-Langeveld, J. Costa, R. Goedemans, and R. van de Vijver (eds.), *Proceedings of ConSOLE V*, 153-168. Leiden: Leiden University, Student Organisation of Linguistics in Europe.
- Kallulli, D. 1999. The Comparative Syntax of Albanian: On the Contribution of Syntactic Types to Propositional Interpretation. PhD Dissertation, University of Durham.
- Kallulli, D. 2008. There is secondary predication in *there*-existentials. In C. Chang and H. Haynie (eds.) *Proceedings of the 26th WCCFL*, 279-287. Somerville, MA: Cascadilla.
- Longobardi, G. 1994. Reference and proper names: A theory of N-movement in syntax and logical form. *Linguistic Inquiry* 25: 609-665.
- Maleczki, M. 2004. The semantic analysis ofthetic judgements. In L. Hunyadi, G. Rákosi and E. Tóth (eds.), *The Eighth Symposium on Logic and Language. Preliminary Papers*, 107-118. Debrecen.
- Mandelbaum, D. 1994. Syntactic Conditions on Saturation. PhD Dissertation, City University of New York.
- McNally, L. 1997. *A Semantics for the English Existential Construction*. New York/London: Garland.
- McNally, L. 2008. DP-internal only, amount relatives, and relatives out of existentials. *Linguistic Inquiry* 39: 161-169.
- Milsark, G. L. 1974. *Existential sentences in English*. New York/London: Garland.
- Milsark, G. L. 1977. Toward an explanation of certain peculiarities of the existential construction in English. *Linguistic Analysis* 3: 1-29.
- Moro, A. 1991. The raising of predicates: Copula, expletives, and existence. In L. Cheng and H. Demirdache (eds.), *More Papers on Wh-movement. MIT Working Papers in Linguistics* 15: 193-218.
- Moro, A. 1997. *The Raising of Predicates: Predicative Noun Phrases and the Theory of Clause Structure*. Cambridge/New York: Cambridge University Press.
- Rapoport, T. R. 1987. Copular, Nominal, and Small Clauses: A Study of Israeli Hebrew. PhD Dissertation, MIT.
- Rothstein, S. 1983. *The Syntactic Forms of Predication*. Bloomington, IN: Indiana University Linguistics Club.
- Rothstein, S. 2001. *Predicates and their Subjects*. Dordrecht/Boston/London: Kluwer.
- Vries, M. de. 2006. The syntax of appositive relativization: On specifying coordination, false free relatives, and promotion. *Linguistic Inquiry* 37: 229-270.
- Williams, E. 1980. Predication. *Linguistic Inquiry* 11: 203-238.
- Williams, E. 1994. *Thematic Structure in Syntax*. Cambridge, MA: MIT Press.
- Williams, E. 2006. The subject-predicate theory of *there*. *Linguistic Inquiry* 37: 648-651.
- Zamparelli, R. 2000. *Layers in the Determiner Phrase*. New York/London: Garland.