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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 *Wekken unden ee-j doa gezien?* (WF)
 which –*en* dogs have you there seen
 'Which dogs did you see there?'
- b *Zukken unden een ze ier ook.* (WF)
 such –*en* dogs have they here also
 '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) a Wat voor een jongens zijn dat?
 what for a boys are those
 ‘What kind of boys are those?’
- b een pracht van een spinazie
 a beauty of a spinach
- c Wat een boeken!
 what a books
 ‘What a large number of books!’

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* construction²

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) [DP wat_{[WH]j} [D_[WH] voor] [FP t_j [X_{i+F} een] [XP jongens [X t_i] [Pred 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). BC&DD assume that *van* is a nominal copula, spelt out in F. See also den Dikken (2006).

- (5) [DP een [FP pracht_j [X_{i+F} van een] [XP kind [X t_i] [Pred 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) [DP wat_j [D_[EXCL] een_i] [XP jongens [X t_i] [Pred 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) [DP *wek*_[WH] [D [WH]] [FP ~~*wek*~~_[X+F] *en*] [XP [NP *unden*] [~~X~~] [~~*wek*~~]]]

2.2.3. WF *zuk* ('such')³

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) [DP [FP *zuk*_[X+F] *en*] [XP [NP *unden*] [~~X~~] [~~*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_{+F} en] [XP [NP unden] [X ~~X~~] ~~zuk~~]]]
- b [DP hoevele_[+WH] [D_[+WH]] [FP zuk [X_{+F} en] [XP [NP unden] [X ~~X~~] ~~zuk~~]]]
- c [DP [D geen] [FP zuk [X_{+F} en] [XP [NP unden] [X ~~X~~] ~~zuk~~]]]

I assume that *geen* is a D-head, i.e. X⁰, 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 veel* ‘too many’, *vree veel* ‘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_{+F} en] [XP [NP unden] [X ~~X~~] ~~zuk~~]]]]]
- b [DP [QP hoevele_[+WH] [Q_[+WH]] [FP zuk [X_{+F} en] [XP [NP unden] [X ~~X~~] ~~zuk~~]]]]]
- c [DP [QP [Q geen] [FP zuk_j [X_{+F} 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 k'een [_{DP} geen zuk*(nen) boek] gezien.
 I have no such*(nen) book seen
- b ??k'een [_{DP} geenen zuk*(nen) boek] gezien.
 I have no-en such*(nen) book seen
- c k'een [_{DP} geen zukk*(en) boeken] gezien.
 I have no such-*(en) books seen
- d k'een [_{DP} geen zukk*(en) bier] gedrunken.
 I have no such-*(en) bier drunk

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 k'een [_{DP} zuk geen(en) boek] gezien.
 I have such no-(en) book seen

b *k'een [_{DP} zuknen geen(en) boek] gezien.

I have such-*en* no(-*en*) book seen

c k'een [_{DP} zukk(*en) geen boeken] gezien.

I have such-(**en*) no books seen

d *k'een [_{DP} zuk geen(en) 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]] klappen.

You *en* may against such no people talk

‘You shouldn’t talk to such people.’

b K'en-een [*zuk* geen boeken] en [*zuk* geen ploaten] gekocht.

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*.

- (18) a [FP *zuk* [F+X *en*] [NP *boeken* [X ~~✱~~] [Pred ~~*zuk*~~]]]]
 b [DP *zuk* [D *geen*][FP ~~*zuk*~~ [X+F *en*] [NP *boeken* [X ~~✱~~] [Pred ~~*zuk*~~]]]]

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) [DP [D *zuk+geen*][FP [F ~~*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 small clause see also Corver (1998:238, 2002, 2004), den Dikken (2006) and Aboh (2007).

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) a [DP [D *zuk+geen*][_{FP} [_F ~~*zuk*~~] [_{NP} *boeken* [_X ~~*zuk*~~] [_{Pred} ~~*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) b *[DP [D *geen*][_{FP} [_F *zuk*] [_{NP} *boeken* [_X ~~*zuk*~~] [_{Pred} ~~*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.⁶

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) a Koopt *zuknen* *oto*.
 buy-IMP such-*nen* car
 ‘Buy such a car.’
- b *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 *one*, WF *eenen* is not compatible with the ellipsis of a non-count masculine NP⁷

- (25) a Koopt zuknen melk.
 buy zuch-*nen* milk
 ‘Buy such milk.’
- b #K’een a zuk eenen.
 I have already such one

3.5. Negative concord in the DP and the distribution of *zuk*

I have proposed that WF *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 *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 *nie vee* (‘not many’), or, alternatively, the negative expression can be doubled by a second negative feature on the negative determiner *geen*. DP-internal negative concord with *geen* is licensed by the presence of the negative marker *nie*. If the DP merely contains a ‘semantically negative’ quantifier such as *weinig* (‘little/few’ = ‘not much/not many’), *geen* is not licensed:⁸

- (26) a k’en-een nie vee (geen) boeken.
 I *en* have not many (no) books
 I don’t have many books
- b K’ een weinig/minder (*geen) geld. .

I have little/less (*no) money

The optional spell out of D by *geen* in the DP (26a) can be compared to the optional⁹ 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 eat 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] gezeid.
 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) 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) [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) a k'en-een [[DP nie vele [D' [D geen] [NP boeken]]] en [DP [D' [D geen] [NP ploaten]]]]

- b *k'en-*een* [_{DP} *nie vele* [[_{D'} [_D *geen*] [_{NP} *boeken*]] *en* [_{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* *zukk (*-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*]] [_{FP} [_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) geen 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.

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TABLES

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

	COUNT NOUNS		NON-COUNT NOUNS
	SINGULAR	PLURAL	
[-NEUTER]	<u>welke</u> dikke vrouw which fat woman	<u>welke</u> dikke vrouwen which fat women	<u>welke</u> witte wijn which white wine
[+NEUTER]	<u>welk</u> dik meisje which fat girl	<u>welke</u> dikke meisjes which fat girls	<u>welk</u> wit bier which white beer

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

	COUNT NOUNS		NON-COUNT NOUNS
	SINGULAR	PLURAL	
[-NEUTER]	<u>zo'n</u> dikke vrouw such -a fat woman	<u>zulke</u> dikke vrouwen such fat women	<u>zulke</u> witte wijn such white wine
[+NEUTER]	<u>zo'n</u> dik meisje such-a fat girl	<u>zulke</u> dikke meisjes such fat girls	<u>zulk</u> wit bier such white beer

Table 3: Adjectival paradigms in WF

	DEFINITE	INDEFINITE
MASC SG	den dikk-en und the fat- <i>en</i> dog	nen dikk-en und a fat- <i>en</i> dog
FEM SG	de dikk-e enne the fat- <i>e</i> hen	en dikk-e enne a fat- <i>e</i> hen
NEUTER SG	t dik undje the fat doggie	en dik undje a fat doggie
MASC PL	de dikk-e unden the fat- <i>e</i> dogs	dikk-e unden fat- <i>e</i> dogs
FEM PL	de dikk-e ennen the fat- <i>e</i> hens	dikk-e ennen fat- <i>e</i> hens
NEUTER PL	de dikk-e undjes the fat- <i>e</i> doggies	dikk-e undjes fat- <i>e</i> doggies

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

	<i>Wek</i>	<i>Zuk</i>
MASC SG	*wekk-en und which –en dog	*zukk-en und such-en dog
FEM SG	*wekk-e enne which-e hen	*zukk-e enne such-e hen
NEUTER SG	*wek undje which doggie	*zuk undje such doggie
MASC PL	*wekk-e unden which-e dogs	*zukk-e unden such-e dogs
FEM PL	*wekk-e ennen which-e hens	*zukk-e ennen such-e hens
NEUTER PL	*wekk-e undjes which-e doggies	*zukk-e undjes such-e doggies

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

	<i>Wek</i>	<i>Zuk</i>
MASC SG	wek-nen und which- <i>nen</i> dog	zuk-nen und such- <i>en</i> dog
FEM SG	wekk-en enne which- <i>en</i> hen	zukk-en enne such- <i>en</i> hen
NEUTER SG	wekk-en undje which- <i>en</i> doggie	zukk-en undje such- <i>en</i> doggie
MASC PL	wekk-en unden which- <i>en</i> dogs	zukk-en unden such- <i>en</i> dogs
FEM PL	wekk-en ennen which- <i>en</i> hens	zukk-en ennen such- <i>en</i> hens
NEUTER PLURAL	wekk-en undjes which- <i>en</i> doggies	zukk-en undjes such- <i>en</i> doggies

Table 6: The WF indefinite article

	SINGULAR	PLURAL	[-COUNT]
MASC SG	nen und a dog	Ø unden Ø dogs	Ø wyn Ø wine
FEM SG	en enne a hen	Ø ennen Ø hens	Ø aspergesoepe Ø asparagus soup
NEUTER SG	en undje a doggie	Ø undjes Ø doggies	Ø eten Ø food

Table 5b: the paradigms for *wek* and *zuk*: [-count] nouns

[-COUNT]	<i>Wek</i>	<i>Zuk</i>
MASC SG	wek-nen wyn which- <i>nen</i> wine	zuk-nen wyn such- <i>nen</i> wine
FEM SG	wekk-en aspergesoepe which- <i>en</i> asparagus soup	zukk-en aspergesoepe such- <i>en</i> asparagus soup
NEUTER SG	wekk-en eten which- <i>en</i> food	zukk-en eten such- <i>en</i> food

Table 7: The inflectional properties of WF *een/geen*

	MASC	FEM	NEUT
[+COUNT SINGULAR]	nen boek a book	en deure a door	en us a house
[+COUNT SINGULAR]	geen(en) boek no book	geen deure no door	geen us no house
[+COUNT PLURAL]	Ø boeken books	Ø deuren doors	Ø uzen houses
[+COUNT PLURAL]	geen boeken no books	geen deuren no doors	geen uzen no houses
[-COUNT SINGULAR]	Ø wyn wine	Ø soepe soup	Ø eten food
[-COUNT SINGULAR]	geen(en) wyn geen wyn	geen soepe no soup	geen eten no food

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¹ For alternative proposals: Matushansky (2002), Leu (2004) and Van Riemsdijk (2005).

² For the *wat voor* construction see BC&DD (1998: 110).

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

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

⁵ One might dispense with the movement of *zok* 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 *zok+geen*] [NP boeken [X ~~*zok*~~] [Pred ~~*zok*~~]]]

For reasons of space I will not go into this point here. Thanks to Marcel Den Dikken for bringing this possibility to my attention.

- ⁶ To exclude (i) I have to assume that the definite determiner is not an appropriate host for *zok*. At the moment it is not clear what this can be made to follow from.

(i) **zok de boeken*
 such the books

- ⁷ For *eenen* see Barbiers (2003, 2005); NP ellipsis see Corver and van Koppen (2008).

- ⁸ 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*'.

- ⁹ For discussion of *en*: Haegeman (1998, 2003) and Breitbarth and Haegeman (2008).

- ¹⁰ Or, if *geen* occupies Q, *nie vele* is in SpecQP:

(i) [_{DP} [_{QP} *nie vele* [_Q *geen*] [_{NP} *boeken*]]]