Philipp Weisser, Luise Schwarzer. NELS 54, 2023 In defense of cyclic coordination structures: The view from German

Claim. Based on novel German data, we claim that coordination with three or more conjuncts can have asymmetric, cyclic structures despite the presence of only one overt coordinator. This is in contrast to claims about English in the recent literature (Neeleman et al. 2023, Ke et al. 2023) and shows that coordination in German still shows evidence for cyclic, binary branching structures. Arguments for this claim come from the availability of subgrouped structures for purposes of Suspended Affixation and adjectival modification and from adversative coordination. **Background.** The literature on the syntax of coordination contains a long-standing discussion about the question as to whether coordination is symmetrical/flat (e.g., Borsley 2005) or asymmetric/hierarchical (e.g., Munn 1993, Zhang 2010) in nature. While work within the Minimalist Program views the asymmetric, binary branching structure as standard, recent papers have cast doubt on the empirical validity of the arguments for it, and instead argue for flat/symmetric structures. Recently, Neeleman et al. (2023) argue that coordination is generally flat, (1), but recursive, cyclic structures, as in (2), are possible. Crucially, recursive structures can be diagnosed by the presence of one overt coordinator, represented as & in (1) and (2). (1)

One of their arguments comes from adjectival modification showing that, with only one coordinator, no non-trivial proper subset of conjuncts can be in the scope of the adjective, (3).

- (3) Mary will buy crocuses, yellow pansies and tulips.
 - a. [[crocuses, [yellow pansies] and tulips]
 - b. *[crocuses, [yellow pansies and tulips]] (Neeleman et al. 2023:71)

In an asymmetric structure, it should be possible to adjoin the adjective to the intermediate subconstituent including only the second and the third conjunct and thus the reading in (3-b) should be available. The unavailability of (3-b) thus suggests that there is no constituent that includes the second and the third conjunct but excludes the first, which directly goes against asymmetric structures. We show, based on two areas of evidence, that German coordination is not flat and instead shows hierarchical, asymmetric properties even without additional coordinators.

In defense of cyclic structures. First, in 3-way coordinations with only one overt coordinator, German allows the subgrouping reading. This can be seen in the pattern of **Suspended** Affixation (SA), a phenomenon where a morpheme takes scope over a coordination despite surfacing only in one conjunct. We take SA to be a type of ellipsis (e.g., Booij 1985). In coordinations with three conjuncts and only one overt coordinator, this type of ellipsis can crucially affect only two conjuncts, (4), suggesting that SA can pick out a sub-constituent in the coordinate structure. A flat-structure analysis would predict that either all or none of the conjuncts take part in SA. Importantly, as (5) shows, it is not any linearly adjacent subset that undergoes SA. It is exactly those conjuncts that a cyclic structure would group together.

(4)	a.	Holunderbüsche, [Kirsch- bäume und Birn-bäume]		
		elder.bushes cherry-trees and pear-trees		
		"elder bushes, cherry trees and pear trees"		
	b.	Damenhandtaschen, [Herren-gürtel und Herren-schuhe]		
		lady.handbags gentlemen-belts and gentlemen-shoes		
		"women's handbags, men's belts and men's shoes"		
(5)	a.	*[Apfel- bäume , Kirsch-bäume] und Holunderbüsche		

(5) a. *[Apfel-bäume, Kirsch-bäume] und Holunderbüsche apple-trees cherry-trees and elder.bushes b. *[Herren-gürtel, Herren-schuhe] und andere Lederwaren gentlemen-belts gentlemen-shoes and other leather.goods

If a sub-constituent is available for SA in such coordination structures, we expect that it should also be able to be modified by an adjective, parallel to (3-b). This prediction is borne out, (6).

(6) Context: At her wedding, Antonia will only allow three types of drinks on the menu. Auf der Hochzeit gibt es nur schwedischen Schnaps, bayrische Biere und Weine. at the wedding will be EXPL only Swedish liquor Bavarian beers and wines "At the wedding they will only serve Swedish liquor, Bavarian beers and Bavarian wines."

The second type of evidence comes from the behavior of **adversative coordination** with *aber* 'but'. While a covert coordinator in 3-way coordinations must usually be interpreted identical to the overt one, (7-a), this is ruled out with 'but': the covert coordinator in (7-b) can only be a conjunction.

(7)	a. Ringo \emptyset Paul und John	b. Ringo Ø Paul aber nicht John
	Ringo Paul and John	Ringo Paul but not John
	"Ringo and Paul and John"	"Ringo and Paul but not John"
	* "Ringo or Paul and John"	* "Ringo but Paul but not John"

This is unexpected with a flat structure. In a flat structure, there is only one coordination, marked by one overt coordinator, which has a uniform interpretation. Combining different types of coordination, e.g., conjunctive and adversative, is only possible with a complex recursive structure, which is marked by multiple overt coordinators, e.g., [[Ringo and Paul] but not John]. In contrast, (7-b) does not show a uniform single-structure interpretation, but instead suggests that two coordinations have been combined, i.e., there is internal structure. In the talk, we will give additional arguments from the semantics and prosody of adversative coordination.

Summary. We show with arguments from SA and adversative coordination in German that coordinate structures can be asymmetric and cyclic even without the presence of a second overt coordinator, contrary to what Neeleman et al. (2023) claim for English. 3-way coordinations with one coordinator can be asymmetric in German, while they seem to be uniformly flat in English. We conclude that the arguments from Neeleman et al. do not sufficiently motivate a retreat from the standard asymmetric model of coordination across the board.

Outlook and possible analysis. Our observations do not exclude the possibility of flat structures in German. However, they indicate that coordinations can at least optionally be cyclic as in (8) even when only one of the coordinator heads surfaces overtly.

 $(8) \qquad [\&_{\rm P} \ \dots \ \& \ \dots \ [\&_{\rm P} \ \dots \ \& \ \dots \]]$

The difference between English and German seems to be that German allows the non-final coordinator in (8) to go unpronounced, while English does not. We propose that German, but not English, has a backward ellipsis process that allows a coordinator to be deleted under identity and c-command, see (9). That German, unlike English, in principle allows backward ellipsis that is contingent on constituency and c-command is already shown with SA in (4-a).

- (9) a. Holunderbüsche und Apfel-bäume und Kirsch-bäume elder.bushes apple-trees and cherry-trees *"elder bushes, apple trees and cherry trees"*
 - b. [&P Holunderbüsche [&' und [&P Apfelbäume [&' und Kirschbäume]]]]]

Selected References. Borsley, R. 2005. Against ConjP. Lingua 115.4 • Ke, A. et al. 2023. Lack of c-command in coordinate structures. *GLOW* 45. • Neeleman, A. et al. 2023. Subordination and binary branching. *Syntax* 26. • Zhang, N. 2010. Coordination in Syntax.