

## Cyclic Spellout Predicts Extended Exponence by Counter-Bleeding

In this talk I show that morphological realisation by Cyclic Spellout predicts extended exponence by counter-bleeding and removes the need for some additional assumptions made in the literature.

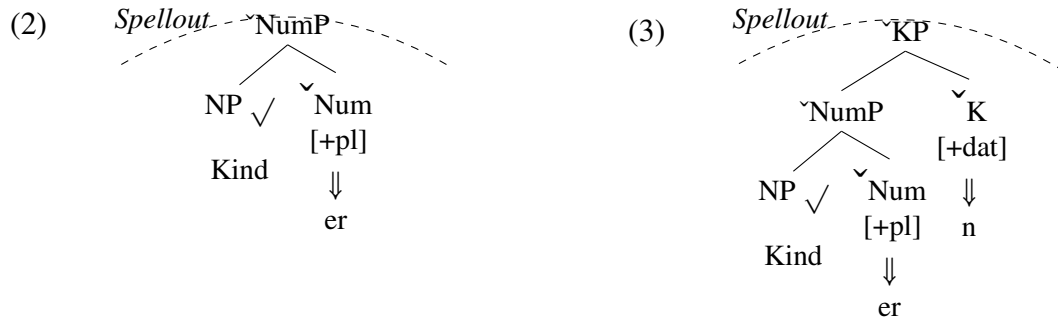
**Extended Exponence:** In (1), the German plural suffix /er/ and the German plural dative suffix /n/ occur together (1b), but /n/ cannot occur on its own (1c). Given the Specificity condition of the Subset Principle (e.g. Halle and Marantz 1993), the less specific plural marker /er/ is expected to be blocked by the more specific plural dative marker /n/, counter to fact.

- |     |    |          |    |                 |    |              |
|-----|----|----------|----|-----------------|----|--------------|
| (1) | a. | Kind-er  | b. | Kind-er-n       | c. | *Kind-n      |
|     |    | child-PL |    | child-PL-PL.DAT |    | child-PL.DAT |

**Previous analyses in DM:** The standard approach is to assume that the shared feature is a primary feature on the less specific and a secondary, contextual feature on the more specific exponent. This relies on a distinction between primary and secondary features and a concept of feature discharge, which arguably makes a wrong prediction for affix order in cases of extended exponence like (1): It predicts that the more specific marker is inserted before and thus closer to the stem than the generic marker, counter to the cross-linguistic observation made in Grofurović & Müller (2023) that in such cases, it is the more generic exponent that tends to be closer to the stem, which means from a derivational point of view that it must be inserted first. Another solution proposed by Müller (2004) and Grofurović & Müller (2023) is enrichment, where prior to vocabulary insertion, the feature shared by two exponents is copied such that it can be discharged twice. This approach involves look-ahead if feature copying only happens before the insertion of exponents whose lexical entries have a feature in common. If, on the other hand, all features are copied independently of whether markers in an extended exponence relation will be inserted or not, then the analysis overgenerates.

**Analysis:** There are two different views on cyclic interaction: a) Morphology interprets syntax (Bobaljik 2000, among others), where in a first cycle, syntactic structure-building takes place, and in a second cycle, morphological realisation applies to the fully built syntactic structure, and b) Cyclic Spellout (see Uriagereka 1999, Chomsky 2001), where once a morphological phase *P* is completed in syntactic structure-building, the structure built so far is transferred to the interfaces and morphological realisation applies to it, such that syntactic structure-building and morphological realisation are intertwined. I adopt the latter view and show that it predicts extended exponence by counterbleeding: As heads are merged in the syntax, features are added incrementally to the syntactic structure that provides the context for vocabulary insertion. Now certain heads have the property that their maximal projection is a morphological phase and must be spelled out before other heads can be merged, i.e., before all features are present in the syntactic structure, leading to premature insertion of more generic exponents where more specific ones would be expected. Which heads have this property, henceforth indicated by a háček diacritic (ˇ), and which do not, remains to be investigated. I furthermore assume that vocabulary insertion does not discharge features, and adopt a variant of the Subset Principle adapted from Grofurović and Müller (2023), which states that a vocabulary item is inserted into a head in a morphological phase if it matches a feature in the head and encodes a subset of the features in the morphological phase *P*, and there is no exponent that realises a bigger subset of the features in the morphological phase. The derivation of the dative plural form in (0) proceeds as follows: The root is merged with a ˇNum head, which is specified for [+pl(ural)]. The ˇNum head bears ˇ, i.e., ˇNumP is a morphological phase, hence spellout applies immediately after Merge of the root and the ˇNum head, and morphological realisation applies, (2). At this point, of the exponents in the lexicon, only /er/ ↔ [+pl] encodes a subset of the morphological phase and can be inserted into the Num head. Only after insertion of /er/ is ˇNumP merged with

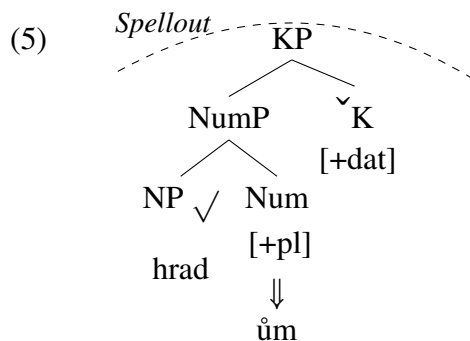
the  $\checkmark$ K(ase) head, which also bears  $\checkmark$ . Again, as KP is a morphological phase, it is immediately spelled out. Now, /n/ ↔ [+pl +dat] can be inserted into the K head, as it matches the [+dat] feature on the K head, it encodes a subset of the features within KP (namely [+pl +dat]), and there is no other exponent that encodes a bigger subset of the features in KP, (3).



Such a Cyclic Spellout approach to exponence cannot only derive extended exponence, but also the opposite case, disjunctive blocking, where a more specific exponent blocks a more generic exponent, if the phase property of certain heads is language-specific. Consider the Czech dative plural form in (4), where the dative plural ending /ûm/ does not co-occur the more generic plural ending /y/ (which appears in the nominative plural, (4a)).

- (4) a. hrad-y  
castle-PL
- b. hrad-ûm  
castle-PL.DAT

This can be straightforwardly derived if in Czech, unlike in German, the Num head does *not* bear  $\checkmark$  and NumP is *not* a morphological phase and therefore not immediately spelled out, as shown in (5). Spellout does not apply until the  $\checkmark$ K head is merged. When  $\checkmark$ KP is spelled out, /ûm/ ↔ [+pl +dat] is inserted into NumP, since it matches the [+pl] feature of the Num head, realises a subset of the features in  $\checkmark$ KP, and there is no marker in the lexicon that encodes a bigger subset of the features in  $\checkmark$ KP.



Thus, an approach to morphological realisation relying on cyclic spellout and small – sometimes phrase-size – spellout domains predicts extended exponence by counterbleeding as well as disjunctive blocking without assuming a distinction between primary and secondary features or feature copying.

**Selected references:**

Bobaljik, Jonathan David (2000): ‘The ins and outs of contextual allomorphy’, *10*, 35–71.

Grofulović, Jelena and Gereon Müller (2023): Cyclicity and Extended Exponence. *In*: M. Privizentseva, F. Andermann and G. Müller, eds, *Cyclicity*. Vol. 95 of *Linguistische Arbeits Berichte*, Institut für Linguistik, Universität Leipzig, pp. 159–198.

Halle, Morris and Alec Marantz (1993): Distributed Morphology and the Pieces of Inflection. *In*: K. Hale and S. J. Keyser, eds, *The View from Building 20*. MIT Press, Cambridge, Mass., pp. 111–176.