## Myopia in Morphology Felicitas Andermann, Universität Leipzig

The goal of this talk is to provide a taxonomic overview over myopic phenomena and analyses in morphology. **Spatial vs temporal myopia:** Myopia can be defined as the absence of look-ahead. Grammatical processes in embedded domains (e.g. affixes that are closer to the stem) cannot be sensitive to more peripheral structure. This can manifest itself either in a *spatial* fashion wrt the structure, in terms of *locality* or in a *temporal* fashion wrt the derivation, in terms of *opacity* (counter-feeding/counter-bleeding/counter-shifting). Unlike phonology, which is known for spatially myopic patterns (see e.g. Wilson 2003 for sour grapes spreading), **morphology exhibits mainly temporally myopic phenomena**. A classical example of myopia in morphology, for instance, is the fact that phonologically conditioned suppletive allomorphy such as in (1) is only sensitive to the stem or inner affixes but not to outer material (Carstairs 1978, Bobaljik 2000, Paster 2006, Embick 2010). This is not brought about by locality restrictions (in (1), the passive allomorphs and the stems that condition their distribution are adjacent and therefore maximally local) but a matter of opacity if one assumes, like Bobaljik (2000:3), that affixation proceeds root-outwards: more peripheral affixes are added later in the derivation

(1) Seri passive prefixes (Embick 2010:5)

 a. /p-/ /\_V p-eši 'the book'
 b. /a:?-/ elsewhere a:?-kašni 'be bitten'

and therefore counterbleed the insertion of one allomorph and counterfield the insertion of another.

**Data vs theory:** Moreover, myopia can be **a property of either a pattern or an analysis**, and a (potentially) myopic pattern does not necessarily coincide with a (strictly) myopic analysis. Another classical case of myopia in morphology is that of partially superfluous extended exponence (Caballero & Harris 2012) as (2), where the German plural suffix /er/ and the German plural dative suffix /n/ occur together (2b), but /n/ cannot occur on its own (2c). Given the Specificity condition of the Subset Principle (e.g. Halle & Marantz 1993), the less specific plural marker /er/ is expected to be blocked by the more specific plural dative marker /n/, counter to fact. According to Stiebels (2015), in such cases of partially superfluous extended exponence, there is a cross-linguistic tendency for the less specific marker to be realised closer to the stem. In a derivational approach to affixation, this means that the less specific affix is inserted first. This can be explained by assuming that, at the point where /er/ is inserted, only the feature [plural] available / visible for insertion, and the feature [dative] becomes visible only later.

(2)	a.	Kind-er	b.	Kind-er-n	с.	*Kind-n
		child-PL		child-PL-PL.DAT		child-PL.DAT

Most existing analyses of partially superfluous extended exponence, however, are not myopic in a strict sense. In DM, for example, 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, such that the possibility of competition between the two markers is not excluded by lack of information but by an independent mechanism. Strictly vs informally myopic derivations: In Inflectional Morphology in Harmonic Serialism (IMHS, Müller 2020), extended exponence is also derived in a way that is not strictly myopic. Specificity effects are generally derived via MAX constraints, but in the case of extended exponence, a constraint MINIMIZE SATISFACTION (MINSAT) requires the least specific of all compatible exponents to be inserted first. Again, competition of exponents is not prevented by lack of information – all information is present during the whole derivation, but the access to it is restricted by independent principles. I refer to such derivations as *informally myopic*, as opposed to *strictly myopic* derivations where information is temporarily not available at all. Strictly myopic derivations can be found in structure-changing rather than structure-building processes, as in the case of Ondarru Basque auxiliaries reported by Arregi & Nevins (2012), where cliticisation resulting from promotion of absolutive arguments to ergative ones opaquely feeds insertion of a L-morpheme

(L-support) and Participant Dissimilation (deletion of a 1PL dative clitic in the presence of a 2nd person ergative clitic). The general order of morphemes in Basque auxiliaries is ABS-TNS-DAT-ERG-COMP. The tense morpheme must always be preceded by some morpheme, so in forms that lack absolutive clitics, a L-morpheme is inserted (L-support). Now some sentences with psych verbs have no ERG argument but only a DAT experiencer and a typically ABS internal argument. When these arguments are both speech act participants, the internal argument acquires ergative (Absolutive Promotion). The corresponding clitic does no longer precede the tense morpheme, which results in L-support (3). Additionally, in a configuration with a 1PL.DAT experiencer and a 2nd person internal argument, the 1PL.DAT clitic is deleted after the 2nd person internal argument has acquired ergative (Participant Dissimilation). Crucially, if there were lookahead and the derivation "knew" Absolutive Promotion would result in L-support and Participant Dissimilation, then Absolutive Promotion would not apply in the first place.

(3) gusta-te d-o-su Gu-ri su-k/-Ø 1PL-DAT 2SG-ERG/-ABS like-PRF L-3SG.PRS-2ERG 'We like you (sg)'

Myopic derivations in OT: While myopic derivations are not possible in parallel OT, they are predicted and can can be characterised as locally, but not globally optimising in cyclic OT frameworks like Stratal OT (Kiparsky 2000, 2015, Bermúdez-Otero 2012) or Harmonic Serialism (Müller 2020). Stratal OT has been argued by Popp (2023), among others, to allow for dual-level affixes, which are underspecified wrt the stratum at which they can be inserted. While the Cyclic Principle (Chomsky 1965) requires them to be inserted as early as possible, their insertion can be delayed by independent restrictions, as in the case of Murrinhpatha discussed by Popp (2023), where the non-sibling dual marker ngintha appears immediately after the classifier stem in the absence of a 2nd person object marker (4a) but word-finally in the presence of a 2nd person object marker and the 1st person dual/paucal classifier stem (4b). Popp (2023) argues

- ba-**ngintha**-ngkardu-nu (4) a. 1SG.see.SBJ-DU-see-FUT
  - nguba-nhi-ngkardu-nu-ngintha b.

that ngintha is inserted at the stem level in (5a) while it is blocked by the more specific dual/paucal stem at stem level and can only be see.1DC.SBJ-2SG.OBJ-see-FUT-DU inserted later at the word level in (5b).

Harmonic Serialism, in turn, predicts morphological movement, which follows from the interaction of Merge (i.e. exponent insertion) and alignment constraints: In each step of the derivation, only one operation (merge, movement, or deletion) may be applied. Given a ranking  $L \leftarrow Root \gg MERGE(X) \gg MERGE(Y) \gg X \Rightarrow R$ , MERGE(X) is ranked highest of all Merge Conditions, and X must be merged as a suffix due to a high-ranked constraint requiring the root to be left-aligned. Subsequently, Y must be merged, also as a suffix, in violation of the constraint  $X \Rightarrow R$  that requires X to be right-aligned. Merging Y as a prefix would violate  $L \Leftarrow$ Root, and not merging Y would violate MERGE(Y), which is ranked higher than  $X \Rightarrow R$ . In the next step of the derivation, however,  $X \Rightarrow R$  can be satisfied by movement of X to the right edge of the word. To sum up, 1) morphology exhibits mainly temporal myopia, 2) myopic patterns do not necessarily coincide with myopic analyses, 3) analyses of exponence (structure-building) tend to be informally myopic whereas strictly myopic derivations are more likely to be found in structure-changing (affix order, deletion). In cyclic optimisation, two cases of myopia that have been recently discussed are dual-level affixes and morphological movement.

Selected references: • Arregi, K. & A. Nevins. 2012. Morphotactics: Basque auxiliaries and the structure of spellout. Springer. • Bobaljik, J. D. 2000. The ins and outs of contextual allomorphy. University of Maryland working papers in linguistics, 10, 35-71. • Embick, D. 2010. Localism versus globalism in morphology and phonology. MIT Press. • Kiparsky, P. 2000. Opacity and cyclicity. The Linguistic Review 17:351-367. • Müller, G. 2020. Inflectional Morphology in Harmonic Serialism. Equinox, Sheffield. • Popp, M.-L. 2023. Delayed Exponence in Murrinhpatha as an Instance of Myopia in Morphology. In: Cyclicity. LAB 95, Universität Leipzig