

Constructional Licensing in Morphology and Syntax*

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1. Introduction

In recent work by the second author it has been argued that the theoretical insights of Construction Grammar can be applied in fruitful ways to the domain of morphology, thus leading to the idea of Construction Morphology (Booij 2005a, b). The basic idea of Construction Grammar may be specified as follows:

“[...] the grammar represents an inventory of form-meaning-function complexes, in which words are distinguished from grammatical constructions only with regard to their internal complexity. The inventory of constructions is not unstructured; it is more like a map than a shopping list. Elements in this inventory are related through inheritance hierarchies, containing more or less general patterns.”

(Michaelis and Lambrecht 1996: 216)

Similar ideas have been put forward in Goldberg (1995, 2003).

This quotation leaves open to what extent words exhibit internal complexity. In this paper, we want to defend a unitary view of complex words (of the concatenative morphology type) and phrases. Like syntactic constructions, word formation patterns can be qualified as constructions, which may have fixed slots and variables as do constructions in sentence grammar (Booij 2005a, b). For instance, de-verbal noun formation in English by means of the suffix *-er* can be represented as a constructional idiom of the form $[[x]_V \text{er}]_N$ ‘one who Vs’. A word formation pattern with a particular affix can be conceived of as a morphological construction in which it is only the affix that is specified whereas the slot for the stem is variable. That is, each affixation pattern is a *constructional idiom* (in the sense of Jackendoff 2002), a construction in which one or more slots (but not all of them) are lexically fixed.

There is another reason why the notion ‘construction’ plays an important role in morphology: the use of morphological processes may be restricted to certain morphological or syntactic constructions. The implication of this form of interface between morphology and syntax is that we need a similar representational format for morphological and syntactic constructions for expressing such dependencies. A number of cases of this kind of dependency in Dutch can be found in Booij (2005a).

One of these examples of interaction between morphology and syntax in Dutch is the use of the suffix *-s* in the specifier position of noun phrases. A summary of the relevant facts can be found in Booij (2002: 34-35). Dutch nouns do not exhibit morphological case marking; this system disappeared in the transition from Middle

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Dutch to present-day Dutch. There are, however, relics of the case system; one of them is that the suffix *-s* (historically the genitive singular case marker) can be used for a number of nouns in the specifier position of a noun phrase:

- | | | |
|-----|-----------------------------------|----------------------------|
| (1) | <i>Jan-s hoed</i> | ‘John’s hat’ |
| | <i>Amsterdam-s rijke verleden</i> | ‘Amsterdam’s rich history’ |
| | <i>vader-s fiets</i> | ‘father’s bicycle’ |
| | <i>dominee-s studeerkamer</i> | ‘reverend’s study’ |
| | <i>ieder-s huis</i> | ‘everybody’s house’ |
| | <i>iemand-s vriend</i> | ‘someone’s friend’ |
| | <i>niemand-s schuld</i> | ‘nobody’s fault’ |

These words ending in the suffix *-s* have the function of possessor. The only nouns that can be used with this kind of possessor marker are proper names, nouns that can be used as forms of address, like *vader* ‘father’, *moeder* ‘mother’ and *dominee* ‘reverend’, that is, words functioning as proper names, and quantifying personal pronouns such as *iemand* ‘someone’. Since a noun like *directeur* ‘director’ cannot be used as a form of address in Dutch, unlike a noun such as *dominee*, the phrase **directeurs kamer* ‘the director’s room’ is ill formed. These *s*-marked nouns cannot be preceded by an article if they are marked as a possessor by means of *-s*. A phrase like **de dominees fiets* ‘the minister’s bicycle’ is therefore ill-formed, unlike its English gloss. The words with *-s* in (1) can only be used in pre-nominal position: a sentence like **Deze hoed is Jans* ‘This hat is John’s’ is ungrammatical which also shows that *-s* does not function as a genitive marker. In short, this use of words ending in this suffix *-s* is subject to strong syntactic restrictions. This kind of grammatical pattern is therefore best qualified as a specific construction with two sub-schemas for the two types of nouns that can be used: proper names (including names of address) and quantifying personal pronouns:

- (2) a. [proper name *-s*]_{Spec-NP}
 b. [quantifying personal pronoun-*s*]_{Spec-NP}

It is a constructional idiom that is productive to the extent that the slot for proper names is an open one, into which all proper names can be inserted.^{1 1}

A second example of this dependency of morphological processes on syntactic configurations, also taken from Booij (2005a), is the pluralization of Dutch numerals. The use of the plural forms of most numerals is restricted to a number of specific constructions, which are exemplified in (3):

- (3) a. Number of parts:
Het schip brak in drie-en
 The ship broke in three-*en*
 ‘The ship broke into three pieces’

¹ The suffix *-s* also occurs in phrases such as *jouw moeder-s kamer* ‘your mother’s room’, in which the specifier contains a possessive pronoun as well. Hence, the relevant constructional idiom should be modified as to also include the possibility of such a pronoun, that is, it should be represented as [(possessive pronoun) + proper name *-s*]_{Spec-NP}.

- b. Appositive collective:
wij / ons drie-en
we /us three-*en*
'the three of us (subj. / obj.)'

- c. Collective adverbial:
met ons / jullie / hun drie-en
with us / you / their three-*en*
'the three of us /you / them together'

- d. Collective adverbial:
met z'n drie-en
with his three-*en*
'the three of us / you / them'

Example (3d) is a prototypical case of a constructional idiom. It has the form of a PP, headed by the preposition *met*, followed by the NP [*z'n* Numeral-*en*]. The possessive pronoun has the weak form *z'n* [zən]. In this NP the slot for the possessive pronoun is fixed as *z'n* (the 3rd pers. sg. possessive pronoun), whereas the slot for the numeral is open and can be filled with all sorts of numeral. Thus we have Dutch sentences like

- (4) *We komen morgen met zijn twintig-en*
We come tomorrow with his twenty-*en*
'We will come tomorrow with twenty persons'

Note the incongruence between the person and number of the subject (1st pers. pl) and that of the possessive pronoun (3rd pers. sg.). The examples in (3c) are variants in which there is agreement in person and number between the subject of the sentence and the possessive pronoun in the collective construction. So there are two different collective constructions that are identical except that the possessive pronoun can either be a variable (and thus subject to the normal agreement constraints for possessive pronouns), or a fixed possessive pronoun *z'n*.

In addition to ordinal numerals the plural quantifiers *all-en* 'all' and *beid-en* 'both' can also be used in the constructions (3b-d). In these cases, the stem of the plural form does not occur as a word by itself.

We should note that these plural numerals cannot be used as subjects (with the exception of the noun-like numerals mentioned above). Thus, a sentence like the following is ungrammatical, although there is no clear semantic explanation for this ungrammaticality:

- (5) **Drie-en gingen naar huis*
Three-*en* went to home
'Three people went home'

This illustrates once more how this productive use of pluralized numerals is restricted to very specific syntactic contexts, in other words, to constructions.

In this paper, we will present some more evidence from Dutch on the central role of the notions ‘construction’ and ‘constructional idiom’ in accounting for the dependency of morphology on morphological and syntactic constructions. In section 2, the morphological construction ‘*uit* + past participle’, as exemplified by the complex word *uitgepraat* in the sentence *Ik ben uitgepraat* ‘I am done with talking’ will be analyzed in section 2. It will be shown that the use of *uit* with the meaning ‘done with’ is licensed only by the presence of a particular morphological form, the participial adjective. We refer to this kind of dependency as ‘constructional licensing’, which means that the use of words with specific meanings is licensed by specific (morphological and/or syntactic) constructions.

In section 3, we will discuss the behaviour of particle verbs with the particle *aan* such as *aanlopen* ‘to arrive by walking’. These particle verbs can only be used in the form of a participle or an infinitive, and only in combination with the verb *komen* ‘to come’. Hence, the formation of such lexical units is constructionally restricted. In other words, this use of *aan* with the meaning ‘to arrive by’ is licensed by a specific construction with certain morphological and syntactic properties.

2. Participial Compounds with *uit*

In order to understand the analytic issues involved in accounting for sentences such as *Ik ben uitgepraat* ‘I am done with talking’ mentioned in section 1, we first introduce some background assumptions on particle verbs since *uitgepraat* looks at first sight as the past participle of the particle verb *uitpraten*. Indeed Dutch has such a particle verb *uitpraten*, but it has a different meaning, as illustrated in (6):

- (6) *Wij hebben het probleem uit-ge-praat*
 We have the problem out-talked
 ‘We talked out the problem’

(Dutch past participles are marked by both a prefix *ge-* unless the stem begins with an unstressed prefix, and a suffix *t/d* or *-en*; the suffix *t/d* is not realized phonetically after a stem ending in *t/d*.) The particle verb *uitpraten* also occurs with another meaning, ‘finish talking’. Interestingly, this use of *uitpraten* is dependent on the presence of the permissive verb *laten* as the verb of the main clause, as in *Jij laat me niet uitpraten* ‘You do not let me finish talking’. Thus, *Ik praat uit* ‘I finish talking’ is not possible. This latter type of restriction is similar to the case discussed in section 3.

Particle verbs are combinations of two words, a particle and a verb that form a lexical unit. They have been the subject of detailed research and discussion (cf. Dehé et al. eds. 2002, Blom 2005 and the literature mentioned in these references). The basic insight that is presupposed in this article is that particle verbs are not words but phrasal lexical units (Booij 2002). Hence, their formation does not belong to the domain of derivational morphology. Instead, each type of particle verb should be seen as a constructional idiom with phrasal properties. For instance, the set of Dutch particle verbs with the particle *door* can be characterised by means of the following constructional idiom:

- (7) [*door* [x]_v]_{v*} ‘to continue V-ing’

where V* stands for a minimal verbal projection (cf. Booij 2002, Blom 2005). In this template, the slot for the verb is represented as a variable. This indicates that this position in the construction is not fixed, and can be occupied by all sorts of verb. Hence, the pattern is qualified as productive. Indeed, new particle verbs with *door* can be coined very easily. Besides existing particle verbs of this type, such as *doorwerken* ‘to continue working’, we may coin new ones such as *doorfotograferen* ‘to continue taking pictures’.

The word *door* is also used in other contexts, as an adverb or a preposition with a range of meanings. However, when used as a particle in new cases of particle verb formation, it only has the meaning ‘to continue V-ing’. This is expressed exactly by the constructional idiom in (7). It is this configuration that licenses the use of *door* with a continuative meaning.

The basic reason for considering particle verbs as multi-word units is that they can be split. In Dutch main clauses the finite forms of verbs appear in second position, but the particle is stranded:

- (8) a. *Wij werkten de hele nacht door*
 ‘We continued working all night’

The particle and the verb are split by the infinitival particle *te*, and the participial prefix *ge-* appears after the particle:

- (8) b. *Wij besloten de hele nacht door te werken*
 ‘We decided to continue working all night’
 c. *Wij hebben de hele nacht door-ge-werkt*
 ‘We continued working all night’

(In Dutch orthography particle verbs are written as one word when the two parts are linearly adjacent, as is the case in sentence (8c).)

Dutch features a number of particle verbs with the particle *uit*, such as *uitpraten* (cf. 6), *uitwerken* ‘to work out’ and *uitkleden* ‘to undress’. However, the word *uit* can also be used in combination with participles with a special meaning, as exemplified by the following examples (taken from Booij 2004: 280):

- (9) *uit-gegeten* ‘lit. out-eaten, finished eating’
uit-geschilderd ‘lit. out-painted, finished painting’
uit-gekleuterd ‘lit. out-toddlered, finished being a toddler
 (“*totdat haar dochter uitgekleuterd was*”,
 J. Pardoën, *Trouw*, 5 April 2002)
uit-gebodemd ‘lit. out-bottomed, has reached its lowest point,
 said of shares on the stock market, *Trouw*, 2 Nov 1999)

These *uit*-participles have a number of special distributional, semantic, syntactic and morphological properties which will be considered in turn.

Participles such as the ones under (9) are used as predicates in combination with the copula *zijn* ‘to be’, or similar copulas such as *raken* ‘to become’:

- (10) *We zijn uit-gepraat* ‘we are done talking’
We raken uit-gekeken op elkaar ‘we are becoming tired of each other’

They might occasionally also be used as attributive adjectives, unlike past participles of un-ergative verbs. An example from the internet is (11a); the examples in (11b) are constructed by us:

- (11) a. *Een jonge zender zoals Veronica kan zich geen inspiratieloze en uitgeprate medewerkers veroorloven*
 ‘a young broadcasting station such as Veronica cannot afford employees without inspiration and who are through with talking’
- b. *de intussen uitgegeten gasten*
 ‘the guests who have finished eating’
- de al weken uitgeprate onderhandelaars*
 ‘the negotiators who are done talking’
- de uitvergaderde professoren*
 ‘the professors who are done conferring’
- de uitgekleuterde kinderen*
 ‘the children who have finished being toddlers’

Can the participles in (9–11) be interpreted as forms of particle verbs such as *uiteten* ‘to eat out’ and *uitpraten* ‘to talk out’? The first thing to notice is the contrast in argument structure between the first two phrases in (11 b) and the corresponding particle verbs in (12). In (11), the head of the NP is bound to the subject argument of the verb: they refer to negotiators who are done talking, to guest who have finished their meal. In contrast, NPs such as

- (12) *de uitgegeten boomtakken* ‘the eaten-out branches’
het uitgeprate probleem ‘the talked-out problem’

require the head of the NP to be interpreted as the Theme, and not as the Agent of the particle verbs *uiteten* ‘to eat out, and *uitpraten* ‘to talk out’, respectively. The latter are transitive verbs, whereas the *uit*-participles do not take an object.

Also in terms of semantics, particle verbs and *uit*-participles can differ widely. The examples in (13) show that the particle verbs *uit-eten*, *uit-praten* and *uit-kijken* cannot be the bases of the *uit*-participles *uitgegeten* ‘done eating’, *uitgepraat* ‘done talking’ and *uitgekeken* ‘tired of’ because their meaning is markedly different:

- (13) *uiteten* ‘to eat out, to have a farewell dinner with somebody’
uitpraten ‘to talk out a conflict’
uitkijken ‘to watch out for, to look forward to’

As another point on the semantic side, the *uit*-participles do not carry the telicity reading normally associated with past participles. The participles freely combine with expressions such as ‘for weeks’, which clash with the telic semantics of the homophonous particle verb. Example (14) illustrates the contrast:

- (14) *We zijn al weken uitgepraat*
‘We’ve been done talking for weeks’

**We hebben het probleem al weken uitgepraat*
‘We’ve talked out the problem for weeks’

As observed by Coppens (2001), the *uit*-participles express a state or property rather than an event and they can also be used in a context that refers to a future situation:

- (15) *We zijn a.s. maandag uitgepraat*
‘we’ll be done talking next Monday’
**We hebben a.s. maandag uitgepraat*

Morgen zijn ze wel uitvergaderd
‘they are sure to be done conferring tomorrow’
**Morgen hebben ze wel uitvergaderd*

The contrasted utterances show that the *uit*-participles in (14) and (15) also differ from the particle verbs in the kind of auxiliary they select, *zijn* versus *hebben*.

- (16) *We hebben / *zijn het probleem uitgepraat*
*We hebben / *zijn naar jullie uitgekeken*

Syntactically, the *uit*-participles differ from particle verbs in their behaviour in verb raising contexts. Verb raising is an operation in which the verb of a lower clause is raised to a higher clause and forms a verbal complex with the verb of that higher clause. In cases of verb raising, the particle can optionally be raised to the higher clause, unlike other elements of the embedded VP except the V itself. Verb raising is disfavoured for the *uit*-participles:

- (17) a. Particle verb *uitpraten* ‘to talk out’:
dat we het probleem *uit* willen *praten*
dat we het probleem willen *uitpraten*
‘that we want to talk out the problems’

b. *Uit*-participle:
omdat we *uitgepraat* raken
**omdat we uit* raken *gepraat*
‘because we are becoming tired of talking’

hoewel we *uitgekeken* zijn op elkaar
**hoewel we uit* zijn *gekeken* op elkaar
‘although we’ve got tired of each other’

A corpus search reveals that sentences with split participles do occur, suggesting that some language users might reanalyse them as ‘participles of a particle verb’. The following sentences illustrate this split use:

- (18) *Nadat we uit waren gezoend wilden we op een bankje gaan zitten*
‘After we had finished kissing, we wanted to sit down on a bench’

Tot je uit bent gehuild ...
‘till you have finished crying...’

In morphological terms, words such as *uitgeschilderd*, *uitgekleuterd* or *uitgebodemd* (recall examples 9) are special in that they only occur in participle form. The corresponding verbs **uitkleuteren* and **uitbodemen* do not exist, neither do the verbs **uiteten*, **uitschilderen* with the appropriate meaning. This shows that they have been formed directly, without the stem of such particle verbs being involved. Hence, what we see here is that a particular morphological form forms a direct building block of a word, without the stem of the corresponding verb forming an intermediate step in the construction.

The specific properties of the *uit*-participles reviewed above suggest that they are not verbs at all, but adjectival compounds headed by a participle. Participles are words that have both adjectival and verbal properties. This analysis is supported by the fact that compounding with adjectival heads is productive in Dutch, whereas compounding with verbal heads is not (Booij 2002). Hence, participles can appear in the head position of compounds because they have adjectival features. These adjectival compounds specify properties (whereas participles functioning as verbs specify events). There are many other types of adjectival compounds in Dutch in which participles function as heads, for instance *tijd-gebonden* ‘time-bound’ and *toekomst-gericht* ‘future-oriented’ (Booij 2002: 76-79, 153-157).

The productivity of the *uit*-participle pattern can be substantiated by a corpus and an internet search. (19) lists examples from the Corpus Gesproken Nederlands and from Google. (Corpora are of particular value for complex words based on derived forms like participles, since - for want of an infinitival form - they will generally not appear in dictionaries.)

- (19) *ik ben nou echt wel uitgeluld eigenlijk*
‘actually, I’m really done gabbing (lit. out-gabbed) now’

dan bel ik daarna nog wel terug als we niet uitgekletst zijn
‘then I call you back later if we’re not yet done chatting (lit. out-chatted)’

Uitgeruzied met uw partner?
‘finished quarrelling (lit. out-quarrelled) with your partner?’

Het heeft in totaal 10 jaar geduurd eer we uitgetwijfeld waren en dan nog wou mijn man liever geen kinderen
‘it took us 10 years in all before our doubts were resolved (lit. before we were out-doubted), and even then my husband didn’t want children’

voor wandelaars die in Nederland zijn uitgewandeld. Meer dan 100 Belgische wandelingen...

‘for hikers who are done walking (lit. out-walked) in the Netherlands. More than a 100 Belgian hikes...’

Mijn dochter is inmiddels ruim 9 maanden, en ik ben al 3 maanden gestopt met borstvoeding, dus inmiddels moet ik toch wel uitgezwangerd zijn

‘my daughter is now more than 9 months old, I stopped breast-feeding three months ago, so I should be done being pregnant (lit. uit-pregnated) by now’

In all these cases, the particle *uit* ‘out’ in combination with a past participle receives the specific interpretation ‘done with’, while the preposition *uit* ‘out’, as its English counterpart, has a range of related meanings. As argued in Booij (2005b), it is a common feature of words to acquire a specific meaning that is bound to their occurrence in lexical or syntactic constructions. For instance, the Dutch word *hoofd* ‘head’ when used as the first part of compounds has the meaning ‘main’, as in *hoofd-gebouw* ‘main building’ and *hoofd-ingang* ‘main entrance’. Similarly, the word *uit* has acquired a specific meaning ‘done with’ as part of the lexical units of the type under discussion here.

The participles involved thus receive an interpretation that is bound to this morphological construction and is different from the regular ones: it specifies the end-state of the Agent of the action expressed by the verbal stem. In sum, the following constructional idiom can be assumed for Dutch:

(20) $[[uit][[x]_{V-PTCP}]_A]_A$ ‘done with V-ing’

(PTCP = participle). Note that the English word *done* has a similar special meaning, and selects the auxiliary *to be* for this interpretation whereas normally a form of *to have* is selected (compare *I am done* to *I have done*).

These *uit*-participles also show their participial potential with respect to word order in embedded clauses. In Dutch we find two orders for participles, before or after the finite verb; adjectives, on the other hand, can only occur before the finite verb:

(21) *omdat ik ziek ben* / **ben ziek* ‘because I am ill’
omdat ik gepraat heb / *heb gepraat* ‘because I have talked’
omdat ik uitgepraat ben / *ben uitgepraat* ‘because I’m done talking’

als je bent uitgegeten, kan je meteen op je ski's stappen (Google)
 ‘When you’ve finished eating you can get on your skis directly’

The verbal stem for the participle in template (20) may be either an existing verb, or a possible verb created through conversion of nouns to verbs. For instance, in the examples *uitgekleuterd* and *uitgebodemd* in (9) we recognize the verbs **kleuter* and **bodem* which do not exist as such in the Dutch lexicon. That is, these cases of N to V conversion have been triggered by the use of this constructional idiom with *uit*. A similar case is found in (19) where the adjective *zwanger* ‘pregnant’ has been converted to a verb. The co-occurrence of word formation patterns is a widespread phenomenon, and can be expressed by assuming that the language user may make shortcuts while

making new multiply complex words. Formally, this can be expressed by the ‘conflation’ of word formation templates. For instance, the following template conflation can be assumed for words such as *uitgekleuterd*:

$$(22) \quad [[uit][[X]_{V-PTCP}]_A]_A + [[X]_N]_V = [[uit][[[X]_N]_{V-PTCP}]_A]_A$$

A nice illustration of this specific use of *uit* is the following headline of a recent newspaper article about a farewell concert by the conductor Jaap van Zweden who gave up his position as conductor of the Orkest van het Oosten:

- (23) *Van Zweden uitgezwaaid, maar niet uitgezwaaid* (*Trouw*, 29 October, 2005)
 Van Zweden out-waved, but not out-waved
 ‘Van Zweden has been waved good-bye, but is not tired of conducting’

In sum, the class of *uit*-participles discussed here shows that the specific meaning of *uit* ‘done with V-ing’ is licensed by a specific morphological construction, adjectival compounds with a participial head.

In the next section, we will discuss a case in which the use of the word *aan* with a specific meaning is licensed by a morphologically and syntactically restricted context.

3. *Aan*-participles

In this section we will focus on a particular phenomenon in relation to particle verbs, the fact that in some cases the productive formation of Dutch particle verbs is restricted to a subset of their possible morphological forms (infinitive or past participle), and to a specific syntactic construction.

Dutch features a number of particle verbs with *aan*. They can be divided into the following three semantic subclasses (De Haas & Trommelen 1993: 135-36):

- (24) a. Surface contact with object:
aanrijden ‘to hit by riding’;
- b. Durative aspect with pejorative connotations:
aanmodderen ‘to muddle on’;
- c. Inchoative aspect:
aansnijden ‘to start cutting’

The use of the particle *aan* that is the focus of this section is its use in clauses with the verb *komen*, as illustrated by the following example:

- (25) *Jan kwam aan-lop-en / aan-ge-lop-en*
 John came at-walk-INF / at-PTCP-walk-PTCP
 ‘John came walking’

(INF = infinitive). As the glosses indicate, the participle has no inherent perfective meaning since the aspect of sentence (25) is non-perfective.

The verb *komen* ‘to come’ can combine with verbal infinitives as in

- (26) *Francesca komt et-en*
Francesca comes eat-INF
‘Francesca will come for dinner’

Lourens kwam een boek breng-en
Lourens came a book bring-INF
‘Lourens came to bring a book’

In other words, Dutch has a constructional idiom of the form [*komen* [...]VP] in which the verb *komen* expresses a physical movement with a certain goal specified by the VP. In this construction with the bare infinitive, the lexical meaning of *komen* is still present: it expresses a spatial movement, and hence we cannot use it as a general aspectual marker, unless we add the infinitival particle *te* (and hence use a different construction):

- (27) **Hij kwam overlijden* / *Hij kwam te overlijden*
He came die.INF / He came to die.INF
‘He died’

The open VP-slot of this constructional idiom with *komen* can be filled by infinitival and participial forms of verbs that express some movement and with the direction of movement specified:

- (28) *Hij komt de hoek om huppelen / gehuppeld*
He comes the corner around hop.INF / hop.PTCP
‘He comes hopping around the corner’

Hij komt naar beneden huppelen / gehuppeld
He comes downwards hop.INF / hop.PTCP
‘He comes hopping downwards’

This is a clear case of construction-dependent morphology (cf. Booij 2005a for other examples) since this use of the participles is dependent on their occurring in this constructional idiom with *komen*.

One of the directional expressions that can be used in this construction is the particle *aan* with the meaning ‘in the direction of the speaker’, as shown in (25). The important point to be noted here is that the occurrence of particle verbs such as *aanlopen* depends on their being embedded in the *komen VP* construction. Hence, these particle verbs can only appear in either the infinitival or the participial form. The word sequences *aan + V* (in infinitival or participial form) have the status of particle verb even though so far we only saw them in syntactic contexts in which they are not split. We can conclude this from the verb raising test (cf. 17). As the following sentences show, the word *aan* in the construction under discussion indeed behaves as a particle, since both word orders are possible, as is generally the case with particle verbs (the second example with the verb and the particle split comes from a Google search):

- (29) a. ... *dat Jan kwam aanrijden / aangereden*
 ... that John came at-ride-INF / at-ride-PTCP
 ‘... that John came riding in’
 ... *dat Jan aan kwam rijden / aan kwam gereden*
- b. ...*dat ze aan komt gehuppeld*
 ...that she at comes hop-PTCP
 ‘... that she comes hopping toward us’

Remember that *aanrijden* and *aanhuppelen* are not used as particle verbs with these meanings in all VPs, but only in this construction.

The sub-construction [*komen aan* V-INF] is a very productive one, and is illustrated by the following examples from the Corpus Gesproken Nederlands:

- (30) *als hij roept komen Anouk en Brigit aangerend*
 ‘when he calls Anouk and Brigit come running’
- haar huisje is zo ’n familienest waar iedereen komt aangewaaid*
 ‘her house is such a family nest where everybody comes blowing in’
- de heks kwam donker en dreigend aangeslopen*
 ‘the witch came creeping up darkly and menacingly’
- hij is aan komen fietsen met z ’n dochtertje*
 ‘he came cycling with his daughter’
- kwam een tweede toestel aanvliegen en ramde de andere toren van ’t WTC.*
 ‘came a second machine flying and hit the other tower of the WTC’

The property relevant for the argumentation in this article is that these particle verbs with *aan* can only be used in this construction. They do not exist independently from this construction. For instance, we do not have sentences like the following, with finite forms of the particle verbs:

- (31) **Jan loopt aan* ‘John arrives by walking’
 **Jenny rent aan* ‘Jenny arrives by running’

Some of these particle verbs may exist, but with a different meaning.

The particle verbs with *aan* in the *komen*-construction are always intransitive verbs that express an action. As we saw, the formation of these particle verbs is dependent on the *komen*-construction. This is why we call such particle verbs constructionally dependent: their formation is dependent on a particular construction, and is not used in a context-free manner for the expansion of the fund of lexical units of Dutch. To put it differently, this use of *aan* is licensed by the presence of a specific morphological form (the infinitive) of a verb, in a specific syntactic construction (after *komen*). The same observation on constructional dependency can be made for the other variant mentioned in (25): the particle verb with *aan* with a participle (there is no

meaning difference between the infinitival and participial variants, and the variation appears to be mainly geographical: the infinitival variant is the preferred one in the Western part of the Netherlands, whereas the participial variant is preferred in Belgium, Haeseryn et al 1997: 965).

As we saw, the *komen* + participle construction imposes a non-perfective interpretation on the participle, just like the passive construction with the verb *worden*. It is enlightening to compare this construction with some other uses of the verb *komen*. This verb can also be used as a copula, with an adjective functioning as the predicate nominal. Since participles can function as adjectives, they can also be used in that way:

- (32) a. *Hoe komt die broek zo vies?*
 How comes those trousers so dirty?
 ‘How did these trousers get so dirty?’
- b. *Hoe komt die vaas gebroken?*
 How comes that vase broken?
 ‘How did that vase get broken?’

This use of *komen* appears to be restricted to sentences that open with *hoe* ‘how’, and is therefore comparable with the English idiom *how come ...*. In sentence (32b), the participle *gebroken* mentions a property that is the result of an event of breaking. In the construction [*komen aan* Participle] on the other hand, there is no perfective meaning, sentences with this construction express an ongoing event.

The verb that can be used in the *komen*-constructions does not have to mention a type of motion, since the verb can also describe an accompanying aspect of the motion, as is illustrated by the following examples (Haeseryn et al 1997: 965):

- (33) *Daar komt mijn neef Nurks weer aan-mopperen / aan-gemopperd*
 there comes my nephew Nurks again towards.speaker-complain.INF/PTCP
 ‘there my nephew Nurks comes complaining’

In de verte kwamen dronken matrozen aan-zwaai-en / aan-ge-zwaai-d
 in the distance came drunken sailors towards.speaker-sway-INF/PTCP
 ‘in the distance, drunken sailors came swaying towards us’

Daar kwam de auto aan-toeter-en / aan-ge-toeter-d
 there came the car towards.speaker-hooting-INF/PTCP
 ‘There the car came hooting its horn’

The directional expression requires a movement interpretation of the verb, and hence the verbs under (33) are interpreted as verbs of motion with a specific manner, a typical case of type coercion.

A special case of the use of this construction is the occurrence of the particle verb *aankakken* with the idiosyncratic, unpredictable meaning ‘to show up’, with a pejorative connotation (the verb *kakken* means ‘to shit’). Again, this particle verb *aankakken* can only be used in combination with the verb *komen*:

- (34) *Jan kwam weer aan-kakk-en / aan-ge-kak-t*
 John came again towards.speaker-shit-INF/PTCP
 ‘John showed up again’

**Jan kakte weer aan*
 ‘John showed up again’

This means that individual instantiations of the *komen aan V* constructions have to be specified in the lexicon if they have unpredictable meaning aspects. Another example of such a verb is the particle verb *aanzetten*, as in *Hij kwam aanzetten* ‘He showed up’. Both *aankakken* and *aanzetten* can only be used with this meaning in the *komen aan* construction. (The particle verb *aanzetten* also occurs in other contexts, but with a completely different meaning ‘to prompt, to urge’ and with transitive valency.)

There is an interesting contrast between *aankakken* and *aanzetten* since the latter form cannot be used in the participial form in this construction: *Hij komt aanzetten / *aangezet*. This suggests that the form with the infinitive is entrenched to such a degree that the other form is blocked from being produced. Such forms of entrenchment may be expected given the highly lexicalized nature of these constructions.

To conclude, the observations presented above show that Dutch has two almost identical constructional idioms with a meaning that focuses the addressee on the manner in which the subject performs the act of arriving:

- (35) [*komen* [*aan V*-INF / *V*-PTCP]_V]_{VP}
 ‘to arrive by means of / while V-ing’

These constructions are instantiations of a more general constructional idiom in which the verb *komen* has a complement that is a directional VP. The non-perfective interpretation of the participle is dependent on this syntactic context. By specifying (35) as a specific instantiation of the *komen*-VP construction we express that the occurrence of particle verbs with directional *aan* depends on this specific construction. In other words, the creation of particle verbs with *aan* with this particular meaning is construction-dependent, and this use of *aan* is licensed by a specific construction defined in both syntactic and morphological terms, as shown in (35).

4. Conclusions

In this article we presented two cases of constructional licensing: the occurrence of words with a particular meaning appeared to be licensed by specific morphological and/or syntactic configurations. The correct specification of the licensing environments implied that information on morphological or syntactic context may be necessary for a proper account of the formation of words and of particle verbs.

The phenomenon of constructional licensing is in line with the findings in Booij (2005a) on the dependency of morphological and lexical constructions on specific syntactic configurations. Hence, what we need in order to provide a correct and insightful account of the facts of Dutch of the sort discussed above is a "construction"

of constructional idioms of varying degrees of abstractness in which reference can be made to morphological properties of the words used in these constructional idioms.

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