Displaced affixes and the proper analysis of non-finite morphology in German

In this paper, I address the issue of the complex interaction between syntax and morphology. In particular, I will argue that non-finite morphology involves phrasal affixes in German and discuss cases of displaced morphology in verb clusters which show that selectional requirements of V1 on V2 can be dispensed with and the relevant morphology be spelled out on V3 (disregarding the selectional requirements of V2 on V3).

It is well-known that the infinitival marker *zu* in Standard German is misplaced in a specific syntactic context: in a non-finite IPP-infinitive, it does not appear on the auxiliary but on the modal verb in the final position of the verbal complex, as is illustrated in (1). Since the grammatial status of zu-displacement in Standard German is disputed (cf. Vogel (2009) vs. Haider (2011)), it may be considered an isolated incidence of a mismatch between syntax and morphology or as pointing to an essential property of the mapping between syntactic structure and morphological form in German.

That the phenomenon itself is much more wide-spread is shown by dialectal and diachronic data. Höhle (2006) points outs that in Middle German dialects any type of infinitival morpholoy can be displaced in a 3-word verb cluster. The Thuringian dialects spoken in and around Sonneberg display three different types of infinitives: the bare infinitive (IN), the ge-Infinitive (GI) and the gerundium (G). All these infinitival forms can be displaced in the relevant environment, as is illustrated in (2). (2a) displays a case of displacement of the gerundium. (2b) displays a case of displacement of zu+gerundium, while (2c) displays a case of displacement of the ge-infinitive. Displacement means that the morphology selected by V1 in the verb cluster does not appear on V2 but is realized on V3, with V2 appearing as (default) infinitive or supinum in these dialects.
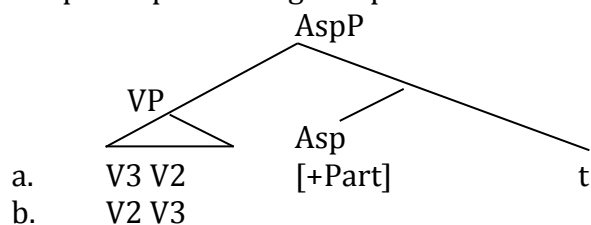
Similar facts can be found in the history of German. Behaghel (1924: 367ff) notes that the construction haben + infinitive + participle occurs rather frequently in legal writings in the late 13th and early 14th century, as is illustrated in (3b). The same construction, however, can already be found in the Nibelungenlied, as is illustrated in (3a).

While double participle constructions are rather rare in the history of German - an example is given in (4a) - they are common in colloquial variants of Frisian, Swedish and Norwegian (cf. den Dikken & Hoekstra 1997, Wiklund 2001). (4b) illustrates the double participle in Frisian, and (4c) provides an example from Norwegian. These cases can be analysed as the double realisation of the displaced morphology of the past participle.

Finally, zu-displacement occurs regularly in Swiss German verb clusters (cf. Hodler 1969, Weber 1987), where its grammaticality is undisputed, as is illustrated in (5). The generalization seems to be that displaced morphology only occurs in right-branching, that is, ascending verb clusters (cf. Schallert 2012). Since in Standard German right-branching clusters are only obligatory with IPP-infinitives, the phenomenon is rather exceptional there, but seems to be completely regular in general.

The data indicate that verb cluster formation somehow interferes with word formation of diverse non-finite forms. In particular, they show that the formation of participles and (zu) infinitives does not involve head movement but must be taken to involve phrasal movement, since if head movement of the respective verb were involved, no difference between ascending and descending verb clusters is expected. On the other hand, if the respective morphology involves phrasal affixes only a descending verb cluster guarantees the correct placement of the ending on the last element in the cluster, as is illustrated in (6). In (6a), the participial morhology selected by V1 will be fused under the condition of strict adjacency with V2, as required, but in (6b) with V3, leading to a case of displaced morphology. V2 is mostly realized as a default (bare) infinitive, raising the question that I will address at the end whether bare infinitives can be taken to be selected.

(1)   a.   * ohne das Buch lesen wollen.IPP zu haben
      b.   ohne das Buch haben lesen zu wollen
(2)   a.   ich waesch **müd** arab du**n**
           ich werd's müssen herab tun.G
           I will have to put it down
      b.   ban a sich ned fun an brichd **los** u:n**tsa** schnütsa
           wenn er sich nicht von ihm braucht lassen.IN an zu schnautzen.G
           when he does not need to be shouted at by him
      c.   kasd ma **helaf ge**schri:
           kannst-du mir helfen.IN schreiben.GI
           can you help me write
(3)   a.   ob in diu edele frouwe het **lazen** das **ge**tan (Nib. 634,2)
           whether the royal woman had let-IN that done
      b.   do si so reht wol von irem allerlibsten liep het **hören ge**rett
           when she so rightly well from her belovest lover had hear-IPP said
(4)   a.   hand wir unser eigen insigel **geton** henk**et** (Urkunden Basel 1387)
           have we our own seal done hanged
      b.   hy soe it **dien** ha **wollen** (den Dikken and Hoekstra 1997, 1058)
           he would it do.PART have want.Part
      c.   Jeg hadde villet   lest   boka
           I had want.PART read.Part books
(5)   So, ich hoff chli chöne ghulfe z ha
      so I hope somewhat can helped to have
(6)   the participial ending as a phrasal affix

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                        AspP
                       /    \
              VP      /      \
             /  \    /        \
            /    \  Asp        \
      a.   V3 V2   [+Part]      t
      b.   V2 V3
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Selected References:

Behaghel, Otto (1924). Deutsche Syntax. Band II. Heidelberg: Winter.
Haider, Hubert (2011). Grammatische Illusionen - Lokal wohlgeformt - global deviant. *Zeitschrift für Sprachwissenschaft* 30(2): 223-237.
Hinterhölzl, Roland (2006). Scrambling, Remnant Movement and Restructuring in West Germanic. Oxford: OUP.
Hodler, Werner (1969). Berndeutsche Syntax. Franke Verlag: Bern.
Höhle, Tilmann (2006). Observing non-finite verbs. Some 3V phenomena in German. In: P. Brandt & E. Fuß (Hrsg.): Form, structure and grammar. Festschr. f. G. Grewendorf. Berlin: Akademieverlag. S. 55-77.
Schallert , Oliver (2012). Untersuchungen zur Ersatzinfinitivkonstruktion in den Vorarlberger und Lichtensteiner Dialekten. Dissertation, Universität Marburg.
Vogel, Ralf (2009). Skandal im Verbkomplex. *Zeitschrift für Sprachwissenschaft* 28(2): 309-346.
Weber, Albert (1987). Zürichdeutsche Grammatik: ein Wegweiser zur guten Mundart. Schweizer Spiegel Verlag: Zürich.