Silence and the construct state in Dutch date expressions*

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1. Introduction

In recent years expressions that seem — in one way or another — to have idiosyncratic properties have come into the limelight of linguistic discussion. Whereas some argue strongly for a syntactic account of the observed (ir)regularities in these cases (Borer 2005), others claim that these expressions are stored in the lexicon and thus are arbitrary combinations of form and meaning (Jackendoff & Culicover 2005, Goldberg 2006).

In this paper I provide support for a syntactic analysis of date expressions in spite of their at first sight idiosyncratic appearance. I discuss two types of Dutch date expressions. The first contains an ordinal, as in (1), the second a cardinal, as in (2).

- 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 Section 2 I propose an analysis for Dutch date expressions that contain an ordinal, henceforth abbreviated as DDEO (cf. (1)). I claim that they contain both a silent noun *DAG* 'day' and a silent preposition *VAN* 'of', as illustrated in (3).¹

(3) [_D de [_{Num} derde [_N DAG [_F VAN [_N februari]]]]] the third DAY OF February In Section 3 I propose an analysis for Dutch date expressions that contain a cardinal, henceforth DDEC, as in (2). I claim that these expressions are an instantiation of construct states and that they also contain a silent noun *DAG* 'day', as represented in (4).

(4) $\begin{bmatrix} DP & DAG & T_{NumP} & drie & T_{Num}, DAG & T_{NP} & februari & T_{N}, DAG & T_{NUMP} & T_{NUM}, T_{NUM$

Section 4 sums up and concludes.

2. Dutch date expressions with an ordinal

At first glance, DDEO, repeated below in (5), looks like a run-of-the-mill DP with an ordinal (cf. (6)). Both constructions consist of an article followed by a numeral and a noun. There is, however, an important semantic difference between the two. *The third bicycle* in (6) refers to a specific bicycle in a spatially or temporally ordered set of bicycles, as illustrated in (7). Example (5) on the other hand is ambiguous. It can have the same semantics as (6), in which case it refers to the third February in a set of Februaries, but in its most salient reading (5) does not denote a specific February, but rather the third day of (a contextually specified) February.

- (5) de derde februari the third February 'the third of February'
- (6) the third bicycle
- (7) ಈ ಈ <u>ಈ</u> ಈ ಈ ಈ ಈ ಈ ↑

To account for this semantic asymmetry, I will argue that DDEOs contain a silent measure noun *DAG* 'day' and a silent preposition *VAN* 'of', so that the structure of the example in (5) is actually as in (8).

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

In what follows, I first present supporting evidence in favor of the assumption that (5) contains a functional projection hosting a silent *vAN* 'of'. Secondly, I present evidence in favor of adopting a silent noun *DAG* 'day'.

2.1 A silent preposition

A first indication that the syntactic structure of (5) 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. (9)) and obligatorily present in cases in which the name of the month is replaced by the DP *de maand* 'the month' as in (10).²

- (9) Je moet betalen tussen de 5de en de 8ste van/VAN april.
 you must pay between the 5th and the 8th of/OF April
 'You have to pay between the 5th and the 8th of April.
- (10) Haar loon wordt de 5de van/*van de maand gestort. her salary becomes the 5th of/ OF the month 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 obligatory.³

(11) the third of/*OF February

I therefore conclude that DDEOs contain a silent preposition *van* 'of', which becomes overt in certain contexts.

2.2 A silent noun DAG 'day'

Kayne (2005a) 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 criteria are met in DDEOs.

First, the overt counterpart of silent DAG 'day' is always possible — though it is considered to be slightly more formal — in this kind of date expression, as is illustrated in (12).

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

Moreover, there is unmarked free variation between a silent and an overt *DAG* in constructions with quantifiers and determiners such as (13) and (14), and in cases of coordination, such as (15).⁴

(13) Haar loon wordt elke 5de 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.'

- (14) Haar loon wordt de 5de dag/DAG van deze maand gestort. her salary becomes the 5th day/DAY of this month deposited 'Her salary will be deposited on the 5th of this month.'
- (15) Je moet betalen tussen de 5de en de 8ste dag/DAG van de maand you must pay between the 5th and the 8th day/DAY of the month 'You have to pay between the 5th and the 8th day of the month.

The constructions in (13)–(15) suggest that *DAG* 'day' 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 an ordinal between 1 and 31. In the beginning of Section 2, I have pointed out 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:

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

This ambiguity disappears, however, when the construction does not contain an ordinal between 1 and 31 (or in this case 29). In other words, the second interpretation is not possible in examples such as (17) or (18).

(17) de laatste februari
the last February
= 'the last February in a set of Februaries'
≠ 'the last day of February'

(18) de warmste februari
the hottest February
= 'the hottest February in a set of Februaries'
≠ 'the hottest day of February'

The occurrence of silent *DAG* is thus restricted to certain lexical contexts. As such, silent *DAG* falls under one of the characteristics of silent nouns as pointed out by Kayne (2005a).

Thirdly, DDEOs 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. This is shown in (19) and (20).

(19) Het is (*de) februari.it is the February.'It is February.'

(20) 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 DDEOs cannot be combined with the name of the month. I therefore conclude that the article in (16) 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 DDEOs pass Kayne's (2005a) three criteria for detecting silent nouns: there is an overt counterpart, the construction is lexically restricted and it contains a spurious article.

2.3 Conclusion

The Dutch date expression with an ordinal contains both a functional projection hosting a silent preposition *VAN* 'of' (cf. § 2.1) and a silent noun *DAG* 'day' (cf. § 2.2). Thus, the structure of this construction can be represented as in (21).

(21) $\begin{bmatrix} D & de \end{bmatrix}_{Num} der de \begin{bmatrix} N & DAG \end{bmatrix}_{F} VAN \begin{bmatrix} N & februari \end{bmatrix} \end{bmatrix}$ the third DAY OF February

3. Dutch date expressions with a cardinal

Dutch date expressions with a cardinal (DDECs) differ from regular Dutch DPs with a cardinal both from a syntactic and a semantic point of view. Syntactically, the construction in (22) lacks plural marking on the noun, which is an otherwise obligatory feature of a Dutch DP with a cardinal (cf. (23)).

| drie | februari | |
|----------------|-------------------|--|
| three February | | |
| 'the t | hird of February' | |
| | three | |

(23) drie fiets-*(en) three bicycle-plural 'three bicycles'

Semantically, DDECs do not involve quantification over a set of months. Rather, it refers to an entity, i.e. one single day. This is not what one would expect on the basis of (23), which does not refer to a single entity, but rather to a set of three bicycles. Thus, if (22) were a garden-variety DP with a cardinal, both its syntax and its interpretation would be unexpected and could not straightforwardly be accounted for.

To account for these syntactic and semantic deviances, I will argue that the DDEC instantiates a construct state (cf. Ritter 1991). In order to do this, I assume that DDECs just like DDEOs contain a silent *DAG* 'day'. The crucial difference between the two, though, lies in the DP-internal syntactic behavior of this empty noun. Consider in this respect the schematic structure of DDECs in (24).

(24) DAG drie februari DAY three February 'the third of February'

This section is organized as follows. In Subsection 3.1 I present semantic evidence for a silent *DAG* 'day' in DDECs. In Subsection 3.2 I discuss a number of empirical parallels between the construct state and DDECs and I will give a detailed presentation of the analysis, while Subsection 3.3 sums up and concludes.

3.1 A silent noun DAG 'day'

As was shown in (23), prenominal cardinals denote the quantity of the set denoted by the noun they modify. The cardinal in the DDEC (cf. (22)), however, does not denote a quantity, but rather refers to a single entity, i.e. a particular day. This reading falls out naturally if we assume that the cardinal in the DDEC is not *pre*nominal, but rather *post*nominal. Postnominal cardinals in Dutch DPs refer to a single entity. This is illustrated in (25)-(26).⁵

- (25) kandidaat/kamer/bus/tram drie candidate/room/bus/tram three 'candidate/room/bus/tram three'
- (26) dag drie day three 'day three'

The expressions in (25) refer to unique entities, i.e. one single candidate/room/ bus/tram that is called 'number three'.⁶

Summing up, in order to derive the correct semantics for the DDEC, we should assume that the cardinal follows the noun it modifies. This implies that the cardinal is not combined with the name of the month, which amounts to saying that a second noun has to be present in DDECs. As should be clear by now, I assume this second noun to be the silent noun *DAG* 'day'.

Support for this analysis comes from the absence of an article. In particular, constructions such as (25)–(26) never co-occur with an article.⁷ This is shown in (29). Furthermore, the determiner and the DP-initial noun are in complementary distribution. This can be concluded from (27)–(30).

- (27) bus driebus three'bus number three'
- (28) de drie the three 'bus number three'
- (29) *de bus drie the bus three
- (30) * drie three Intended: 'bus number three'

(27-30) show that the article and the noun in this kind of construction never cooccur and occupy the same position. This suggests that the noun raised to D°. (31) shows that also in the DDEC the article is illicit.

(31) (*de) drie februari the three February

If we assume a silent noun *DAG* 'day' that raised from N° to D° in the DDEC, we can not only account for the peculiar semantics, i.e. the reference to one single day, but also for the absence of the article (cf. (29)). We can now represent the structure of (24) as (32).

(32) $\left[_{DP} \left[_{D'} DAG \left[drie \left[februari \left[_{N'} \frac{DAG}{DAG} \right] \right] \right] \right]$

In the next section I describe this structure in more detail.

3.2 The analysis: Dutch date expressions as construct states⁸

To understand the structure of the DDEC more precisely, it is important to note that this construction never displays a preposition in between the numeral and the name of the month (cf. (33)).

(33) drie (*van) februari three of February 'the third of February'

Furthermore, recall that for the DDEO the preposition is optionally overt in cases of coordination (cf. (9)) and obligatorily so if the name of the month is replaced by the DP *de maand* 'the month' (cf. (10)). In DDECs, however, this preposition never becomes overt in these — or any other — contexts. This is illustrated in (34) and (35).⁹

- (34) tussen drie en vijf (*van) februari between three and five of February
- (35) * drie van de maand three of the month

We can thus conclude that a preposition is illicit in the DDEC. If we combine this insight with the conclusions of Subsection 3.1, we can see that the DDEC resembles the Hebrew construct state in its three major properties, namely N-to-D raising (cf. Ritter 1991), the absence of an initial determiner and the absence of a preposition. For Hebrew, the two latter properties are illustrated in (36) and (37).

| (36) | (*ha-)sifrey ha-mesorerim | |
|------|--|-------------------|
| | the-books the-poets | |
| | 'the poets' books' | [Siloni 1997, 23] |
| (37) | beyt (*sel) ha-'is house of the-man | |
| | 'the man's house' | [Siloni 1997, 21] |

(36) shows that the Hebrew construct state does not allow for an initial determiner. (37) shows that this construction never displays a preposition.

The fact that the DDEC instantiates a construct state is further supported by other properties the DDEC and the Hebrew construct state have in common (cf. Siloni 1997). These are the obligatory presence of the possessor/the name of the month and the fact that they can be used recursively. I illustrate these two properties in detail below.

The next parallel between the DDEC and the Hebrew construct state is the obligatory presence of the possessor/the name of the month. In Hebrew, construct states never occur without an overt realization of the possessor, as can be seen in (38).

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(38) *beyt
house [Siloni 1997, 25]
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Similarly, in DDECs the name of the month cannot be left out, (cf. (39)).

(39) *Ik zie je (op) drie.¹⁰
I meet you (at) three
intended: 'I'll meet you on the third.'

In Hebrew construct states, the possessor has to be realized. This fact is mirrored in DDECS by the obligatory presence of the name of the month.

The last similarity between the DDEC and the Hebrew construct state is the fact that they can both be used recursively. In Hebrew the complement of a construct state can become the head of another construct state. This is illustrated in (40).

(40) gag (*ha)beyt ha-'is roof (the)house the-man
'the roof of the house of the man' [Siloni 1997, 23]

DDECs also display recursiveness in that they can combine with the name of a year.¹¹

(41) drie februari 2007 three February 2007 February, the third 2007

Summing up, the DDEC mirrors the Hebrew construct state in five respects: N-to-D raising, the absence of an initial determiner, the absence of a preposition, the obligatory presence of the possesor/the name of the month and the possibility of recursion. Not surprisingly, then, I propose to analyse DDECs as instantiations of construct states (cf. Svenonius & Taraldsen (2007)). Taking the structural similarities with the Hebrew construct state into account, the DDEC can be represented as follows (cf. Ritter 1991).¹²

(42) $[_{DP} [_{D'} DAG [_{NumP} drie [_{Num'} \overline{DAG} [_{NP} februari [_{N'} \overline{DAG}]]]]]$

3.3 Conclusion

Given the semantic evidence for a silent noun DAG 'day' that has raised from N° to D° and given the structural resemblances between the DDEC and the Hebrew construct state, I conclude that the DDEC contains a silent noun DAG 'day' which has raised to D and that the DDEC is thus an instantiation of the construct state. This structure not only provides an account for the peculiar semantics discussed in Section 3.1, but also for the many structural facts outlined in Section 3.2.

4. 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'. As for the second construction, I have provided evidence for the fact that it also contains a silent noun *DAG* and that it instantiates a construct state.

From a slightly broader perspective, then, these analyses provide additional support for the existence of a silent preposition in Dutch and for the existence of a silent noun *DAG* 'day'. It is not clear at this point, though, 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 (2005b) proposes that Spell-Out fails to see phrases in the spec of a phase.¹³ If this proposal holds, it would have important implications for further research on the date expressions under discussion here, as it could potentially complicate their syntactic analysis considerably.¹⁴

These data and these conclusions also support the view that syntax is present in expressions that at first sight appear to be idiosyncratic. Rather than representing a motley crew of arbitrarily stored facts in the lexicon, Dutch date expressions are products of UG-principles.

Notes

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1. Throughout this paper I use Dutch lexical items written in small caps to represent silent elements. This is only a matter of presentation, though, and I do not intend to imply that such silent elements are language-specific. On the contrary, I assume that they are elements of UG. Thanks to a LIN-reviewer for raising this issue.

2. Why precisely these elements allow/force the preposition to be overt I leave as a topic for further research.

3. As Richard Kayne points out to me, the contrast between the Dutch and the English date expressions looks like the contrast between the English *a pound of apples* and its Dutch counterpart *een pond appelen* (lit. a pound apples). Due to space limitations, though, I cannot explore this interesting parallel any further here.

4. There is a clear parallel between the contexts in which overt *dag* 'day' can appear and those in which an overt preposition can/must occur, suggesting that a unified account should be sought for these phenomena. I leave this as a topic for further research.

5. Like English, Dutch displays free variation in this construction with respect to whether or not the noun *number* can occur (e.g. *cadidate three* vs. *candidate number three*). I leave this variation for further research, but interestingly, whereas Spanish has the same free variation, e.g. *la linea tres* (lit. the line three) vs. *la linea numero tres* (lit. the line number three), it never has *numero* 'number' in date expressions (*el dia* (**numero*) *tres de abril* lit. the day number three of April).

6. It should be noted that these postnominal cardinals do not receive exactly the same interpretation as ordinals, i.e. in contrast to ordinals, postnominal cardinals do not presuppose an ordered set, e.g. *office number 524* does not imply that there is a set in which at least 524 offices are ordered, it only implies that the office in question is referred to as 'office number 524'. It makes no claim about the total number of offices involved (cf. Wiese 2003).

7. These constructions can exceptionally take an indefinite article, just like proper names, if used generically, e.g. *Een bus drie is meestal comfortabel.* 'A bus number three is commonly comfortable.' Under the same generic reading, also the DDEC can take an indefinite article, e.g. *een drie februari is meestal koud* 'February third is commonly a cold day.'

8. I would like to thank an anonymous reviewer for suggesting this parallel to me.

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

10. Interestingly, the DDEO does allow for the absence of the name of the month, e.g. *Ik zie je de derde*. I'll meet you on the third'. This suggests that (39) is out for syntactic rather than semantic or pragmatic reasons.

11. I abstract away from the precise categorial nature of *2007*. Note, however, that the numeral denoting the year can take an article as in *het verschrikkelijke 2007* '(lit. the terrible 2007) and thus presumably acts like — or at any rate involves — a noun.

12. One could choose to represent this initial relation between *februari* and *DAG* as as small clause. Nothing in my analysis hinges on this, though.

13. Note in this respect that the silent noun of the DDEC ends in the phase edge.

14. Note that in construct states the first noun is phonetically reduced in Hebrew. This might be related to the silence of *DAG* in the similar configuration in DDECs. (cf. Svenonius & Taraldsen 2007)

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