

Topics in Comparative Scandinavian and Germanic Syntax

Sten Vikner, Dept. of English, Aarhus University, DK-8000 Aarhus C, Denmark • sten.vikner@cc.au.dk
<https://pure.au.dk/portal/en/persons/sten.vikner@cc.au.dk> • <https://tildeweb.au.dk/au132769/>

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3d. Immobile Complex Verbs in the Germanic SOV-languages

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Abstract

Certain complex verbs in Dutch, German, and Swiss German may only occur in finite form in embedded clauses, not in main clauses. These languages are V2 languages, like the Scandinavian languages, which means that in main clauses, the finite verb has to move to the second position. Hence the assumption is that these complex verbs are **immobile**, i.e. they do not undergo verb movement.

I suggest that these immobile verbs have to fulfill both the requirements imposed on complex verbs of the V° type (= verbs with "non-separable prefixes") and the requirements imposed on complex verbs of the V* type (= verbs with "separable prefixes"). This results in such verbs being morphologically unexceptional, i.e. having a full set of forms, but syntactically peculiar ("immobile"), i.e. they can only occur in their base position, where no movement has taken place. Any kind of movement is incompatible either with the V° requirements or with the V* requirements.

Haider (1993:62) and Koopman (1995), who also discussed such immobile verbs, only account for verbs with two prefix-like parts (e.g. German *uraufführen* 'to perform (a play) for the first time' or Dutch *herinvoeren* 'to reintroduce'), not for the more frequent type with only one prefix-like part (e.g. *zwüsche* in Swiss German *zwüschelände* 'to have a stop-over' or *bauch/buik* in German *bauchreden*/Dutch *buikspreken* 'to ventriloquise').

This analysis will try to account not only for the data in Haider (1993) and Koopman (1995) but also for:

- why these immobile verbs include verbs with only one prefix-like part and also
- why the single prefix-like part in these verbs may NOT be a particle,
- why these immobile verbs include verbs with two prefix-like parts where each of these are separable (!) particles (as in e.g. German *voranmelden* 'preregister' and *vorankündigen* 'announce in advance')
- why there is such a great amount of individual speaker variation as to which verbs are immobile,
- and finally also for why such verbs are not found in Germanic VO-languages such as English and Danish.

Whereas I thus disagree with Haider (1993) and Koopman (1995) about the details of the morpho-syntactic analysis of the individual verbs, I agree with these two works about the consequences for the analysis of verb movement in Dutch, German, and Swiss German. The reason why finite forms of these verbs can only occur in clause-final position in embedded clauses is that this position is the base-generated position, and therefore no conflict can arise as to whether the prefix-like part must or must not be carried along under verb movement.

Thus, the fact that a considerable number of OV-Germanic verbs, not just one or two, behave in this way provides support for the conclusion that the clause-final position of finite verbs in embedded clauses is parallel to the position that non-finite verbs have in all clauses, i.e. inside their own VP. In other words, Dutch, German, and Swiss German do not have V°-to-T° movement.

This hand-out is based on Vikner (2005) **and it was last updated for content in 2014!!**

1. The data

1.1 German *uraufführen* (Haider 1993)

The German verb *uraufführen* 'to put on (a play) for the very first time' contains two prefixes, *ur-* 'for the first time' and *auf-* 'on':

- (1) Ge. a. Sollten sie das Stück uraufführen?
Should they the play original-on-put.INF
 (= 'Should they put on the play for the first time?')
- b. Haben sie das Stück uraufgeführt?
Have they the play original-on-put.PPLE
 (= 'Have they put on the play for the first time?')

These two (main) clauses contain non-finite versions of *uraufführen*. The following (embedded) clause on the other hand contains a finite form (simple past, 3rd person plural) of *uraufführen*:

- (2) Ge. a. ... ob sie das Stück uraufführten.
... if they the play original-on-put.3.PL.PAST
 (= '... whether they put on the play for the first time.')

It would thus seem that this is a more or less ordinary verb. That this is not so, is clear when native speakers are asked to construct main clauses containing a finite form of *uraufführen*. The verb simply refuses to undergo V2:

- (3) Ge. a. * Uraufführten sie das Stück _____ ?
 b. * Aufführten sie das Stück ur _____ ?
 c. * Ur führten sie das Stück auf _____ ?
 d. * Führten sie das Stück urauf _____ ?
(Original)(on)put.3.PL.PAST they the play (original)(on)
 (= 'Did they put on the play for the first time?')

Following Höhle (1991), Haider (1993:62) suggests the following analysis (summarised in English in Haider 2001:70-73, 2010:58-61): *ur-* is a non-separable particle and *auf-* is a separable one. Given that the separable particle *auf-* is closer to the stem *-führen* than the inseparable particle *ur-* is, one of three possible situations must obtain, each of which leads to ungrammaticality: Either *auf-* is carried along under V2, violating its requirements, (3)a,b, or *ur-* is left behind, violating its requirements, (3)b,d, or what is moved is not a constituent, (3)c. Consequently, the only well-formed sentences with this verb are ones where the verb is not moved at all: (1)a,b and (2).

The fact that *uraufführen* may be finite iff if it occurs sentence-finally, (2), leads to the conclusion that the clause-final position of finite verbs in embedded clauses is a non-moved position, since it violates neither the requirements of the non-separable *ur-*, nor the requirements of the separable *auf-*.

According to Höhle (1991) and Haider (1993:62), this means that German finite verbs in clause-final position in embedded clauses have not undergone any movement. This again means that German does not have V°-to-T° movement, assuming that it is a characteristic of V°-to-T° movement (as opposed to e.g. V2) that all finite verbs obligatorily undergo this movement (as is generally assumed e.g. for the Romance languages and for those Germanic VO-languages that have V°-to-T° movement, cf. e.g.

Vikner 1997/1999, 2001, Rohrbacher 1999, ...). Whether German does or does not have V° -to- T° movement has been an on-going debate for at least 25 years. The point is that as opposed to V° -to- T° movement in a VO-language, V° -to- T° movement in an OV-language is often assumed to be string vacuous.

While I agree with the conclusion that the data concerning immobile verbs show that German does not have V° -to- T° movement, I do not find the Höhle/Haider analysis itself satisfactory, as it does not apply to a large number of immobile verbs, to be discussed in more detail in sections 1.3 and 3 below. The verbs not accounted for are immobile verbs that do not have two "conflicting" prefixes/particles, either because there is only one prefix-like part, e.g. *schutzimpfen* 'inoculate', or because the two prefixes/particles do not impose conflicting requirements, e.g. *voranmelden* 'preregister' (both prefixes/particles are separable) or *strafversetzen* 'transfer for disciplinary reasons' (both prefixes/particles are non-separable).

1.2 Dutch *herinvoeren* (Koopman 1995)

Koopman's (1995:139, (2b)) examples from Dutch are all parallel to *uraufführen*, i.e. they contain two prefixes/particles with conflicting requirements:

- (4) Du. a. *herindelen* 'to re-in-split', i.e. 'to redivide'
 b. *herindijken* 'to re-dike-in', i.e. 'to put within dikes again'
 c. *herinvoeren* 'to re-in-lead', i.e. 'to reintroduce'
 d. *heruitgeven* 'to re-out-put', i.e. 'to republish'
 e. *heruitzenden* 'to re-out-send', i.e. 'to rebroadcast'
- (5) Du. a. ... omdat ze vorig jaar deze wet hebben heringevoerd.
 ... because they last year this law have re-intro-duced.PPLE
 (= '... because they have reintroduced this law last year.')
- b. ... omdat ze vorig jaar deze wet herinvoerden.
 ... because they last year this law re-intro-duced.3.PL.PAST
 (= '... because they reintroduced this law last year.'
 (Koopman 1995:141, (6d) & (5d))
- (6) Du. a. * Deze wet herinvoerden ze vorig jaar _____.
 b. * Deze wet invoerden ze vorig jaar her _____.
 c. * Deze wet her voerden ze vorig jaar ____in _____.
 d. * Deze wet Voerden ze vorig jaar herin _____.
This law (re)(intro)duced.3.PL.PAST they last year (re)(intro)
 (Intended: 'This law, they reintroduced last year.'
 ((a) from Koopman 1995:141, (4d))

Koopman (1995:143) adapts and elaborates Haider's (1993:62) analysis of (1)-(3). This analysis rests on an insoluble conflict between the two particles/prefixes: *ur-* cannot be left behind if the verb moves, and *auf-* must be left behind if the verb moves, and so the only way to avoid conflict is to avoid verb movement. Koopman (1995:156-159) accounts for the data by assuming that *ur-* in (1)-(3) and *her-* in (4)-(6) (i.e. the leftmost or outermost of the two particles/prefixes) blocks overt checking of finiteness features. This in turn means that only LF-checking is an option, which again means that there can be no overt movement to a checking head (i.e. no V° -to- T° movement) in examples like (2) and (5)b.

It seems to me that the conclusions concerning verb movement drawn by Haider (1993:62) and Koopman (1995) must be on the right track, even if I disagree with the analyses themselves. Both Haider's and Koopman's analyses only work for verbs with two prefixes: Haider's (1993:62) analysis needs the prefixes to conflict, and Koopman's (1995:159) analysis needs a second prefix to violate the strict c-command requirement. In section 3 below, I will suggest a different analysis, also based on conflicting requirements, but not requiring such verbs to have two prefix-like parts. Before that, in section 2 below, I will discuss immobile verbs that only have one prefix-like part.

1.3 Other immobile verbs

Haider (1993:62) lists some additional German verbs (originally from Höhle 1991) which behave exactly like *uraufführen* in (1)-(3), cf. (7). Eisenberg (1998:324, (14)) further adds to the list so that it looks as in (8). All these verbs have only one prefix-like part, and it is thus not clear which predictions Haider's (1993:62) account or Koopman's (1995:156-159) account would make for them:

- (7) Ge. a. Sie will bausparen.
 She wants (to) building-save (= 'She wants to save with a building society.')
- b. ... weil er bauspart.
 ... because he building-saves (= '... because he saves with a building society.')
- (adapted from Eisenberg 1998:226, 324, (16a))
- (8) Ge. a. * Spart er bau?
 b. * Bauspart er?
 (Building-)saves he (building) (Intended: 'Does he save with a building society?')
- (9) Ge. a. *bauchlanden* 'to stomach-land', i.e. 'to land on one's stomach'
 b. *bauchreden* 'to stomach-speak', i.e. 'to ventriloquise'
 c. *bausparen* 'to building-save', i.e. 'to save with a building society'
 d. *bergsteigen* 'to mountain-rise', i.e. 'to climb mountains'
 e. *bruchlanden* 'to break-land', i.e. 'to make a crash-landing'
 f. *ehebrechen* 'to marriage-break', i.e. 'to commit adultery'
 g. *kopfrechnen* 'to head-reckon', i.e. 'to do mental arithmetic'
 h. *kunststopfen* 'to art-mend', i.e. 'to mend textiles so well that you cannot tell that they have been mended'
 i. *manndecken* 'to man-cover', i.e. 'to mark someone in soccer (man-to-man marking)'
 j. *preiskegeln* 'to prize-bowl', i.e. 'to play skittles in order to win a prize'
 k. *punktschweißen* 'to spot-weld'
 l. *rückfragen* 'to back-question', i.e. 'to query'
 m. *schutzimpfen* 'to protection-inoculate', i.e. 'to inoculate'
 n. *strafversetzen* 'to punishment-transfer', i.e. 'to transfer for disciplinary reasons'
 o. *teilzahlen* 'to part-pay', i.e. 'to pay by instalments'
 p. *wettrudern* 'to contest-row', i.e. 'to row in a competition'
 q. *wettturnen* 'to contest-exercise', i.e. 'to do gymnastics in a competition'

A search through the electronic versions of the 1993 *Duden Universal Wörterbuch* and the 2000 *Duden Rechtschreibung* and subsequent checks with native speakers turned up the following further examples of the same kind, i.e. of verbs which may occur in finite form clause-finally in embedded clauses, but not in the first or second position in main clauses:

(10) Ge.	a.	<i>auferstehen</i>	'to up-rise',	i.e. 'to rise from the dead'
	b.	<i>auferwecken</i>	'to up-wake',	i.e. 'to raise from the dead'
	c.	<i>erstaufführen</i>	'to first-on-put',	i.e. 'to perform a play for the first time'
	d.	<i>feuerverzinken</i>	'to fire-zinc',	i.e. 'to rustproof something by immersion in liquid zinc'
	e.	<i>gefrieretrocknen</i>	'to freeze-dry'	
	f.	<i>gegensprechen</i>	'to counter-speak',	i.e. 'to speak on a two-way intercom'
	g.	<i>generalüberholen</i>	'to general-overhaul',	i.e. 'to give something a general overhaul'
	h.	<i>hartlöten</i>	'to hard-solder',	i.e. 'to solder at more than 450°C'
	i.	<i>hohnlächeln</i>	'to scorn-smile',	i.e. 'to smile scornfully'
	j.	<i>hohnsprechen</i>	'to scorn-speak something',	i.e. 'to fly in the face of something'
	k.	<i>prämiensparen</i>	'to prize-save',	i.e. 'to save in such a way that a prize may be won'
	l.	<i>sonnenbaden</i>	'to sun-bathe'	
	m.	<i>voranmelden</i>	'to pre-at-report',	i.e. 'to preregister, to book e.g. a ticket'
	n.	<i>vorglühen</i>	'to pre-glow',	i.e. 'to pre-heat a diesel engine'
	o.	<i>zweckentfremden</i>	'to purpose-alienate',	i.e. 'to use for a different purpose'
	p.	<i>zwischenlanden</i>	'to between-land',	i.e. 'to stop over in X on the way to Y'

Strictly speaking, some of these verbs have a structure similar to *uraufführen* and the other verbs discussed in section 1.1 above: In *auferstehen*, *auferwecken*, *feuerverzinken*, *generalüberholen*, *strafversetzen*, *zweckentfremden*, and also in *erstaufführen* and *voranmelden*, there is not one but two prefix-like parts. However, only *erstaufführen* and *voranmelden* are really parallel to *uraufführen*, because these are the only two where the second of the prefix-like parts, i.e. *-auf-* and *-an-*, is a separable particle (see section 3.5 below).

Another question is of course whether examples of either kind exist in the other Germanic OV-languages. According to Cooper (1994:47), the Zürich Swiss German versions of *uraufführen* (*uruffüere*) and the verbs in (8) may move to C°. However, according to my informants, in so far as verbs that correspond to the immobile German verbs exist at all, most of them are also immobile e.g. in Stuttgart (Swabian) and in Bern, Zürich and Sankt Gallen (Swiss German, where the conflict may be avoided by insertion of *tun* 'do'). Consider the following example from Swiss German as spoken in Bern (Ursula Wegmüller, p.c.):

- (11) Be. a. Uf em Wääg vo Züri uf New York müesse mer in Paris zwüschelände.
On the way from Zürich to New York must we in Paris between-land
 (= 'On the way from Zürich to New York, we have to have a stopover in Paris.')
- b. Uf em Wääg vo Züri uf New York si mer in Paris zwüschegglandet.
On the way from Zürich to New York are we in Paris between-landed
 (= 'On the way from Zürich to New York, we had a stopover in Paris.')
- c. ... öb mer äch uf em Wääg vo Züri uf New York in Paris zwüschelände.
... if we really on the way from Zürich to New York in Paris between-land
 (= '... whether we will really have a stopover in Paris on the way from Zürich to New York.')
- (12) Be. a. *Lande mer eigentlech in Paris zwüsche?
 b. *Zwüschelände mer eigentlech in Paris?
(Between-)land we actually in Paris (between)
 (Intended: 'Will we actually have a stopover in Paris?')

A brief check of Dutch (Norbert Corver, p.c.) shows that at least the following Dutch verbs behave the same way (see also Booij 2008:14, 2009:19):

- (13) Du. a. *bergklimmen* 'to mountain-climb', i.e. 'to climb mountains'
 b. *bouwsparen* 'to building-save', i.e. 'to save with a building society'
 c. *buikspreken* 'to stomach-speak', i.e. 'to ventriloquise'
 d. *echtbreken* 'to marriage-break', i.e. 'to commit adultery'
 e. *diepvriezen* 'to deep-freeze'
 f. *hardsolderen* 'to hard-solder', i.e. 'to solder at more than 450°C'
 g. *hoofdrekenen* 'to head-reckon', i.e. 'to do mental arithmetic'
 h. *mandekken* 'to man-cover', i.e. 'to mark someone in soccer (man-to-man marking)'
 i. *prijsschieten* 'to prize-shoot', i.e. 'to shoot a rifle for a prize'

Summing up this section, we have seen that the immobile verbs include not only verbs with two (conflicting) prefix-like parts, but also verbs with only one prefix-like part. Furthermore we have seen that the languages are less different than might appear from the literature: The data seem to be quite parallel in at least Dutch, German, and Swiss German.¹

2. Complex verbs: V° or V*

The crucial property common to all the immobile verbs as discussed above is that they are complex verbs, with two (or more) internal parts, the last of which is itself a verb. Before returning to the verbs above, I would like to discuss complex verbs more generally.

I assume that for a complex verb, whether it consists of a noun and a verb or of a particle and a verb, there are two relevant possibilities: V° and V*. One option is that the complex verb is of exactly the same status as a simplex verb, V°. The other option, using the notation of e.g. Booij (1990), is that the complex verb constitutes a V* (which is more than V° but possibly less than V). This follows a suggestion for German made by Haiden (1997:105), Wurmbrand (1998:271), and others, namely that verb and separable particle form a lexical unit but not necessarily also a syntactic X°-constituent. For more about particle verbs in Danish, German and Yiddish along these lines, see Vikner (2001:33-49).

Examples of V° are [V° [Prt *ver*][V° *stehen*]] 'to under-stand', among the particle verbs (Prt-V° complex verbs), and [V° [N° *brand*][V° *marken*]] 'to fire-mark', i.e. 'to brand, to denounce', among the N°-V° complex verbs. Examples of V* are [V* [Prt *ab*][V° *schicken*]] 'to send off', among the particle verbs (Prt-V° complex verbs), and [V* [N° *statt*][V° *finden*]] 'to place-find', i.e. 'to take place', among the N°-V° complex verbs:

¹ Postma (2002:236-239) suggests a connection for Dutch between whether a complex verb is immobile or not and whether it has regular ("weak") or irregular ("strong") simple past and past participle forms. It may be suggestive that in German almost all of the 34 immobile verbs in (1), (9), and (10) are weak verbs (the 5 exceptions are *bergsteigen*, *ehebrechen*, *aufstehen*, *gegensprechen*, and *hohnsprechen*, (9)d,f and (10)a,f,j). Also all of the mobile inseparable verbs in (21) below are weak verbs (*lobreisen*, (21)c, has both a set of weak forms and a set of strong forms), whereas almost all the mobile separable verbs in (22) below are strong verbs (the one exception is *Halt machen*, (22)d).

(14)	INSEPARABLE	SEPARABLE
Prt + V COMPOUNDS	a. Ge. V° $\swarrow \quad \searrow$ Prt V° <i>ver</i> <i>stehen</i>	b. Ge. V^* $\swarrow \quad \searrow$ Prt V° <i>ab</i> <i>schicken</i>
N + V COMPOUNDS	c. Ge. V° $\swarrow \quad \searrow$ N° V° <i>brand</i> <i>marken</i>	d. Ge. V^* $\swarrow \quad \searrow$ N° V° <i>statt</i> <i>finden</i>

2.1 Particle verbs

Particle verbs that are V° are **mobile** but **inseparable**: (15)b would be excorporation, i.e. there would be a trace inside V° , which is impossible, according to Baker (1988:73).

V° : mobile but inseparable

- (15) Ge. a. Den Brief wird er nicht verstehen.
The letter will he not understand (= 'The letter he will not understand.')
- b. * Den Brief [v° steht] er nicht [v° ver [v° t]].
- c. Den Brief [v° versteht] er nicht. [v° t].
The letter (under)stands he not (under) (= 'The letter he does not understand.')

Particle verbs that are V^* are **mobile** but **separable** (actually, it is the V° contained within a V^* that is mobile): In (16)c, C° contains a V^* , not a V° , but as a V^* is larger than an X° , it cannot occur in C° .

V^* : mobile but separable

- (16) Ge. a. Den Brief wird er nicht abschicken.
The letter will he not off-send (= 'The letter he will not send off.')
- b. Den Brief [v° schickt] er nicht [v^* ab [v° t]].
- c. * Den Brief [v^* abschickt] er nicht. [v^* t].
The letter (off)sends he not (off) (= 'The letter he does not send off.')

Particle verbs of the V° and V^* types also differ when it comes to the placement of the past participle prefix *ge-* and of the infinitival marker *zu*. If the whole particle verb is a V° , it does not allow the past participle prefix *ge-* at all, and all of it is preceded by the infinitival marker *zu*, whereas if it is a V^* , only its second half (which is a V°) is preceded by *ge-* or by *zu*:

V° , inseparable: no *ge-*

- (17) Ge. a. * Er hat den Brief nicht [v° ver- *-ge-* standen].
- b. * Er hat den Brief nicht *ge-* [v° verstanden].
- c. Er hat den Brief nicht [v° verstanden].
He has the letter not (under) AFF (under)stood (= 'He has not understood the letter.')

V°, inseparable: zu as prefix

- (18) Ge. a. * Er hat versucht, den Brief [_{V°} ver- -zu- stehen].
 b. Er hat versucht, den Brief zu [_{V°} verstehen].
He has tried the letter (under) to (under)stand
 (= 'He has tried to understand the letter.')

V*, separable: ge- as infix

- (19) Ge. a. Er hat den Brief nicht [_{V°} ab- -ge- schickt].
 b. * Er hat den Brief nicht ge- [_{V°} abschickt].
He has the letter not (off) AFF (off)sent (= 'He has not sent off the letter.')

V*, separable: zu as infix

- (20) Ge. a. Er hat versucht, den Brief [_{V°} ab- -zu- schicken]
 b. * Er hat versucht, den Brief zu [_{V°} abschicken]
He has tried the letter (off) to (off)send
 (= 'He has tried to send off the letter.')

For more detail on the *ge-* prefix, see Geilfuß (1998) and Rathert (2003).

2.2 N°-V° complex verbs

The following verbs with N°-V° structure, taken from the lists in Eisenberg (1998:323, (10) & 324, (15)) and Wellmann (1998:449) are further examples of the two types: ²

- (21) **V°, mobile but inseparable** (like *brandmarken*):
- | | | | |
|--------|-----------------------|---------------------------|---|
| Ge. a. | <i>gewährleisten</i> | 'to guarantee-achieve', | i.e. 'to guarantee, to ensure' |
| b. | <i>handhaben</i> | 'to hand-have', | i.e. 'to handle, to implement' |
| c. | <i>lobpreisen</i> | 'to praise.N-praise.V', | i.e. 'to praise' |
| d. | <i>lustwandeln</i> | 'to joy-stroll', | i.e. 'to stroll' |
| e. | <i>maßregeln</i> | 'to measure-rule', | i.e. 'to reprimand' |
| f. | <i>nachtwandeln</i> | 'to night-stroll', | i.e. 'to sleepwalk' |
| g. | <i>sandstrahlen</i> | 'to sand-radiate', | i.e. 'to sandblast' |
| h. | <i>schlussfolgern</i> | 'to conclusion-conclude', | i.e. 'to conclude' |
| i. | <i>wetteifern</i> | 'to contest-strive', | i.e. 'to compete' |
| j. | <i>wetterleuchten</i> | 'to weather-light', | i.e. 'for lightning to flash in the distance' |
- (22) **V*, mobile but separable** (like *stattfinden*):
- | | | | |
|--------|---------------------|----------------------|--|
| Ge. a. | <i>Acht geben</i> | 'to attention give', | i.e. 'to pay attention' |
| b. | <i>Amok laufen</i> | 'to amok run', | i.e. 'to run amok' |
| c. | <i>Eis laufen</i> | 'to ice run', | i.e. 'to ice-skate' |
| d. | <i>Halt machen</i> | 'to stop make', | i.e. 'to stop' |
| e. | <i>Hof halten</i> | 'to court hold', | i.e. 'to hold court' |
| f. | <i>Kopf stehen</i> | 'to head stand', | i.e. 'to stand on one's head' |
| g. | <i>Maß halten</i> | 'to measure hold', | i.e. 'to exercise moderation' |
| h. | <i>preisgeben</i> | 'to prize-give', | i.e. 'to relinquish, to surrender something' |
| i. | <i>Probe singen</i> | 'to sample sing', | i.e. 'to show how well one sings' |

² I have changed Eisenberg's spelling to conform with the 1998 German orthographical reform. The changes introduced in the words in (23), from e.g. *achtgeben* to *Acht geben*, have been the subject of heated debate not only in the public at large but also among linguists, cf. e.g. Bredel & Günther (2000), and Gallmann (1999, 2000). According to the latest changes, obligatory from August 2007, both *achtgeben* and *Acht geben* are allowed.

- | | | | |
|----|------------------------|-------------------|-----------------------------------|
| j. | <i>Schlange stehen</i> | 'to snake stand', | i.e. 'to queue, to stand in line' |
| k. | <i>standhalten</i> | 'to stand-hold', | i.e. 'to stand firm' |
| l. | <i>teilnehmen</i> | 'to part-take', | i.e. 'to take part' |
| m. | <i>Wort halten</i> | 'to word hold', | i.e. 'to keep one's word' |

The two types behave differently both syntactically and morphologically, but in a way which is completely parallel to the situation with the particle verbs in (15)-(16). If the whole complex N° - V° verb is a V° , all of it may undergo verb movement, (23)c, whereas if it is a V^{*} , only its second half (which is a V°) may undergo verb movement, (24)b.³ Of course, if the verb occurs clause-finally, there are no observable differences between the two types, (23)a and (24)a.

V°: mobile but inseparable

- (23) Ge. a. ... ob er die Missstände brandmarkte.
 ... if he the irregularities fire-marked
(= '... whether he denounced the irregularities.')
- b. * Er [v° markte] die Missstände [v° brand [v° t]].
c. Er [v° brandmarkte] die Missstände [v° t].
 He (fire)marked the irregularities (fire)
(= 'He denounced the irregularities.'
(adapted from Eisenberg 1998:322)

V*: mobile but separable

- (24) Ge. a. ... ob die Tagung in Berlin stattfand.
 ... if the conference in Berlin place-found
 (= '... whether the conference took place in Berlin.')

³ Although *stattfinden* thus may split up when *finden* undergoes V2, there are other indications than the orthography that *stattfinden* and the other V* complex verbs make up a complex verb rather than simply being two different constituents of the clause. One such indication is that unless *-finden* itself undergoes V2, *statt-* and *-finden* can never be split, cf. (ib) and (iiib,c), as opposed to the transitive verb *finden* 'find' and its object, cf. (iib) and (ivb,c):

- (i) Ge. a. Die Tagung hat in Berlin [_V* stattgefunden].
b. * Die Tagung hat statt in Berlin gefunden.
The conference has (place) in Berlin (place)_{AFF-found} (= 'The conference has taken place in Berlin.')
- (ii) Ge. a. Peter hat in Berlin [_{VP} das Buch gefunden].
b. Peter hat das Buch in Berlin gefunden.
Peter has (the book) in Berlin (the book)_{AFF-found} (= 'Peter found the book in Berlin.')
- (iii) Ge. a. [_V* Stattgefunden] hat die Tagung in Berlin.
b. * Gefunden hat die Tagung statt in Berlin.
c. * Gefunden hat die Tagung in Berlin statt.
(place)_{AFF-found} has the conference (place) in Berlin (place)
(= 'The conference has taken place in Berlin.')
- (iv) Ge. a. [_{VP} Das Buch gefunden] hat Peter in Berlin, ...
b. Gefunden hat Peter das Buch in Berlin, ...
c. Gefunden hat Peter in Berlin das Buch, ...
(The book)_{AFF-found} has Peter (the Book) in Berlin (the Book)
(= 'The conference has taken place in Berlin.')

The fronted participles in (iii-a) and (iv-a-c) trigger a contrastive focus on the main verb. Examples of such contexts could be for (iii): *The conference took place in Berlin, but it was planned in Stuttgart*, for (iv-a): *Peter found the book in Berlin, but he wrote his paper on it in Stuttgart*, for (iv-b): *Peter found the book in Berlin, but he read it in Stuttgart*, and finally for (iv-c): *Peter found the book in Berlin, but he found the article in Stuttgart*.

- b. 2012 [v° fand] die Tagung in Berlin [v* statt [v° t]].
 c. * 2012 [v* stattfand] die Tagung in Berlin [v* t].
 2012 (place)found the conference in Berlin (place)
 (In 2012, the conference took place in Berlin)

Complex N°-V° verbs of the V° and V* types also differ when it comes to the placement of the past participle prefix *ge-* and of the infinitival marker *zu* (almost parallel to the particle verbs in (17)-(20)). If the whole complex N°-V° verb is a V°, it does not allow the past participle prefix *ge-* at all, and all of it is preceded by the infinitival marker *zu*, whereas if it is a V*, only its second half (which is a V°) is preceded by *ge-* or by *zu*:

V°, inseparable: ge- as prefix

- (25) Ge. a. * Er hat die Missstände [v° brand- ge- markt].
 b. Er hat die Missstände ge- [v° brandmarkt].
 He has the irregularities (fire) AFF (fire)marked
 (= 'He has not denounced the irregularities.')

V°, inseparable: zu as prefix

- (26) Ge. a. * Er hat versucht, die Missstände [v° brand- zu- marken].
 b. Er hat versucht, die Missstände zu [v° brandmarken].
 He has tried the irregularities (fire) to (fire)mark
 (= 'He has tried to denounce the irregularities.')

V*, separable: ge- as infix

- (27) Ge. a. 2012 hat die Tagung in Berlin [v° statt- ge- funden].
 b. * 2012 hat die Tagung in Berlin ge- [v° stattfunden].
 2012 has the conference in Berlin (place) AFF (place)found
 (= 'In 2012, the conference took place in Berlin.')

V*, separable: zu as infix

- (28) Ge. a. 2022 scheint die Tagung in London [v° statt- zu- finden].
 b. * 2022 scheint die Tagung in London zu [v° stattfinden].
 2022 seems the conference in London (place) to (place)find
 (= 'In 2022, the conference would seem to take place in London.')

Neither of the two classes of complex verbs discussed here (complex N°-V° verbs of the V° type and complex N°-V° verbs of the V* type) are immobile, in that V2 is possible in both cases, see (23)c and (24)b.

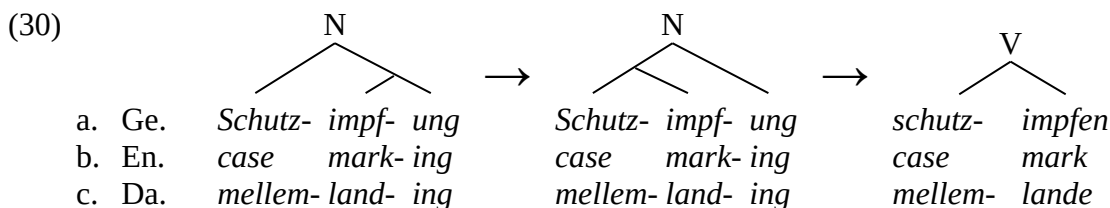
Summing up all of section 2, there are nine logical possibilities (where the underlining shows which parts may undergo V2):

(29)	INSEPARABLE (V2: INCLUDING THE PREFIX)	SEPARABLE (V2: EXCLUDING THE PREFIX)	IMMOBILE (V2: NOT AT ALL)
N+V	a. <u>brand-marken</u>	b. <u>statt-finden</u>	c. <u>schutz-impfen</u>
Prt+V	d. <u>ver-stehen</u>	e. <u>ab-schicken</u>	f. -----
Prt+Prt+V	g. <u>be-[ein-flussen]</u> <u>ver-[aus-gaben]</u>	h. <u>an-[er-kennen]</u> <u>[vor-an]-gehen</u>	i. <u>ur-[auf-führen]</u> <u>vor-[an-melden]</u>

The non-existence of type (29)f is discussed at the end of 3.3 below. The differences between types (29)g and (29)i are discussed at the end of 3.5 below, where it is argued that the verbs under (29)g here should really be under (29)d.

3. Immobile verbs have to respect the requirements for both V° and V^*

I would now like to return to the immobile verbs discussed previously, i.e. the ones which did not allow verb movement. Take as an example the complex verb *schutzimpfen* 'to inoculate', which behaves syntactically exactly like *uraufführen* in (1)-(3) and *bausparen* in (7)-(8) above. It has been derived from the compound noun *Schutzimpfung* (*Schutz* 'protection', *Impfung* 'inoculation') by means of back-formation, which undoes the nominalisation of the second part of the compound by removing the nominalising suffix *-ung*. The result is a so-called pseudo-compound (e.g. Wellmann 1998:449), as *schutzimpfen* was not derived by composition although it appears to be a compound, i.e. *schutz-impfen*. In other words, it is derived exactly like the English verbs *to back-stab* and *to case-mark* or the Danish *mellemlande* 'to betweenland', i.e. 'to stop over in X on the way to Y', and *førsteopføre* 'to first-up-put', i.e. 'to perform a play for the first time' (for more Danish examples, see (48) below):



It is clear that the second half of *schutzimpfen*, i.e. *impfen*, is a verb, cf. the infinitival morphology, but the categorial status of the whole complex verb has not been resolved, i.e. it has not been resolved whether it is a V° or a V^* . I would like to make the rather controversial suggestion that *schutzimpfen* and the other immobile complex verbs above have to fulfill **BOTH** the requirements imposed on complex verbs of the V° type **AND** the requirements imposed on complex verbs of the V^* type.

I would like to suggest that maybe the reason that immobile verbs have to fulfill the requirements imposed on V° is that they are seen as verbal elements that can receive a suffix (because they are derived by removing a nominalising affix) and that the reason that immobile verbs have to fulfill the requirements imposed on V^* is that they clearly consist of two parts ($N^\circ + V^\circ$) each of which is interpretable on its own. Whatever the exact reasons may be, I suggest that the result is that immobile verbs are not specified as being only V^* or as being only V° , and therefore they may only occur in contexts which are compatible with both analyses. (See Fortmann 2007 and Sternefeld 2006:512-519 for alternative analyses, which are semantically based.)

Notice that it is not just a case of the immobile verbs being underspecified for whether they are V° or a V^* . Had that been case, these verbs should be well-formed if the conditions on just one of the two types were fulfilled, i.e. they should not be immobile but hypermobile, i.e. they should be possible in C° both with the first element (like the inseparable type, V° , (15)c/(23)c) and without the first element (like the separable type, V^* , (16)b/(24)b).

3.1 Syntactic consequences

Syntactically, this means that V2 contexts are impossible, as neither the last half of the complex verb, nor the whole complex verb can undergo V2 in more than one of the two analyses.

- In the V° case, the whole complex verb can undergo V2 or other verb movement, (15)c/(23)c, as it is a V° , but the last half of the complex verb cannot, (15)b/(23)b, as this would cause the existence of a trace inside a V° (which is impossible, according to Baker 1988:73).
- In the V^* case, the whole complex verb cannot undergo V2 or other verb movement, (16)c/(24)c, as it is not a V° but a V^* , but the last half of the complex verb can, (16)b/(24)b, as it is a V° , and as such a movement would not cause a word-internal trace (but only a trace internal to V^*).

However, as both V° and V^* complex verbs may occur clause-finally in an embedded clause, so may immobile verbs like *schutzimpfen*.

3.2 Morphological consequences

Morphologically, the requirement that the complex verb may only occur in contexts which are compatible with both analyses means that *ge-* prefixation of the whole complex verb is impossible, as this is incompatible with the V^* analysis: (19)b/(27)b, *ge-* can only be prefixed on a V° , not on a V^* . Exactly the same goes for the infinitival marker *zu*, it cannot occur in front of the whole complex verb, as this is incompatible with the V^* analysis: (20)b/(28)b, *zu* only occurs in front of a V° , not in front of a V^* .

However, the second half of the complex verb is itself a V° under both analyses, and although this V° cannot be moved when it is itself part of another V° , it may be prefixed either by *ge-* or by *zu*, both when it is part of V^* , (19)a/(27)a and (20)a/(28)a, and, by assumption, also when it is part of V° . The latter may look rather unlikely, given the ungrammaticality of *vergestanden* (17)a, *brandgemarkt* (25)a, *verzustehen* (18)a, and *brandzumarken*, (26)a, but I would like to suggest that this ungrammaticality is only caused by a preference for prefixation to apply to as large domains as possible, and so *vergestanden* (17)a, *brandgemarkt* (25)a, *verzustehen* (18)a, and *brandzumarken*, (26)a are only dispreferred because the options *verstanden* (17)b, *gebrandmarkt* (25)b, *zu verstehen* (18)b, and *zu brandmarken*, (26)b are possible.

That "infixation" of *ge-* and *zu* is an option with all types of complex verbs, even with the complex verbs of the V° type, is supported by the following facts:

According to the German orthographical dictionary, *Duden Rechtschreibung*, two of the V° verbs in (21) may have either prefixation or infixation of *ge-*: *gelobpreist* and *lobgepriesen* are both possible past participles of *lobpreisen* 'praise', *gesandstrahlt* and also *sandgestrahlt* are possible participles of *sandstrahlen* 'sandblast'.

A search of the corpus of written German available at the Institut für deutsche Sprache in Mannheim (529 million words, January 2001) turned up the following infixed forms among the complex verbs of the V° type in (21) above:

- (31) Ge. a. 7 cases of *handzuhaben* vs. 528 of *zu handhaben*
b. 1 case of *lobzupreisen* vs. 13 of *zu lobpreisen*
c. 2 cases of *lustzuwandeln* vs. 17 of *zu lustwandeln*
d. 1 case of *maßzuregeln* vs. 40 of *zu maßregeln* / *zu massregeln*

- e. 21 cases of *sandgestrahlt* vs. 3 of *gesandstrahlt*
 f. 2 cases of *wettzueifern* vs. 37 of *zu wetteifern*

All other forms of the verbs mentioned here, and the other verbs in (21) above were only found with prefixed *ge-* and *zu*. Still, in contrast to this somewhat mixed picture, all the verbs in the V^* group, (23), only have one type of forms, with infixation of *-ge-* and *-zu-*. As for the group of immobile verbs, I would also expect them only to have infixed *-ge-* and *-zu-*, and I have to admit that the corpus search turned up two "prefixed" verb forms that go against this:

- (32) Ge. a. 20 cases of *aufzuerstehen* vs. 1 of *zu auferstehen*
 b. 6 case of *zweckzuentfremden* vs. 1 of *zu zweckentfremden*

I conclude that although prefixation of *ge-* and *zu* (*zu handhaben*) is much more frequent than infixation (*handzuhaben*) with the complex verbs of the V^0 type, infixation remains an option.

3.3 Overview

The various possibilities can be summarised as follows:

	$[V^0 N^0 V^0]$, <i>brandmarken</i>	$[V^* N^0 V^0]$, <i>stattfinden</i>	EXAMPLES
(33) V2, LEAVING BEHIND THE FIRST ELEMENT	a. * $[C^0 V^0] \dots [V^0 N^0 t]$ 	b. $[C^0 V^0] \dots [V^* N^0 t]$ 	(23)b/(24)b
(34) V2, PIED PIPING THE FIRST ELEMENT	a. $[C^0 V^0] \dots t$ 	b. * $[C^* V^0] \dots t$ 	(23)c/(24)c
(35) V-FINAL	a. $C^0 [TP \dots [V^0 N^0 V^0]]$	b. $C^0 [TP \dots [V^* N^0 V^0]]$	(23)a/(24)a
(36) PAST PARTICIPLE, <i>ge</i> -INFIX	a. $[V^0 N^0 ge-V^0]$	b. $[V^* N^0 ge-V^0]$	(25)a/(27)a
(37) PAST PARTICIPLE, <i>ge</i> -PREFIX	a. $ge-[V^0 N^0 V^0]$	b. * $ge-[V^* N^0 V^0]$	(25)b/(27)b
(38) INFINITIVE, <i>zu</i> -INFIX	a. $[V^0 N^0 zu V^0]$	b. $[V^* N^0 zu V^0]$	(26)a/(28)a
(39) INFINITIVE, <i>zu</i> -PREFIX	c. $zu [V^0 N^0 V^0]$	d. * $zu [V^* N^0 V^0]$	(26)b/(28)b

Under the assumption that the immobile verbs like *schutzimpfen* have to fulfill both the requirements imposed on complex verbs of the V^0 type and the requirements imposed on complex verbs of the V^* type, we expect to find them only in structures which are possible in both columns. These cases are (35)a,b, clause-final finite verbs in embedded clauses, and (36)a,b and (38)a,b, "infixation" of *ge-* and of *zu* (even though (36)a and (38)a would seem to be very infrequent).

One way of describing this situation is that the immobile verbs are in the intersection of the two sets of verbs, one which comprises complex verbs of the V^0 type, and another which comprises complex verbs of the V^* type:

- (40) Ge.
- | V^0 | | V^* |
|---|---|--|
| $[V^0 [N^0 \textit{brand}][V^0 \textit{marken}]]$ | <i>uraufführen</i>
<i>voranmelden</i>
<i>bausparen</i>
<i>schutzimpfen</i> | $[V^* [N^0 \textit{statt}][V^0 \textit{finden}]]$ |
| $[V^0 [P_{\text{rt}} \textit{ver}][V^0 \textit{stehen}]]$ | | $[V^* [P_{\text{rt}} \textit{ab}][V^0 \textit{schicken}]]$ |
| | | |
| | | |

One fact which is striking is that there are hardly any particle verbs (to be exact: hardly any particle verbs with only one particle) which belong to the intersection of the two sets, i.e. there are hardly any immobile particle verbs (with the possible exception of *vorglühen/zwischenlanden*, (10)n,p). I think that this is due to the fact that the verbs which are immobile are not semantically transparent, i.e. we need real world knowledge to interpret what *bausparen* 'building-save' means, and thus semantics can offer no help in determining whether *bausparen* should belong to the V° or V* class. Particle verbs never find themselves in this situation: If they are semantically opaque, then they are also lexicalised and as such established as belonging either to the V° or the V* group (e.g. *umbringen*, *aufhören*, *verstehen*, where it is not obvious what the contribution of *um-/auf-/ver-* to the semantics of the verb is). If they are not established or lexicalised, then they (or rather their particles) have a transparent semantics/morphology, which will put them clearly into either the V° or the V* class.

3.4 The considerable variation from speaker to speaker

This account (in particular, the fact that the semantics of the verbs in question is nontransparent) is also compatible with the fact that there is considerable variation from speaker to speaker in whether they find a given example well-formed or not when confronted with potentially immobile back-formation verbs. This is because it is a property of the individual complex verb in the lexicon whether it is a V° or a V* (or indeed both). Which class a given complex verb belongs to depends on many factors which vary from speaker to speaker, including how frequently it is used.

As Eisenberg (1998:324) and Eschenlohr (1999:156) also say, the judgements on these data are subject to a lot of variation. One example is that Eisenberg (1998:324, (15)) classifies *notlanden*, 'to emergency-land', i.e. 'to make an emergency landing', among the V* verbs, so that *notlanden* may undergo V2 if *not* stays behind while *landen* moves to C°, like *stattfinden* in (24). Gallmann (1999:298, (90)), on the other hand, classifies *notlanden* among the immobile verbs, like *uraufführen* in (1)-(3) and *bausparen* in (7)-(8) above.

A search of the corpus of written German available at the Institut für deutsche Sprache in Mannheim (533 million words, February 2001) turned up the following figures showing that a few V2 cases do occur, even though informants reject them:

(41) Ge. a.	Out of 153 finite cases of <i>auferstehen</i> ,	15 were V2 (9.8%)
b.	Out of 4 finite cases of <i>auferwecken</i> ,	0 were V2 (0 %)
c.	Out of 2 finite cases of <i>bausparen</i> ,	0 were V2 (0 %)
d.	Out of 1 finite case of <i>erstaufführen</i> ,	0 were V2 (0 %)
e.	Out of 2 finite cases of <i>gefriertrocknen</i> ,	1 was V2 (50 %)
f.	Out of 18 finite cases of <i>hohnsprechen</i> ,	0 were V2 (0 %)
g.	Out of 2 finite cases of <i>manndecken</i> ,	0 were V2 (0 %)
h.	Out of 26 finite cases of <i>notlanden</i> ,	1 was V2 (3.8%)
i.	Out of 1 finite case of <i>rückfragen</i> ,	0 were V2 (0 %)
j.	Out of 4 finite cases of <i>sonnenbaden</i> ,	0 were V2 (0 %)
k.	Out of 2 finite cases of <i>strafversetzen</i> ,	0 were V2 (0 %)
lo.	Out of 66 finite cases of <i>uraufführen</i> ,	0 were V2 (0 %)
m.	Out of 5 finite cases of <i>voranmelden</i> ,	0 were V2 (0 %)
n.	Out of 42 finite cases of <i>zweckentfremden</i> ,	10 were V2 (23.8%)
o.	Out of 19 finite cases of <i>zwischenlanden</i> ,	0 were V2 (0 %)

(Notice also that if two of the fifteen immobile verbs that are found in finite form were excluded from the count, viz. *auferstehen* and *zweckentfremden*, the number of counterexamples would fall from a total of 27 to only 2 (or from 7.8% to 1.3%). Notice further that these two verbs were the only

two that were found with the infinitival marker *zu* prefixed to the entire complex verb, cf. (32) above. In other words, maybe these two verbs are in the process of becoming separable, i.e. V*.)

3.5 Verbs with two prefixed particles

This analysis can also be applied to those immobile verbs which have two prefix-like parts, the second of which is a separable prefix, i.e. the Dutch verbs in (4) above and the following German verbs:

- (42) Ge. a. *uraufführen* 'to original-on-put', i.e. 'to put on (a play) for the very first time'
b. *erstaufführen* 'to first-on-put', i.e. 'to put on (a play) for the very first time'
c. *voranmelden* 'to pre-to-report', i.e. 'to preregister'
d. *vorankündigen* 'to pre-to-announce', i.e. 'to announce in advance'
e. *voreinchecken* 'to pre-in-check', i.e. 'to check in in advance'

The reason why these verbs are immobile has to do with the verb formed by the inner particle and the final V°, i.e. *-auf-führen*, *-an-melden* and *-ein-checken*.

I have already suggested above that

- complex verbs containing separable prefixes are V*

and this also goes for *-auf-führen*, *-an-melden* and *-ein-checken*, given that *auf*, *an* and *ein* are separable particles. Now I would like to add the suggestion that

- the element to which German *ur-*, *erst-*, *vor-*, and Dutch *her-* are prefixed must be interpretable as a V°

We therefore find ourselves in the same double requirement situation as above (presumably due to the fact that also these verbs came into existence through back-formation), where the *-aufführen* that occurs in *uraufführen* has to conform to both the requirements imposed by the V° analysis (e.g. *-auf-* cannot be left behind during verb movement), and those imposed by the V* analysis (e.g. *-auf-* cannot be taken along during verb movement), which means both that the *-aufführen* that occurs in *uraufführen* can not occur in V2 at all, only clause-finally, and that *ge-* and *zu* can precede only *-führen*.

This account has a distinct advantage over the one that relies on the two prefix-like parts imposing different requirements (i.e. that in *uraufführen*, *ur-* is non-separable and *auf-* is separable). The point is that such an account could not be applied to the immobile *voranmelden*, *vorankündigen*, and *voreinchecken*, (42)c,d,e. The immobility of these three verbs cannot be linked to either of the two prefixes/particles being non-separable, because both *vor-* and *an-* (and *ein-*) are actually separable, and yet *voranmelden*, *vorankündigen*, and *voreinchecken* belong to the immobile verbs.

That *vor-* and *an-* are both separable can be seen from the fact that when either *vor* or *an* is the only particle, they are always separable, e.g. in *annehmen* 'assume', *anschauen* 'look at', or *vornehmen* 'plan, carry out', *vortäuschen* 'simulate', *vorgehen* 'go first'.

That *vor-* and *an-* are both separable can also be seen from the large number of verbs where *voran-* can be left behind during V2: e.g. *voranbringen* 'advance something', *vorangehen* 'go in front', *vorankommen* 'make headway', *vorantreiben* 'push ahead'.

The relevant difference between *voranmelden* and *vorankündigen*, both immobile, and *vorangehen*, *vorantreiben* etc., which are well-formed in V2 clauses, is not that the prefixes/particles impose different requirements, but instead that the two types have different structures:

- (43)
- | | | | | | | | | |
|-----|----|-------|-----|--------|-----|-------|------|-------------|
| | | V | | | | V | | |
| | | └─┬─┘ | | | | └─┬─┘ | | |
| | | / \ | | | | / \ | | |
| Ge. | a. | vor- | an- | melden | vs. | b. | vor- | an- treiben |

(This is a difference which is also supported by the differences in interpretation and in accentuation.)

Summary: Only in case of *[vor[anmelden]]*, is there a V*, viz. *[anmelden]*, that now also has to fulfill the requirements imposed on a V°, because *vor-* cannot be prefixed on a V*. In the case of *[[voran]treiben]*, there is a complex particle, *voran*, which together with the verbal part *treiben*, form a V*, but there is nothing which has to be interpreted both as a V° and as a V*, and so *[[voran]treiben]* may undergo V2 like any other combination of a separable particle and a verb.

A different but related question is what the difference is between the verbs in (42) above, e.g. *ur-[auf-führen]* or *vor-[an-melden]*, which belong to the type (29)i above and the following verbs listed at the end of section 2 as belonging to type (29)g, which are inseparable and not immobile:

- (44) Ge. a. *be-[auf-tragen]* 'to PRT-on-carry', i.e. 'to give someone a particular task'
 b. *be-[ein-drucken]* 'to PRT-in-press', i.e. 'to impress'
 c. *be-[ein-flussen]* 'to PRT-in-flow', i.e. 'to influence'
 d. *ver-[aus-gaben]* -to PRTout-give', i.e. 'to give more than one has, to wear oneself out'
 (TO BE REVISED BELOW !!!)

Under the analysis suggested here, the verbs in (44) would be predicted to be immobile verbs, just like the verbs in (42) above. The prefixation by the outer particles (*be-*, *vor-*) require the inner particle and the verb to form a V° , whereas the inner particle itself is a separable one (*auf-*, *ein-*, *aus-*) requiring the inner particle and the verb to form a V^* , much like *ur-* and *vor-* require the inner particle and the verb (in *ur-[auf-führen]* and *vor-[an-melden]*) to form a V° whereas the inner particle itself is a separable one (*auf-*, *an-*) requiring the inner particle and the verb to form a V^* .

However, there are reasons to assume that the analysis in (44) is not the correct one. As opposed to the verbs in (42) above, the verbs in (44) do not arise through back-formation but through conversion. *be-* and *ver-* are purely verbal prefixes, which are applied to the nouns *Auftrag* 'task', *Eindruck* 'impression', *Einfluß* 'influence' and *Ausgabe* 'expenditure' (cf. also that the vowels in *-drucken*, *-flussen*, and *-gaben* are different from their corresponding verbs, which are *drücken* 'press', *fließen* 'flow', and *geben* 'give'). This means that the structures in question are not as given in (44), but rather:

- (45) Ge. a. *be-auftragen* 'to PRT-on-carry', i.e. 'to give someone a particular task'
 b. *be-eindrucken* 'to PRT-in-press', i.e. 'to impress'
 c. *be-einflussen* 'to PRT-in-flow', i.e. 'to influence'
 d. *ver-ausgaben* -to PRT-out-give', i.e. 'to give more than one has, to wear oneself out'

In other words, these are not examples of type (29)g but rather of type (29)d, i.e. inseparable verbs with only one particle. This does not necessarily mean that no verbs of type (29)g (inseparable particle verbs with two particles) could possibly exist, but only that both particles would have to be inseparable.

4. Why a VO-language like Danish has no immobile verbs

In Danish (and in the other Germanic VO-languages), no finite verbs exist that are possible in some positions, e.g. in embedded clauses, but not in others, e.g. in main clauses. It is important that the crucial difference here is OV vs. VO, rather than e.g. V2 vs. non-V2, as suggested in McIntyre (2002).

As far as potential verbs derived by back-formation are concerned, there are only two relevant groups. One consists of verbs that do not exist, even though related nouns that could be the source for back-formation do exist:

- (46) Da. a. * *båndoptage* 'to tape-up-take', which should mean 'to record on tape'
 b. * *bjergbestige* 'to mountain-climb', which should mean 'to climb mountains'
 c. * *bogbinde* 'to book-bind', which should mean 'to bind books'
 d. * *boligopspare* 'to home-up-save', which should mean 'to save for buying a home'
 e. * *bugtale* 'to stomach-speak', which should mean 'to ventriloquise'
 f. * *hovedregne* 'to head-reckon', which should mean 'to do mental arithmetic'
 g. * *solbade* 'to sun-bathe'
 h. * *vandkøle* 'to water-cool'

The other group consists of back-formation verbs that do exist. I have split this group into two subgroups, because I do not find the (47) group completely well-formed (although all the verbs in both (47) and (48) may be found in two Danish dictionaries from 1996, *NuDansk Ordbog* and *Retskrivningsordbogen*).

- (47) Da. a. ? *databehandle* 'to data-treat', i.e. 'to computerise, to process on a computer'
 b. ? *gæsteforelæse* 'to guest-lecture'
 c. ? *kæderyge* 'to chain-smoke'
 d. ? *maskinskrive* 'to machine-write', i.e. 'to type'
 e. ? *nydanne* 'to new-form', i.e. 'to construct, to coin'
 f. ? *prisgive* 'to prize-give', i.e. 'to relinquish, to surrender something'
 g. ? *strejkelamme* 'to strike-paralyze', i.e. 'to paralyze through a labour strike'

- (48) Da. a. *dagdrømme* 'to day-dream'
 b. *deltage* 'to part-take', i.e. 'to take part'
 c. *dybfryse* 'to deep-freeze'
 d. *førsteopføre* 'to first-up-put', i.e. 'to perform a play for the first time'
 e. *hjernevaske* 'to brain-wash'
 f. *iscenesætte* 'to in-scene-put', i.e. 'to direct, to engineer'
 g. *lovprise* 'to praise.N-praise.V', i.e. 'to praise'
 h. *mandsopdække* 'to man-cover', i.e. 'to mark someone in soccer (man-to-man marking)'
 i. *mavelande* 'to stomach-land', i.e. 'to land on one's stomach'
 j. *mellemlande* 'to between-land', i.e. 'to stop over in X on the way to Y'
 k. *planlægge* 'to plan-lay', i.e. 'to plan'
 l. *støvsuge* 'to dust-suck', i.e. 'to vacuum-clean'
 m. *sygemelde* 'to sick-report', i.e. 'to call in sick, to report someone as sick'
 n. *uropføre* 'to original-up-put', i.e. 'to perform a play for the first time'

It is clear, however, that in so far as the verbs in (47) and (48) are well-formed, they may occur in finite form in all positions in which finite verbs may occur (see also Hansen 1967, III:177). Thus the question arises why Danish (and presumably the other Germanic VO-languages) do not have any verbs like the Dutch, German, and Swiss German immobile verbs.

The analysis of such verbs suggested in section 3 above was that they have to fulfill the requirements imposed on V° complex verbs as well as the requirements imposed on V* complex verbs.

I would like to suggest that the reason why such verbs do not exist in Danish is that there is no way Danish verbs could possibly satisfy the two sets of requirements, due to the directionality variation.

In the (inseparable) V° cases, the verbal part of the complex verb is the **rightmost** one, (47) and (48), as in [V° [N° *plan*][V° *lægge*]] 'to plan'. (49)b shows that *planlægge* is a V° and (50) shows that the order is N-V:

V°, inseparable

- (49) Da. a. * Lægger de plan at holde konferencen i Reykjavík?
 b. Planlægger de at holde konferencen i Reykjavík?
(Plan)lay they (plan) to hold conference-the in Reykjavík?
 (= 'Are they planning to hold the conference in Reykjavík?')

- (50) Da. a. * Hvorfor kunne de ikke lægge plan at holde konferencen her?
 b. Hvorfor kunne de ikke planlægge at holde konferencen her?
Why could they not plan to hold conference-the here

In the (separable) V* cases (see (55) below for more examples), the verbal part of the complex verb is the **leftmost** one, as in [V* [V° *finde*][N° *sted*]] 'to take place'. (51)a shows that *finde sted* is a V* and (52) shows that the order is V-N:

V*, separable

- (51) Da. a. Finder konferencen sted i Reykjavík?
 b. * Stedfinder konferencen i Reykjavík?
(Place)find conference-the (place) in Reykjavík?
 (= 'Is the conference taking place in Reykjavík?')

- (52) Da. a. Hvorfor kunne konferencen ikke finde sted her?
 b. * Hvorfor kunne konferencen ikke stedfinde her?
Why could conference-the not take place here

The difference between the Danish separable complex verb [V* [V° *finde*][N° *sted*]] and the German separable complex verb [V* [N° *statt*][V° *finden*]] is thus completely parallel to the differences between entire VPs in the two languages, Danish is VO and German OV. In other words, the intersection between the two sets, illustrated for German in (40), is necessarily empty in Danish:

- (53) Da.
- | | | |
|---|-----|---|
| V°
[V° [N° <i>plan</i>][V° <i>lægge</i>]]
[V° [Prt <i>for</i>][V° <i>stå</i>]]
(V° follows N/Prt) | --- | V*
[V* [V° <i>finde</i>][N° <i>sted</i>]]
[V* [V° <i>sende</i>][Prt <i>afsted</i>]]
(V° precedes N/Prt) |
|---|-----|---|

- (54) Da. (translation of (53))

V°	V*
<i>planlægge</i> 'to plan-lay', i.e. 'to plan'	<i>finde sted</i> 'to find place', i.e. 'to take place'
<i>forstå</i> 'to fore-stand', i.e. 'to understand'	<i>smide ud</i> 'to throw out'

Here are some more examples of the V* type (more can be found in the literature on Danish under the heading "unit accentuation", e.g. Thomsen 1992 or Grønnum 1998:206):

- (55) Da. a. *gå amok* 'to go amok'
 b. *give agt* 'to give attention', i.e. 'to pay attention'
 c. *gøre holdt* 'to make stop', i.e. 'to stop'
 d. *holde måde* 'to hold measure', i.e. 'to exercise moderation'
 e. *holde ord* 'to hold word', i.e. 'to keep one's word'
 f. *holde stand* 'to hold stand', i.e. 'to stand firm'
 g. *tage del* 'to take part'
 h. *vække opsigt* 'to awake attention', i.e. 'to attract attention'
- The reason why a VO-language like Danish has no immobile verbs is thus that it is simply not possible for any verbs to satisfy both the requirements on complex V° verbs

(which are Prt-V°) and the ones on complex V* verbs (which are V°-Prt). This account therefore explains why Danish "doubly-affixed" verbs similar to *uraufführen* and the other doubly prefixed verbs are not immobile. In Danish, the following verbs are of this type:

- (56) Da. a. *genopblomstre* 'to re-up-blossom', i.e. 'to experience a renaissance'
 b. *genopblusse* 'to re-up-flare', i.e. 'for e.g. hostilities to break out again'
 c. *genopsætte* 'to re-up-put', i.e. 'to put on a play again'

These may all undergo V2, (57)a), even though without the prefix *gen-* 're-', they are impossible in V2 clauses unless the (separable) inner particle *op-* 'up' is left behind, (58)a,b):

- (57) Da. a. I maj genopblussede stridighederne med fornyet styrke.
 b. *I maj opblussede stridighederne gen med fornyet styrke.
 c. *I maj gen blussede stridighederne op med fornyet styrke.
 d. *I maj blussede stridighederne genop med fornyet styrke.
In May (re)(up)flared hostilities-the (re)(up) with renewed force
 (= 'In May the hostilities broke out again with renewed force.')

- (58) Da. a. *I maj opblussede stridighederne med fornyet styrke.
 b. I maj blussede stridighederne op med fornyet styrke.
In May (up)flared hostilities-the (up) with renewed force
 (= 'In May the hostilities broke out with renewed force.')

The point here is similar to the one above, namely that the requirements for V* are violated even before the new verb with *gen-*, e.g. *genopblusse*, is formed, because V* (i.e. with a separable particle) does not allow the order particle-verb, but only verb-particle. Therefore *opblusse* has already been forced into being a V° only, and the fact that prefixation of *gen-* requires *opblusse* to be a V° does not change anything. The crucial question is thus whether *genopblusse* is a possible verb or not, and not whether it occurs in one position or the other.

5. Conclusion

In this hand-out, I have suggested a somewhat radical analysis of the immobile verbs in Dutch, German, and Swiss German. The suggestion was that for reasons of underspecification, these immobile verbs have to fulfill **both** the requirements imposed on complex verbs of the V° type (= verbs with non-separable prefixes) **and** the requirements imposed on complex verbs of the V^* type (= verbs with separable prefixes). This results in such verbs being morphologically unexceptional, i.e. they have a full set of forms, but syntactically peculiar (immobile), i.e. they can only occur in their base position, where no movement has taken place. Any kind of movement is incompatible with either the V° requirements or the V^* requirements.

The analysis here has thus accounted for:

- why these immobile verbs include verbs with only one prefix-like part (because they are created through back-formation and are semantically opaque) and also
- why the single prefix-like part in these verbs may NOT be a particle (particle verbs are either semantically transparent and then the particle determines V° or V^* , or they are opaque, and then they are lexicalised as either V° or V^*),
- why these immobile verbs include all two-particle verbs with the structure [Prt [Prt V]] where the inner (i.e. rightmost) particle is a separable particle, including verbs with two separable particles as in e.g. German *voranmelden* 'preregister' and *vorankündigen* 'announce in advance' (because the outer separable particle requires a V° but the inner separable particle produces a V^*),
- why there is such a high amount of individual speaker variation as to whether a given verb belongs to this group or not (because it is a property of the individual complex verb in the lexicon whether it is a V° or a V^* or unspecified, and this depends on many factors which vary from speaker to speaker, including how frequently the verb in question is used),
- and finally also for why such verbs are not found in Germanic VO-languages like English and Scandinavian (there is no way that any verb could simultaneously satisfy the V° requirements, which include a prefixed particle, and the V^* requirement, which include a postposed particle).

Whereas I thus disagree with Haider (1993:62) and Koopman (1995) about the details of the morpho-syntactic analysis of the individual verbs, I agree with these two works about the consequences for the analysis of verb movement in Dutch, German, and Swiss German. The reason why it is only possible for finite forms of these verbs to occur in clause-final position in embedded clauses, is that this position is the base-generated position, and thus no conflict can arise as to whether the prefix-like part must or must not be carried along under verb movement.

Thus the fact that several OV-Germanic verbs, not just one, behave in this way provides further support for the conclusion that the clause-final position of finite verbs in embedded clauses is the same position that non-finite verbs have in all clauses (presumably inside their own VP and definitely below T°). In other words, Dutch, German, and Swiss German do not have V° -to- T° movement.

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