213 verb clusters exist. Evidence from new diagnostics to distinguish V(P)R and the 3rd construction:

**Misplaced z(u) and short relative clause extraposition in (Swiss) German**

1. Introduction. It is often claimed that of the 6 logically possible orders in West-Germanic 3-verb clusters, 213 does not exist, cf. Wurmbrand (2005), Barbiers (2005), Abels (2011). While unattested in the prominent Aux-Mod-Inf-, Mod-Mod-Inf-, and Mod-Aux-Part-clusters, 213 orders do occur in constructions with perception verbs, inchoatives and benefactives as V2, taking a bare infinitive as V3. Examples are found in Swiss German, Dutch and Luxemburgish varieties:

1.1. Misplaced-\textit{z(u)}: Bader (1995) should be distinguished, cf. e.g. Haegeman & van Riemsdijk (1986), Geilfuß (1991) [yes] vs. ter Beek (2008) [no]. I will present evidence from short relative clause (RC) extraposition and misplaced-\textit{z(u)} that the constructions systematically differ w.r.t. a central property: while VPR bears all the hallmark diagnostics of complementation, the 3rdC behaves like an adjunction structure.

3.1. Misplaced-\textit{z(u)}: Bader (1995). While in ascending verb clusters (understood to include VR and VPR) \textit{z(u)} ends up on the wrong verb, viz. not on V1 but on the rightmost verb of the cluster, cf. \textit{z(u)} is not misplaced in the 3rdC, but occurs on V1, \textit{z(u)} \textit{ohne} selects a \textit{z(u)}-infinitive; \textit{z(u)} \textit{V1} selects a \textit{z(u)}-infinitive as well, accounting for \textit{z(u)} on V2:

\begin{enumerate}
  \item \textit{ohni mi} \textit{VP1 \textit{z(u)} welle} \textit{VP2 tmi uf d bullesite \textit{z(u)} stelle2}\text{...}\text{without me to want.INF on the cops.side to put.INF} \textit{VP2 Swiss German, internet}
  \item \textit{ohne es} \textit{VP1 \textit{z(u)} versuchen1} \textit{VP2 tmi zu lesen2}\text{...}\text{without it to try.INF to read.INF} \textit{VP Swiss German, internet}
  \end{enumerate}

3.2. Short relative clause extraposition. While in VPR, RCs extraposed from VP1 have to appear clause-finally (=long), cf. \textit{4-a} they can intervene between V1 and VP2 (=short) in the 3rdC, cf. \textit{4-b}

\begin{enumerate}
  \item \textit{wil jede} \textit{wett1, \textit{x} wo s betriift, es Wörtli mitrede2, \textit{x}s wo s betriift because everyone wants C it affects a word talk with.INF C it affects `because everyone who is affected by it wants to have a say'}
  \item \textit{weil ihr jeder} \textit{versuchte1, \textit{v der da} war1, tmi nach Kräften zu helfen2, \textit{v der da} war} since her everyone tried who was after forces to help.INF who was there \textit{3rdC Standard German}
  \end{enumerate}

3.3. Accounting for the differences. (i) \textit{4-a} and (b) \textit{4-b} trivially follow if VPR involves complementation while the 3rdC involves right-adjunction (= classic extraposition): in VPR, adjunction to VP1 places the RC clause-finally, cf. \textit{5-a} but in the 3rdC, the RC can surface between V1 and VP2 because VP2 adjoins to VP1 as well, cf. \textit{5-b}

\begin{enumerate}
  \item \textit{VP1 [VP1 V1 t1 V1 t1 RC [VP2 V2 t2] RC] RC [VP2 V2]}\textit{V1} places the RC clause-finally, cf. \textit{5-a} but in the 3rdC, the RC can surface between V1 and VP2 because VP2 adjoins to VP1 as well, cf. \textit{5-b}
  \item \textit{VP1 [VP1 t1 RC [VP2 V2 t2] RC] RC [VP2 V2]}\textit{V1} places the RC clause-finally, cf. \textit{5-a} but in the 3rdC, the RC can surface between V1 and VP2 because VP2 adjoins to VP1 as well, cf. \textit{5-b}
  \item \textit{else mi [VP1 [VP1 t1 RC [VP2 V2 t2] RC] RC] RC [VP2 V2]}\textit{V1} places the RC clause-finally, cf. \textit{5-a} but in the 3rdC, the RC can surface between V1 and VP2 because VP2 adjoins to VP1 as well, cf. \textit{5-b}
  \end{enumerate}

4. Applying the diagnostics to 213 orders. Crucially, \textit{1} behaves like VPR (I will also address the subtlety of the data): short RC extraposition is not possible, cf. \textit{7-a} and \textit{z} is misplaced, cf. \textit{7-b} on the other hand, shows the behavior of a 3rdC:

\begin{enumerate}
  \item \textit{da. dass si} \textit{s e} \textit{Maa ghulfi2 haut1, \textit{x} wo si guet käntt, tmi in Ornig bringe3, \textit{v wo si guet käntt} that she if a.DAT man helped has C she well knows in order bring.INF C she well knows `that he helped a man who she knows well to bring it in order`}
  \item \textit{ohni en ghöört3 \textit{z(u)} ha1 en Arie \textit{z(u)} singe3 without him heard to have.INF an aria to sing.INF `without having heard him sing an aria' \textit{3rdC Standard German}}
  \end{enumerate}

213 orders are derived as follows: (i) \textit{VP2} inversion leads to an ascending order = 123, (ii) V1 and V2 are inverted by head-mvt in syntax or, as I will argue more generally, by means of Local Dislocation). RC-extraposition to VP1 thus surfaces clause-finally; \textit{z} being in FP above VP1 will have the last element of the cluster, viz. V3, as z-placement follows cluster-reordering.