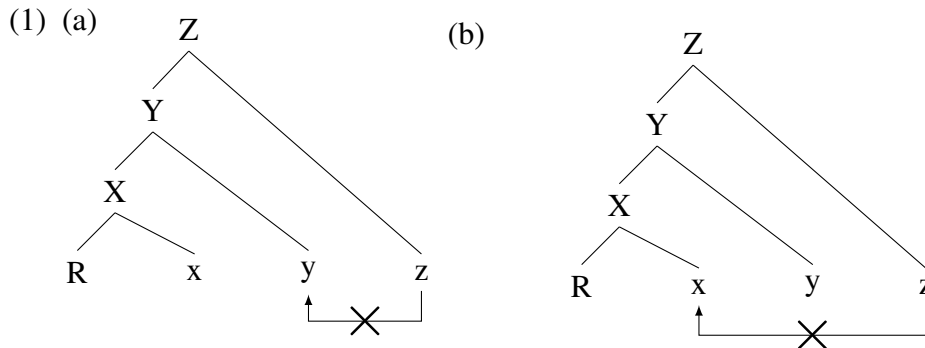# Outward dependencies as prosodic selection

A class of cyclic approaches to morphology predict that allomorphy cannot be conditioned by an outward morphological context, so that in (1) y cannot depend on z, x on y or on z, nor R on y or on z.

(1) (a)

(b)

Since roots often do depend morphologically on their sister affixes and vice versa, such approaches must claim that bare roots are not cyclic constituents.

(2) (a)

(b)

The empirical validity of (1) remains disputed, however. Some putative cases of outward-sensitive allomorphy have been shown to be instances of general phonological processes. Of Deal & Wolf's (2016) two cases, one involves a straightforward root-suffix dependency of the type (2), and the other is not allomorphy at all, but an instantiation of a general phonological process in the language, subject to phonological rather than morphological locality conditions (Kiparsky 2021).

Yet there remain some recalcitrant cases that seem to falsify (1). Many of them, however, share a syndrome of properties that point to a different analysis: they are (1) phonologically conditioned, (2) prosodically optimizing, and (3) context-free. I will suggest that they are not cases of outward-sensitive allomorphy, but result from word-level well-formedness constraints that select the contextually optimal output from the set of outputs delivered by an overgenerating morphology.

A common such type of case is the differentiation of bound (stem) and free (word) allomorphs. The Finnish diminutive suffix has two forms: the isolation form *-nen*, which only appears in the nominative singular, which has no overt case ending, and a bound form *-se-* which is the base of all suffixation and compounding: *kukka-nen* 'little flower', Gen.Sg. *kukka-se-n*, Iness.Sg. *kukka-se-ssa*, Part.Sg. *kukkas-ta*, *kukka-s-lapsi* 'flower child'. Words in *-nen* cannot be suffixed or compounded, though they can be followed by clitics, which attach to whole words. The corresponding

stems in *-se-*, like all stems, *must* be suffixed or compounded.The difference between *-nen* and *-se* follows from the prosodic constraint that Finnish words but not stems can end in /-C/, and Finnish stems but not words can end in /-e/. From that perspective, there is no outward conditioning at play.

A more intricate example is suffixal allomophy in Southwestern Khanty (Uralic), conditioned by the prosodic structure of words (Vaysman 2009). A Khanty word must be completely parsable into binary moraic trochaic feet, each foot consisting either of one heavy syllable or of two light syllables. Many suffixes, such as the possessive *-(ə)ŋ ~ -(ə)pï*, serve this constraint by having alternate allomorphs of different sizes, selected at the word level to provide an even-parity mora count. For example, when a word containing the possessive is followed by the invariant one-mora abessive case ending *-a*, *-(ə)pï* appears instead of *-(ə)ŋ* and vice versa. The flip ensures the complete bimoraic parsing of the phonological word. Rather than outward sensitivity, this can be seen as a satisfaction of metrical well-formedness constraint on *words* that requires them to be fully parsed into binary feet. Formally, let both allomorphs of the possessive morpheme *-(ə)ŋ ~ -(ə)pï* be added at the stem level. At the word level the resulting stems are composed with nominal endings, and the binary foot constraint at that point selects the output that is fully parsable into complete moraic trochees. It selects the even-syllabled stem form when no overt case suffix is added, and the odd-syllabled stem form in the lative, where the suffix *-(j)a* is added.

(3) 1. Stem morphology: /toxl/ → *toxləpï, toxləŋ*, /neepk/ → *neepkəpï, neepkəŋ*

   2. Word morphology:

      (a) Nominative: no overt case suffix is added. FOOTBINARITY selects the word form *toxləŋ* over **toxləpï*, and *neepkəpï* over **neepkəŋ*.

      (b) Abessive: the suffix *-(j)a* is added. FOOTBINARITY selects the word form *toxləpï-jä* over **toxləŋə*, and *neepkəŋ-ä* over **neepkəpï-jä*.

This analysis capitalizes on the templatic phonological conditioning of the allomorphy. The distribution of the allomorphs is not dependent on any particular outward morphology. It simply responds to a word-level prosodic imperative.

Finally, the "Mixed" past participle formation in Icelandic is an instance of exactly this type. S subclass of verbs make their participles with *-ð-* before -V and *-in-* before -C, both of these suffixes being participle formatives in their own right, which here compete on the basis of prosodic well-formedness (Svenonius 2012, 2023).

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