

# Deadjectival human nouns: conversion, nominal ellipsis, or mixed category?

Petra Sleeman

p.sleeman@uva.nl

*ACLCL, University of Amsterdam (The Netherlands)*

**ABSTRACT.** Whereas deadjectival nouns referring to humans such as *the Germans* have been analyzed as the result of morphological conversion, the human construction *the rich* in English has been analyzed as a special case of nominal ellipsis. In this paper counterarguments are presented against the ellipsis analysis, mainly focusing on the human construction in Dutch, which has mixed adjectival and nominal properties. Traditionally, deadjectival human nouns ending in the suffix *-e* are analyzed as the result of morphological derivation. In the ellipsis analysis the suffix *-e* is analyzed as an inflectional suffix rather than a derivational one, licensing an empty noun. The plural suffix *-n* and the determiner would provide the human interpretation. In this paper an analysis in the framework of Distributed Morphology is proposed, which is a combination of the ellipsis analysis (without an empty noun) and the traditional derivational/conversion analysis.

**KEY-WORDS.** Deadjectival noun, human construction, ellipsis, mixed category, Dutch.

## 1. Introduction

In many languages human nouns can be derived from an adjective by means of an overt suffix, meaning 'N that has the property A'. This is exemplified in (1):

- |  |         |
|--|---------|
| (1) a. <i>strange</i> 'strange' + <i>er</i> → stranger             | ENGLISH |
| b. <i>riche</i> 'rich' + <i>ard</i> → <i>richard</i> 'rich person' | FRENCH  |
| c. <i>dik</i> 'fat' + <i>erd</i> → <i>dikkerd</i> 'fat person'     | DUTCH   |

However, adjectives can also be used to refer to a person without a nominalizing suffix. This is exemplified in (2)-(4) for English:

- (2) Of all these musicians, John is the best.
- (3) the Germans and the Russians
- (4) the rich and the poor

Kester (1996a,b) argues that the analysis of the relevant noun phrases in (2)-(4) is not the same. According to Kester, the noun phrase *the best* in (2) can best be analyzed as a case of nominal ellipsis: the noun is missing in the noun phrase and gets its semantic content from an antecedent noun in the previous discourse:

- (5) Of all these musicians, John is the best (musician).

For (3) she argues that the noun phrases contain a noun that is the result of conversion: the adjectives have been lexically transformed into nouns, as witnessed by the fact that they can be morphologically pluralized.

Although the noun phrases in (4) are semantically plural, they do not bear a plural morpheme. Therefore Kester argues that they do not contain a nominalized adjective, as in (3), but that, just as in (2), the noun phrases in (4) are cases of ellipsis: there is an empty noun and *rich* and *poor* are adjectives.<sup>1</sup>

Kester claims that the Dutch equivalents of the noun phrases in (4) do not contain a nominalized adjective either, but do also contain an empty noun, in spite of the fact that they can be pluralized, which is expressed by the plural morpheme *-n* in (6). Kester analyzes the schwa in the noun phrases in (6) not as a nominalizing affix, but as an inflectional affix on the adjective preceding the empty noun, represented as [e] in (7).

- (6) *de rijken en de armen*  
the rich and the poor  
'the rich and the poor'

---

<sup>1</sup> A similar analysis of (2)-(4) is put forth by Borer & Roy (2010).

- (7) *de rijk-e-n*            *[e] en de arm-e-n [e]*  
the rich-ADJ.INF-PL      and the poor.ADJ.INF-PL  
'the rich and the poor'

The inflectional properties of *rijken* and *armen* in (6) make them mixed categories: the schwa is an adjectival property, whereas the plural is a nominal property.<sup>2</sup>

Within the model of the Lexicalist Hypothesis (Chomsky 1970), morphological operations such as derivation or conversion took place in the Lexicon. Forms such as those in (2) and (3) were the result of the morphological conversion of an adjective into a noun. In this model, the schwa on the adjective in (7) could not be interpreted as an inflectional suffix expressing syntactic concord, as in Kester's ellipsis analysis, but was analyzed as a derivational suffix, converting the adjective into a noun, just like the suffixes in (1). More recent research, couched within the framework of Distributed Morphology (Halle & Marantz 1993, 1994; Harley & Noyer 1999; Embick & Noyer 2006), makes use of Syntax to account for the properties of mixed categories (e.g., Borsley & Kornfilt 2000; Alexiadou 2001; Embick 2004). In the light of syntactic analyses of mixed categories that have been proposed, the analysis of the noun phrases in (2)-(4) is re-examined in this paper.

The paper is organized as follows. In §2, an analysis of mixed categories within a Distributed Morphology approach is illustrated. In §3, an analysis of deadjectival nominalizations in terms of ellipsis is discussed. In §4, an analysis of deadjectival nominalizations within a Distributed Morphology approach is proposed. A conclusion is presented in §5.

## 2. Mixed categories and conversion

Due to their category-shifting nature, mixed categories can present properties both of the original base and of the resulting category. In the Principles and Parameter framework of the Generative model (Chomsky 1981) mixed categories posed a theoretical problem. The X'-structure of phrases made a category switch within syntax theoretically impossible. This

---

<sup>2</sup> In Dutch, attributive adjectives can take an inflectional schwa. Nouns, but not adjectives, can take a plural morpheme in the plural.

is illustrated by nominalized infinitives in Dutch.

Nominalized infinitives are verbs used as nouns and they can present properties of both categories. In the literature, the more verbal types are generally called verbal infinitives and the nominal types are called nominal infinitives (e.g., Plann 1981, Alexiadou, Iordăchioaia & Schäfer 2011), a distinction that has also been made by Chomsky (1970) for English gerunds. Verbal properties are the combination with a subject, direct complementation, i.e. the combination with direct objects, the combination with auxiliaries, and the combination with adverbs. Nominal properties are the use of a determiner (article, possessive or demonstrative pronoun), modification by an adjective instead of an adverb, and the combination with genitives instead of a subject or a direct object, gender distinctions, and pluralization. In its most verbal use, the nominalized infinitive is used without a determiner, but occurs in argument position. In its most nominal use, the nominalized infinitive functions in all respects as a noun. Verbal infinitives and nominal infinitives are situated on a scale between these two extremes. The middle of the scale contains nominalized infinitives in which verbal and nominal properties are mixed.

The following examples illustrate the ambiguity of the Dutch nominalized infinitive. In (8), taken from Sleeman (2001), the infinitive is purely verbal: there is no determiner and the direct object precedes the infinitive (Dutch is an SOV language). In (9), also taken from Sleeman (2001), the infinitive is purely nominal. Within the Lexicalist model, its nominal category is the result of a conversion rule in the Lexicon, changing a verb into a noun.<sup>3</sup>

(8) *Alcohol drinken kan schadelijk zijn.*  
alcohol drinking can harmful be  
'Drinking alcohol can be harmful.'

(9) *Heb je je drinken al op?*  
have you your drinking already finished  
'Have you already finished your drink?'

---

<sup>3</sup> In the case of "relisting", a rule simply changes a category into another without suffixation. Another rule that has been proposed to account for the category shift, zero-derivation, makes use of a null suffix: [V [Ø]<sub>N</sub>]<sub>N</sub> (see, e.g. Don 2005).

Sentences (10)-(12) have been taken from Ackema & Neeleman (2004):

*Deze zanger is vervolgd voor...*

This singer has-been prosecuted for...

(10) ... *dat stiekem succesvolle liedjes jatten*

that sneaky.ADV successful songs pinch

'that sneaky pinching of successful songs'

(11) ... *dat stiekeme succesvolle liedjes jatten*

that sneaky.ADJ successful songs pinch

'that sneaky pinching of successful songs'

(12) ... *dat stiekeme jatten van succesvolle liedjes*

that sneaky.ADJ pinch of successful songs

'that sneaky pinching of successful songs'

In (10), the infinitive is modified by an adverb and is preceded by a direct object. These are verbal properties. Differently from (8), the infinitive in (10) is introduced by a determiner, which is a nominal property. In (11), the infinitive is preceded by its direct object (verbal property), but is introduced by a determiner and is modified by an adjective (nominal properties). In (12), instead of a prenominal direct object, there is a prepositional phrase, which is a nominal property. In these five examples, the nominal infinitive changes thus from purely verbal (8) into purely nominal (9), with three intermediary steps (10)-(12).

Both within the Lexicalist Hypothesis and in the traditional X' model, it is difficult to account for these intermediary steps. They show that the infinitive has verbal and nominal properties at the same time. The X' model does not allow the insertion of a category with verbal properties, i.e. a verb, under, e.g., a nominal head, accounting for the mixed behavior.

The Distributed Morphology model (Halle & Marantz 1993, 1994) and comparable models offered a solution. Category-neutral roots are dominated by, e.g., verbal and nominal functional projections. In this way, the inner verbal behavior (lower verbal functional projections) and the outer nominal

behavior (higher nominal functional projections) can be accounted for.

Alexiadou, Iordăchioaia & Schäfer (2011) analyze verbal and nominal non-derived nominalizations (infinitive, supine, gerund) in several European languages (see also Sleeman 2010). In the verbal type, the verbal properties dominate, in the nominal type the nominal properties dominate. On the basis of the presence of the subject of the infinitive in the Spanish example (13), Alexiadou et al. (2011) analyze the verbal nominalized infinitive in Spanish as the most verbal type. In its structure, it has TP as its highest verbal functional projection (14).

- (13) *el cantar yo la Traviata*  
 the sing.INF I.NOM the Traviata  
 ‘me singing the Traviata’

- (14) [DP [TP [Aspect [VoiceP [vP [Root]]]]]]

For nominal non-derived nominalizations a structure as in (15) is proposed by Alexiadou et al.:

- (15) [DP [(NumberP) [ClassP [nP [AspP [VoiceP [vP [Root]]]]]]]]

Languages differ in the presence or nature of functional projections in the structure of nominal non-derived nominalizations. Languages like English and Romanian have, e.g., ClassP [+ count], because the nominal non-derived nominalizations in these languages can be pluralized, as illustrated for the English gerund and the Romanian infinitive:

- (16) a. *the repeated killings of unarmed civilians*  
 b. *demolările frecvente ale cartierelor vechi*  
 demolish.INF-PL frequent-PL of quarters.GEN old  
 ‘the frequent demolitions of old quarters’

Mixed categories have mixed properties, expressed by the presence of both verbal and nominal functional projections in structures (14)-(15). The

purely verbal infinitive in (8) would only have verbal functional projections in its structure, whereas the purely nominal one in (9) – the result of conversion within a Lexicalist Hypothesis – would only have nominal functional projections in its structure.

In the next section I will turn to the presentation of the subject of this paper, non-derived deadjectival human nouns in Dutch, and Kester's (1996) analysis.

### 3. An ellipsis analysis of nominalizations

Traditionally, deadjectival human nouns as *de zieke* 'the sick person' in Dutch are analyzed as the result of derivation, through which the derivational suffix *-e*, just like a null suffix in a conversion analysis for *the poor* in (4) in English (see fn. 3), converts the adjectival base into a noun (e.g., Geerts et al 1984):

(17) [A [e] ]<sub>N</sub> ]<sub>N</sub>

Kester (1996a,b) argues, however, that they should be analyzed as cases of nominal ellipsis, on a par with cases of genuine nominal ellipsis, as (18), in which [e] represents the omitted noun:

(18) *Jan kocht de rode auto en de groene [e].*  
John bought the red car and the green  
'John bought the red car and the green one.'

Kester presents several arguments against a nominalization, i.e. derivational, analysis. First, human nouns in Dutch can be preceded by degree modifiers and adverbs, as in (19)-(20), they can appear in comparative and superlative forms, as in (21), and they can be preceded by adjuncts and complements, as in (22):

(19) *de zeer rijken*  
the very rich  
'the very rich'

- (20) *de vandaag gearriveerden*  
the today arrived  
'the people arrived today'
- (21) a. *de nog ziekeren*  
the yet sicker  
'the people that are (even) sicker'
- b. *de allerbesten*  
the all-best  
'the best of all'
- (22) a. *de naar onze maatstaven zeer vermogenden*  
the to our standards very wealthy  
'the people that are very wealthy to our standards'
- b. *de hiervan afhankelijk*  
the here-on dependent  
'the people dependent on this'

Second, the complement precedes the adjective in (22b), which suggests that the adjective is in prenominal position, cf. (23). When the adjective is in predicative position, the complement can precede or follow it (24):

- (23) a. *de hiervan afhankelijke vluchtelingen*  
the here-on dependent refugees  
'the refugees dependent on this'
- b. \**de afhankelijk hiervan*  
the dependent here-on  
'the people dependent on this'
- c. \**de afhankelijke hiervan vluchtelingen*  
the dependent here-on refugees  
'the refugees dependent on this'



(24) a. *De vluchtelingen zijn hiervan afhankelijk.*

the refugees are here-on dependent

'The refugees are dependent on this.'

b. *De vluchtelingen zijn afhankelijk hiervan.*

the refugees are dependent here-on

'the refugees are dependent on this'

Third, the human nouns do not allow diminutive formation:

(25) \**een zieketje*

a sick.DIM

'a small sick person'

Fourth, the human construction has an irregular plural. Contrary to most nouns ending in schwa in Dutch, they form the plural by means of the affix [-n] instead of [-s]:

(26) a. *de zieken*

the sick.pl

'the sick'

b. \**de ziekes*

the sick.pl

'the sick'

Instead of the traditional nominalization analysis, Kester proposes a syntactic analysis, viz. an ellipsis analysis, just as for (18). She adopts Lobeck's (1995) analysis of nominal ellipsis, according to which the adjective in the ellipsis construction has to formally license and identify small *pro* (Rizzi 1986), the head of the noun phrase. The assumption that the human construction is an adjective modifying an elided noun in a syntactic ellipsis construction, explains, according to Kester, why modification by degree modifiers and adverbs (19-20) and comparative and superlative formation (21) are possible, why the complement precedes the human construction

(22), and why diminutive suffixation is not allowed (25).

As for the plural suffix, which in the standard case does not show up on adjectives in Dutch, Kester proposes that it identifies *pro* endowed with the inherent person features [+human, +plural]. As an argument in favor of her analysis, she presents the data in (27):

- (27) *Ik heb er enkele(n) in Amsterdam gezien.*  
 I have of-it some in Amsterdam seen  
 'I have seen some of them in Amsterdam.'

She states that the use of the plural ending *-n* is optional in this example, but that its presence leads to the [+human] interpretation.

Giannakidou & Stavrou (1999) argue against an ellipsis analysis and in favor of a nominalization analysis for the human noun in Greek. One of their most important arguments is that the human construction has a kind interpretation. Since the Greek human construction does not have the same properties as the Dutch human construction – degree modifiers, adverbs, comparatives and superlatives are not possible – Giannakidou & Stavrou remain agnostic as to whether their analysis of the Greek human construction can be extended to languages such as Dutch. In what follows I will also for Dutch argue against an ellipsis analysis.

The first problem with Kester's analysis concerns the properties of the empty noun. Kester adopts Lobeck's (1995) analysis of the empty noun as a small *pro*, and argues that in Dutch in all ellipsis cases *pro* is formally licensed by adjectival inflection. In the standard ellipsis case, *pro* does not have features, but is identified by its antecedent. In (18), *pro* is interpreted as [–human, –plural, –generic] on the basis of the context. In the human construction, *pro* is identified as [+human, +plural, ±generic] by the suffix *-n* on the adjective, and as [+human, –plural, ±generic] by the determiner if there is no *-n* on the adjective (*de rijke* 'the rich person').<sup>4</sup> The analysis

---

<sup>4</sup> To account for the uninflected forms *the rich* and *the poor* in the English example (4) Kester assumes that [+human], [+plural], [+generic] are the default features of *pro*, which is non-referential in this case and does not have to be formally licensed by adjectival inflection. In this way she accounts for the presence in English of the human construction with a generic interpretation only. However, if adjectival inflection is not needed to license the default features of *pro*, the question arises why adjectival inflection is needed in the plural generic reading in Dutch:

(i) \**de rijk\*(e) en de arm\*(e)*  
 the rich and the poor  
 'the rich and the poor'

of the empty nominal either as *pro* or as an empty noun in the Lexicon (Panagiotidis 2003) has been abandoned in more recent accounts of nominal ellipsis, in favor of analyses in which the noun is either deleted at PF under identity with an antecedent (see, e.g., Depiante & Masullo 2004), or is not inserted as a phonological matrix at the level of PF (see, e.g., Kornfeld & Saab 2002). In both analyses, identity with the antecedent plays a crucial role. However, in Kester's analysis of the human construction, there is no antecedent. In another recent account, focalization or a contrastive interpretation plays an important role (see, e.g., Corver & van Koppen 2009, Eguren 2009). In the analysis of the human construction presented above the adjective is not focalized or contrasted.

A second problem is Kester's analysis of the schwa, which she analyzes as an inflectional morpheme. In canonical DPs the inflectional schwa is used on adjectives in Dutch if the determiner is definite or plural or, with an indefinite singular article, if the noun is a common noun. This means that in the human construction it would have to be assumed that *pro* also has the feature [+common], which is, however, a morphological feature and not a semantic feature as [human], [plural], and [generic]. Furthermore, human nouns that would have been "omitted" in this context, are neuter nouns like *mens* 'human' or *persoon* 'person', which would not require an inflected adjective in an indefinite, singular context (28). However, in an indefinite singular noun phrase the adjective in the human construction bears the suffix –e (29):

(28) a. *een ziek persoon*

a sick person.N

'a sick person'

b. *een ziek mens*

a sick human.N

'a sick human being'

---

Following Lobeck (1995), Kester assumes that, because of the absence of adjectival inflection in English, nominal ellipsis is not licensed in other contexts than in the human construction. Sleeman (1996), however, shows that nominal ellipsis in which the antecedent is recovered from the context is not excluded in English. She proposes that partitivity and not adjectival inflection is the licensing factor.

- (29) *een zieke*  
a sick  
'a sick person'

Participial forms ending in *-en* cannot be inflected in their attributive use. However, in the human construction they bear the suffixal *-e*:<sup>5</sup>

- (30) *de verlaten(\*e) echtgenote*  
the abandoned-ADJ.INF spouse  
'the abandoned spouse'

- (31) *de verlatene*  
the abandoned-NOM.  
'the abandoned person'

A third problem is the plural *-n*. In genuine elliptical constructions, plural indefinite quantifiers in Dutch bear the suffix *-e* (32). In a human reading (32b) *-n* may be added (33):

- (32) a. *Ik heb veel boeken. Sommige heb ik gelezen.*  
I have many books. Some have I read  
'I have many books, some of which I have read.'

- b. *Ik heb veel vrienden. Sommige zie ik bijna nooit.*  
I have many friends. Some see I almost never  
'I have many friends, some of whom I almost never see.'

- (33) *Ik heb veel vrienden. Sommigen zie ik bijna nooit.*  
I have many friends. Some see I almost never  
'I have many friends, some of whom I almost never see.'

However, in my intuition, in combination with the quantificational pronoun *er* adding *-n* in (27) is incorrect, even in the human interpretation

---

<sup>5</sup> Participles used in the human construction can be combined with an agent, a complement or an adjunct, as (20) shows.

(34). If *-n* is added, *er*, which is obligatory in combination with an indefinite elliptical DP in object position, cannot be used (35):<sup>6</sup>

(34) *Ik heb er enkele(\*n) in Amsterdam gezien.*

I have of-it some in Amsterdam seen

'I have seen some of them in Amsterdam.'

(35) *Ik heb enkelen in Amsterdam gezien.*

I have some in Amsterdam seen

'I have seen some in Amsterdam.'

This would mean that only the grammatical variant of (34) is a case of ellipsis, the quantitative pronoun replacing the noun in object position. Since there is no *er* in (35), this cannot be a case of ellipsis, contrary to what Kester claims.

Because of these problems with Kester's ellipsis analysis of the human construction in Dutch, I will propose another analysis in the next section.

#### 4. A root-analysis of nominalizations

In the previous section it was shown that a nominalization analysis, i.e. a morphological derivation analysis, of deadjectival human nouns in Dutch such as *de zieke* 'the sick person' raises problems, because they can, e.g., be combined with adverbs and complements, and allow comparative and superlative formation. This suggests that they are still adjectives and have not been converted into nouns in the Lexicon. It was, however, also shown that a syntactic ellipsis analysis, in which the empty noun has the form of a small *pro* with the features [+human], [±plural], and [±generic] is also not without problems, which concern the interpretation of the human construction, the features on *pro*, the schwa, and the plural *-n*. Because of these problems, I will propose another analysis in this section, which is a mix of the nominalization and the ellipsis analysis.

In section 2, I showed that in a Distributed Morphology approach

---

<sup>6</sup> The Dutch grammar Geert et al. (1984) does not give a rule or an example confirming or infirming my intuition. Van den Toorn (2008:179), however, gives an example containing *er* and *enkelen*, which infirms my intuition. In Google, in examples such as (27) involving a human interpretation, however, *-n* is used in half of the cases. I attribute the use of *-n* here to the confusion with the use in (33) and (35).

morphological operations like conversion and derivation can be accounted for in Syntax. For mixed categories this syntactic approach to morphology is an ideal way of accounting for their mixed properties. The functional projections dominating category-neutral roots determine to what degree properties are mixed. If a root is only dominated by nominal functional projections, it is purely nominal, if there are, e.g., verbal and nominal projections, we are dealing with a deverbal nominalization. In Alexiadou's (2001) analysis of nominalizations (ending in the suffix *-ion* in English), the number of functional verbal projections determines if the nominalization is a process noun or a result noun (Alexiadou 2001).

Since the human nouns discussed in this paper are deadjectival, we must assume that they are roots dominated by at least an adjectival functional projection: *aP*.<sup>7</sup> We saw that, in Dutch, adjectival properties such as complementation, degree modification, and comparative and superlative formation can also be present. This means that the head of *aP* must have the property to license a complement, and that *aP* can be dominated by the adjectival functional projection *DegP*.

In Kester's analysis, the schwa morpheme on the adjective in the human construction is analyzed as an inflectional morpheme. However, it has been pointed out in the previous section that this analysis raises a problem: attributival participles ending in *-en* cannot get an inflectional schwa, but in a nominalized form they do end in a schwa morpheme. I therefore assume, just as in traditional analyses (Geerts et al. 1984), that in the human construction *-e* is a derivational suffix, and not an inflectional suffix. In Distributed Morphology it is assumed that derivational suffixes (or their features) are inserted in the head of the functional nominal projection *nP*. Since I analyze the schwa in the human construction as a derivational suffix, I propose that it is inserted in the head of *nP*. Its features are [+human] and [+common]: it creates human nouns that combine with the singular definite determiner *de* in Dutch.

Since, in this analysis, the human construction is a (syntactic)

---

<sup>7</sup> In the head of *aP* (features bundles of) adjectival suffixes can be inserted. Suffixed adjectives can also be used in the human construction:

(i) *de aandacht-ig-e-n*  
the attention.suff.-e-n  
'those paying attention'

nominalization and not a case of ellipsis, pluralization is simply the consequence of the presence of *nP* in the functional domain dominating the root.<sup>8</sup> Borer (2005) proposes that the distinction between mass nouns and count nouns is made in Syntax by means of the functional projection Classifier Phrase. Count nouns are roots dominated by ClassP. In section 2, we saw that, in Alexiadou et al. (2011) analysis of non-derived deverbal nominalizations, the possibility to function as a count noun is expressed as the feature [+count] in the head of ClassP, accounting for the possibility of pluralization. Finally, the presence of the functional projection DP accounts for the presence of a determiner in the human construction.<sup>9</sup>

The structure that results from the combination of the proposed functional projections dominating the root in the human construction is the following:

$$(36) [_{DP} [_{FP} [_{NumP} [_{ClassP[+count]} [_{nP} [_{DegP} [_{aP} [root]]]]]]]]]]$$

Based on (36), structure (37b) represents the human construction in (37a), in which for concreteness the morphemes have a phonological shape and are not simply feature bundles:<sup>10</sup>

(37) *a.de volkomen afhankelijk*  
 the completely dependent  
 ‘the completely dependent persons’

$$b.[_{DP} [de] [_{NumP} [_{ClassP[+count]} [n] [_{nP} [e] [_{DegP} volkomen [_{aP} [afhankelijk]]]]]]]]]]$$

The presence of functional projections in the structure is determined by the combinatorial properties of the human construction. A genuine “lexicalized” deadjectival nominalization like *de blanke* ‘the white person’,

<sup>8</sup> Although in Kester’s analysis, the human construction is analyzed as a case of ellipsis, it does not have an antecedent. This is the same in the DM analysis.

<sup>9</sup> The human construction can be modified by an adjective, which is inserted in FP:

(i) *een opgewekte zieke*  
 a good-humoured sick  
 ‘a good-humoured sick person’

<sup>10</sup> If a complement is licensed by the head of *aP*, the order “complement – degree phrase” in (i) is unexpected. Stonoius (1992: 112) suggests that this ordering suggests that the complement has been preposed:

(i) *de hiervan volkomen afhankelijken*.  
 the of.this completely dependent  
 ‘the persons who are completely dependent on this.’

which does not allow for modification by a degree adverb, does not have a DegP in its structure and has an 'intransitive head of aP', because it cannot be combined with a complement.

So far we have seen that a syntactic root analysis can account for the adjectival properties of the human construction (the combination with modifiers, comparative and superlative formation, and complementation), just like the ellipsis analysis. The root analysis differs from the ellipsis analysis in that the schwa is analyzed as a derivational morpheme and not as an inflectional morpheme. The possibility of pluralization is related to the presence of *nP* and *ClassP* in the structure, which accounts for the absence of the quantificational pronoun *er* with *enkelen* in (35), *er* being also analyzed as *nP* by Kranendonk (2010). In the ellipsis analysis, on the other hand, *-e* and *-n* serve to formally license resp. identify *pro*, which has the features [+human], [+plural], [ $\pm$ generic]. In the singular, the common definite determiner *de* instead of *-n* identifies *pro* as being human.<sup>11</sup> However, I argued that the omitted noun in the human construction rather seems to be a neuter noun like *het mens* 'the human being' or *het persoon* 'the person', which is an argument against the ellipsis analysis. Furthermore I follow Giannakidou & Stavrou (1999) in assuming that the human construction results from the transformation of a property into a kind (and eventually into an individual). The root analysis proposed in this section has the advantages of the ellipsis analysis, but crucially does not involve ellipsis, but nominalization. Therefore the human construction can have a kind reading, and *-e*, *-n* and *de* do not have a formal licensing resp. identificational function, but simply express nominalization.

Although the root analysis seems to account quite nicely for the mixed properties of the human construction in Dutch, it raises some questions. First, as shown in the previous section, one of the arguments used by Kester in favor of her ellipsis analysis is the fact that the plural morpheme is *-n* and not *-s*. She notices that other deadjectival nouns ending in *-e* take the plural morpheme *-s* and not *-n*:

---

<sup>11</sup> Kester (1996a,b) also analyzes abstract deadjectival nouns as elliptical constructions. In the abstract construction, *pro* is again formally licensed by the schwa, which Kester assumes also here to be inflectional, and is identified by the neuter definite determiner *het*: *het goede* 'the good thing'.



(38) a. *rond*  
‘round’

b. *de ronde*  
‘the round (in a competition)’

c. *de rondes*  
‘the rounds’

Kester tries to account for the exceptional behavior of human nouns like *de zieken* ‘the sick people’ by analyzing *-n* in this case as a morpheme that identifies *pro* as [+human], [+plural]. However, the human construction is not exceptional in taking *-n* as the plural morpheme. As noticed by Van der Hulst & Kooij (1997), *-(e)n* is the unmarked plural affix in Dutch. The affix *-s* is marked. It occurs in loan words, but also in some native words, such as *wapens* ‘weapons’ or *lengtes* ‘lengths’ (next to *lengten*). Although Kester takes the plural morpheme *-n* in the human construction to be exceptional, the choice of the *-* unmarked *-* plural suffix *-n* in this deadjectival syntactic construction is, on the contrary, rather as expected.

Second, as observed in the previous section, the human construction does not take the diminutive form *-tje*, whereas other nouns ending in *-e* do so:

(39) \**een zieketje*  
a sick.DIM  
‘a small sick person’

(40) *een rondetje*  
a round.DIM  
‘a small round (in a competition)’

The impossibility of diminutive formation might be related to the construction’s deadjectival nature. As we saw, Giannakidou & Stavrou (1999) follow Chierchia (1998) in assuming that in the case of nominalization a property is changed into a kind and eventually into an individual.

De Belder (2011) assigns to the Dutch word *chocolade* 'chocolate' a kind reading and a unit reading. According to De Belder, kind nouns in Dutch can be countable:

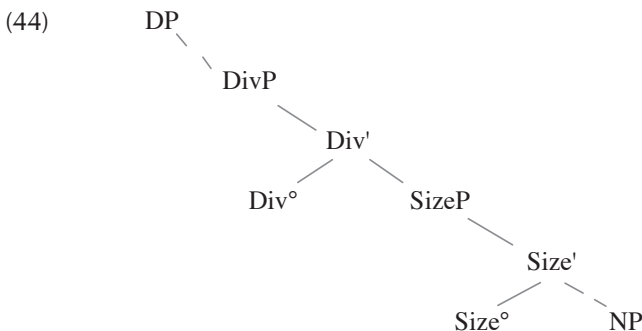
- (41) *Ik proefde chocolades*  
I tasted chocolate-PL  
'I tasted different kinds of chocolate.'  
# 'I tasted pieces of chocolate.'

However, only in the unit reading a diminutive suffix can be added:

- (42) *Ik proefde een chocola-tje.*  
I tasted a chocolate-DIM  
'I tasted a piece of chocolate.'  
# 'I tasted a certain kind of chocolate.'

- (43) *Ik proefde chocola-tje-s.*  
I tasted chocolate-DIM-PL  
'I tasted pieces of chocolate.'  
# 'I tasted different kinds of chocolate.'

For the unit interpretation De Belder proposes structure (44), in which DivP corresponds to ClassP in the structure of the nominalized infinitives discussed in section 2. Both notions are used by Borer (2005). In the kind reading there is no SizeP. With a mass noun DivP would also be absent.



I suggest that the human construction lacks the Size Phrase projection, because the human construction basically expresses a property turned into a kind (*een zieke* 'someone having the property of being sick') rather than a unit ('a sick person'). This would explain why pluralization but not diminutive formation is possible. For English generic plural human nouns such as *the rich*, as in (4), I suggest that both SizeP and DivP are missing, with plurality expressed in NumP.

## 5. Conclusion

In this paper, I have argued against a syntactic ellipsis analysis of the human construction in Dutch. Following Kester, I have recognized that a lexical nominalization analysis cannot account either for the mixed properties of the human construction. I have proposed, instead, an analysis that is a mix of a syntactic ellipsis analysis and a nominalization analysis.

In a Distributed Morphology approach, I have proposed that the mixed character of the human construction in Dutch is expressed in the diversity of the functional projections dominating the category-neutral, non-elliptical, root. The adjectival functional projections account for the combination with adverbs and for the possibility of complementation, whereas the nominal functional projections make the analysis of the schwa as a derivational morpheme inserted in the head of nP and the availability of pluralization, expressed by the unmarked suffix *-n*, possible. The absence of diminutive formation has been related to the basic kind interpretation of the human construction.

## REFERENCES

- Ackema, P. & Neeleman, A. 2004. *Beyond Morphology. Interface Conditions on Word Formation*. Oxford & New York: Oxford University Press.
- Alexiadou, A. 2001. *Functional Structure in Nominals: nominalization, and ergativity*. Amsterdam & Philadelphia: John Benjamins.
- Alexiadou, A., Iordăchioaia, G. & Schäfer, F. 2011. Scaling the variation in Romance and Germanic nominalizations. In: P. Sleeman & H. Perridon (Eds.). *The Noun Phrase*

- in Romance and Germanic: Structure, variation and change*, [Linguistik Aktuell/ Linguistics Today, volume 171]. Amsterdam & Philadelphia: John Benjamins, 25-40.
- Belder, M. De. 2011. A morphosyntactic decomposition of countability in Germanic. *The Journal of Comparative Germanic Linguistics* 14(3): 173-202
- Borer, H. 2005. *In Name Only*. [Vol. 1 of *Structuring Sense*]. Oxford: Oxford University Press.
- Borer, H. & Roy, I. 2010. The name of the adjective. In: P. Cabredo-Hofherr; O. Matushansky (Eds.). *Adjectives: Formal analyses in syntax and semantics*. [Linguistik Aktuell/Linguistics Today 153]. Amsterdam & Philadelphia: John Benjamins.
- Borsley, R.D. & Kornfilt, J. 2000. Mixed extended projections. In: R.D. Borsley (Ed.). *The Nature and Function of Syntactic Categories*. New York: Academic Press, 101-131.
- Chierchia, G. 1998. Reference to kinds across languages. *Natural Language Semantics* 6(4): 339-405.
- Chomsky, N. 1970. Remarks on nominalization. In: R. Jacobs; Rosenbaum, P. (Eds.). *Readings in English Transformational Grammar*. Waltham, MA: Blaisdell, 184-221.
- Chomsky, N. 1981. *Lectures on Government and Binding*. Dordrecht: Foris.
- Corver, N. & Koppen, M. van. 2009. Let's focus on NP-ellipsis. *GAGL (Groninger Arbeiten zur germanistischen Linguistik)* 48: 3-26.
- Depiante, M. & Masullo, P. 2004. Gender is in the lexicon, number is in the syntax: evidence from nominal ellipsis in Spanish. Paper presented at GLOW 27, Thessaloniki.
- Don, J. 2005. On conversion, relisting and zero-derivation. A comment on Rochelle Lieber: English word-formation processes. *SKASE Journal of Theoretical Linguistics* 2(2): 2-16.
- Eguren, L. 2009. Adjectives and deleted nominals in Spanish. In: E. Aboh, E. van der Linden, J. Quer & P. Sleeman (Eds.). *Romance Languages and Linguistic Theory. Selected Papers from Going Romance 2007*. Amsterdam & Philadelphia: John Benjamins, 67-86.
- Embick, D. 2004. On the structure of resultative participles in English. *Linguistic Inquiry* 35(3): 355-392.
- Embick, D. & Noyer, R. 2006. Distributed Morphology and the Syntax/Morphology interface. In: G. Ramchand & C. Reiss (Eds.). *Oxford Handbook of Linguistic Interfaces*. Oxford: Oxford University Press, 289-324.
- Geerts, G., Haeseryn, W., De Rooij, J. & van den Toorn, M. 1984. *Algemene Nederlandse Spraakkunst*. Groningen: Wolters-Noordhoff.
- Giannakidou, A. & Stavrou, M. 1999. Nominalization and ellipsis in the Greek DP.

- Linguistic Review* 16: 295-331.
- Halle, M. & Marantz, A. 1993. Distributed Morphology and the pieces of inflection. In: K. Hale; S. J. Keyser (Eds.). *The View from Building 20*. Cambridge, MA: MIT Press, 111-176.
- Halle, M. & Marantz, A. 1994. Some key features of Distributed Morphology. *MIT Working Papers in Linguistics* 21: 275-288.
- Harley, H. & Noyer, R. 1999. Distributed Morphology. *Glott International* 4(4): 3-9.
- Hulst, H. van der & Kooij, J.G. 1997. Prosodische keuzes bij meervoudsvorming in het Nederlands. In: A. van Santen & M. van der Wal (Eds.), *Taal in Tijd en Ruimte. Voor Cor van Bree bij zijn afscheid als hoogleraar Historische Taalkunde en Taalvariatie aan de Vakgroep Nederlands van de Rijksuniversiteit Leiden*. Leiden: SNL, 365-373.
- Kester, E.-P. 1996a. *The Nature of Adjectival Inflection*. PhD dissertation, Utrecht University.
- Kester, E.-P. 1996b. Adjectival inflection and the licensing of empty categories in DP. *Journal of Linguistics* 32(1): 57-78.
- Kornfeld, L. & Saab, A. 2002. Nominal ellipsis and morphological structure in Spanish. In: R. Bok-Bennema, B. Hollebrandse, B. Kampers-Manhe & P. Sleeman (Eds.), *Romance Languages and Linguistic Theory 2002. Selected Papers from Going Romance*. Amsterdam & Philadelphia: John Benjamins, 183-198.
- Kranendonk, H. 2010. *Quantificational Constructions in the Nominal Domain: Facets of Dutch Microvariation*. PhD dissertation, Utrecht University.
- Lobeck, A. 1995. *Ellipsis, Functional Heads, Licensing and Identification*. Oxford: Oxford University Press.
- Panagiotidis, P. 2001. Empty nouns. *Natural Language and Linguistic Theory* 21: 381-432.
- Plann, S. 1981. The Two *el* + infinitive Constructions in Spanish. *Linguistic Analysis* 7: 203-240.
- Rizzi, L. 1986. Null objects of Italian and the theory of *pro*. *Linguistic Inquiry* 17: 501-557.
- Sleeman, P. 1996. *Licensing Empty Nouns in French*. The Hague: Holland Academic Graphics.
- Sleeman, P. 2001. Deverbale procedés in het Nederlands en het Frans. In: L. Beheydt & P. Godin (Eds.). *Contrastief Onderzoek Nederlands-Frans*. Bibliothèque des Cahiers de l'Institut de Linguistique de Louvain 108, 195-209.
- Sleeman, P. 2010. The nominalized infinitive in French: structure and change. *Linguística*.

*Revista de Estudos Linguísticos da Universidade do Porto* 5: 145-173.

Svenonius, P. 1992. The extended projection of N: identifying the head of the noun phrase. *Working Papers in Scandinavian Syntax* 49: 95-121.

Van den Toorn, M.C., 2008, 9<sup>th</sup> edition. *Nederlandse Grammatica*, [www.dbnl.org/tekst/toor004nede01\\_01/toor004nede01\\_01.pdf](http://www.dbnl.org/tekst/toor004nede01_01/toor004nede01_01.pdf) (first edition: 1984. Groningen: Wolters-Noordhoff).