Preverbs: an introduction

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The notion 'preverb' is a traditional descriptive notion in Indo-European linguistics. It refers to morphemes that appear in front of a verb, and which form a close semantic unit with that verb. In many cases, the morpheme that functions as a preverb can also function without a preverbal context, often as an adverb or an adposition. Most linguists use the notion 'preverb' as a cover term for preverbal words and preverbal prefixes. The preverb may be separated from the verb whilst retaining its close cohesion with the verb, which is called 'tmesis'. It may also develop into a bound morpheme, that is, a prefix inseparable from the verb, with concomitant reduction of phonological form in some cases. If the preverb has become a real prefix, we may use the more specific notion of 'complex verb', whereas we take the notion 'complex predicate' to refer generally to multi-morphemic expressions with verbal valency. That is, we make a terminological distinction between complex predicates and complex verbs. The latter are multi-morphemic, but behave as single grammatical words.

For both complex predicates in general (cf. Spencer 1991, Ackerman and Webelhuth 1998) and complex verbs (cf. Miller 1993) in particular, the question has been raised how and where in the grammar they should be accounted for. Well-known examples of complex predicates are auxiliary-verb sequences, serial verb constructions, the coverb-verb combinations as in Australian languages (Schultze-Berndt, this volume), similar light verb constructions in other languages, and verb raising constructions in Germanic languages. These different types of complex predicates represent various kinds of mismatches in the syntactic and morphological coding of complex events and verbal valency, and thereby challenge our view of the architecture of the grammar, and the relation between syntax, morphology, and the lexicon.

Complex predicates of the preverb-verb type occur in most European languages, both the Indo-European languages (Watkins 1963, 1964) and those of the Finno-Ugric family (Ackerman and Webelhuth 1998, Ackerman (this volume), and in Georgian and Caucasian languages (Harris, this volume). A number of mostly descriptive articles on preverbs in the languages of Europe can be found in Rousseau (ed., 1995). In particular, particle verbs in Germanic languages have received a lot of attention in the recent literature (Ackerman and Webelhuth 1998, Lüdeling 2001, McIntyre 2000, 2001, 2002, this volume), Booij 2002a;b, Dehé and Wanner (eds.) 2001, Dehé et al. (eds.) 2002, Zeller 2001; this volume, van Kemenade and Los, this volume, and references in these publications). The history of particles and prefixes in Latin and French is discussed in Vincent (1999), and Dufresne et al. (this volume) respectively.

It is the aim of the collection of articles in this thematic section of the *Yearbook of Morphology* on preverbs to provide in-depth empirical investigations of preverbs in a number of typologically diverse languages and to discuss

the consequences of their behaviour for a proper theory of the architecture of the grammar. It is striking indeed that this phenomenon is widely attested crosslinguistically, which suggests that the grammatical and historical mechanisms responsible for the rise of a class of preverbs are universal. In many cases, the development of preverbs and prefixes represents a clear case of grammaticalization, and this thematic section therefore also focuses on the diachrony of preverb constructions.

For the preverb situation in Indo-European, Kuryłowicz (1964) and Watkins (1964) remain the authoritative sources. In the early stages, preverbs seem to have been independent constituents. Kuryłowicz notes that, since in many of the daughter languages preverbs behave both as preverbs and as prepositions, it is thought that the origin of both preverbs and prepositions is adverbial (cf. also Baldi 1979). The basis for the divergence in word class in the daughter languages is in the potential for variation between various syntactic modification relations. When a particle appeared with a transitive verb, it was ambiguous between a modifier of the verb (in which case it was interpreted as an adverb) and a modifier of the object (and was interpreted as a preposition/predicate). In addition, the particle could modify other adverbs and be positioned accordingly. For a list of preverbs with cognates in the various languages, the reader is referred to Beekes (1995). Kuryłowicz (1964) gives a brief discussion of some developments in the early Indo-European languages.

According to Watkins, preverbs could appear in two basic positions in Sanskrit: a sentence-final one left of the verb it modifies, which is called the *contact position* and is exemplified in (1); and a sentence-initial one where it is not adjacent to the verb, which is illustrated in (2). This latter position of the preverb in which is does not precede the verb directly is called *tmesis*. The examples are from Delbrück (1893–1900):

- (1) #... P V#
 dasvasam upa gachatam (RV I, 47, 3)
 worshipper to come
 'come to the worshipper'
- (2) #P... V#
 ati tṛṣṭam vavakṣita (RV III, 9, 3)
 'you have grown beyond the harmful (smoke)'²

Preverb and verb are thought to be a kind of syntactic unit. The argument for this comes from the fact that the preverb is stressed only in main clauses (as in (3), where stress is marked by an acute accent), while in subordinate clauses, in the position preceding the verb, stress shifted to the verb, as in (4). The examples are again from Sanskrit:

- (3) prá gacchati (he) forth goes 'he goes forth'
- (4) yáh pra gácchati who forth goes 'who goes forth'

This stress shift is thought to be the result of what Watkins calls 'univerbation', resulting in a syntactic unit. According to Kuryłowicz, a consequence of this univerbation was either that the verb was encliticized to the preverb (as in Sanskrit and Greek), or that the preverb was procliticized to the verb (as in Old Irish, Germanic and Balto-Slavic). In the daughter families/languages, the preverb maintains its status as an independent constituent for quite a long time in some cases, while in others it follows various stages in a classical grammaticalization path from preverb > prefix > ultimate disappearance (cf. also Pinault 1995). As cases in point, we can cite here some developments in Romance and Germanic respectively (see Dufresne et al. (this volume), and van Kemenade and Los (this volume)).

Vincent (1999) discusses some interesting cases in Latin from which it is clear that, while in the early Latin prayers, preverbs/prepositions must be assumed to have independent constituent status, they later become members of compound verb stems, later developing into prefixes. This applies to the following words:

(5) *sub* 'under'; *trans* 'across; *in* 'in'; *ab* 'from'; *ob* 'against'; *cum* 'with'; *ex* 'out of'; *pro* 'for'

To contrast the two stages, consider the following examples of Latin preverbs (Vincent 1999: 1118): the grammarian Festus makes two remarks on the language of the early prayers:

- (6) a. *Sub vos placo*, in precibus fere cum dicitur, significat id, quod supplico 'when people say, mostly in prayers, *sub vos placo*, it means the same as *supplico*'
 - b. ob vos sacro, in quibusdam precationibus est, pro vos obsecro, ut sub vos placo, pro supplico
 'ob vos sacro in certain prayers stands for vos obsecro, just as sub vos placo stands for supplico'

What seems to be the case here is that the preverb in the early prayers is in tmesis, with the personal pronoun encliticized to it by the Wackernagel effect. This indicates that the preverb is an independent constituent in first constituent

position. The same preverbs form part of compound verb stems in Classical Latin and later become prefixes, as in:

(7) submittere 'to put underneath'; *permittere* 'to let through'; *transmittere* 'to send across'; *transferre* 'to carry across', *perferre* 'to carry through'; *obligare* 'to bind'

A similar phenomenon can be observed in Gothic, where the aspectual preverb ga occurs in first constituent position with sentence particles encliticized to it:

(8) ga-u-hva-sehvi ga – wh particle – anything – saw 'whether he saw anything' (Mark, VII, 23)

This preverb is attested in the Old West-Germanic languages as the past participle prefix *ge*-, which disappeared in English but is still widely used in present-day Dutch and German. It is thought to be cognate with Latin *cum*, and would thus be clearly a locative or circumstantial item in origin (although this is not uncontroversial). Phenomena parallel to the preverb-enclitic pronoun/particle ... V pattern in (6) and (8) have been observed in Hittite and Old Irish (Hopper 1975). These patterns represent instances of preverbs that follow a grammaticalization path as in (9)

(9) independent preverb > left member of verbal compound > prefix > (zero).

A different type of development seems to be represented by the preverb system that is still very productive in the present-day Germanic languages, in particular in West-Germanic. In the older stages of these languages, there is still a clear differentiation of word class status between adverb and preposition, as observed for Indo-European by Kuryłowicz (1964). For instance, Hiltunen (1983) makes a distinction for Old English between those phrasal adverbs that cannot occur as prepositions and include adun 'down'; aweg 'away; forð 'forth'; niðer 'down; up 'up'; ut 'out', and prepositional adverbs, which can be used as either preposition or adverb and include beforan 'before'; æfter 'after'; to 'to'; ofer 'over'; ongean 'toward'. It is probably fair to say that this differentiation lives on to a certain extent into the present-day language. A similar differentiation is suggested by studies on the early stages of other Germanic languages such as Eythórsson (1995) and Ferraresi (1997) on Gothic. An appropriate term for the preverb-verb combination in these languages is: separable complex verb, since this abstracts from the divergent syntactic development that took place mostly during the recorded history (as discussed in van Kemenade and Los, this volume). When we consider the history of the West-Germanic languages in particular, it is especially striking that the old preverb-verb system was regimented anew as a syntactically circumscribed and often lexicalized system of aspectual marking. During this process, it became immensely productive, as the very lively recent history of Dutch and German separable complex verbs and English phrasal verbs testify.

The analysis of separable complex verbs in Dutch and German has been a focus of interest in the recent literature on preverbs (cf. the references given above), and it is therefore appropriate to provide the reader with some essential discussion concerning the analytical and theoretical issues involved.

Preverbs in Modern Dutch and German are quite similar in their behaviour. Most of them derive from adpositions and adverbs. In addition, there are some nouns and adjectives that pattern in the same way as preverbs, in the sense that the N-V or A-V combination behaves as a separable complex verb. Preverbverb sequences in these languages differ from prefixed verbs and verbal compounds in that the preverb is separable from the verb. Dutch and German have two different word orders, XvSOV in main clauses (where v stands for the finite verb), and SOV in embedded clauses. This difference in word order has the effect that preverbs can be stranded at the end of the main clause, as a result of finite verb movement to second constituent position of the verbal part of the separable verb complex. Let us first illustrate the separability of the preverbs with some examples from Dutch (Booij 2002a: 205):

(10)	Verb-final clause	Verb-second clause
	Hans zijn moeder opbelde	Hans belde zijn moeder op
	de fietser <i>neerstortte</i>	'Hans phoned his mother' De fietser <i>stortte neer</i>
		'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 <i>stelde</i> ons <i>teleur</i>

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 combination is referred to as a particle verb. Particle verbs form a productive class of separable complex verbs (SCVs). In the second example, the word *neer* 'down' is also used as an adverb. The next two examples show that adjectives (like *schoon*) and nouns (like *huis*) can also occur in SCVs. In the last example, the word *teleur* 'sad' does not occur as an independent

'This result disappointed us'

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 separability of SCVs also manifests itself in the position 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/passive participle, with the prefix *ge*- in between the particle and the verbal stem: *op-ge-beld*. In derivational morphology, SCVs behave similarly; for instance, the *ge*-nominalisation of *opbellen* is *opgebel*, with the prefix in between the particle and the verbal stem.

A number of these particles correspond to bound morphemes with an identical phonological form; these are real prefixes that cannot be separated from the verbal stem. 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:

(11) *SCV*

dóorboor 'to go on drilling' ómblaas 'to blow over' ónderga 'to go down' óverkom 'to come over' vóorkom 'to occur'

prefixed verb

doorbóor 'to perforate' ombláas 'to blow around' ondergá 'to undergo' overkóm 'to happen to' voorkóm 'to prevent'

Similar facts can be cited for German (Lüdeling 2001): the German preverbs can be stranded and they can be separated from the verb by means of zu 'to' and by the participial prefix ge.

Like phrasal verbs in English (cf. Brinton 1988), the meaning of the preverb-verb combination (PV-V) in Dutch and German is often not fully predictable, and this implies that at least these combinations are lexical units of some sort. Typically, the preverbs contribute to the aspectual properties of the PV-V, in particular lexical aspect (Aktionsart) such as telicity or duration, and thus they may also influence the syntactic valency of the verb. For instance, the Dutch verb *lopen* 'to walk' is intransitive, whereas the SCV *aflopen* can be used as a transitive verb, as in the VP *de straten aflopen* 'to tramp the streets'. In this respect, preverbs are quite similar to some of the verbal prefixes that similarly influence the aspectual and syntactic properties of a verb, as illustrated below.

A second domain in which the unitary character of the PV-V combination manifests itself, is that of word formation: PV-Vs can feed word formation, both compounding and derivation., as illustrated by the following examples from Dutch with SCVs in the left column (from Booij 2002a: 209):

(12) deverbal suffixation aanbied 'to offer'

aanbieder 'offerer', aanbieding 'offer'

deverbal prefixation:

invoer 'to introduce' herinvoer 'to reintroduce' uitgeef 'to publish' heruitgeef 'to republish'

compounding with verbal left constituent:

doorkies 'to dial through' doorkiesnummer 'direct number' doorkijk 'to see through' doorkijkbloes 'lit. see through blouse,

transparent blouse'

PV-V sequences form a challenge for our view of the relation between syntax and morphology. On the one hand, PV and V do not form a syntactic atom, as is clear from their separability in various syntactically defined contexts. Yet, their behaviour is similar to that of complex morphologically derived verbs in the sense that they form lexical units of some sort, expressing aspectual notions and having derivational effects like affecting the valency of the verb. Thus, the transitivizing effect of the particle *af* in *aflopen* as discussed above, competes with a bound prefix such as *be*- which has a similarly transitivizing effect. This is illustrated by the following examples:

(13) op straat *lopen* intransitive (lit. on street walk)

'walk in the street'
de straten *aflopen* separable, transitive (lit. the street off-walk)

'roam the streets'
de straat belopen inseparable, transitive (lit. the street be-walk)

'walk the streets'

These facts raise some intriguing questions with respect to the question of how to model the relation between syntax and morphology.

It seems appropriate to view the semantically transparent cases of preverbverb as syntactically defined cases of secondary predication (we would restrict analyses along such lines, e.g. Neeleman (1994), Den Dikken (1995) to the semantically transparent cases). The facts from the history of English as discussed by van Kemenade and Los (this volume) suggest that the secondary predicate configuration may well be the historical origin of the construction. They also suggest, however, that there are many cases in Dutch and German, and probably even more in English, where the phrasal combination is not (no longer) semantically transparent. In addition to this, the construction is immensely productive in all three languages. The particles in these very productive constructions may have highly specific meanings that do not correlate regularly with the range of meanings of the same word when used in nonpreverbal contexts. Therefore, PV-V combinations call for a definition in syntactic as well as lexical terms. It is this that provides us with the possibility of interpreting PV-V combinations as derivationally related to the verbal part. Since PV-V combinations express various aspectual notions, and have gained in frequency at the expense of the older bound aspectual prefixes, we might think of them in terms of a derivational type of periphrasis.

Are we justified in extending the notion 'periphrasis' to word formation? Let us point out that, at a more general level, there are good arguments for locating certain syntactic patterns in the lexicon, although they are productive. These are the so-called constructional idioms or idiomatic patterns, syntactic constructions formed according to the syntactic rules of the language, but with a specific meaning that cannot be derived compositionally. These are the kinds of configurations that are the focus of interest of Construction Grammar (Goldberg 1995).

Periphrasis may then be seen as a specific subcategory of construction, since the periphrastic forms compete directly with synthetic morphological forms: they must be used instead of a synthetic form for the expression of specific kinds of information (Booij 2002c). This is clearly the case for inflectional periphrasis. Is it also the case for PV-Vs: do they compete with derivational morphology? Indeed, in languages such as German and Dutch the use of affixes to form derived verbs is very restricted. Dutch has only one productive verbalizing suffix, the suffix -iseer that is exclusively attached to non-native stems. The only more or less productive verbalizing prefixes are be-, ver-, and ont- 'de-'. These prefixes are on the whole incompatible with the use of a particle. In other words, it appears that preverbs have taken over the function of verbalizing prefixes. A very telling detail in this respect is that preverbs are also employed to derive a verbal stem from a nominal or adjectival root: the PV-V opleuken 'to embellish' is a combination of the preverb op and the adjective leuk 'nice'; the verb leuken does not exist by itself. Another example is the SCV uithuwelijken 'to marry off', which is a combination of the preverb uit and the noun huwelijk 'marriage', used as a verb. Again, there is no verb huwelijken in Dutch.

In the terms of Bybee et al. (1994), the overall development of PV-V combinations in the West-Germanic languages represents a good example of a grammaticalization development. In the older system aspectual bound prefixes loose their aspectual function (this is particularly clearly the case with *ge*-, which first became a past participle marker, was grammaticalized as such, and retained this status in Dutch and German while it was lost altogether in English). This function is then taken over on a large (and on the face of it, increasing) scale by the aspectual particles, which are bounders in the sense of Bybee et. al. (1994). In a general sense, the development seems to warrant quite clearly the notion of derivational periphrasis introduced above.

Let us conclude with some remarks on the types of grammaticalization that we seem to be looking at here. If the above suggestions are correct, they add to the evidence for grammaticalization in the lexical/derivational domain. One scenario here is the regimentation of formerly autonomous preverbs to mark aspect periphrastically, following on the weakening and/or loss of aspectual

bound prefixes. Both scenarios seem to involve at least one of the core characteristics of 'grammaticalization processes': semantic bleaching as evidenced in the case of the West-Germanic SCVs by the rise of metaphorical and idiomatic meanings for the PV-V combination. We would suggest, however, that the details of the historical developments show up a delicate interplay of independent syntactic and morphological (derivational as well as inflectional) developments, which, if given close scrutiny, may add considerably to our insight in the balance between syntax, morphology and the lexicon.

The articles on preverbs in this thematic section of the *Yearbook of Morphology* are revised versions of papers selected from those presented at a workshop on preverbs at the Catholic University of Nijmegen in January 2001, organized by Ans van Kemenade in cooperation with Nigel Vincent and Geert Booij. They demonstrate that the systems of preverbs that are familiar to us in some of the Indo-European languages as sketched here, and the historical developments giving rise to systems of preverbs, are parallelled in languages as diverse as Caucasian languages and Northern Australian languages. This serves to further underline the challenge that preverbs pose to our views of the organization of the grammar, in particular the relation between syntax and morphology. The contributions in this collection rise to this challenge in a variety of ways: by extending our empirical basis; by suggesting various ways of modelling the relationship between morphology and syntax as instantiated by the preverb problem; and by showing how a diachronic perspective will help us to understand their behaviour.

NOTES

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- We are grateful to Mark Hale for his help with the translation of this example.

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