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Abstract

This paper discusses the derivation of WF nominal constructions containing interrogative wek and demonstrative zuk. Wek and zuk are often followed by what looks like a singular indefinite article, even when they associate with plural or non-count nouns. This use of the article is referred to as the spurious article (Bennis, Corver and Den Dikken 1998). It is proposed that wek and zuk originate as the (XP) predicates of a DP-internal small clause and undergo predicate inversion (cf. Bennis, Corver and Den Dikken 1998). In order to violate a locality violation due to the fact that the predicate (wek, zuk) A-moves across the subject of the small clause, the head of the small clause incorporates to a higher functional head. The ‘spurious’ article en spells out the relevant head.

To account for the data in which prenominal zuk co-occurs with the negative determiner geen in the absence of spurious en it is proposed that in addition to inverting with the subject of the small clause as an XP, zuk may also invert with the subject by head-movement. In the latter case, spurious en will not be required hence impossible. The same account applies to some patterns with wek. When moved as heads, zuk and wek are structurally deficient and need to incorporate to a lexical host.

Key words:
predicate inversion, spurious article, DP-internal XP-movement, DP-internal head-movement, DP-internal negative concord.

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1. Introduction

1.1. Aim and organization of the paper

This paper focuses on the form and distribution of interrogative wek ('which') and demonstrative zuk ('such') in West Flemish (WF) illustrated in (1).

(1) a  

\[ \text{Wekken unden ee-j doa gezien?} \]  
\[ \text{which –en dogs have you there seen} \]  
\[ \text{‘Which dogs did you see there?’} \]

b  

\[ \text{Zukken unden een ze ier ook.} \]  
\[ \text{such –en dogs have they here also} \]  
\[ \text{‘Such dogs, they also have here.’} \]

In (1) wek and zuk modify a plural head noun unden ('dogs'), but they themselves seem to be followed by en, the indefinite article, which is unexpected in a plural context. This ‘inappropriate’ occurrence of the indefinite article has been labeled 'spurious een' in the literature. Following Bennis, Corver and den Dikken (1998), from now on (BC&DD), and also den Dikken (2006), I will propose that zuk and wek originate as the predicate of a DP-internal small clause, and that they undergo predicate inversion, i.e. A-movement. A-movement of the predicate across the subject of the small clause would lead to a locality violation. The obligatory insertion of een is a manifestation of a domain extending movement of the head of a small clause to a higher functional head, which allows for domain extension. To account for the absence of een in cases in which wek and zuk precede geen I propose that in such patterns zuk and wek undergo head-movement.

The paper is organized as follows: In the remainder of this section I briefly go over some manifestations of spurious een in Dutch and the analysis proposed by BC&DD (1998).
Section 2 provides a detailed description of the WF manifestation of spurious *een* with interrogative *wek* and demonstrative *zuk* and a first analysis of the data in terms of predicate inversion. Section 3 examines patterns in which ‘uninflected’ *zuk* is embedded under quantifiers leading to a modification for the analysis. Section 4 shows that the modification proposed in section 3 to account for the use of *zuk* also applies to *wek*. Section 5 is a summary of the paper.

### 1.2. Manifestations of spurious *een* in Dutch

In a number of patterns in Dutch what looks like the indefinite article *een* (‘a’), is found in a position *a priori* incompatible, namely with plural nouns and with non-count nouns. (2a) illustrates the *wat voor een* construction, (2b) illustrates the *N of an N* construction, and (2c) illustrates *wat* exclamatives. When *een* occurs in such contexts BC&DD label it as ‘spurious’ *een*, I return to their analysis below.¹

(2)  

<table>
<thead>
<tr>
<th>a</th>
<th>Wat voor een jongens zijn dat?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>what for a boys are those</td>
</tr>
<tr>
<td></td>
<td>‘What kind of boys are those?’</td>
</tr>
<tr>
<td>b</td>
<td>een pracht van een spinazie</td>
</tr>
<tr>
<td></td>
<td>a beauty of a spinach</td>
</tr>
<tr>
<td>c</td>
<td>Wat een boeken!</td>
</tr>
<tr>
<td></td>
<td>what a books</td>
</tr>
<tr>
<td></td>
<td>‘What a large number of books!’</td>
</tr>
</tbody>
</table>
Although in the examples (3a)-(3c) the article *een* is actually compatible with the singular N that follows it, the examples are interpretively and syntactically analogous to (2a-c) and, by analogy, it is assumed that they also contain an occurrence of 'spurious *een*:

(3)  

a. Wat voor een boek is dat?  
what for a book is that  
‘What kind of book is that?’

b. een pracht van een kind  
a beauty of a child

c. Wat een verrassing!  
what a surprise

1.2.1. Predicate inversion and predicate fronting in the Dutch DP

One influential proposal to account for the occurrence of spurious *een* in Dutch was elaborated in by BC&DD (1998), according to whom the spurious article is the overt reflex of DP-internal predicate movement. I summarize their analysis in this section. For more details I refer the reader to the original paper and to den Dikken (2006).

1.2.1.1. The *wat voor een construction*²

For Dutch (2a) (and (3a)) BC&DD (1998:91) propose the derivation in (4). The NP *jongens* originates as the specifier of the DP-internal small clause (XP), whose predicate is interrogative *wat*. The predicate undergoes predicate inversion and moves to the specifier position of a functional projection (FP). Because predicate inversion is A-movement, inversion of the predicate *wat* across *jongens* (‘boys’), the subject of the small clause, would violate locality restrictions on movement. To allow for predicate inversion, the head of the small clause (X) moves to the head F of the higher projection, thus extending the domain of X.
to that of F. The combination of the head of the small clause X and the head F to which it is incorporated spells out as ‘spurious’ een. Wat moves further to SpecDP to type the DP as interrogative. The interrogative D-head is lexically filled by voor.

\[(4) \quad [\text{DP} \quad \text{wat}_{\text{whj}} \quad [\text{D}_{\text{whj}} \quad \text{voor}] \quad [\text{FP} \quad t_j \quad [X_i+\text{F} \quad \text{een}] \quad [\text{XP} \quad \text{jongens} \quad [X \quad t_i] \quad [\text{pred} \quad t_j]]]\]

1.2.1.2. The N van een N construction

In the Dutch N van een N construction (2b,3b), een is also the manifestation of a domain extending movement whereby the head X of a DP-internal small clause merges with a higher head, F, to allow for predicate inversion (BC&DD 1998:92). (3b) is derived as in (5).

B,C&DD assume that van is a nominal copula, spelt out in F. See also den Dikken (2006).

\[(5) \quad [\text{DP} \quad \text{een} \quad [\text{FP} \quad \text{prachtj}] \quad [X_i+\text{F} \quad \text{van} \quad \text{een}] \quad [\text{XP} \quad \text{kind} \quad [X \quad t_i] \quad [\text{pred} \quad t_j]]]\]

1.2.2. Spurious een as the spell out of a functional head D.

Dutch wat exclamatives also manifest a spurious article, witness the fact that een occurs with a plural head noun (jongens 'boys') in (2c). BC&DD (1998:106) propose the derivation in (6).

The predicate wat moves to the specifier of DP. This is an instantiation of predicate fronting, which targets an A’ position, and hence the predicate crossing the subject does not give rise to a locality violation. BC&DD propose that in wat exclamatives spurious een spells out the head D, whose specifier hosts the exclamative operator (DP) (BC&DD: 1998:106). See also den Dikken (2006:225).

\[(6) \quad [\text{DP} \quad \text{wat}_{\text{j}} \quad [\text{D}_{\text{EXCL}} \quad \text{een}] \quad [\text{XP} \quad \text{jongens} \quad [X \quad t_i] \quad [\text{pred} \quad t_j]]]\]
2. West Flemish wek, zuk and spurious een

In this paper I examine the form and distribution of prenominal zuk ('such') and wek ('which') in WF, illustrated in (1). The two items are related, wek being the interrogative pendant of a demonstrative form zuk. Similar pairs are found in English (which, such), Dutch (welk, zulk), German (welch, solch), French (quel, tel), Italian (quale, tale) (see also Vangsnes, 2006). I restrict the discussion to the WF pair wek/zuk.

2.1. Standard Dutch welk and zulk

The Romance analogues of wek/zuk, French quel/tel and Italian quale/tale, are inflected as adjectives and often treated so. (For present-day German solch being adjectival see Demske (2005)). As discussed in Broekhuis, Keizer and den Dikken (2003:707), Dutch welk ('which') and zulk ('such') also inflect like adjectives. The inflection of Dutch welk is illustrated in Table 1: its ending is consistently like that of the adjective (dik 'fat', wit 'white') to its right. Similarly, Dutch zulk inflects like an adjective as shown in Table 2. Note that for singular count nouns Standard Dutch replaces zulk by zo'n (cf. Barbiers, 2003, 2005).

[Table 1: The inflectional pattern of welk in standard Dutch (based on BK &DD, 2003:707)]

[Table 2: Non D-linked demonstratives in Standard Dutch (based on BK &DD, 2003:707)]

2.2. WF wek and zuk.

2.2.1. The spurious article

Table 3 shows the inflectional paradigm for the adjective dik ('fat') in prenominal position: in the left-hand column the adjective is preceded by a definite article, in the right-hand column by an indefinite article or (with plural and non-count nouns) by the zero form. Observe in
particular that (i), both with definite and indefinite article, the ending -en is restricted to the singular masculine noun, (ii) the neuter form has no ending, neither with definite nor with indefinite article, and (iii) feminine forms as well as plural forms display an –e ending.

[Table 3: Adjectival paradigms in WF]

Applying the adjectival inflection to WF wek and to zuk systematically leads to ungrammaticality, as shown in Table 4.

[Table 4: wek and zuk do not inflect like adjectives (cf (3))]

Table 5a shows the inflectional paradigms for wek and zuk with countable nouns. Rather than having an adjectival inflection, wek en zuk seem to be followed by a form of the indefinite article. The paradigm for the WF indefinite article is provided in Table 6.

[Table 5a: The paradigms for wek and zuk : [+count] nouns]

[Table 6: The WF indefinite article]

As shown by the lower half of Table 5a and by Table 5b, wek and zuk are also accompanied by the indefinite article when the head noun with which they associate is a plural or a non-count noun.

[Table 5b: The paradigms for wek and zuk: [-count] nouns]
Given the obligatory presence of what looks like the indefinite article it might be proposed that, unlike their standard Dutch counterparts, WF wek and zuk themselves are uninflected and that they are followed by a singular indefinite article associated with a silent (semi-lexical) KIND noun (cf. van Riemsdijk, 2005; Leu, 2004). However, this would lead one to expect that such DPs have a ‘kind reading’: so wekken boeken would mean ‘what kind/sort of books.’ Though this interpretation is available (7A), it is not the only one: wek-DPs also have a token reading (7B) (see van Riemsdijk (2005:118) on the wat voor (een) construction in Dutch):

(7)  Wekken boeken ee-j gelezen?

which –en books have-you read

‘What/which books have you read?’

A: Romans.

‘Novels’

B:  Atonement en Saturday.

‘Atonement and Saturday’

In view of the discussion in section 1.2, an alternative hypothesis is that, uninflected wek (‘which’) and zuk (‘such’) are followed by a spurious article, (n)en, in the sense of BC&DD (1998) and to analyse this as a byproduct of DP-internal predicate inversion. In the remainder of this paper I explore this analysis in more detail.

2.2.2 Interrogative wek

Based on BC&DD’s analysis of the wat voor een construction, let us assume that wek originates as the predicate of a small clause and undergoes predicate inversion to the specifier of a functional projection, followed by predicate fronting to SpecDP, the latter for the purpose of DP typing. The initial step of the movement crosses the NP unden (‘dogs’), the subject of
the small clause. Because of this, the head of the small clause, X, merges with the higher functional head, F, to extend the domain. The resulting head is spelt out as *nen* or as *en*; the choice of form is determined by agreement with the features of the head noun: *nen* combines with masculine singular, *en* is used elsewhere. The derivation is shown in (8):

(8) \[ [\text{DP wek }_{\text{wh}} [D \text{[wh]}]] [\text{FP wek }_{X+F} \text{en}] [\text{XP [NP unden }] [X \text{[wek]]}]] \]

2.2.3. *WF zuk* (*such*)

Given the similarity in the 'inflectional' patterns of *wek* and *zuk*, and considering that they can be seen as the interrogative and demonstrative pendants of one formative, it seems natural to extend the predicate inversion analysis of *wek* to *zuk*. Accordingly, *zuk* originates as the predicate of a DP-internal small clause and undergoes predicate inversion. Once again, *en* spells out the head resulting from the incorporation of the head of the small clause, X, to F, the functional head whose specifier hosts the inverted predicate.

(9) \[ [\text{DP }_{\text{fp}} \text{zuk }_{X+F} \text{en}] [\text{XP [NP unden }] [X \text{[zuk]}]]] \]

Section 3 shows that the distribution of prenominal ‘uninflected’ *zuk* in negative DPs will necessitate a slight modification of this initial hypothesis.

3. Extending patterns with *WF zuk*

3.1. *Quantification of zuk nominals*

As shown in (10), plural DPs with prenominal *zuk* can be embedded under quantifiers and numerals (10a), interrogative *hoevele* (10b), and negative *geen* (10c). Similarly, non-count nominals with prenominal *zuk* embed under quantifiers (11a), *hoevele* (11b) and *geen* (11c).
When *zuk* is preceded by a quantificational element, spurious *en* remains obligatory, also with plural and non-count nominals.

(10) a  k’een  vele/ te vele/ zovele/ genoeg/drie  zukken/*zuk  unden gezien.

I have many/too many/so many/ enough/three such-en/*such dogs  seen

‘I have seen many/too many/so many/ enough/three such dogs.’

b  Hoevele  zukken/*zuk  unden ee-j  gie  gezien?

how many such-en/*such dogs  have you seen

‘How many dogs like that did you see?’

c  k’(en)  een  geen  zukken/*zuk  unden gezien.

I (en) have no  such-en/*such dogs  seen

‘I did not see any dogs like that.’

(11) a  k’een  te vele/een beetje  zuknen/*zuk  wyn  gedrunken.

I have too much/a little  such-nen/*such wine drunk

‘I drank too much/ a bit wine of that kind.’

b  Hoevele  zuknen/*zuk  wyn  ee-j  gedrunken?

how much such-nen/*such wine have you drunk

‘How much wine of that kind did you drink?’

c  k’(en)  een  geen  zuknen/*zuk  wyn  gedronken.

I (en) have no  such-nen/*such wine drunk

‘I haven’t drunk any wine of that kind.’

As it can be preceded by a range of quantificational elements, these data suggest that *zuk* - and the spurious article associated with it - need not occupy the highest layer of the DP. Let us
assume the structures in (12), in which the label 'D' is to be taken in a broad sense. According to (12), the quantificational elements merge with FP in (10).

(12)  
a. \[DP \ [veel \ [D] \ [FP \ zuk \ [X+en] \ [XP \ [NP \ unden] \ [X \ X \ zuk]]]]\]

b. \[DP \ [hoevele[+wh] \ [D[+wh]]] \ [FP \ zuk \ [X+en] \ [XP \ [NP \ unden] \ [X \ X \ zuk]]]]\]

c. \[DP \ [D \ geen] \ [FP \ zuk \ [X+en] \ [XP \ [NP \ unden] \ [X \ X \ zuk]]]]\]

I assume that *geen* is a D-head, i.e. X°, with a negative feature (cf. Campbell, 1996; Wood, 2002), and that quantifiers such as *veel* are XPs. The latter hypothesis is motivated by the observation that these quantifiers can be modified by degree adverbs (*te vele ‘too many’, vree vele ‘very many’ etc). If *geen* is in D, then *zuk* and its associated spurious article occupy a position lower than D. Further decomposition of D could be envisaged (D, Q, Dem, etc), with (12) reanalyzed as DPs with a null D, and the quantificational elements associated with QP. In the next section I focus on the co-occurrence of *geen* with *zuk* in (13c).

(13)  
a. \[DP \ [QP \ [veel \ [Q]] \ [FP \ zuk \ [X+en] \ [XP \ [NP \ unden] \ [X \ X \ zuk]]]]\]

b. \[DP \ [QP \ [hoevele[+wh] \ [Q[+wh]]] \ [FP \ zuk \ [X+en] \ [XP \ [NP \ unden] \ [X \ X \ zuk]]]]\]

c. \[DP \ [QP \ [Q \ geen] \ [FP \ zukj \ [X+en] \ [XP \ [NP \ unden] \ [X \ X \ zuk]]]]\]

3.2. The interaction of *zuk* and negation in the DP

3.2.1. *Geen*: inflectional patterns

Before discussing the co-occurrence of *geen* and *zuk* I provide the inflectional paradigm for WF *geen*, compared with that of the indefinite article. The inflection of *geen* is similar to that of the indefinite article, with the -en ending reserved for masculine singular. In the masculine singular there is an alternation *geenen*-geen, the nature of this is unclear to me at this point.
[Table 7: The inflectional properties of WF *en/ geen*]

### 3.2.2. *Geen* + inflected *zuk* = uninflected *zuk* + *geen*

Embedded under *geen*, *zuk* is obligatorily followed by spurious *en*, both in singular and in plural contexts. In the masculine singular *geen* itself may appear in the bare form or it may (perhaps more marginally) have the -*en* ending (14a,b):

(14) a  

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>k'een [DP geen <em>zuk</em>(en) boek] gezien.</td>
<td>I have no such*(nen) book seen</td>
<td></td>
</tr>
<tr>
<td>b</td>
<td>??k'een [DP geenen <em>zuk</em>(en) boek] gezien.</td>
<td>I have no-<em>en</em> such*(nen) book seen</td>
</tr>
<tr>
<td>c</td>
<td>k'een [DP geen <em>zukk</em>(en) boeken] gezien.</td>
<td>I have no such-*(en) books seen</td>
</tr>
<tr>
<td>d</td>
<td>k'een [DP geen <em>zukk</em>(en) bier] gedrunken.</td>
<td>I have no such-*(en) bier drunk</td>
</tr>
</tbody>
</table>

In addition to the sequence *geen*+ *zuk*+ spurious article, in (14), WF allows *zuk* to precede *geen* as in (15) (at least for some speakers)\(^4\). With a masculine singular noun, *geen* may show up in the inflected form *geenen* or in its bare form (15a). However, crucially, when it precedes *geen*, *zuk* becomes incompatible with spurious *en* (15b), regardless of the form of *geen*. The order *zuk*-*geen* is also available with plural count nouns (15c,d) and with non-count nouns (15e,f). In such cases too, *zuk* remains uninflected and *geen* has the regular form displayed in Table 7; *geen* cannot itself be associated with a spurious article (15d,f):

(15) a  

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>k'een [DP <em>zuk</em> geen(en) boek] gezien.</td>
<td>I have such no-(en) book seen</td>
<td></td>
</tr>
</tbody>
</table>
b *k'een [DP zukken geen(en) boek] gezien.
I have such-en no(-en) book seen

c k'een [DP zuk(*en) geen boeken] gezien.
I have such-(*en) no books seen

d *k'een [DP zuk geenen boeken] gezien.
I have such no -en books seen

e k'een [DP zukk(*en) geen bier] gedrunken.
I have such*(en) no beer drunk

f *k'een [DP zuk geen-en bier] gedrunken.
I have such no-en beer drunk

From the data above I conclude that when co-occurring with zuk, the inflection of geen does not differ from its usual inflection, in particular there is no evidence for a spurious article. Things are different for zuk. When it follows the negative marker geen, zuk must be accompanied by spurious en, when it precedes geen, zuk is obligatorily uninflected and spurious en is not possible.

3.2.3. Constituency

When preceding geen uninflected zuk can be shown to be part of the nominal constituent. The sequence zuk-geen-N can be the complement of a preposition (16a) and coordinated with other DPs (16b):

(16) a G'en-meugt [PP tegen [zuk geen mensen]] klapen.
You en may against such no people talk
‘You shouldn’t talk to such people.’

I en have [such no books] and [such no records] bought

‘I didn’t buy no such books and no such records.’

The possibilities of DP-internal coordination depend on the linear order of zuk and geen. With the order geen-zuk, geen can take as its complement a coordination of two zuk constituents, i.e. two FPs.

(17) a K’en-een geen [[FP zukken boeken] of [FP zukken ploaten]] gekocht.
I en have no such-en books or such-en records bought
‘I didn’t buy any such books or such records.’

On the other hand, in the order zuk-geen, zuk cannot take as its complement the coordination of two geen constituents. (17b), in which geen boeken (‘no books’) and geen ploaten (‘no records’) are embedded under zuk, is ungrammatical. (17b’) is grammatical with the bracketing indicated: here zuk only embeds the first constituent geen boeken, geen ploaten is a separate constituent. The coordination data suggest that there is a tighter cohesion between zuk and geen in the pattern zuk-geen than in the pattern geen-zuk.

(17) b *k’en-een [zuk [geen boeken] en [geen ploaten]] gekocht.
I en have such no books and no records bought

b' #k’en-een [zuk [geen boeken]] en [geen ploaten] gekocht.
I en have such no books and no records bought
‘I bought no such books and no records (at all).’
3.3. DP initial zuk
Assuming the predicate inversion analysis also in the pattern zuk - geen, one might propose
the derivation in (18). The head D containing geen merges with FP in (18a), whose specifier
hosts zuk; zuk moves to SpecDP (18b). However, in (18b) it not clear what happens to
spurious een, the reflex of the domain extension that permits predicate inversion of zuk.

\[
\begin{align*}
(18) \quad & a \quad [FP \ zuk \ [F_X \ en] \ [NP \ boeken \ [X \ \hat{x}] \ [Pred \ zuk]]] \\
& b \quad [DP \ zuk \ [D \ geen] [FP \ zuk \ [X+X \ en] \ [NP \ boeken \ [X \ X] \ [Pred \ zuk]]]
\end{align*}
\]

One possibility is that een incorporates to geen and that the combination geen+ spurious en
simply spells out as geen. Alternatively, this is a context in which spurious en can be zero.

An alternative account to (18b) would be that, as the head of the predicate of a small
clause, zuk can undergo head-movement. By the HMC, zuk will have to move via the head of
the small clause X. Head-movement of zuk does not lead to locality violations and hence no
additional device is needed for domain extending in order to allow predicate inversion. Since
spurious en is not needed for domain extending purposes, by economy it is excluded.

\[
(19) \quad [DP \ [D \ zuk+geen] [FP \ zuk] [NP \ boeken \ [X \ zuk] [Pred \ zuk]]]
\]

In terms of den Dikken (2006:150-152) (19) is a case of predicate inversion by way of head-
movement and without a linker.\(^5\) Head-movement of the head of the predicate in the nominal
domain (DP) can be compared to head-movement of the verb, the head of the predicate, in the
clausal domain (CP). For proposals for head-movement of the predicate of the DP-internal
If *zuk* incorporates to *geen* the coordination patterns in (17b/17b’) are predicted: *zuk* incorporates to *geen* in the first conjunct, as in (17b’), and it does not have scope over the second conjunct.

The only 'quantifier' that can be preceded by *zuk* is *geen* (20). We can make sense of this restriction if, as proposed above, *geen* has head status, and can serve as a host for *zuk*, while quantificational elements such as *veel* occupy SpecDP.

(20) *K‘een zuk (vree) vee boeken.

I have such very many books

3.4. Restrictions on head-movement of *zuk*

If *zuk* head-moves the left of *geen*, obviating the need for the spell out of spurious *en*, the question arises if *zuk* can head-move in the other patterns, and if so, why spurious *en* is ever needed. In particular, the question arises why we cannot derive the pattern with *geen* - *zuk* without spurious *en* simply through head-movement:

(21) a *[DP [D geen][FP [F zuk] [NP boeken [X zuk] [Pred zuk]]]]

b *geen zuk boeken

Likewise, we may wonder why, in non-negative DPs, *zuk* cannot simply head-move to F, or to D, dispensing with spurious *en*:

(22) a *[DP [D ∅][FP [F zuk] [NP boeken [X zuk] [Pred zuk]]]]

b *[DP [D zuk][FP [F zuk] [NP boeken [X zuk] [Pred zuk]]]]

c *zuk boeken
I can only provide a tentative answer for this problem here. I propose that when it undergoes head-movement, *zuk* is structurally deficient (in the sense of Cardinaletti and Starke, 1999) and that it must incorporate to a lexical host. In the pattern in which *zuk* - *geen, geen* in D provides the required lexical support required by *zuk*.

(23)  
\[
\text{a} \quad [\text{DP} [D \text{zuk}+\text{geen}][FP [F \text{zuk}] [NP \text{boeken} [X \text{zuk}] [Pred \text{zuk}]]])
\]

On the other hand, if structurally deficient *zuk* were to head-move only as far as F, the absence of a lexical head in F will mean that its morphological requirement is not met.

(23)  
\[
\text{b} \quad *[\text{DP} [D \text{geen}][FP [F \text{zuk}] [NP \text{boeken} [X \text{zuk}] [Pred \text{zuk}]]])
\]

Observe that in (23b) insertion of spurious *een* is excluded by considerations of economy. If *zuk* head-moves there is no need for domain extension and spurious *en* cannot be inserted.  

We predict that if the DP structure contains a head which can provide a lexical host, *zuk* will be able to head-move and there will not be any need for spurious *en*. Arguably this situation arises in examples of NP-ellipsis such as in the context in (24), in which *zuk* is hosted by *eenen*.

(24)  
\[
\text{a} \quad \text{Koopt zuknen oto.}
\]

\[
\text{buy-IMP such-nen car}
\]

‘Buy such a car.’

\[
\text{b} \quad \text{k’een a zuk-eenen ghet.}
\]

I have already had such-one-MASC-SG

‘I have already had one like that.’
In (24a) \( zuk \) precedes spurious \( een \). In (24b), with NP ellipsis, \( eenen \) is not ‘spurious’. As shown in (25), like English \textit{one}, WF \textit{eenen} is not compatible with the ellipsis of a non-count masculine NP\textsuperscript{7}

(25)  
\begin{enumerate}
  \item a Koopt \textit{zuknen melk}.
        buy \textit{zuch-nen milk}
        ‘Buy such milk.’
  \item b \#K’e\textit{een a zuk eenen}.
        I have already such one
\end{enumerate}

\textit{3.5. Negative concord in the DP and the distribution of \textit{zuk}}

I have proposed that WF \textit{zuk} can head-move just in case it can be hosted by an overt head. Additional data from WF offer some support for the idea that \textit{zuk} can have head status.

WF displays DP-internal negative concord (Vanacker, 1975; Haegeman, 2002). This is illustrated in (27): a DP may contain either one negative expression, the negated quantifier \textit{nie vee} (‘not many’), or, alternatively, the negative expression can be doubled by a second negative feature on the negative determiner \textit{geen}. DP-internal negative concord with \textit{geen} is licensed by the presence of the negative marker \textit{nie}. If the DP merely contains a ‘semantically negative’ quantifier such as \textit{weinig} (‘little/few’ = ‘not much/not many’), \textit{geen} is not licensed:\textsuperscript{8}

(26)  
\begin{enumerate}
  \item a k’en-een \textit{nie vee (geen) boeken}.
        \textit{I en} have not many (no) books
        I don’t have many books
  \item b K’e\textit{en weinig/minder (*geen) geld}.
        \textit{K’en weinig/minder (*geen) geld}
\end{enumerate}
I have little/less (*no) money

The optional spell out of D by *geen* in the DP (26a) can be compared to the optional spell out of *en* on the finite verb in the clause (27a). The spell out of *en-* also has to be licensed by a negatively marked expression.

(27) a Z'(en)-eet nie vele.
    she (en)-eats not much
    'She doesn't each much.'
    b Z'(*en)-eet weinig.
    she (en)-eats little
    'She eats little.'

Constituency tests show that the string *niet Q geen* N in (26) is a constituent: it can be the complement of a preposition (28a), it can be the first constituent in a V2 structure (28b), and it can be coordinated with another DP (28c):

(28) a k'en-een dat [an nie vele geen mensen] gezaid.
    I *en* have that to not many no people said
    'I did not tell that to many people.'
    b [Nie vele geen mensen ] en-weten der dadde.
    not many no people *en*-know there that
    'Not many people know that.'
    c K'en-een [nie vee geen boeken] en [hoast geen ploaten].
    I *en* have not many no books and almost no records
'I have not many books and hardly any records.'

It is possible to embed two coordinated NPs (or FPs) under geen (29a), but it is not possible to coordinate two geen constituents under nie vele ('not many'): the string in (29b) is grammatical when rebracketed as (29c), in which the second conjunct is not in the scope of nie vele.

(29)  

(29) a  k'en-een [nie vele [geen [boeken en ploaten]]]

I en-have not many no books and records

'I don’t have many books and records.'

b  *k'en -een [nie vele [geen boeken] en [geen ploaten]]

c  #k'en-een [nie vele [geen boeken]] en [geen ploaten]

I don’t have many books and I have no records

'I have few books and no records.'

Assuming, as before, that geen is a negative D, one might propose that the agreeing negative quantifier occupies its specifier.10

(30)  

(30) [DP nie vele [D geen] [NP boeken]]

not many no books

The data in (30) follow. (30a) is NP (or FP) coordination, (30c) is DPs coordination cf. (31a). (30b) is ruled out if we assume that X' coordination is not grammatical (31b).

(31)  

(31) a  k'en-een [[[DP nie vele [D [geen] [NP boeken]]] en [DP[D' [D geen] [NP ploaten]]]]]
In (32) *zuk occurs in a DP with negative concord. In (32a) geen precedes *zuk and spurious en must be present, as expected. In (32b), *zuk intervenes between nie vele en geen, and the spurious article is absent. If the negative quantifier *nie vele is in the specifier position of the projection whose head hosts geen, the analysis according to which *zuk has head status when it precedes geen accounts for the data since, being a head, *zuk can incorporate to the head. We can derive (32b) as in (32c):

(32)  a  K'(en)-een nie vele geen zukk*-(-en) boeken.
     I (en)-have not much no such*-(-en) books
     'I don't have many such books.'

b  K'(en)-een nie vele  *zuk (-en) geen boeken.
I (en) have not many such (-en) no books
'I don't have many such books.'

c  [DP nie vele [D zuk+geen][F P [F zuk] [NP boeken [X-zuk] [Pred zuk]]]]

4. Head-movement of *wek

Given the similarity in the distribution and form of *wek and *zuk we need to return briefly to the derivation of *wek nominals discussed in section 2.2.2. and illustrated in (8). In that derivation *wek undergoes predicate inversion qua XP movement, triggering the insertion of spurious en. We may wonder whether, like *zuk, *wek may undergo predicate inversion qua head-movement. Once again, in the context of head-movement, spurious en should be absent. In (33) with NP ellipsis, *wek is hosted by eenen. As was the case in the examples of NP ellipsis with *zuk in (24)-(25), eenen is not spurious because the understood deleted masculine
NP must be a [+count]. Thus (33) cannot be a question about a masculine [-count] N, say, melk (‘milk’).

(33)  Wek eenen goa-j kuopen?
      which one go-you buy
      ‘Which one are you going to buy?’

In the negative exclamative in (34a), wek is accompanied by spurious en: Some speakers accept - perhaps marginally - the variant in (35b), in wek precedes geen. Once again the need for spurious en is obviated in (35b) by the presence of geen in D, which serves as the lexical support for head-moved wek.

(34)  a  Wek*(-nen) boel goat da nie zyn!
      which -nen muddle goes that not be
      b  Wek(*-nen) geenen boel goat da nie zyn!
      which no muddle goes that not be

5. Summary
In this paper I have discussed the derivation of WF DPs containing interrogative wek and demonstrative zuk. I have explored the analysis according to which wek and zuk originate as the predicates of a DP-internal small clause and undergo predicate inversion. To account for the data in which prenominal zuk co-occurs with the negative determiner geen in the absence of spurious en I propose that in addition to inverting with the subject of the small clause as an XP, zuk can invert with the subject by head-movement. In the latter case, spurious en will not be required hence impossible. The same account applies to some patterns with wek. To
account for the restrictions on head-movement, I propose that when moved as heads, *zuk* and *wek* are structurally deficient and need to incorporate to a lexical host.

**Acknowledgements**

This paper was presented at the conference on *DP-internal Information Structure: Topic, focus and other Illocutionary Forces*. November 17th-18th. OTS University of Utrecht. I thank the audience for their comments. Special thanks are due to Enoch Aboh, Guglielmo Cinque, Norbert Cover, and Øystein Vangsnes for comments and to Marcel Den Dikken and Terje Lohndal for discussion of an earlier version of this paper. Needless to say none of these mentioned can be held responsible for the final version of this paper.
Table 1: The inflectional pattern of *welk* in standard Dutch (based on BK &DD 2003:707)

<table>
<thead>
<tr>
<th></th>
<th>COUNT NOUNS</th>
<th>NON-COUNT NOUNS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SINGULAR</td>
<td>PLURAL</td>
</tr>
<tr>
<td>[-NEUTER]</td>
<td>welke dikke vrouw</td>
<td>welke dikke vrouwen</td>
</tr>
<tr>
<td></td>
<td>which fat woman</td>
<td>which fat women</td>
</tr>
<tr>
<td>[+NEUTER]</td>
<td>welk dik meisje</td>
<td>welke dikke meisjes</td>
</tr>
<tr>
<td></td>
<td>which fat girl</td>
<td>which fat girls</td>
</tr>
</tbody>
</table>
Table 2: Non D-linked demonstratives in Standard Dutch (based on BK &DD 2003:707)

<table>
<thead>
<tr>
<th></th>
<th>COUNT NOUNS</th>
<th>NON-COUNT NOUNS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SINGULAR</td>
<td>PLURAL</td>
</tr>
<tr>
<td>[-NEUTER]</td>
<td>zo'n dikke vrouw</td>
<td>zulke dikke vrouwen</td>
</tr>
<tr>
<td></td>
<td>such-a fat woman</td>
<td>such fat women</td>
</tr>
<tr>
<td>[+NEUTER]</td>
<td>zo'n dik meisje</td>
<td>zulke dikke meisjes</td>
</tr>
<tr>
<td></td>
<td>such-a fat girl</td>
<td>such fat girls</td>
</tr>
</tbody>
</table>
Table 3: Adjectival paradigms in WF

<table>
<thead>
<tr>
<th></th>
<th>DEFINITE</th>
<th>INDEFINITE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MASC SG</strong></td>
<td>den dikk-en und the fat-\textit{en} dog</td>
<td>nen dikk-en und a fat-\textit{en} dog</td>
</tr>
<tr>
<td><strong>FEM SG</strong></td>
<td>de dikk-\textit{e} enne the fat-\textit{e} hen</td>
<td>en dikk-\textit{e} enne a fat-\textit{e} hen</td>
</tr>
<tr>
<td><strong>NEUTER SG</strong></td>
<td>t dik undje the fat doggie</td>
<td>en dik undje a fat doggie</td>
</tr>
<tr>
<td><strong>MASC PL</strong></td>
<td>de dikk-\textit{e} unden the fat-\textit{e} dogs</td>
<td>dikk-\textit{e} unden fat-\textit{e} dogs</td>
</tr>
<tr>
<td><strong>FEM PL</strong></td>
<td>de dikk-\textit{e} ennen the fat-\textit{e} hens</td>
<td>dikk-\textit{e} ennen fat-\textit{e} hens</td>
</tr>
<tr>
<td><strong>NEUTER PL</strong></td>
<td>de dikk-\textit{e} undjes the fat-\textit{e} doggies</td>
<td>dikk-\textit{e} undjes fat-\textit{e} doggies</td>
</tr>
</tbody>
</table>
Table 4: *wek* and *zuk* do not inflect like adjectives (cf (3))

<table>
<thead>
<tr>
<th></th>
<th><em>Wek</em></th>
<th><em>Zuk</em></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MASC SG</strong></td>
<td><em>wekk-en und which –en dog</em></td>
<td><em>zukk-en und such-en dog</em></td>
</tr>
<tr>
<td><strong>FEM SG</strong></td>
<td><em>wekk-e enne which -e hen</em></td>
<td><em>zukk-e enne such-e hen</em></td>
</tr>
<tr>
<td><strong>NEUTER SG</strong></td>
<td><em>wek undje which doggie</em></td>
<td><em>zuk undje such doggie</em></td>
</tr>
<tr>
<td><strong>MASC PL</strong></td>
<td><em>wekk-e nden which -e dogs</em></td>
<td><em>zukk-e nden such-e dogs</em></td>
</tr>
<tr>
<td><strong>FEM PL</strong></td>
<td><em>wekk-e ennen which -e hens</em></td>
<td><em>zukk-e ennen such-e hens</em></td>
</tr>
<tr>
<td><strong>NEUTER PL</strong></td>
<td><em>wek-k e ndjes which -e doggies</em></td>
<td><em>zukk-k e ndjes such-e doggies</em></td>
</tr>
</tbody>
</table>
Table 5a: The paradigms for *wek* and *zuk*: [+count] nouns

<table>
<thead>
<tr>
<th></th>
<th><em>Wek</em></th>
<th><em>Zuk</em></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MASC SG</strong></td>
<td>wek-nen und which-<em>nen</em> dog</td>
<td>zuk-nen und such-<em>en</em> dog</td>
</tr>
<tr>
<td><strong>FEM SG</strong></td>
<td>wekk-en enne which-<em>en</em> hen</td>
<td>zukk-en enne such-<em>en</em> hen</td>
</tr>
<tr>
<td><strong>NEUTER SG</strong></td>
<td>wekk-en undje which-<em>en</em> doggie</td>
<td>zukk-en undje such-<em>en</em> doggie</td>
</tr>
<tr>
<td><strong>MASC PL</strong></td>
<td>wekk-en unden which-<em>en</em> dogs</td>
<td>zukk-en unden such-<em>en</em> dogs</td>
</tr>
<tr>
<td><strong>FEM PL</strong></td>
<td>wekk-en ennen which-<em>en</em> hens</td>
<td>zukk-en ennen such-<em>en</em> hens</td>
</tr>
<tr>
<td><strong>NEUTER PLURAL</strong></td>
<td>wekk-en undjes which-<em>en</em> doggies</td>
<td>zukk-en undjes such-<em>en</em> doggies</td>
</tr>
</tbody>
</table>
Table 6: The WF indefinite article

<table>
<thead>
<tr>
<th></th>
<th>SINGULAR</th>
<th>PLURAL</th>
<th>[-COUNT]</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MASC SG</strong></td>
<td>nen und</td>
<td>Ø unden</td>
<td>Ø wyn</td>
</tr>
<tr>
<td></td>
<td>a dog</td>
<td>Ø dogs</td>
<td>Ø wine</td>
</tr>
<tr>
<td><strong>FEM SG</strong></td>
<td>en enne</td>
<td>Ø ennen</td>
<td>Ø aspergesoepe</td>
</tr>
<tr>
<td></td>
<td>a hen</td>
<td>Ø hens</td>
<td>Ø asparagus soup</td>
</tr>
<tr>
<td><strong>NEUTER SG</strong></td>
<td>en undje</td>
<td>Ø undjes</td>
<td>Ø eten</td>
</tr>
<tr>
<td></td>
<td>a doggie</td>
<td>Ø doggies</td>
<td>Ø food</td>
</tr>
</tbody>
</table>
Table 5b: the paradigms for *wek* and *zuk*: [-count] nouns

<table>
<thead>
<tr>
<th>[-COUNT]</th>
<th><em>Wek</em></th>
<th><em>Zuk</em></th>
</tr>
</thead>
<tbody>
<tr>
<td>MASC SG</td>
<td>wek-nen wyn</td>
<td>zuk-nen wyn</td>
</tr>
<tr>
<td></td>
<td>which-<em>nen</em> wine</td>
<td>such-<em>nen</em> wine</td>
</tr>
<tr>
<td>FEM SG</td>
<td>wekk-en aspergesoepe</td>
<td>zukk-en aspergesoepe</td>
</tr>
<tr>
<td></td>
<td>which-<em>en</em> asparagus soup</td>
<td>such-<em>en</em> asparagus soup</td>
</tr>
<tr>
<td>NEUTER SG</td>
<td>wekk-en eten</td>
<td>zukk-en eten</td>
</tr>
<tr>
<td></td>
<td>which-<em>en</em> food</td>
<td>such-<em>en</em> food</td>
</tr>
</tbody>
</table>
Table 7: The inflectional properties of WF *een/ geen*

<table>
<thead>
<tr>
<th></th>
<th>MASC</th>
<th>FEM</th>
<th>NEUT</th>
</tr>
</thead>
<tbody>
<tr>
<td>[+COUNT SINGULAR]</td>
<td>nen boek</td>
<td>en deure</td>
<td>en us</td>
</tr>
<tr>
<td></td>
<td>a book</td>
<td>a door</td>
<td>a house</td>
</tr>
<tr>
<td>[+COUNT SINGULAR]</td>
<td>geen(en) boek</td>
<td>geen deure</td>
<td>geen us</td>
</tr>
<tr>
<td></td>
<td>no book</td>
<td>no door</td>
<td>no house</td>
</tr>
<tr>
<td>[+COUNT PLURAL]</td>
<td>∅ boeken</td>
<td>∅ deuren</td>
<td>∅ uzen</td>
</tr>
<tr>
<td></td>
<td>books</td>
<td>doors</td>
<td>houses</td>
</tr>
<tr>
<td>[+COUNT PLURAL]</td>
<td>geen boeken</td>
<td>geen deuren</td>
<td>geen uzen</td>
</tr>
<tr>
<td></td>
<td>no books</td>
<td>no doors</td>
<td>no houses</td>
</tr>
<tr>
<td>[-COUNT SINGULAR]</td>
<td>∅ wyn</td>
<td>∅ soepe</td>
<td>∅ eten</td>
</tr>
<tr>
<td></td>
<td>wine</td>
<td>soup</td>
<td>food</td>
</tr>
<tr>
<td>[-COUNT SINGULAR]</td>
<td>geen(en) wyn</td>
<td>geen soepe</td>
<td>geen eten</td>
</tr>
<tr>
<td></td>
<td>geen wyn</td>
<td>no soup</td>
<td>no food</td>
</tr>
</tbody>
</table>
References


Barbiers, S., 2005. Variation in the morphosyntax of ONE. The Journal of Comparative Germanic Linguistics 8, 159-183


Corver, N. and van Koppen, M., 2008. Let’s Focus on noun ellipsis, Ms. University of Utrecht, Uil-OTS.


3 Like English such (Wood, 2002), WF zuk has an identifying use and an intensifying use. So far I have not found any empirical evidence for distinguishing the two uses of zuk in WF. I restrict this paper to examples with identifying zuk.

4 There is speaker variation. I describe my intuitions and those of two other informants.

5 One might dispense with the movement of zuk to F, and simply have it move to D. This depends largely on the precise nature of FP and the cartography of the DP.

(i) \[DP [D zuk+geen] [NP boeken [x zuk] [Pred zuk]]]\
For reasons of space I will not go into this point here. Thanks to Marcel Den Dikken for bringing this possibility to my attention.

To exclude (i) I have to assume that the definite determiner is not an appropriate host for *zuk. At the moment it is not clear what this can be made to follow from.

(i) *zuk de boeken

such the books

For *eenen see Barbiers (2003, 2005); NP ellipsis see Corver and van Koppen (2008).

Negative Concord in the DP is not possible with a non-quantificational descriptive adjective. Pace Zeijlstra (2004:111), the pattern we are concerned with must not be described as 'niet A geen N', but must be described as 'niet Q geen N'.


Or, if geen occupies Q, nie vele is in SpecQP:

(i) [DP [QP nie vele [Q geen] [NP boeken]]]