Verb-Particle Explorations

Most of the articles in the present volume originated as talks in a workshop on verb-particle constructions held in Leipzig in February 2000. We would like to thank the participants of that workshop - the speakers for their contributions, the audiences for their interest in and their stimulating discussion of the questions that are elaborated on in this volume. We are grateful for the support from the Max-Planck Institute of Cognitive Neuroscience in Leipzig, especially Angela D. and her staff, and for the use of their rooms and facilities during the workshop. We express our gratitude to the contributors to this volume who participated in the workshop.

We wish to thank the following people for their time and expertise they contributed to the reviewing process: Marcel den Dikken, Hildegard Farke, Holden Hartl, Bernd Kortmann, Allee Marantz, Susan Olsen, Jean-Yves Pollock, Norvin Richards, Andrew Stringfellow, Peter Svenonius, along with some other linguists who requested anonymity.

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Preface

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Separable complex verbs in Dutch: A case of periphrastic word formation

Geert Booij

1. Syntax or morphology?

Separable complex verbs (SCVs) - also called samenkoppelingen ‘combinations’ in Dutch grammars - are combinations of a verb and some other word which have both word-like properties and properties of a combination of words (Booij 1990). Thus, they pose the important theoretical question of how to draw the boundaries between morphology and syntax, and they have received a lot of attention in the morphological literature. The following sentences illustrate the use of SCVs, both with SOV word order (embedded clauses) and with SVO word order (main clauses):

(1) ...Hans zijn moeder opbelde / Hans belde zijn moeder op
   ‘Hans phoned his mother’
...de fietser neerstortte / De fietser stortte neer
   ‘The cyclist fell down’
...Jan het huis schoonmaakte / Jan maakte het huis schoon
   ‘John cleaned the house’
...Rebecca pianospeelde / Rebecca speelde piano
   ‘Rebecca played the piano’
...dit resultaat ons teleurstelde / Dit resultaat stelde ons teleur
   ‘This result disappointed us’

In the first example, the word op ‘up’ that combines with the verb, is also used as an adposition. In that case, the non-verbal element is also referred to as a particle, and the SCV is then referred to as a particle verb. Particle verbs form a productive class of SCVs. In the second example, the word neer ‘down’ is also used as an adverb. The next two examples show that adjectives (schoon) and nouns (huis)
can also occur in SCVs. In the last example, the word *teleur* ‘sad’
does not occur as an independent word. The fact that SCVs are felt as
word-like units is reflected by Dutch orthography, which requires
SCVs to be written as one word, without internal spacing, if the two
constituents are adjacent.

The basic reason why SCVs have to be considered as word combi-
nations, and not as prefixed words, is that they are separable: in main
clauses, the tensed verbal form appears in second position, whereas
the other part is stranded. If we assumed SCVs to be words, we
would violate the principle of Lexical Integrity that says that syntac-
tic rules cannot refer to elements of morphological structure (Bresnan
and Mchombo 1995). It is exactly this principle that enables us to ac-
count for the differential behaviour of particle verbs and prefixed
verbs with respect to syntactic movement rules such as Verb Second
in Dutch and German, the rule that moves the finite form of a verb
from its clause-final position to the second position in main clauses.
In that case, particles will be stranded, unlike prefixes, because
Lexical Integrity will block the movement of only the stem part of a
prefixed verb.

A second phenomenon in which we see the separability of SCVs
is Verb Raising. If the verb of an embedded clause is raised to the
matrix clause, the SCV can be split, but it can also be treated as a
unit.

(2)  a. ...*dat* Hans [*zijn moeder op bellen*]s wilde
    that Hans his mother up phone wanted
b. ...*dat* Hans [*zijn moeder wilde opbellen*
    that Hans wanted to phone his mother
c. ...*dat* Hans [*zijn moeder op wilde bellen*]

In sentence (2b) the whole SCV *opbellen* is raised to the matrix
clause, whereas in sentence (2c) the particle *op* is left behind in the
embedded clause. This means that either the verb *bellen* only, or the
whole SCV *opbellen* can be raised to the matrix clause. This shows
that there is certainly a level at which the SCV does form a unit for
the syntax. The conclusion from sentences like (2b) that SCVs can
Separable complex verbs in Dutch

behave as syntactic units is supported by the behaviour of SCVs in the progressive construction ‘aan het + infinitive’; compare:

(3)  

Hans is zijn moeder aan het opbellen  
‘Hans is phoning his mother’

*Hans is zijn moeder op aan het bellen  
‘Hans is phoning his mother’

*Hans is aan het zijn moeder bellen  
‘Hans is phoning his mother’

Hans is zijn moeder aan het bellen  
‘Hans is phoning his mother’

Whereas opbellen must appear after aan het without being split, this is not the case for the VP zijn moeder bellen, which cannot appear after aan het.

The separability of SCVs also manifests itself in the location of the infinitival particle te that occurs between the two constituents of SCVs, as in op te bellen, and in the form of the perfect participle, with the prefix ge- in between the particle and the verbal stem: opgebeld.

A number of these particles also function as real prefixes, i.e. as bound morphemes that cannot be separated from the verb. These prefixed verbs carry main stress on the verbal stem, not on the prefix, whereas the SCVs carry main stress on the non-verbal constituent. Thus we get minimal pairs like the following:

(4) SCVs  

<table>
<thead>
<tr>
<th>Dutch SCVs</th>
<th>Dutch Prefixes</th>
</tr>
</thead>
<tbody>
<tr>
<td>dörborren ‘to go on drilling’</td>
<td>doorbóren ‘to perforate’</td>
</tr>
<tr>
<td>ómblazen ‘to blow down’</td>
<td>omblázen ‘to blow around’</td>
</tr>
<tr>
<td>óndergaan ‘to go down’</td>
<td>ondergáan ‘to undergo’</td>
</tr>
<tr>
<td>óverkomen ‘to come over’</td>
<td>overkómen ‘to happen to’</td>
</tr>
<tr>
<td>vóorkomen ‘to occur’</td>
<td>voorkómen ‘to prevent’</td>
</tr>
</tbody>
</table>

The phenomenon of Dutch SCVs is an instantiation of a wide-spread phenomenon, the occurrence of verbs preceded by a so-called pre-verb. We find SCVs in other Germanic languages like German, in many other Indo-European languages, in Hungarian and Estonian.
They form a subset of the class of phrasal predicates discussed in Ackerman and Webelhuth (1998).

The separability of the two constituents of SCVs has brought a number of linguists to propose a syntactic account of them, by analysing them as cases of secondary predication. (Hoekstra et al. 1987). The syntactic analysis of secondary predication may have the form of a so-called small clause-analysis, but there are also other options (cf. Neeleman 1994). In the small-clause analysis, the particle is interpreted as the predicate of a small clause (that is, a subject-predicate combination without a copula), which is then raised to the matrix clause, and Chomsky-adjoined to the verb of the matrix clause. This is indeed the analysis proposed in Hoekstra (1988). For instance, in such an analysis the following surface structure is assigned to the verb phrase *het huiswerk afmaken* ‘to finish one’s homework’:

(5) \[[[het huiswerk]\_NP[t]\_PP]\_SC [[[af]\_PP [maken]\_V]]\_V

This analysis presupposes that a verb such as *maken* can combine with resultative small clauses. In the case of *af maken* the interpretation of *af* as the predicate of a small clause is a possible analysis, because *af* ‘ready, finished’ does function as a predicate of its own in Dutch witness a sentence like *Het huiswerk is af* ‘The homework is finished’. Moreover, the word *af* can also be topicalized, which confirms its syntactic and semantic independence, and can also be modified:

(6) Áf maak ik mijn huiswerk niet
   ‘I will not finish my homework’
   Ik maak mijn huiswerk helemaal af
   ‘I will completely finish my homework’

However, in many cases topicalization or modification of the particle is impossible, for instance in:

(7) *Óp bel ik mijn moeder niet
   ‘I will not call my mother’
Separable complex verbs in Dutch

*Aán val ik hem niet*
*I do not attack him completely*

These are the cases where the particle does not function as a predicate with an independent meaning, unlike the particle *af* ‘finished’ in (6). This is a problem for the small clause analysis of particle verbs since this analysis predicts that topicalization is always possible. The same holds for other analyses in which particles are seen as cases of secondary predication, and hence are given the status of independent syntactic constituents.

The basic problem for the interpretation of particles as secondary predicates is therefore that particle verbs clearly behave as lexical units in a number of ways which I will focus on now. It is these word-like properties that have led a number of linguists to take the opposite view that particle verbs are morphological constructions created by a presyntactic morphological component (Neeleman 1994; Neeleman and Weerman 1993a; Ackema 1999a, 1999b). The basic problem for this latter view is that it does not account for the separability of particle verbs, and therefore, this position is not satisfactory either.

It is the aim of this article to show that an intermediate position should be taken: SCVs are constructional idioms, combinations of words with phrasal status, and yet created in the lexicon. Before this proposal will be defended in detail, we will first have a closer look at the ways in which particle verbs behave as lexical units.

Related to the observation that the particles can often not be topicalized, the meaning of an SCV is often not fully predictable: because the particle has no clear individual meaning in isolation, it cannot be focused upon. The semantic unpredictability of SCVs is nicely illustrated by the different SCVs for the verb *vallen* ‘to fall’ which exhibits a bewildering variety of meanings, in most cases without a meaning constituent that corresponds to the meaning of the verb *vallen*:
It is obvious that, given this variation in meaning, it does not make sense to focus on the particles of these verbs only.

Lexical storage of SCVs is also necessary for other reasons: in SCVs such as teleurstellen ‘to disappoint’ and gadeslaan ‘to watch’ the first parts teleur and gade do not occur as independent words. Moreover, there are also many verbal constituents of SCVs that do not occur as independent verbs, for instance:

\[(9)\] na-bootsen ‘to imitate’, om-kukelen ‘to fall down’, aan-tijgen ‘to accuse’, op-kalefateren ‘to restore’

These idiosyncrasies show that many SCVs must be lexically stored; however, since syntactic units can be stored lexically as idioms, this fact does not necessarily point into a morphological direction for the formal analysis of SCVs.

A second important observation is that SCVs freely feed deverbal word formation. Normally, derivation is only fed by words, not by phrases, and this is taken by those linguists who advocate a morphological analysis of SCVs as evidence for the word-status of SCVs:

\[(10)\] deverbal suffixation:
  aankomen ‘to arrive’ \(\rightarrow\) aankomst ‘arrival’
  aantrekken ‘to attract’ \(\rightarrow\) aantrekkelijk ‘attractive’

deverbal prefixation:
  uitgeven ‘to publish’ \(\rightarrow\) heruitgeven ‘to republish’
  uitzenden ‘to transmit’ \(\rightarrow\) heruitzenden ‘to retransmit’

compounding with verbal left constituent:
  opbergen ‘to store’ \(\rightarrow\) opbergdoos ‘store box’
  doorkiezen ‘to dial through’ \(\rightarrow\) doorkiesnummer ‘direct number’
However, it is not the case that syntactic phrases can never feed word formation (Booij 2001): both compounding and affixation may be fed by units that are larger than one word, as shown by the following examples:

(11) [blote vrouwen]_{NP} blad ‘nude women magazine’
    [hete lucht]_{NP} ballon ‘hot air balloon’
    [doe het zelf]_{S} er ‘do-it-yourself-er’
    [ban de bom]_{S} er ‘ban-the-bomb-er’

In the first two examples in (11), the first constituents of the compounds are NPs of the form A + N. The adjectives are inflected, and hence we know for certain that these A + N combinations are phrases, not compounds.

Moreover, the fact that SCVs do not feed verbal prefixation except with her- can be taken as support for their non-word status because the other Dutch prefixes only take words as their bases. For instance, the prefix ver- attaches to complex verbs, but not to SCVs:

(12) Prefixed verbs:
    onder-stellen ‘to suppose’  ver-onderstellen ‘to presuppose’
    vol-máken ‘to perfect’  ver-volmaken ‘to make perfect’

SCVs:
    vol-máken ‘to fill’  *vervolmaken
    óver-máken ‘to transfer’  *verovermaken

In the case of SCVs with a nominal constituent it is also clear that SCVs are not straightforward syntactic units: such SCVs take niet as a negative element, whereas syntactically independent NP’s take geen:

(13) Jan kan niet / *geen huishouden
    ‘John cannot do the household’
    Jan kan *niet / geen vriendin houden
    ‘John cannot keep a girlfriend’
As mentioned above, these observations on the unitary nature of SCVs have been used as evidence in favour of a morphological analysis of SCVs: in that view, particle verbs are prefixed verbs with a special property, the separability of the prefix, and SCVs with a nominal or adjectival first constituent are verbal compounds, again with the special property of separability. It will be clear now that this is not the position taken in this article.

There are two other phenomena that seem to speak in favour of a morphological analysis of SCVs. First, the addition of a particle may have the effect of category change since particle verbs can also be formed productively on the bases of adjectives and nouns. The power to change category is generally assumed to be a prerogative of morphological operations, in accordance with the Projection Principle which says that syntactic structure is a projection of lexical properties. The following examples illustrate the category-determining power of particle attachment:

(14) adjectival base: particle verb:
    *helder* ‘clear’ *ophelderen* ‘to clarify’
    *hoog* ‘high’ *ophogen* ‘to heighten’

nominal base: particle verb:
    *hoop* ‘pile’ *ophopen* ‘to pile up’
    *kikker* ‘frog’ *opkikkeren* ‘to perk up’

In all these examples, the corresponding particle-less verb does not exist independently, and hence it is the combination with the particle that makes these adjectives and nouns function as verbs. Note, however, that these formations differ from verbalizing prefixation in that the adjectives and nouns themselves are turned into verbs. This is clear from the fact that they occupy the verb second position in main clauses, without the particle, as is shown by the following examples:

(15) *Deze ramp hoogde de kosten nog meer op*
    ‘This disaster raised the costs even more’

In other words, we have to assign the structure $[[\text{hoog}]_{\text{A}}]_{\text{V}}$ to the second part of the verb *ophogen*. 
In a purely syntactic account of this observation we have to assume that nouns and adjectives are turned into verbs by means of conversion (a productive process in Dutch), and that these conversion verbs are then lexically subcategorized for appearing with specific particles only.

A second, related argument for a morphological view of particle verbs is that the addition of a particle may change the syntactic valency of the verb. In many cases, the SCV and its base verb differ in transitivity or in the optionality of transitivity. Again, the Projection Principle implies that changes in syntactic valency must be due to lexical operations. The following examples illustrate the valency change effect:

(16)  

<table>
<thead>
<tr>
<th>SCV</th>
<th>Base Verb</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>bellen</td>
<td>(optionally tr.) ‘to phone’</td>
<td>opbellen ‘to phone, obl. tr’</td>
</tr>
<tr>
<td>rijden</td>
<td>(intransitive) ‘to ride’</td>
<td>inrijden ‘to run in’</td>
</tr>
<tr>
<td>wonen</td>
<td>(intransitive) ‘to live’</td>
<td>bijwonen ‘to attend’</td>
</tr>
</tbody>
</table>

It is morphological operations that typically have effects on the syntactic valency of words. In a syntactic account of these effects, the Small Clause analysis, the VP *de straten aflopen* ‘to tramp the streets’ would receive the following deep structure analysis:

(17)  

\[ [de straten af]_{sc} \text{ lopen} \]

The verb *lopen* ‘to walk’ combines with a resultative small clause, of which *af* forms the predicate. Hence, the superficial object *de straten* originates as subject of the small clause. Thus, it is explained why *aflopen* is a transitive verb. Semantically, however, it does not make sense to consider *af* as the predicate of *de straten* because it does not make sense to claim that *de straten* receive the property of being *af* ‘finished’ as a result of the event expressed by the verb *lopen*.

Another problem for such a syntactic analysis is that it does not relate syntactic valency to the semantics of each individual particle verb. Argument structure, and hence syntactic valency, is the syntactic projection of the lexical-conceptual structure of a complex word. The crucial role of semantics can be seen in the following two sen-
tences, in which the particle verb *aflopen* is used with two different meanings, and has corresponding syntactic valencies:

(18)  
De wekker loopt *af* (intransitive)  
‘The alarm clock goes off.’

Hij liep de hele tentoonstelling *af* (transitive)  
‘He did the whole exposition.’

A syntactic account of valency effects does not do justice to this relation between syntactic valency and the semantics of each individual particle verb. Note, moreover, that Dutch has no systematic transitive / unaccusative alternation that could account for these two uses of the verb *aflopen*.

Note that I do not claim that all syntactic properties of SCVs follow from their semantics, only their valency properties. In particular, the distribution of the particles follows from the structural analysis to be defended below, an analysis that treats particle verbs as phrasal word combinations, in combination with the standard syntactic analyses of the distribution of verbal forms: underlying SOV word order, Verb Second in main clauses, and Verb Raising.

A final observation on particle verbs that any proper analysis has to account for is that they form a productive category. Therefore, they cannot simply be qualified as idioms, as lexicalized phrases. For instance, the particle *af* can be used productively to form telic verbs, witness recent coinings such as *afdansen* ‘to do a dance examination’ and *afrijden* ‘to do one’s driving examination’. Similarly, the particle *door* can be used to create new durative verbs such as *doorvergaderen* ‘to go on with a meeting’ and *doordrinken* ‘to go on drinking’. The point to be noted here is that the words *af* and *door* have a specific and restricted (aspectual) meaning in their use as particles.

In conclusion, we need an analysis that can do justice to the paradoxical properties of SCVs discussed above. The concept that we can use for such an analysis is that of ‘constructional idiom’. 
2. SCVs as constructional idioms

The debate on the proper analysis of SCVs summarized in the previous section presupposes a particular, and rather standard view of the lexicon: the lexicon is the fund of existing words, and this fund can be extended by morphological operations. In addition, the lexicon will also contain idioms, that is, syntactic chunks with a non-compositional semantic interpretation. Productive syntactic construction belongs to the syntactic module. This sharp boundary between lexicon and syntax has recently been challenged by linguists working in the framework of Construction Grammar (Goldberg 1995), and also in Jackendoff (1997b). It is also debated, in a different way, in analyses that account for noun incorporation structures by means of syntactic rules, as in Baker (1988).

The notion ‘constructional idiom’ can be used to do justice to both the syntax-like and the morphology-like properties of SCVs. The basic claim is that SCVs all have the following general structure:

(19) \[X\[v\]v\] where \(X = P, \text{Adv}, A \text{ or N}\]

By assigning a V'-node to SCVs, we represent their phrasal nature, and hence their syntactic separability. The node V' indicates a first level of projection above the V-node. It cannot be equated with the VP-node in the classical sense, because we must be able to distinguish between SCVs and VPs that contain NPs: in standard Dutch, VP's of embedded clauses cannot be raised to their matrix clauses, unlike SCVs.

In this structure, the verbal position is open, and can in principle be filled by any verb. The non-verbal constituent, however, is specified. That is, there are as many different constructional idioms of this kind as there are words that can fill the left position. For instance, we will have the following constructions:


that give rise to particle verbs that begin with \(af\), \(door\), and \(op\) respectively. That is, we fix the terminal node for the particle consti-
tuent. This has two advantages. First, the notion ‘particle’ has no role outside the construction under discussion here, and therefore such words should not be specified independently as particles in the lexicon. Secondly, if a specific particle verb combination is no longer productive, we will not have the corresponding constructional idiom in the lexicon, but only a list of the individual existing cases of that type. Note that there are also cases where the verb only occurs in the SCV-construction, cases like nabootsen ‘to imitate’ and omkukelen ‘to fall down’. In these cases, we no longer have an instantiation of a construction, but of a lexical idiom, with all terminal nodes fixed.

For each constructional idiom of this kind, its meaning will also be specified. For instance, the meaning of the constructional idiom door-V will be specified as ‘to go on V-ing’, and the constructional idiom af-V will be specified as ‘to finish V-ing’.

What about those SCVs that do not take an existing verb in the open position, but an adjective or a noun? The obvious step to take is to specify constructional idioms of the type

\[(21) \ [\text{op} \ [\ [x]_{A}]_{V}]_{V}\]

This means that adjectives can be converted to verbs by inserting them in the slot after the particle op. This makes the conversion of adjectives dependent on their occurrence in SCVs, and this is correct since normally, conversion of adjectives to verbs is not productive in Dutch. Moreover, this approach enables us to express the dependency of A to V conversion and N to V conversion on specific particles. It is indeed the case that the particle op is used productively in this construction, but this does not apply to all particles. It is only the particles op, uit and af that can combine with adjectives; as for nouns, they can only be used as verbs in combination with af, in, na, and uit:

\[(22) \ \text{opfrissen} \ ‘\text{to refresh}’, \ \text{uitdiepen} \ ‘\text{to deepen}’, \ \text{afzwakken} \ ‘\text{to weaken}’, \ \text{afbeelden} \ ‘\text{to represent}’, \ \text{inpolderen} \ ‘\text{to drain, to impolder}’, \ \text{naäpen} \ ‘\text{to imitate}’, \ \text{uithuwelijken} \ ‘\text{to marry off}’\]
As noted by Jackendoff (1995), the syntactic valency of constructions can differ from that of the verbal head. This is what we observed in the preceding section for Dutch particle verbs: it is the combination of words that has a particular valency that is predictable from its semantic interpretation.

The essence of this analysis is that we introduce the idea of periphrastic word formation. It is quite uncontroversial that we have periphrasis in inflection: certain cells of inflectional paradigms may be expressed by a combination of words (Börjars et al. 1997). For instance, in Dutch the perfect tenses are expressed by a combination of a non-finite form of a verb, in combination with an auxiliary that is separable from the non-finite form of the main verb. The idea that there is also derivational periphrasis is supported by the observations in Coopmans and Everaert (1988) concerning the causative and passive verb laten ‘to let’ in Dutch. They observe that this verb is syntactically independent, and yet it has the same property as bound morphemes in that it can affect the argument structure of its complement verb, and thus act as substitute for causative and passive morphology.

3. Grammaticalization

Although many of the words designated here as particles also occur as preposition or postposition, it is not the case that all adpositions can function as particles. The relevant generalization appears to be that only those adpositions function as particles that function as predicates in combination with the copula zijn. For instance, the preposition met ‘with’ cannot be used as a predicate, whereas the postposition mee with the same meaning ‘with’ can be used as such, witness the following sentences:

(23) Jan is ook *met / mee.
    ‘John has joined.’
    Ik ga met mijn moeder mee.
    ‘I will accompany my mother.’
Here is a list of adpositions that can be used as predicates, and also function as particles:

(24) prepositions:
    aan, achter, bij, binnen, boven, buiten, na, om, onder, over, tegen, voor
prepositions/postpositions:
    door, in, langs, op, rond, over, uit, voorbij
postpositions:
    af, heen, mee, toe

The following list provides examples of the use of each of these words:


This restriction on the words that can be used as particles can be seen as a reflection of the origin of the particle verb construction: it is a grammaticalization of a syntactic configuration with secondary predication. For instance, the sentence Jan maakte zijn huiswerk af ‘John finished his homework’ can still receive a purely syntactic interpretation, with the predicate af functioning as a secondary predicate. That is, such a sentence can receive the same structural analysis as a sentence like Jan verfde zijn fiets wit ‘John painted his bike white’. In many cases, however, the meaning of particles such as af has bleached, and acquired a purely aspectual, in this case telic value. For such cases, we have to assume that the predicate-verb combination has grammaticalized into a particle verb construction. In other
words, the particle verb construction is the result of reanalysis of syntactic configurations with secondary predication. Thus, these observations illustrate two properties of grammaticalization (Hopper and Traugott 1993: 17): "(a) earlier forms may coexist with later ones ...; (b) earlier meanings may constrain later meanings and/or structural characteristics".

The second class of SCVs that we mentioned above are those with words that are also used as adverbs, such as:

(26) **neer** 'down', **samen** 'together', **terug** 'back', **thuis** 'home', **weg** 'away'

In these cases, it is the combination of verb and adverb that is reanalysed as a unit. For instance, in the sentence *Hij legde het boek weg* 'He put the book away' it is the combination **weg leggen** that has the syntactic valency of a transitive verb, for which **het boek** functions as direct object: the sentence *Hij legde het boek* 'He put the book', without the adverb, is ungrammatical.

The phenomenon of grammaticalization can be circumscribed as: "... the process whereby lexical items and constructions come in certain linguistic contexts to serve grammatical functions, and, once grammaticalized, continue to develop new grammatical functions" (Hopper and Traugott 1993: xv). This is indeed what we observe for particle verbs: they have, diachronically speaking, a syntactic origin, and now function as complex verbs with a number of aspectual properties, and thus developed into constructional idioms. In those cases where the original meaning of the particle is still available, as in the case of **afmaken** discussed in Section 1, the particle verbs can also be given a purely syntactic analysis, in which the particle has the status of secondary predicate, from the synchronic point of view.

From the point of view of grammaticalization particles can be seen as an intermediate stage in the development of words into bound morphemes, in particular prefixes. Some particles are also used as inseparable prefixes. The following minimal pairs illustrate this (ICV = Inseparable Complex Verb):
The change from particle to prefix implies a loss of lexical meaning: the prefixes have an abstract, aspectual meaning, whereas the corresponding particles have a more concrete, spatial meaning. In sum, the following historical development can be reconstructed for Dutch:

(28) word > part of SCV > prefix

Some morphemes belong to more than one of these categories, for example:

(29) word and part of SCV:
    *af, neer ‘down’, op
word, part of SCV, and prefix:
    *achter, door, mis ‘wrong’, om, vol ‘full’

The prefixes be- and ver- derive historically from the words bi (modern Dutch bij ‘at’) and voor ‘for’ respectively, whereas bij and voor function as prepositions and as particles.

The idea that SCVs represent an intermediate stage in the grammaticalization of syntactic constructions into morphological constructions is supported by the observation that many verbs which were still SCVs in Middle Dutch, have developed into ICVs in modern Dutch. This applies to, for instance, the following verbs:

(30) achtervolgen ‘to run after’, omringen ‘to surround’, omsingelen ‘to surround’, overbruggen ‘to bridge’, overvallen ‘to attack suddenly’
As the glosses of these examples show, the preverbal elements, originally locational prepositions, have developed a more abstract meaning in their use as inseparable prefixes. The following examples serve to illustrate the more concrete, spatial interpretation of these verbs in Middle Dutch:

(31) Voort gheven wy hem oorloff eene nieuwe havene te graven ende die over te brugghen

‘Furthermore, we give him permission to dig a new harbour, and to put a bridge across it’

Mettien hebben sise ommegeringhet

‘Immediately they have her [= the woman] surrounded’

In sum, the preverb position of SCVs clearly forms an intermediate step in the development of words into prefixes.

4. SCVs with adjectives and nouns

As pointed out above, adjectives may also function as part of an SCV. For instance, the adjective open ‘id’ functions as such. The difference with a ‘normal’ adjective such as groen ‘green’ can be seen in the verb raising construction:

(32) ...dat ik de deur wilde open maken / open wilde maken
...dat ik de deur *wilde groen verven / groen wilde verven

Since groen does not form a verbal constituent with verven, the modal verb wilde cannot be adjoined to the word sequence groen verven because it does not form a SCV. On the other hand, the grammaticality of the sequence wilde open maken shows that open maken is a verbal unit. Thus, we must assume a constructional idiom [[open]A [x]V]v, with the left terminal node fixed. The constructional idiom approach thus enables us to account for the productivity of SCVs with the word open. This is indeed a productive category. The Van Dale Woordenboek van het Hedendaags Nederlands (1991) lists 36 SCVs with open, for example:
(33) *openbarsten* ‘to burst open’, *openbreken* ‘to break open’, *openscheuren* ‘to tear open’, *openschieten* ‘to burst open’, *openschoppen* ‘to kick open’

Actually, intuitions of native speakers of Dutch with respect to the SCV character of *open* + Verb combinations may differ, because there are two potential sources of such a combination: the syntactic construction with a secondary predicate, and the constructional idiom with *open*. Both interpretations are possible because there is no semantic irregularity involved.

In many other cases, the SCV nature of the adjective verb sequence which can be determined on the basis of its behaviour under Verb Raising, is also proven by its unpredictable meaning, and by the fact that the adjective does not allow for modification:

(34) *blootstaan* ‘to be exposed to’ < *bloot* ‘naked’, *staan* ‘to stand’
    *goedkeuren* ‘to approve of’ < *goed* ‘well’, *keuren* ‘to judge’

In these SCVs, the adjectives cannot be modified. This follows from the proposed structure since the left constituent of such SCVs will be specified as a bare adjective, not as an AP. Hence, it is impossible to modify the adjective in that position.

Most of the SCVs with adjectives are cases of lexicalization; only a few, such as the *open-V* combination is productive, and hence will be represented as constructional idiom, with an open V-position.

There is quite a number of adverbs that can productively be used in SCVs. The set of these adverbs also comprises a number of complex locational and temporal adverbs such as *omlaag* ‘down’ and *achtereen* ‘continuously’. The examples below are SVCs with simplex adverbs:

(35) *heengaan* ‘to leave’ < *heen* ‘away’, *gaan* ‘to go’
    *neerkomen* ‘to descend’ < *neer* ‘down’, *komen* ‘to come’
    *terechtwijzen* ‘to reprimand’ < *terecht* ‘right’, *wijzen* ‘to point’

SCVs with nouns are not productive across the board. The nouns that are used are typically non-referential, as is expected since SCVs are
lexical units that function as terms. Some of these nouns can also occur independently without a determiner (for instance the mass nouns *adem* ‘breath’ and *bier* ‘beer’), whereas other nouns are count nouns (*huis, college*) that require a determiner if they function as independent NPs:

(36) *ademhalen* ‘to breathe’ < *adem* ‘breath’, *halen* ‘to fetch’
*bierbrouwen* ‘to brew beer’ < *bier* ‘beer’, *brouwen* ‘to brew’
*collegelopen* ‘to take classes’ < *college* ‘class’, *lopen* ‘to walk’

Generally, these separable NV combinations can be considered as idioms: there is no general productivity of SCVs with nouns.

The following word combinations pose a specific analytical problem because they cannot occur in main clauses:

(37) *zeezeilen* ‘sea sailing’, *mastklimmen* ‘mast climbing’,
*wedstrijdzwemmen* ‘competition swimming’, *hardlopen* ‘fast-running’, *wadlopen* ‘shallow-walk’

For instance, of the following sentences with the meaning ‘My brother likes sea-sailing’ the first two are ungrammatical:

(38) a. *Mijn broer zeezeilt graag*
    b. *Mijn broer zeilt graag zee*
    c. ...*dat mijn broer graag zeezeilt*

Sentence (38a) in which the verb is not split, presupposes that *zeezeilen* is a verbal compound of the NV type. In the light of the ungrammaticality of (38a), we have to conclude that *zeezeilen* is not a verbal compound (this category of compounds is unproductive), but an SCV, because real verbal compounds such as *stofzuigen* ‘to vacuum-clean’ can appear in Verb Second Position:

(39) *Mijn broer stofzuigt het huis*

‘My brother vacuum-cleans the house’
On the other hand, the verb *zeezeilen* cannot have a syntactic origin, because *ziel* ‘sail’ cannot function as an argument of the verb *zeilen*. In other words, it is not a possible complement of *zeilen*, and therefore *zeezeilen* must have a lexical origin, that is, that of an SCV.

We then still need a separate explanation for the ungrammaticality of (38b). In other words, the question is: why cannot *zee* be stranded? As pointed out by Ackema (1999b), stranding of the noun of an SCV is awkward if that noun does not function as an argument of the verb. This is what distinguishes the verbs in (38) from those in (36). This suggests that SCVs can only be used if they lead to canonical surface structures, i.e. those surface structures that are allowed for independently by the syntax. This is the case for stranded particles, adjectives, and nouns that can function as arguments: they occur in the same positions as secondary predicates and object nouns. On the other hand, a verb such as *zeilen* ‘to sail’ is intransitive, and does not allow for a direct object; hence, a sentence like *Mijn broer zeilt de zee* ‘My brother sails the sea’ is ungrammatical.

Splitting SCVs in non-embedded clauses can also be avoided by means of another strategy, the use of the periphrastic progressive construction *aan het V*. Thus, we can make grammatical sentences like:

(40)  *Mijn broer is aan het zeezeilen*

‘My brother is sea-sailing’

Whatever the correct explanation is for the unsplittability of such verbs in main clauses, it is at least clear that verbs such as *zeezeilen* must have a lexical origin, just like many particle verbs.

5. **Conclusions**

The behaviour of particle verbs can be made sense of in a theory of language that allows for periphrastic word formation: the formation in the lexicon of units that are functionally identical to complex words, but do not form one grammatical word, but two. This led to the assumption of constructional idioms in the lexicon: templates for
word combinations with at least one open terminal position. It is only in this way that both the syntactic behaviour of particle verbs, and their functional similarity to words can receive a proper account.

1. Introduction

The position of a verb particle in front of the verb is a marked position in English. How exactly it arrives in this position, or how the verb and the subject switch positions in e.g. *And up rises the particle* is not my concern in this paper. I remain even agnostic as to whether a preposing sentence actually has a non-preposed version in underlying structure. Consequently, the use of the term *preposing*, though suggesting some sort of transformational account, is really non-commital.¹

Instead, the purpose of this paper is to present the grammatical and pragmatic properties of particle preposing. For indeed, it is to be expected that this marked pattern is subject to some constraints that do not hold for the unmarked pattern and that it has different pragmatic purposes. I will therefore try to answer two questions: 1. What type of particle verbs can occur in this construction and what type cannot? 2. How does this construction function in discourse?

This study is corpus-based. A total of 475 sentences with particle preposing was extracted from the CobuildDirect corpus.² In the text, examples from this data set are indicated with (CH). The majority of sentences were gathered by looking for particles in sentence-initial position (i.e. with capitalised first letter), after conjunction, and after connectors like *and, so, and then*. In addition, the particles were combined with *go/goes/went and come/comes/come*, which yielded such extra examples like *Pour down she went or Just as you've cleaned up in they come.* Such a large data set can bring to light certain grammatical and pragmatic characteristics that have not previously been noticed.

It should be noted here that particle preposing is not a phenomenon unto itself, but really a special case of "locational preposing", with "locationals" comprising both particles (as in *Up it rises*) and

² CobuildDirect Corpus. Available online at: https://www.english-corpora.org/cobuilddirect/