



## Immobile complex verbs in Germanic\*

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**Abstract.** Certain complex verbs in Dutch, German, and Swiss German do not undergo verb movement. The suggestion to be made in this article is that these “immobile” verbs have to fulfill both the requirements imposed on complex verbs of the V<sup>o</sup> 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. Any movement is incompatible with either the V<sup>o</sup> requirements or the V\* requirements.

Haider (1993, p. 62) and Koopman (1995), who also discuss 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., German *bauchreden*/Dutch *buikspreek* ‘to ventriloquize’).

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

- why immobile verbs include verbs with only one prefix-like part (and why this single prefix-like part may NOT be a particle),
- why immobile verbs even include verbs with two prefix-like parts, where each of these are separable particles (as in, e.g., German *voranmelden* ‘preregister’),
- why there is such a great amount of speaker variation as to which verbs are immobile,
- why such verbs are not found in Germanic VO-languages such as English and Scandinavian.

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### 1. German *uraufführen*

There are three types of complex verbs in Dutch, German, and Swiss German: separable, inseparable, and immobile, of which the first two types are much less controversial than the third type.

Separable complex verbs leave their prefix (or particle) behind when they undergo verb movement, e.g., V2 (verb second). Inseparable complex verbs take their prefix (or particle) along when they undergo verb movement. For examples of these, please refer to Section 4 below.

For the third type, the immobile complex verbs, it cannot be determined whether the prefix (or particle) is separable or not because the verb does not occur in contexts that would allow this to be determined, i.e., the verb does not leave its base position.

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) a. Sollten sie das Stück uraufführen? (German)  
           *should they the play original-on-put.INF*  
 b. Haben sie das Stück uraufgeführt?  
           *have they the play original-on-put.PPLE*

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) ... ob sie das Stück uraufführten (German)  
       ... *if they the play original-on-put.3.PL.PAST*

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

- (3) a. \*Uraufführten sie das Stück \_\_\_\_\_ ? (German)  
 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*)

Following Höhle (1991), Haider (1993, p. 62) suggests the following analysis (an English summary of the argument may be found in Haider 2001, pp. 70–73): *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 ((3a and b)); or *ur-* is left behind, violating its requirements ((3b and d)); or what is moved is not a constituent ((3c)).

Consequently, the only well-formed sentences with this verb are ones where the verb is not moved at all: (1a and b) and (2).

The fact that *uraufführen* may take on a finite form if and only 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 (i.e., that it is of the same kind as the position that the underlined non-finite verb has in (1a and b)) 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, p. 62), this means that German finite verbs in clause-final position in embedded clauses have not undergone any movement. This in turn means that German does not have V°-to-I° movement, assuming that a characteristic of V°-to-I° movement (as opposed to other kinds of movement, including V2) is that all finite verbs obligatorily undergo this movement (which is generally assumed to be the case, e.g., in the Romance languages and in those Germanic VO-languages that have V°-to-I° movement, cf., e.g., Vikner 1997, 2001, Rohrbacher 1999, and references therein). Whether German does or does not have V°-to-I° movement has been an on-going debate for at least 15 years. The point is that, as opposed to V°-to-I° movement in a VO-language, V°-to-I° movement in an OV-language is often assumed to be string vacuous.

While I agree with the conclusions in the preceding paragraph (that the data concerning immobile verbs show that German does not have V°-to-I° 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 3 and 5 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’ (in which both prefixes/particles are separable) or *strafversetzen* ‘transfer for disciplinary reasons’ (in which both prefixes/particles are non-separable).

## 2. Dutch *herinvoeren*

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

- (4) *herindelen* 'to re-in-split', i.e., 'to redivide'  
*herindijken* 'to re-in-dike', i.e., 'to put within dikes again'  
*herinvoeren* 'to re-in-lead', i.e., 'to reintroduce'  
*heruitgeven* 'to re-out-put', i.e., 'to republish'  
*heruitzenden* 'to re-out-send', i.e., 'to rebroadcast'
- (5) a. ... omdat ze vorig jaar deze wet hebben heringevoerd (Dutch)  
 ... because they last year this law have re-intro-duced. PPLE  
 b. ... omdat ze vorig jaar deze wet herinvoerden  
 ... because they last year this law re-introduced.3.PL.PAST  
 (Koopman 1995, p. 141, (6d) and (5d))
- (6) a. \*Deze wet herinvoerden                    ze vorig jaar \_\_\_\_\_ (Dutch)  
 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)*  
 ((6a) from Koopman 1995, p. 141, (4d))

Koopman (1995, p. 143) adapts and elaborates Haider's (1993, p. 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, pp. 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  $V^{\circ}$ -to- $I^{\circ}$  movement) in examples like (2) and (5b).

It seems to me that the conclusions concerning verb movement drawn by Haider (1993, p. 62) and Koopman (1995) must be on the right track even if I disagree with the analyses themselves.

To see that the data concerning immobile verbs are incompatible with the assumption of obligatory  $V^\circ$ -to- $I^\circ$  movement, let us consider what a potential analysis of immobile verbs would look like under the assumption that  $V^\circ$ -to- $I^\circ$  movement obligatorily applies in German (and Dutch).

The only possible analysis of immobile verbs which is compatible with  $V^\circ$ -to- $I^\circ$  movement having applied in (2) and (5b) (i.e., an analysis which is compatible with German and Dutch having  $V^\circ$ -to- $I^\circ$  movement) would be that the ungrammaticality of (3) and (6) results from the blocking of an obligatory checking procedure (e.g., Rizzi's 1996, p. 64, *wh*-criterion) that takes place at some point after  $V^\circ$ -to- $I^\circ$  movement has taken place (i.e., in  $C^\circ$ ). This would seem to be the only way to explain why *uraufführten* and *herinvoerden* cannot undergo V2 ((3) and (6)) when they may undergo  $V^\circ$ -to- $I^\circ$  movement, as shown by (2) and (5b), still under the assumption that German and Dutch have (obligatory)  $V^\circ$ -to- $I^\circ$  movement.

The problem with such an account is that the particles/prefixes that would have to block checking in  $C^\circ$  could not possibly block checking in  $I^\circ$  (or  $Agr^\circ$  or  $T^\circ$  or whatever the landing site of  $V^\circ$ -to- $I^\circ$  movement is), which makes working out exactly what it is that is checked in  $C^\circ$  and in  $I^\circ$  very difficult. If  $I^\circ$  can check a finite verb across such particles/prefixes, why should  $C^\circ$  not be able to do the same thing? Even though there may be a difference in that  $C^\circ$  may have to check the verb (stem) itself, and  $I^\circ$  may only have to check the finite verb ending, it does not seem very likely that  $C^\circ$  should not be able to check the verb across the finite verbal ending, given that in other cases  $C^\circ$  has no trouble doing such checking across the finite verbal ending: all well-formed verbs in  $C^\circ$  (i.e., the finite verb in all well-formed main clauses) not only may but actually must have a finite ending.

As I stated above, both Haider's and Koopman's analyses only work for verbs with two prefixes: Haider's (1993, p. 62) analysis needs the prefixes to conflict, and Koopman's (1995, p. 159) analysis needs a second prefix to violate the strict c-command requirement. In Section 5 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 3 below, I will discuss immobile verbs that only have one prefix-like part.



*manndecken* ‘to man-cover’, i.e., ‘to mark someone in soccer (man-to-man marking)’

*preiskegeln* ‘to prize-bowl’, i.e., ‘to play skittles in order to win a prize’

*punktschweißen* ‘to spot-weld’

*schutzimpfen* ‘to protection-inoculate’, i.e., ‘to inoculate’

*strafversetzen* ‘to punishment-transfer’, i.e., ‘to transfer for disciplinary reasons’

*teilzahlen* ‘to part-pay’, i.e., ‘to pay by instalments’

*wettturnen* ‘to contest-exercise’, i.e., ‘to do gymnastics in a competition’

A search through the electronic versions of two Duden dictionaries of German, the 1993 *Duden Universal Wörterbuch* and the 2000 *Duden Rechtschreibung*<sup>1</sup> 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) *aufstehen* ‘to up-rise’, i.e., ‘to rise from the dead’  
*aufwecken* ‘to up-wake’, i.e., ‘to raise from the dead’  
*erstaufführen* ‘to first-on-put’, i.e., ‘to perform a play for the first time’  
*feuerverzinken* ‘to fire-zinc’, i.e., ‘to rustproof something by immersion in liquid zinc’  
*gefriertrocknen* ‘to freeze-dry’  
*gegensprechen* ‘to counter-speak’, i.e., ‘to speak on a two-way intercom’  
*generalüberholen* ‘to general-overhaul’, i.e., ‘to give something a general overhaul’

*hartlöten* ‘to hard-solder’, i.e., ‘to solder at more than 450 °C’  
*hohnlächeln* ‘to scorn-smile’, i.e., ‘to smile scornfully’  
*hohnsprechen* ‘to scorn-speak’, i.e., ‘to fly in the face of something’  
*prämiensparen* ‘to prize-save’, i.e., ‘to save in such way that a prize may be won’  
*sonnenbaden* ‘to sun-bathe’  
*voranmelden* ‘to pre-at-report’, i.e., ‘to preregister, to book, e.g., a ticket’  
*vorglühen* ‘to pre-glow’, i.e., ‘to preheat a diesel engine’  
*zweckentfremden* ‘to purpose-alienate’, i.e., ‘to use for a different purpose’  
*zwischenlanden* ‘to between-land’, i.e., ‘to stop over in X on the way to Y’

A brief check of Dutch (Norbert Corver, p.c.) shows that at least the following Dutch verbs behave the same way:

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

Strictly speaking, some of these verbs have a structure similar to *uraufführen* and the other verbs discussed in Section 1 above: in *aufstehen*, *aufwecken*, *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 in which the second of the prefix-like parts, i.e., *auf-* and *an-*, is a separable particle (see Section 5 below).

Another question is of course whether examples of either kind exist in the other Germanic OV-languages. In (4) and (11) above, we saw that both kinds are attested in Dutch.

According to Cooper (1994, p. 47), the Zürich Swiss German versions of *uraufführen* (*uruffüere*) and the verbs in (7) 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 (i.e., in 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.):

- (12) a. Uf em Wääg vo Züri uf New York müesse mer in  
Paris zwüschelände (Swiss German)  
*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  
zwüschegelegdet  
*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

- (13) a. \* *Zwüschelande* mer eigentlech in Paris?  
b. \* *Lande* mer eigentlech in Paris zwüsche?  
(*between-*)*land* we actually in Paris (*between*)  
Intended: Will we actually have a stopover in Paris?

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.

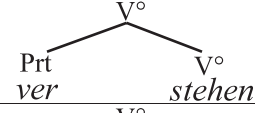
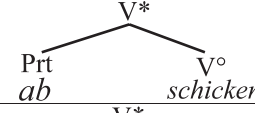
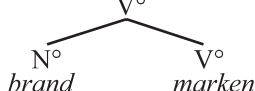
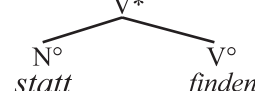
#### 4. Complex verbs: $V^\circ$ or $V^*$

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 continuing the discussion of immobile verbs in Section 5 below, I would like to discuss complex verbs in German 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:  $V^\circ$  and  $V^*$ . One option is that the complex verb is of exactly the same status as a simplex verb,  $V^\circ$  (result: verbs with non-separable prefixes). The other option, using the notation, of e.g., Booij (1990), is that the complex verb constitutes a  $V^*$  (result: verbs with separable prefixes,  $V^*$  being interpreted as more than  $V^\circ$  but possibly less than  $V'$ ). This follows a suggestion for German made by Haiden (1997, p. 105), Wurmbbrand (1998, p. 271), and many others, namely that verb and separable particle form a lexical unit but not necessarily also a syntactic  $X^\circ$ -constituent. For more discussion of particle verbs in Danish, German, and Yiddish along such lines, see, e.g., Vikner (2001, pp. 33–49).

Examples of  $V^\circ$  (inseparable) are [ $V^\circ$  [Prt *ver*] [ $V^\circ$  *stehen*]] ‘to understand’ among the Prt- $V^\circ$  complex verbs, and [ $V^\circ$  [ $N^\circ$  *brand*] [ $V^\circ$  *marken*]] ‘to fire-mark’, i.e., ‘to brand, to denounce’, among the  $N^\circ$ - $V^\circ$  complex verbs.

Examples of V\* (separable) are [V\*[Prt *ab*][V° *schicken*]] ‘to send off’ among the Prt-V° complex verbs, and [V\*[N° *statt*][V° *finden*]] ‘to place-find’, i.e., ‘to take place’, among the N°-V° complex verbs:

(14)	inseparable	separable
Prt+V compounds	a. 	b. 
N+V compounds	c. 	d. 

Let us first consider those complex verbs in which the first part is a particle.

Particle verbs that are V° are mobile but inseparable. (16a) is ruled out as a case of excorporation, i.e., there is a trace inside V°, which is impossible, according to Baker (1988, p. 73):

(15) Den Brief wird er nicht verstehen (German)  
*the letter will he not understand*

(16) a. \*Den Brief steht er nicht [V° ver [V° t]](German)  
b. Den Brief versteht er nicht [V° t]  
*the letter (under)stands he not (under)*

Particle verbs that are V\* are mobile but separable (actually, it is the V° contained within the V\* that is mobile). In (18b), C° contains a V\*, not a V°, but as a V\* is larger than an X°, V\* cannot occur in C°:

(17) Den Brief wird er nicht abschicken (German)  
*the letter will he not offsend*

(18) a. Den Brief schickt er nicht [V\* ab [V° t]] (German)  
b. \*Den Brief ab schickt er nicht [V\* t]  
*the letter (off)sends he not (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 (19c), and all of it is preceded by the infinitival marker *zu* (21b) whereas if the whole particle verb is a V\*, only its second half (which is a V°) is preceded by *ge-* or by *zu* (20a)/(22a):

- (19) a. \*Er hat den Brief nicht vergestanden (German)  
 b. \*Er hat den Brief nicht geverstanden  
 c. Er hat den Brief nicht verstanden  
*he has the letter not understood*
- (20) a. Er hat den Brief nicht abge[V° schickt] (German)  
 b. \*Er hat den Brief nicht ge[V\* abschickt]  
*he has the letter not off – sent*
- (21) a. \*Er hat versucht, den Brief ver-zu-[V° stehen] (German)  
 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.
- (22) a. Er hat versucht, den Brief ab-zu-[V° schicken]  
 (German)  
 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 placement of the *ge-* prefix, see, e.g., Geilfuß (1998) and Rathert (2002).

Let us now turn to those complex verbs in which the first part is nominal.

The following verbs, taken from the lists in Eisenberg (1998, p. 323, (10) and p. 324, (15)) and Wellmann (1998, p. 449) are further examples of the two types:<sup>2</sup>

- (23) V°, like *brandmarken* : (mobile but inseparable)  
*gewährleisten* ‘to guarantee-achieve’, i.e., ‘to guarantee, to ensure’  
*handhaben* ‘to hand-have’, i.e., ‘to handle, to implement’  
*lobpreisen* ‘to praise.N-praise.V’, i.e., ‘to praise’  
*lustwandeln* ‘to joy-stroll’, i.e., ‘to stroll’

*maßregeln* ‘to measure-rule’, i.e., ‘to reprimand’  
*nachtwandeln* ‘to night-stroll’, i.e., ‘to sleepwalk’  
*sandstrahlen* ‘to sand-radiate’, i.e., ‘to sandblast’  
*schlussfolgern* ‘to conclusion-conclude’, i.e., ‘to conclude’  
*wetteifern* ‘to contest-strive’, i.e., ‘to compete’  
*wetterleuchten* ‘to weather-light’, i.e., ‘for lightning to flash  
in the distance’

(24) **V\*, like *stattfinden*: (mobile but separable)**

*Acht geben* ‘to attention give’, i.e., ‘to pay attention’  
*Amok laufen* ‘to amok run’, i.e., ‘to run amok’  
*Eis laufen* ‘to ice run’, i.e., ‘to ice-skate’  
*Halt machen* ‘to stop make’, i.e., ‘to stop’  
*Hof halten* ‘to court hold’, i.e., ‘to hold court’  
*Kopf stehen* ‘to head stand’, i.e., ‘to stand on one’s head’  
*Matß halten* ‘to measure hold’, i.e., ‘to exercise moderation’  
*preisgeben* ‘to prize-give’, i.e., ‘to relinquish, to surrender  
something’  
*Probe singen* ‘to sample sing’, i.e., ‘to show how well one  
sings’  
*Schlange stehen* ‘to queue stand’, i.e., ‘to queue, to stand  
in line’  
*standhalten* ‘to stand-hold’, i.e., ‘to stand firm’  
*teilnehmen* ‘to part-take’, i.e., ‘to take part’  
*Wort halten* ‘to word hold’, i.e., ‘to keep one’s word’

The two types behave differently both syntactically and morphologically. If the whole complex verb is a V°, all of it may undergo verb movement (25), cf. the inseparable (16) above. If it is a V\*, only its second half (which is a V°) may undergo verb movement<sup>3</sup> (26), cf. the separable (18) above.

- (25) a. \*Er markte die Missstände [ $V^\circ$  brand [ $V^\circ$  t]] (German)  
 b. Er brandmarkte die Missstände [ $V^\circ$ t]  
*he (fire) marked the irregularities (fire)*  
 He denounced the irregularities adapted from  
 (Eisenberg 1998, p. 322)
- (26) a. 1999 fand die Tagung in Berlin [ $V_*$  statt [ $V^\circ$ t]] (German)  
 b. \*1999 statt fand die Tagung in Berlin [ $V^\circ$  t]  
*1999 (place) found the conference in Berlin (place)*  
 In 1999, the conference took place in Berlin

However, if the verb occurs clause-finally in an embedded clause, there are no observable differences:

- (27) ... ob er die Missstände brandmarkte (German)  
 ... *if he the irregularities fire-marked*  
 ... whether he denounced the irregularities
- (28) ... ob die Tagung in Berlin stattfand (German)  
 ... *if the conference in Berlin place-found*  
 ... whether the conference took place in Berlin

If the whole complex verb is a  $V^\circ$ , all of it is preceded by the past participle prefix *ge-* (29b), and all of it is preceded by the infinitival marker *zu* (31b) whereas if the whole complex verb is a  $V_*$ , only its second half (which is a  $V^\circ$ ) is preceded by *ge-* or by *zu* (30a)/(32a):

- (29) a. \*Er hat die Missstände brandge[ $V^\circ$ markt] (German)  
 b. Er hat die Missstände ge[ $V^\circ$ brandmarkt]  
*he has the irregularities fire-marked*  
 He denounced the irregularities

- (30) a. 1999 hat die Tagung in Berlin stattge[V° funden]  
(German)  
b. \*1999 hat die Tagung in Berlin ge[V\* stattfinden]  
*1999 has the conference in Berlin place-found*  
In 1999, the conference took place in Berlin
- (31) a. \*Er hat versucht, die Missstände brand-zu-[V° marken]  
(German)  
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.
- (32) a. 2001 scheint die Tagung in Berlin statt- zu-[V° finden]  
(German)  
b. \*2001 scheint die Tagung in Berlin zu [V\*stattfinden]  
*2001 seems the conference in Berlin (place) to (place) find*  
In 2001, the conference would seem to take place in Berlin

Also here, the parallels between complex particle verbs and complex N° + V° verbs are striking, with the exception that the past participle of inseparable particle verbs contains no *ge-* prefix at all (19c) whereas the past participle of inseparable N° + V° verbs has a *ge-* prefix in front of the whole complex verb (29b).

Neither of the two classes of complex verbs discussed in this section, V° and V\*, are immobile, in that V2 is possible in both cases; see, e.g., (25b) and (26a).

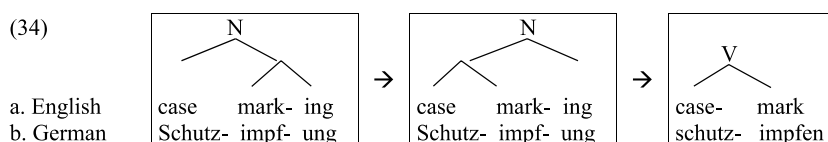
Summing up, there are nine logical possibilities (the underlining shows which parts may undergo V2):

(33)	Inseparable verbs (V2 includes the prefix)	Separable verbs (V2 excludes the prefix)	Immobile verbs (V2 impossible)
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 +	g. <u>be-[ein-flüssen]</u>	h. <u>an-[er-kennen]</u>	i. <u>ur-[auf-führen]</u>
Prt + V	<u>ver-[aus-gaben]</u>	<u>vor-an]-gehen</u>	<u>vor-[an-melden]</u>

The non-existence of the type (33f) is discussed at the end of Section 5.3 below. The differences between types (33g) and (33i) are discussed at the end of Section 5.5 below, where it is argued that the verbs under (33g) here should actually be under (33d).

### 5. Immobile verbs respect the requirements for both $V^\circ$ 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 (8) above. It is derived from the compound noun *Schutzimpfung* (*Schutz* ‘protection’, *Impfung* ‘inoculation’) by means of back-formation, which undoes the nominalization of the second part of the compound by removing the nominalizing suffix *-ung*. The result is a so-called pseudo-compound (e.g., Wellmann 1998, p. 449) as *schutzimpfen* is 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*:



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  $V^\circ$  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  $V^\circ$  type AND the requirements imposed on complex verbs of the  $V^*$  type. I would furthermore like to tentatively suggest that maybe the reason that immobile verbs have to fulfill the requirements imposed on  $V^\circ$  is that they are seen as verbal elements that can receive a suffix (because they are derived by removing a nominalizing affix), and maybe 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 submit

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.

### 5.1. Syntactic consequences

Syntactically, this means that V2 contexts are impossible. It is not the case that the last half of the complex verb can undergo V2 in both the V\* and the V° analysis (as this is only possible in the V\* analysis), nor is it the case that the whole complex verb can undergo V2 in both of the two analyses (as this is only possible in the V° analysis):

In the V° case, the whole complex verb can undergo V2 (25b) as it is a V°, but the last half of the complex verb cannot (25a) as this would cause the existence of a trace inside a V° (which is impossible, according to Baker 1988, p. 73).

In the V\* case, the whole complex verb cannot undergo verb movement (26b) as it is not a V° but a V\*, but the last half of the complex verb can (26a) as it is a V° and as such a movement would not cause a V°-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*.

### 5.2. 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: in *\*gestattfinden* (30b), *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: in *\*zu stattfinden* (32b), *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. I would like to suggest that it may be prefixed by *ge* - or by *zu*, not only when the V° half is part of a V\* (cf. *stattgefunden* and *stattzufinden* in (30a) and (32a)) but also when this V° is part of a larger V°. The latter cannot be directly observed, cf. the ungrammaticality of *\*brandgemarkt* (29a) and *\*brandzumarken* (31a), but this ungrammaticality might only be caused by a preference for prefixation to

apply to as large domains as possible. So *\*brandgemarkt* (29a) and *\*brandzumarken* (31a) are only dispreferred because the options *geb-randmarkt* (29b) and *zu brandmarken* (31b) 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* (Scholze-Stubenrecht, ed., 2000), two of the V° verbs in (23) 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<sup>4</sup> turned up the following infixed forms among the complex verbs of the V° type in (23) above:<sup>5</sup>

- (35) 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 the other forms of the verbs mentioned here and the other verbs in (23) above were found only with prefixed *ge-* and *zu*.)

In contrast to this somewhat mixed picture, all the verbs in the V\* group (24), have only one type of forms, namely with infixation of *ge-* and *zu*.

As for the group of immobile verbs, I would also expect them to have only infixed *ge-* and *zu*, but I have to admit that the corpus search turned up two “prefixed” verb forms that go against this:<sup>6</sup>

- (36) 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  $V^\circ$  (inseparable) type, infixation remains an option. This means that infixation is an option both for complex verbs of the  $V^*$  (separable) type and of the  $V^\circ$  (inseparable) type, and this again explains why infixation is also possible with immobile verbs, even given the assumption from above that immobile verbs have to respect the requirements for both  $V^\circ$  (inseparable) and  $V^*$  (separable) verbs.

### 5.3. Overview

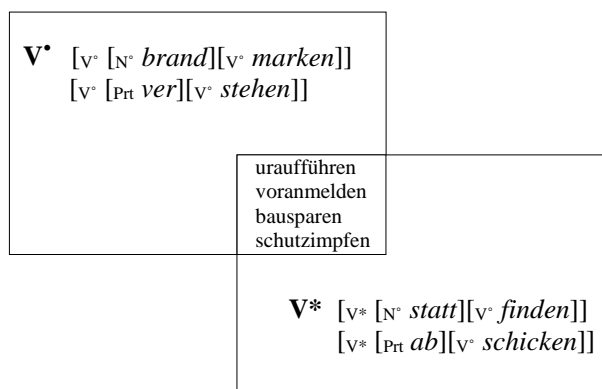
The various options for complex verbs of the  $V^\circ$  type (left column) and for complex verbs of the  $V^*$  type (right column) can be schematized as follows:

	$[V^\circ N^\circ V^\circ]$ , e.g. <i>brandmarken</i>	$[V^* N^\circ V^\circ]$ , e.g. <i>stattfinden</i>	Examples
(37)	a. $*[C^\circ V^\circ] \dots [V^\circ N^\circ t]$ ←	a' $[C^\circ V^\circ] \dots [V^* N^\circ t]$ ←	(25a), (26a)
	b. $[C^\circ V^\circ] \dots t$ ←	b' $*[C^\circ V^*] \dots t$ ←	(25b), (26b)
(38)	a. $C^\circ [IP \dots [V^\circ N^\circ V^\circ]]$	a' $C^\circ [IP \dots [V^* N^\circ V^\circ]]$	(27), (28)
(39)	a. $[V^\circ N^\circ ge-V^\circ]$	a' $[V^* N^\circ ge-V^\circ]$	(35e), (30a)
	b. $ge-[V^\circ N^\circ V^\circ]$	b' $*ge-[V^* N^\circ V^\circ]$	(29b), (30b)
(40)	a. $[V^\circ N^\circ zu V^\circ]$	a' $[V^* N^\circ zu V^\circ]$	(35a), (32a)
	b. $zu [V^\circ N^\circ V^\circ]$	b' $*zu [V^* N^\circ V^\circ]$	(31b), (32b)

Under the assumption that the immobile verbs like *schutzimpfen* have to fulfill both the requirements imposed on complex verbs of the  $V^\circ$  type (inseparable) and the requirements imposed on complex verbs of the  $V^*$  type (separable), we expect to find them only in structures which are possible in both columns. These cases are (38a/a'), clause-final finite verbs in embedded clauses, and (39a/a') and (40a/a'), “infixation” of *ge-* and of *zu* (even though (39a) and (40a) would seem to be very infrequent as discussed in section 5.2 above).

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  $V^\circ$  type and another which comprises complex verbs of the  $V^*$  type:

(41)



One fact which is striking is that no particle verb (to be exact: no particle verb with only one particle, i.e., type (33f) above) belongs to the intersection of the two sets, i.e., there are no immobile (single) particle verbs. 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 lexicalized 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 lexicalized, then they (or rather their particles) have a transparent semantics/morphology, which will put them clearly into either the V° or the V\* class.

#### 5.4. *The considerable variation from speaker to speaker*

This account (in particular, the fact that the semantics of the verbs in question is non-transparent) 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 “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, p. 324) and Eschenlohr (1999, p. 156) also note, the judgments on these data are subject to great variation. For example Eisenberg (1998, p. 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 (26). Gallmann (1999, p. 298, (90)), on the other hand, classifies *notlanden* among the immobile verbs such as *uraufführen* in (1)–(3) and *bausparen* in (8).

A search of the corpus of written German available at the *Institut für deutsche Sprache* in Mannheim<sup>7</sup> turned up the following figures showing that a few V2 cases do occur even though my informants find them unacceptable:

(42) a.	Out of 153 finite cases of <i>auferstehen</i> ,	15 were V2 (9.8%)
b.	Out of 4 finite cases of <i>aufërwecken</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>gefrieretrocknen</i> ,	1 was V2 (50.0%)
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%)
l.	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 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. (36) above.)

5.5. *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:

- (43) *uraufführen* ‘to original-on-put’, i.e., ‘to put on (a play) for the very first time’  
*erstaufführen* ‘to first-on-put’, i.e., ‘to put on (a play) for the very first time’  
*voranmelden* ‘to pre-to-report’, i.e., ‘to preregister’  
*vorankündigen* ‘to pre-to-announce’, i.e., ‘to announce in advance’  
*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* cannot occur in V2 at all but only clause-finally and also that *ge-* and *zu* can only precede *-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, e.g., *voranmelden* or *vorankündigen* (cf. *Voranmeldung* ‘pre-registration’ and *Vorankündigung* ‘advance announcement’), both of which are immobile. The immobility of these two verbs cannot be linked to either of the two prefixes/particles

being non-separable because both *vor-* and *an-* are actually separable, and yet *voranmelden* and *vorankündigen* belong to the immobile verbs.<sup>8</sup>

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., *annehmen* ‘assume’, *anschauen* ‘look at’, *vornehmen* ‘plan, carry out’, and *vortäuschen* ‘simulate’. 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’, and *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: [*vor*[*anmelden*]] vs. [[*voran*]*treiben*] a difference which is also supported by the differences in interpretation and in accentuation. Only in the former case, [*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 separable particle and verb combination.

A different but related question is what the difference is between the verbs in (43), e.g., *ur*-[*auf*-*führen*] or *vor*-[*an*-*melden*], which belong to the type (33i) above, and the following verbs, listed at the end of Section 4 as belonging to type (33g), which are inseparable and not immobile:

- (44) *be*-[*auf*-*tragen*] ‘to PRT-on-carry’,  
 i.e., ‘to give someone a particular task’  
*be*-[*ein*-*drucken*] ‘to PRT-in-press’, i.e., ‘to impress’  
*be*-[*ein*-*flussen*] ‘to PRT-in-flow’, i.e., ‘to influence’  
*ver*-[*aus*-*geben*] ‘to pre-out-give’, i.e.,  
 ‘to give more than one has, wear oneself out’

Under the analysis suggested here, the verbs in (44) would be predicted to be immobile verbs, just like the verbs in (43). The prefixation by the outer particles (*be-*, *vor-*) requires 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 as *ur-* and *vor-* require the inner particle and the verb (in *ur*-[*auf*-*führen*] and

*vor-[an-melden]*) to form a  $V^\circ$  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 (43), 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’ (notice 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 as follows<sup>9</sup>

- (45) *be-auftragen* ‘to PRT-task’,  
 i.e., ‘to give someone a particular task’  
*be-eindrucken* ‘to PRT-impress’, i.e., ‘to impress’  
*be-einflussen* ‘to PRT-influence’, i.e., ‘to influence’  
*ver-ausgaben* ‘to pre-expenditure’,  
 i.e., to give more than one has, wear oneself out’

In other words, these are not examples of type (33g) but rather of type (33d), i.e., inseparable verbs with only one particle. This does not necessarily mean that no verbs of type (33g) (inseparable particle verbs with two particles) could possibly exist, only that both particles would have to be inseparable.

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

In Danish and presumably 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 groups of these. One consists of verbs that do not exist, even though related nouns that could be the source for back-formation do exist:

- (46) \**båndoptage* ‘to tape-up-take’, which should mean  
 ‘to record on tape’

- \**bjergbestige* ‘to mountain-climb’, which should mean  
‘to climb mountains’
- \**bogbinde* ‘to book-bind’, which should mean  
‘to bind books’
- \**boligopspare* ‘to home-up-save’, which should mean  
‘to save for buying a home’
- \**bugtale* ‘to stomach-speak’, which should mean  
‘to ventriloquize’
- \**hovedregne* ‘to head-reckon’, which should mean  
‘to do mental arithmetic’
- \**solbade* ‘to sun-bathe’
- \**vandkøle* ‘to water-cool’

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

- (47) a. ?*databehandle* ‘to data-treat’, i.e., ‘to computerize,  
to process on a computer’  
? *gæsteforelæse* ‘to guest-lecture’  
? *kæderyge* ‘to chain-smoke’  
? *maskinskrive* ‘to machine-write’, i.e., ‘to type’  
? *nydanne* ‘to new-form’, i.e., ‘to construct, to coin’  
? *prisgive* ‘to prize-give’, i.e., ‘to relinquish,  
to surrender something’  
? *strejkelamme* ‘to strike-paralyze’, i.e., ‘to paralyze  
through a labor strike’
- b. *dagdrømme* ‘to day-dream’  
*deltage* ‘to part-take’, i.e., ‘to take part’  
*dybfryse* ‘to deep-freeze’  
*førsteopføre* ‘to first-up-put’, i.e., ‘to perform  
a play for the first time’

*hjernevaske* 'to brain-wash'  
*iscenesætte* 'to in-scene-put', i.e., 'to direct, to engineer'  
*lovprise* 'to praise.N-praise.V', i.e., 'to praise'  
*mandsopdække* 'to man-cover', i.e., 'to mark someone  
in soccer'  
*mavelande* 'to stomach-land', i.e., 'to land on one's  
stomach'  
*mellemlande* 'to between-land', i.e., 'to stop over in X  
on the way to Y'  
*planlægge* 'to plan-lay', i.e., 'to plan'  
*støvsuge* 'to dust-suck', i.e., 'to vacuum-clean'  
*sygemelde* 'to sick-report', i.e., 'to call in sick,  
to report someone as sick'  
*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 (47a and b) are well formed, they may occur in finite form in all positions in which finite verbs may occur (see also Hansen 1967, vol. 3, p. 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 5 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. The verbal part of the complex verb is the rightmost one in the V° cases (47a and b), as in [V° [N° *plan*][V° *lægge*]] 'to plan'. (48b) shows that *planlægge* is a V°, and (49) shows that the order is N-V:

- (48) a. \* Lægger de plan at holde konferencen i Reykjavík?  
(Danish)
- 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?
- (49) a. \*Hvorfor kunne de ikke lægge plan at holde konferencen her?  
(Danish)
- b. Hvorfor kunne de ikke planlægge at holde konferencen her?  
*why could they not plan to hold conference-the here*

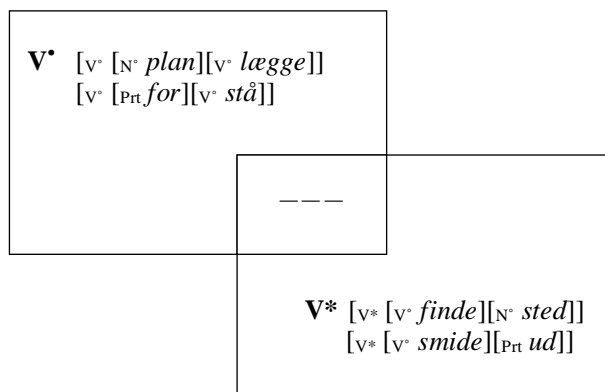
In the V\* cases (see (53) below for more examples), the verbal part of the complex verb is the leftmost one, as in [V\* [V° *finde*][N° *sted*]] ‘to take place’. (50a) shows that *finde sted* is a V\*, and (51) shows that the order is V–N:

- (50) a. Finder konferencen sted i Reykjavík? (Danish)
- b. \*Sted finder konferencen i Reykjavík?  
*(place)find conference-the(place) in Reykjavík*  
Is the conference taking place in Reykjavík?
- (51) a. Hvorfor kunne konferencen ikke finde sted her?  
(Danish)
- b. \*Hvorfor kunne konferencen ikke sted-finde 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, namely that Danish is VO and German OV.

In other words, the intersection between the two sets, illustrated for German in (41), is necessarily empty in Danish:

(52)



*planlægge* ‘to plan-lay’, i.e., ‘to plan’  
*finde sted* ‘to find place’, i.e., ‘to take place’  
*forstå* ‘to fore-stand’, i.e., ‘to understand’  
*smide ud* ‘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., in Thomsen 1992 or Grønnum 1998, p. 206):

- (53) *gå amok* ‘to go amok’  
*give agt* ‘to give attention’, i.e., ‘to pay attention’  
*gøre holdt* ‘to make stop’, i.e., ‘to stop’  
*holde måde* ‘to hold measure’, i.e., ‘to exercise moderation’  
*holde ord* ‘to hold word’, i.e., ‘to keep one’s word’  
*holde stand* ‘to hold stand’, i.e., ‘to stand firm’  
*tage del* ‘to take part’  
*vække opsigt* ‘to awake attention’, i.e., ‘to attract attention’

The reason why a VO-language such as 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 verbs similar to *uraufführen* and the other doubly prefixed verbs are not immobile. In Danish, the following verbs are of this type:

- (54) *genopblomstre* ‘to re-up-blossom’,  
 i.e., ‘to experience a renaissance’  
*genopblusse* ‘to re-up-flare’, i.e., ‘for,  
 e.g., hostilities to break out again’  
*genopsætte* ‘to re-up-put’, i.e., ‘to put on a play again’

These may all undergo V2 (55a) even though without the prefix *gen-* ‘re-’ they are impossible in V2 clauses unless the (separable) inner particle *op-* ‘up’ is left behind (56):

- (55) a. I maj genopblussede stridighederne med fornyet styrke  
 (Danish)  
 b. \*I maj oplussede 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.
- (56) a. \*I maj oplussede stridighederne med fornyet styrke  
 (Danish)  
 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.

## 7. Conclusion

In this paper, 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  $V^\circ$  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 with either the  $V^\circ$  requirements or the  $V^*$  requirements.

The analysis here has tried to account 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 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  $V^\circ$  or  $V^*$ , or they are opaque, and then they are lexicalized as either  $V^\circ$  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 particle requires a  $V^\circ$ , but the inner separable particle produces a  $V^*$ ),
- why there is so much 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  $V^\circ$  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),
- why such verbs are not found in Germanic VO-languages such as English and Scandinavian (there is no way that any verb could simultaneously satisfy the  $V^\circ$  requirements, which include a prefixed particle, and the  $V^*$  requirement, which include a postposed particle).

Whereas I thus disagree with Haider (1993, p. 62) and Koopman (1995) about the details of the morphosyntactic 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  $I^\circ$ ). In other words, Dutch, German, and Swiss German do not have  $V^\circ$ -to- $I^\circ$  movement.

### Notes

1. These searches were made by looking for lexical entries containing the remark “only/mainly used in the infinitive or in the past participle”. For each of the verbs in (10), my informants disagreed with this and found the verbs to possess a full set of morphological forms. This conflicts not only with the Duden dictionaries but also with some authors, e.g., Eschenlohr (1999, p. 147), who says that some of these verbs have neither finite forms nor a past participle.
2. I have changed Eisenberg’s spelling to conform with the 1998 German orthographical reform. The changes introduced in the words in (24), 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 and Günther (2000) and Gallmann (1999, 2000).
3. Although *stattfinden* thus may split up when *finden* undergoes V2, there are more indications than the orthography that *stattfinden* and the other V\* complex verbs are indeed complex verbs and not simply two 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 and c), as opposed to the transitive verb *finden* ‘find’ and its object, cf. (iib) and (ivb and c):

- |       |   |          |
|-------|---|----------|
| (i)   | a. Die Tagung hat in Berlin stattgefunden                         | (German) |
|       | b. *Die Tagung hat statt in Berlin gefunden                       |          |
|       | <i>the conference has (place) in Berlin (place)found</i>          |          |
|       | The conference took place in Berlin.                              |          |
| (ii)  | a. Peter hat in Berlin das Buch gefunden                          | (German) |
|       | b. Peter hat das Buch in Berlin gefunden                          |          |
|       | <i>Peter has (the book) in Berlin (the book) found</i>            |          |
|       | Peter found the book in Berlin.                                   |          |
| (iii) | a. Stattgefunden hat die Tagung in Berlin                         | (German) |
|       | b. * Gefunden hat die Tagung statt in Berlin                      |          |
|       | c. * Gefunden hat die Tagung in Berlin statt                      |          |
|       | <i>(place)found has the conference (place) in Berlin (place)</i>  |          |
|       | The conference took place in Berlin.                              |          |
| (iv)  | a. Das Buch gefunden hat Peter in Berlin                          | (German) |
|       | b. Gefunden hat Peter das Buch in Berlin                          |          |
|       | c. Gefunden hat Peter in Berlin das Buch                          |          |
|       | <i>(the book) found has Peter (the book) in Berlin (the book)</i> |          |
|       | Peter found the book in Berlin.                                   |          |

- The topicalized participles in (iiia) and (iva–c) focus on the main verb and are best in contrastive contexts. Examples of such contexts could be for (iii): ‘The conference took place in Berlin, but it was planned in Stuttgart’, for (iva): ‘Peter found the book in Berlin, but he wrote his paper on it in Stuttgart’, for (ivb): ‘Peter found the book in Berlin, but he read it in Stuttgart’, and finally for (ivc): ‘Peter found the book in Berlin, but he found the article in Stuttgart’.
4. The corpus searched comprised 529 million words at the time of this search in January 2001. Strings which were cited precisely for their peculiar syntax, e.g., as examples in newspaper articles on the German orthographical reform, have not been counted.
  5. An anonymous reviewer points out that it is possible that the speakers who produced the infixations reported in (35) simply interpret these (normally inseparable verbs) as separable. This is of course possible, but as opposed to the account offered in the main text, this would not explain why infixation of *ge-/zu* with  $V^{\circ}$  verbs occurs sporadically whereas prefixation of *ge-/zu* with  $V^*$  verbs would seem not to occur at all. Nor would it explain why native speakers are slightly less unhappy with infixations such as the ones in (35) than they are with the same verbs in constructions where the first element has been stranded under  $V_2$ .
  6. This picture conflicts somewhat with the findings of Åsdahl-Holmberg (1976), reported in Eschenlohr (1999, p. 158), where, e.g., 31% of the informants accepted the prefixed form *zu schutzimpfen* and 5% *geschutzimpft*, 19% *zu bausparen* und 7% *gebauspart*.
  7. The corpus searched comprised 533 million words at the time of this search in February 2001. Strings which were cited precisely for their peculiar syntax, e.g., as examples in newspaper articles on the German orthographical reform, have not been counted.
  8. An anonymous reviewer suggests an analysis where the immobility of verbs with two separable prefixes, e.g., *voranmelden*, results from *vor-* and *an-* not both being able to be stranded at the same time. The idea would be that either *vor-* is stranded, and then the non-stranding of *an-* causes ungrammaticality, or *voran-* is stranded, in which case the non-stranding of *vor-* is the cause of the ungrammaticality. However, I think that the stranding of *voran-* must be seen as satisfying the separability requirement of *vor-*, given that when *voran-* is stranded, *vor-* is not followed by a verbal element. Also, it seems to me that if the stranding of *voran-* could be seen as not satisfying the separability requirement of *vor-*, stranding of *voran-* is predicted to be impossible also in a number of cases where it is possible, e.g., *vorantreiben* ‘push ahead’, as discussed below in the main text.
  9. As in previous segmentations of this kind, the infinitival ending is ignored.

## References

- Åsdahl-Holmberg, Märta: 1976, *Studien zu den verbalen Pseudokomposita im Deutschen*, Göteborger germanistische Forschungen 14, Lund University Press, Lund.
- Baker, Mark: 1988, *Incorporation*, University of Chicago Press, Chicago.
- Becker-Christensen, Christian: 1996, *Politikens store nye nudansk ordbog*, CD-rom version, Politikens Forlag, Copenhagen.
- Booij, Geert: 1990, ‘The Boundary between Morphology and Syntax: Separable Complex Verbs in Dutch’, in G. Booij and J. van Marle (eds.), *Yearbook of Morphology 1990*, Foris, Dordrecht, pp. 45–63.
- Bredel, Ursula and Hartmut Günther: 2000, ‘Quer über das Feld das Kopfadjunkt’, *Zeitschrift für Sprachwissenschaft* 19.1, 103–110.
- Cooper, Kathrin: 1994, *Topics in Zurich German Syntax*, Ph.D. dissertation, University of Edinburgh.
- Eisenberg, Peter: 1998, *Grundriß der deutschen Grammatik I: Das Wort*, J.B. Metzler, Stuttgart.
- Eschenlohr, Stefanie: 1999, *Vom Nomen zum Verb: Konversion, Präfigierung und Rückbildung im Deutschen*, Olms Verlag, Hildesheim.

- Gallmann, Peter: 1999, 'Wortbegriff und Nomen-Verb-Verbindungen', *Zeitschrift für Sprachwissenschaft* **18.2**, 269–304.
- Gallmann, Peter: 2000, 'Kopferbrechen wegen Kopfdjunkten', *Zeitschrift für Sprachwissenschaft* **19.1**, 111–113.
- Geilfuß, Jochen: 1998, 'Über die optimale Position von ge-', *Linguistische Berichte* **176**, 581–588.
- Grønnum, Nina: 1998, *Fonetik og Fonologi – Almen og Dansk*, Akademisk Forlag, Copenhagen.
- Haiden, Martin: 1997, 'Verbal Inflection and the Structure of IP in German', *Groninger Arbeiten zur Germanistischen Linguistik* **41**, 77–106.
- Haider, Hubert: 1993, *Deutsche Syntax Generativ*, Gunter Narr Verlag, Tübingen.
- Haider, Hubert: 2001, 'Heads and Selection', in N. Corver and H. van Riemsdijk (eds.), *Semilexical Categories*, Mouton de Gruyter, Berlin, pp. 67–96.
- Hansen, Aage: 1967, *Moderne Dansk 1-3*, Grafisk Forlag, Copenhagen.
- Höhle, Tilman: 1991, 'Projektionsstufen bei V-Projektionen', ms., University of Tübingen.
- Koopman, Hilda: 1995, 'On Verbs that Fail to Undergo V-Second', *Linguistic Inquiry* **26.1**, 137–163.
- McIntyre, Andrew: 2002, 'Verb-Second and Backformations and Scalar Prefix Verbs in German: The Interaction between Morphology, Syntax and Phonology', ms., University of Leipzig.
- Rathert, Monika: 2002, 'Morphophonology of the past participle in German: Where is the place of ge-?', ms., University of Tübingen.
- Retskrivningsordbogen*, 1996, CD-rom version of the 2nd edition, Aschehoug, Copenhagen.
- Rizzi, Luigi: 1996, 'Residual Verb Second and the Wh-Criterion', in A. Belletti and L. Rizzi (eds.), *Parameters and Functional Heads*, Oxford University Press, New York, pp. 63–90.
- Rohrbacher, Bernhard: 1999, *Morphology-driven Syntax*, John Benjamins, Amsterdam.
- Scholze-Stubenrecht, Werner (ed.): 2000, *Duden-Die deutsche Rechtschreibung*, CD-rom version of the 22nd edition, Bibliographisches Institut and F.A. Brockhaus, Mannheim.
- Thomsen, Ole Nedergaard: 1992, 'Unit Accentuation as an Expressional Device for Predicate Formation in Danish', *Acta Linguistica Hafniensia* **23**, 145–196.
- Vikner, Sten: 1997, 'V<sup>o</sup>-to-I<sup>o</sup> Movement and Inflection for Person in All Tenses', in L. Haegeman (ed.), *The New Comparative Syntax*, Longman, London, pp. 189–213.
- Vikner, Sten: 2001, *Verb Movement Variation in Germanic and Optimality Theory*, Habilitation dissertation, University of Tübingen.
- Wellmann, Hans: 1998, 'Die Wortbildung', in P. Eisenberg et al. (eds.), *Grammatik der deutschen Gegenwartssprache (Duden 4)*, Dudenverlag, Mannheim, pp. 408–557.
- Wurmbrand, Susi: 1998, 'Heads or Phrases? Particles in Particular', in W. Kehrein and R. Wiese (eds.), *Phonology and Morphology of the Germanic Languages*, Max Niemeyer, Tübingen, pp. 267–295.