Silence and Classifiers in Dutch Date Expressions

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1. Introduction

Borer recently brought to the fore the idea that classifiers exist universally (Borer 2005). This development is a welcome result in light of Kayne's arguments in favor of the existence of classifier-like silent nouns (such as the silent noun *YEAR*) in languages that are traditionally argued to lack classifiers such as English (Kayne 2003).

In this paper I provide support for Borer's idea that classifiers exist universally and present new evidence in favor of an analysis of silent nouns as classifiers. I discuss two types of Dutch date expressions. The first type contains an ordinal, as in (1), the second one a cardinal, as in (2).

- 1) de derde februari the third February 'the third of February'
- 2) drie februari three February 'the third of February'

This paper is organized as follows. In the next section I present Hurford's (2003) overview of typological variation in quantification and discuss why the data in (1)/(2) at first sight do not fit into his classification. In section 3 I propose an

analysis for date expressions that contain an ordinal (cf. (1)). I claim that they contain both a silent noun DAG 'day' and a silent preposition, as illustrated in (3).

3)
$$[_{D}de \quad [_{Num} derde [_{N} DAG \quad [_{F} VAN \quad [_{N} februari]]]]]]$$

the third day of February

In section 4 I propose an analysis for date expressions that contain a cardinal as in (2). I claim that this construction contains a silent classifier *DAG* 'day', as represented in (4).

4)
$$\begin{bmatrix} N_{\text{um}} & \text{drie} & [C_{\text{I}} & DAG & [N_{\text{I}} & \text{februari}]] \end{bmatrix}$$

three day February

Section 5 sums up and concludes.

2. The problem: Three ways to quantify nouns

Hurford (2003) shows that typologically speaking, there are three ways to quantify nouns. I discuss his classification in the following three subsections.

2.1 The count noun construction

The first way to quantify nouns is by combining an article, a numeral and a noun as in (5) and (6).

- 5) (the) three bicycles
- 6) the third bicycle

This construction can only be used if the noun is a count noun. It is normally pluralized if the numeral is a cardinal higher than one, as in (5).

2.2 The measure noun construction

The second quantificational construction involves more elements, as it typically contains an article, a numeral, a measure noun, a preposition and a quantified noun, as in (7) and (8).

- 7) (the) three glasses of wine
- 8) the third glass of wine

In this construction it is the measure noun that is most commonly marked as plural if the numeral is a cardinal higher than one, as in (7). The quantified noun on the other hand is often mass (as in (7)/(8)) or plural (cf. Doetjes 1997:chapter 7 and Borer 2005: 100n15)).

2.3 The classifier construction

The third strategy, the classifier construction, is a combination of three elements, viz. a numeral, a classifier and a noun, as in (9).

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9) san ping jiu
three bottle liquor
'three bottles of liquor' (Cheng & Sybesma 1999: 514)
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In contrast to the measure noun in the previous subsection, the classifier in this construction generally does not display plural marking, even if the numeral is a cardinal higher than one. The quantified noun has the particular property of being a noun that is yet to be divided into countable units (Doetjes 1997:chapter 7 and Cheng & Sybesma 1999: 517 and 520). Furthermore, this construction does not need a determiner, even when used in argument position.

3. Dutch date expressions with an ordinal

At first glance, the date expression with an ordinal, repeated below in (10), looks like a count noun construction (cf. (11)). Both constructions consist of an article followed by a numeral and a noun. It is clear, however, that this cannot be the correct account, as there is an immediate semantic difference between the two. *The third bicycle* in (11) refers to a specific bicycle in a spatially or temporally ordered set of bicycles, as illustrated in (12). Example (10) on the other hand is ambiguous. It can have the same semantics as (11), in which case it refers to the third February in a set of Februaries. In its most salient reading, however, (10) does not denote a specific February, but rather the third day within the month February.

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10) de derde februari
the third February
'the third of February'
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11) the third bicycle



To account for this semantic asymmetry, I will argue that (10) parallels the measure noun construction, repeated below in (13).

13) the third glass of wine

In presenting this analysis, I will argue that Dutch date expressions with an ordinal, as in (10), contain a silent measure noun DAG 'day' and a silent preposition VAN 'of', so that the structure of the example in (10) is actually as in (14).

14) de derde DAG VAN februari the third DAY OF February 'the third of February'

In what follows, I first present supporting evidence in favour of the assumption that (10) contains a functional projection hosting a silent *VAN* 'of'. Secondly, I present evidence in favour of adopting a silent noun *DAG* 'day'.

3.1 A silent preposition

A first indication that the syntactic structure of (10) contains a silent preposition is the fact that it becomes overt in several grammatical contexts. The preposition is optionally silent in cases of coordination (cf. (15)) and obligatorily in cases in which the name of the month is replaced by the DP *de maand* 'the month' as in (16)¹.

15) Je moet betalen tussen de 5^{de} en de 8^{ste} van/VAN april. you must pay between the 5^{th} and the 8^{th} of/OF April 'You have to pay between the 5^{th} and the 8^{th} of April.

16) Haar loon wordt de 5^{de} van/*VAN de maand her salary becomes the 5^{th} of/ OF the month

¹ Why precisely these elements allow/force the preposition to be overt should be accounted for in further research.

gestort deposited.

'Her salary will be deposited on the 5th day of the month.'

Further corroborating evidence comes from the English counterpart of this construction, in which an overt preposition is obligatory².

17) the third of/*OF February

Note that alongside (17) English also the construction in (18).

18) February the third³

It is tempting to try and derive (17) from (18) via predicate inversion. (17) is then derived by raising the predicate *the third (DAY)* across *February*, with the functional element *of* licensing the inversion. (cf. Den Dikken 2006:178) The fact that Dutch only displays the order in (10) then suggests that in that language is obligatory. The functional head licensing the inversion is in this case the preposition *van*. (cf. in this respect also Bennis e.a. 1998, Den Dikken 2006).⁴

Summing up, in this subsection I have argued that Dutch date expressions with an ordinal contain a silent preposition *van* 'of', which has an overt counterpart that appears in some specific contexts.

3.2 A silent noun DAG 'day'

Kayne (2003) presents the following three criteria for detecting the presence of a silent noun: (i) the existence of an overt counterpart, (ii) the restriction to a particular lexical context, and (iii) the presence of a spurious article. All three these elements are present in Dutch date expressions with an ordinal.

First, the overt counterpart of silent *DAG* 'day' is always possible in this kind of date expression, as is illustrated in (19).⁵

⁴ An analysis of Dutch date expressions in terms of predicate inversion along the lines of Den Dikken (2006), would yield the following structure.

 $[_{FP} [de derde DAG]_i [_{F'} VAN + RELATOR_i [_{RP} [februari] [_{R'} t_i t_j]]]]$

² I leave this cross-linguistic variation as a topic for further research.

³ In this construction the article is not obligatory.

⁵ This example is considered to be more formal than its silent counterpart.

19) de derde dag van februari the third day of February 'the third day of February'

Further, there is unmarked free variation between a silent and an overt *DAG* in constructions with a universal quantifier such as (20) and (21), and in cases of coordination, such as (22).

- 20) Haar loon wordt elke 5^{de} dag/DAG van de maand gestort. her salary becomes each 5th day/DAY of the month deposited 'Her salary will be deposited on the 5th of each month.'
- 21) Haar loon wordt de 5^{de} dag/DAG van elke maand gestort. her salary becomes the 5th day/DAY of each month deposited 'Her salary will be deposited on the 5th of each month.'
- 22) Je moet betalen tussen de 5^{de} en de 8^{ste} dag/DAG you must pay between the 5th and the 8th day/DAY van de maand of the month
 'You have to pay between the 5th and the 8th day of the month.

The constructions in (20)-(22) suggest that *DAG* is always present in the construction, but becomes silent under certain conditions.

Secondly, the occurrence of silent *DAG* is restricted to those contexts in which it is selected by a numeral (more specifically the numbers from 1 to 31), as is illustrated in (24)-(25). In the beginning of this section, we have seen that *de derde februari* is ambiguous, as it can denote either the third February in a set of Februaries or the third day within one February.

23) de derde februari the third February = 'the third February in a set of Februaries' = 'the third day of February'

This ambiguity only occurs in a context which displays a numeral between 1 and 31 (or in this case 29). In other words, the second interpretation is not possible in examples such as (24) or (25).

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⁶ The contexts in which overt *dag* and an overt preposition appear are presumably identical or at least related. I leave this topic for further research.

- 24) de laatste februari the last February = 'the last February in a set of Februaries' ≠ 'the last day of February'
- 25) de warmste februari the hottest February = 'the hottest February in a set of Februaries' ≠ 'the hottest day of February'

Thirdly, this kind of date expressions display the spurious article *de* 'the'. At first sight, this article seems to combine with the name of the month. This is unlikely, however, as names of months in Dutch are bare proper names, and as such do not combine with determiners in (26) and (27).

- 26) Het is (*de) februari.

 It is the February.
- 27) Ik kijk uit naar (*de) februari. I look out to the February 'I am looking forward to February.'

As names of months generally do not take an article in Dutch, the article in this kind of date expressions cannot be combined with the name of the month. I therefore conclude that the article in (23) is a spurious article and that it in fact combines with the silent noun *DAG* 'day'.

Summing up, in this section I have shown that Dutch date expressions with an ordinal pass Kayne's (2003) three criteria for detecting silent nouns: there is an overt counterpart, the construction is lexically restricted and it contains a spurious article.

3.3 Conclusion

The Dutch date expression with an ordinal contains both a functional projection hosting the silent VAN 'of' (cf. § 3.1) and a silent noun DAG 'day' (cf. § 3.2). Thus, the structure of this construction can be represented as in (28).

28) de derde februari = de derde DAG VAN februari

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the third February = the third DAY OF February 'the third of February'
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From this analysis it follows that these date expressions are not count noun constructions (cf. § 2.1), but rather measure noun constructions (cf. § 2.2), as is illustrated in (29).

29) de derde februari = de derde DAG VAN februari

≠ the third bicycle [count noun construction]

= the third glass of wine [measure noun construction]

4. Dutch date expressions with a cardinal

The date expression with a cardinal, repeated below in (30), does not resemble any of the three quantificational types discussed by Hurford (2003). This kind of date expression only contains a numeral and a noun, which makes it different from the count noun construction, the measure noun construction and the classifier construction. Nevertheless, I will bring this construction in line with the typology of quantified nouns, arguing that it instantiates a classifier construction. In order to do this, I assume that an example such as (30) contains a silent *DAG* 'day' which functions as a classifier in this construction. This is illustrated in (31).

- 30) drie februari three February 'the third of February'
- 31) drie DAG februari three DAY February 'the third of February'

This section is organized as follows. In subsections 4.1 and 4.2 I first point out why this construction is neither a count noun construction, nor a measure noun construction. In section 4.3 I present evidence for a classifier analysis of this construction.

4.1 Not a count noun construction

It is implausible that Dutch date expression with a cardinal, as repeated in (32), are instantiations of the count noun construction (cf. (33)).

- 32) drie februari three February 'the third of February'
- 33) drie fiets-*(en) three bicycle-plural 'three bicycles'

The reason for this is twofold. First of all, the construction in (32) lacks plural marking on the noun, which is an otherwise regular feature of the Dutch count noun construction (cf. (33)). Secondly, in the date expression it is not the number of months that is quantified, while this is precisely what one would expect on the basis of (33), in which the bicycles are quantified and nothing else. If (32) were a regular count noun construction, this interpretation would be unexpected and could not be accounted for.

4.2 Not a measure noun construction

It is equally implausible that Dutch date expressions with a cardinal are measure noun constructions, cf. (34).

34) *(the) third glass of wine

Recall that measure noun constructions are characterized by the presence of an article and by the presence of a preposition that links the measure noun to the quantified noun.

Recall also the fact that the preposition was optionally overt in cases of coordination (cf. (15)) and obligatorily if the name of the month is replaced by the DP *de maand* 'the month' (cf. (16)). If date expressions with cardinal numbers are measure noun constructions, this characteristic preposition should become overt under the same conditions. This prediction, however, is not borne out, as can be seen in (35) and $(36)^7$.

35) tussen drie en vier (*van) februari between three and four of February

⁷ This example might be less relevant as *drie de maand* 'three the month' is equally ungrammatical.

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36)* drie van de maand
three of the month
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Further, if we were to assume that the date expression under discussion is a measure noun construction, the absence of an article would remain mysterious. Above we have seen that a measure noun construction cannot lack a determiner (cf. (34)). As the example in (37) illustrates, however, determiners are obligatorily absent in date expressions with a cardinal.

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37)* de drie februari
the three February
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4.3 A classifier construction

The date expression under discussion resembles the classifier construction in that there is no article and no plural marking. The only thing that is missing seems to be the classifier itself. In this section I provide evidence for a silent classifier *DAG* 'day'. To support this view, I show that Dutch has – previously unnoticed – overt classifier *dag* 'day'.

4.3.1 Classifier constructions in Dutch

A classifier construction generally contains a numeral, a nonplural measure word and a noun that is yet to be divided into countable units (Doetjes 1997:chapter 7 and Cheng & Sybesma 1999: 517 and 520). Furthermore, a classifier construction typically has no obligatory determiner in argument position. Dutch has a restricted set of measure words that allow for a construction in which these properties can be found (cf. Doetjes 1997:chapter7). An example is given in (38).

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38) Ik heb (de) zes liter water gekocht.

I have (the) six liter water bought

'I have bought (the) six liters of water.'
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This sentence contains the numeral zes 'six', the nonplural measure word *liter* 'liter' and the lexicial noun that is being quantified, i.e. water 'water'. Furthermore, as (38) shows, this classifier construction does not require the use of a determiner in argument position, although the definite determiner can occur.

Summing up, Dutch displays classifier constructions with a restricted set of measure words.

4.3.2 Dag 'day' as a classifier

Among the elements that show up in classifier constructions are certain temporal nouns, as illustrated in (39) and (40).

- 39) twaalf jaar gevangenis twelve year prison 'twelve years of prison'
- 40) twee uur les two hour lesson 'two hours of classes'

These phrases are structurally identical to (38) in that they contain a numeral, a nonplural measure word and a lexical noun that is being quantified. I propose that the date expression with a cardinal is a similar classifier construction. This construction contains a numeral, a lexical noun, i.e. the name of the month, and a silent classifier.

A first indication that date expressions with a cardinal contain a silent classifier is the - to my knowledge previously undiscussed - fact that dag 'day' can occur as an overt classifier in certain varieties of Dutch⁸. The relevant examples are given in (41) - (43).

- 41) drie dag weekend [non-standard Dutch] three day weekend 'three days of weekend'9
- 42) [non-standard Dutch] zeven dag zon day seven sun 'seven days of sun' 10
- veertien dag 43) verlof [non-standard Dutch] fourteen day holiday 'fourteen days of holiday' 1

⁸ The precise distribution of this phenomenon is not clear to me as yet. It is well-known, though, that the range of elements that can occur as classifiers is subject to both inter- and intralinguistic

http://ellebel.skynetblogs.be/archive-month/2005-10 + confirmed by Elke Popleu p.c. http://frankspencer.skynetblogs.be/archive-month/2006-08

¹¹ p.c. Elke Popleu

These data are parallel to the examples in (39) - (40) as they contain a numeral, a lexical noun that is being quantified and a temporal classifier. I therefore conclude that *dag* 'day' can function as a classifier in Dutch, either overtly or covertly.

Further support for this analysis comes from the fact that this construction is also restricted to a particular lexical context. Specifically, it is only allowed when the classifier is selected by a number from 1 to 31, as is illustrated in (44) and (45).

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44)* al(le) april
all April
INTENDED: all days of April
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45)* vele/veel april
many April
INTENDED: many days of April
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4.3.3 Conclusion

I conclude that Dutch date expressions with cardinals are classifier constructions with a silent classifier *DAG*. This is illustrated in (46) and (47).

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46) drie februari = drie DAG februari
three February = three DAY February
'the third of February'
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47) [Num drie [Cl DAG [N februari]]] three day February
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5. Conclusion

In this paper, I have examined two types of date expressions in Dutch. The first one contains an ordinal, the second one a cardinal. I have argued that the first construction contains both a silent preposition and a silent noun DAG 'day' and that it is thus a measure noun construction. Furthermore, I have provided evidence for the fact that the second construction contains a silent classifier DAG. I have shown that this structure is in fact a classifier construction.

These conclusions provide evidence for the existence of a silent preposition in Dutch and for the existence of a silent noun *DAG* 'day', which can equally function as a classifier. In this respect, silent *dag* strongly resembles Kayne's silent *YEAR* (Kayne 2003), which is also a temporal measure noun and which can equally play a classifier role.

It is not clear at this point in which contexts an element can remain silent, nor is it clear which elements can remain silent in the first place. With respect to the first issue, Kayne (2005) proposes that Spell-Out fails to see phrases in the spec of a phase. If this proposal holds, it would have important implications for further research on the date expressions under discussion as it could potentially complicate their syntactic analysis considerably. As for the range of elements that can remain silent, I have argued for a silent preposition, a silent noun and a silent classifier. This means that the range of elements that can remain silent must be rather broad.

These data and these conclusions also support Borer's view that facts which were traditionally seen as typological variation can be reduced to intra-language variation. In this light, we have seen that Dutch displays the three ways to quantify nouns that were presented in Hurford's (2003) typological classification of quantification. Next to its regular use of the count noun constructions, it also makes use of the measure noun construction and the classifier construction.

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