Dialectal Variation in German 3-verb clusters

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Clause-final verb clusters consisting of auxiliary, modal and main verb, as in the standard German example in (1), are quite flexible in their ordering possibilities and vary a lot among different German dialects (the data presented here are the intermediate results of ongoing empirical investigation).

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(1) ... daß Maria singen müssen wird (... that M. sing must will)
Order A: Verb – Mod – Aux; Order B: Mod – Verb – Aux;
Order C: Aux – Mod – Verb; Order D: Aux – Verb – Mod;
Order E: Verb – Aux – Mod; Order F: Mod – Aux – Verb;
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Some of the orders in (1) are more 'marked' than others, and dialects vary in which of the possible orders they take as 'default order'. Swiss German dialects take order C, while standard German dialects take order A. Order D is nearly as frequent as order A with this type (but not others) of verb clusters in standard German dialects (reflecting the general tendency to avoid 'weak' elements like auxiliaries in clause-final position).

From this one might infer that in Swiss German the direction of selection is left-to-right, while in standard German it is right-to-left. However, as the unmarked position of a direct object is *left adjacent* to the verb in both groups, i.e., we have 'Aux – Mod – Obj – Verb' order in Swiss German, this is restricted to selection of VP complements by other verbs. In our optimality theoretic (OT) setting, we capture this by assuming conflicting constraints, one demanding that an LF sisterhood relation between head and complement be mapped onto PF such that the complement precedes the head (this determines OV order, as well as VP-V order), **MAPch**, and a second constraint requiring that the asymmetric c-command relation between heads of the same extended projection of category V be mapped onto PF as precedence relation, **MAPlr(V)**, (this determines V-VP order, but says nothing about direct objects):

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(2) a. MAPch \gg MAPlr(V) \longrightarrow standard German
b. MAPlr(V) \gg MAPch \longrightarrow Swiss German
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MAPhc, a mirror image constraint to MAPch, requiring heads to precede their complements, yields SVO patterns, if ranked high (it is ranked low in German):

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(3) MAPhc MAPlr(V) \gg MAPch \longrightarrow SVO languages
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MAPhc and MAPch together encode the head parameter. In our conception, the head parameter is a linearization convention that is necessary because of the *inherent string ambiguity* of LF sisterhood relations. For this reason, Kayne's (1994) *Linear Correspondence Axiom (LCA)* only talks about terminal nodes. In our OT conception, LCA and head parameter can coexist – the interaction of these now violable constraints derives the typological variation (without syntactic movement!).

A second source of variation are optional orders. Besides the default orders, dialects vary in which additional orders they allow for under special circumstances, most importantly, unusual stress assignments and/or focus interpretations. The Swiss German dialect of St. Gallen and the Northern German dialect 'Rheiderländer Platt' (located in East Frisia) have the same optional patterns, namely the orders E and F in (1), but differ in which of the verbs receives main stress:

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(4) St. Gallen (Swiss German) – main stress on the leftmost verb:e. ... síngen hat müssen (... sing has must)
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f. ... műssen hat singen (... must has sing)
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(5) 'Rheiderländer Platt' (standard German) – mains stress on the rightmost verb:

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e. ... singen hat műssen
f. ... müssen hat síngen
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The advantage of the orders E and F is that they have the auxiliary in the middle of the verb cluster, and thus separate modal and predicative verb from each other. Focused constituents tend to occur at edges of (syntactic and/or phonological) phrases. The orders E and F are therefore perfect for narrow focus on the modal or the predicative verb — note that under default order and default intonation the predicative verb receives main stress, but focus is 'projected' to the higher VPs. This is prevented by 'isolating' the predicative verb from the modal.

We assume two constraints, **FocusLeft** and **FocusRight**, encoding the tendency to place the focus on the left and right edge of their phonological phrase, respectively. While East Frisian has FocusRight ranked high, the St.Gallen dialect uses FocusLeft. The two constraints are not syntactic, but phonological in nature, and reflect the default stress assignment that can also be observed in other environments like, e.g., compounds. They nevertheless compete with the syntactic constraints introduced above. We thus claim that the linear order of the verbs within the verb cluster is determined not only by syntactic factors, but also by non-syntactic factors, if they have enough weight, i.e., if the respective constraints are ranked high enough. Our approach radically differs from purely syntactic accounts like Koopman & Szabolcsi (2000) in its PF-orientation, which it shares with earlier proposals like Haegeman & van Riemsdijk (1986) or, more recently, Wurmbrand (2000). It departs from these in that it focuses on PF in a much more radical way.

There also seem to be Swiss German variants, e.g., the Bernese dialect, which are much more restricted and allow for hardly more than the default order C. Likewise, the standard German dialect of Upper Hessian allows for hardly more than the default orders A and D in (1). These dialects share the property of ranking the syntactic constraints higher than the non-syntactic ones.

Swabian dialects do not clearly belong to one of the two major groups defined above – though they must be considered as standard German. They are extremely flexible, and always seem to prefer a verb order that fits best to a given focus assignment, (nearly) ignoring syntactic and phonological restrictions (focus appears at edges, but has no preference for the left or right edge). Here, a third class of constraints seems to be relevant that directly reflects (focus) semantics–PF correspondence.

To sum up: Our optimality theoretic model uses PFs (i.e., linearization plus prosodic structure) as output candidates and syntactic structures plus focus assignments as inputs. Syntactic constraints compete with phonological and semantic constraints in determining optimal orders. While at a 'macro-'level two classes of dialects can be defined which differ in the relative ranking of syntactic constraints *only*, at a 'micro-' level dialects further differ in how much influence non-syntactic factors can have on the verb orders within verb clusters. A general claim that follows from this study is that macro-variation results from different syntax-internal 'parameter settings', while micro-variation is the result of the varying relative strength of non-syntactic factors.

References

Haegeman, Liliane & Henk van Riemsdijk (1986): 'Verb Projection Raising, Scope and the Typology of Verb Movement Rules', *Linguistic Inquiry* **17**, 417–466.

Kayne, Richard (1994): The Antisymmetry of Syntax. MIT Press, Cambridge, Massachusetts.

Koopman, Hilda & Anna Szabolcsi (2000): Verbal Complexes. MIT Press, Cambridge, Massachusetts.

Lötscher, Andreas (1978): 'Zur Verbstellung im Zürichdeutschen und in anderen Varianten des Deutschen', Zeitschrift für Dialektologie und Linguistik **XLV**(1), 1–29.

Wurmbrand, Susi (2000): 'Verb Clusters: Variation at the Right Periphery', Handout, presented at the Workshop on Syntactic Microvariation, Amsterdam, August 2000.

Zwart, Jan-Wouter (1996): Verb clusters in Continental West Germanic dialects. *In:* J. Black & V. Motapanyane, eds, *Microparametric syntax and dialect variation.* John Benjamins, Amsterdam, pp. 229–258.