

## Suffix counterposition as rule aggregation

An important metatheoretical issue in morphology is whether rules of affixation are rules filling slots in a word form's predefined skeletal structure (word-skeletal theories) or operations in a system of operator/operand relations (operand theories). Among the phenomena relevant to deciding this issue is that of SUFFIX COUNTERPOSITION, a morphotactic pattern in which

- affix *Y* is suffixal in the default case,
- affix *X* is invariably prefixal, and
- *X* serves as a kind of 'carrier' for *Y*, in that *Y* immediately follows *X* when both appear in the same word form; here, *Y* is counterposed to *X*.

This pattern (likely the result of diachronic developments such as (1)) is exemplified in Table 1. In preterite verb forms in Fula, the preterite affix *-no* is ordinarily suffixal, but is counterposed to the aspectual prefix *don-* when this is present (Table 1, row (a)). In reflexive verb forms in Lithuanian, the reflexive affix *-si* is ordinarily suffixal, but is counterposed to any sort of verb prefix that may be present, e.g. the negative prefix *ne-* (row (b)). In relative verb forms in Swahili, the relative affix for a particular noun class, e.g. the affix *-ye* for noun class I, is suffixal in verb forms that are tenseless and positive, but is counterposed to any prefix of tense/negation that may be present, e.g. the tense prefix *taka-* (row (c)).

What is the status of the counterposed affix *Y*? In a word-skeletal theory, *Y* is an affix with both a default suffixal allomorph  $Y_{\text{suff}}$  and a special prefixal allomorph  $Y_{\text{pref}}$  such that  $Y_{\text{pref}}$  is only inserted into word forms whose content also requires the prefix *X*. This analysis of suffix counterposition must stipulate both the adjacency of  $Y_{\text{pref}}$  to *X* and the fact that  $Y_{\text{pref}}$  has the same directionality with respect to *X* as  $Y_{\text{suff}}$  otherwise has with respect to the stem with which it joins.

In a less stipulative, operand theory, the rule introducing *Y* is invariably suffixational, and has, as its operand, either a stem (as in the default cases in column (i) of Table 1) or the carrier prefix *X* (as in column (ii)).

I propose an analysis of this latter sort in a framework in which two rules of affixation may enter into a formulaic combination serving as a single, more complex rule of affixation. In this framework, the suffixational rule (2a), which ordinarily operates on a stem, may combine with the prefixational rule (2b) to produce the AGGREGATED rule (2c), a prefixational rule in whose definition rule (2a) has the prefix in (2b) as its operand.

This approach furnishes a streamlined account of suffix counterpositions such as those in Table 1; thus, the Swahili case may be represented in the manner sketched in (3). This account further affords a straightforward model of the dimensions of morphotactic variation in Table 2.

This approach to suffix counterposition provides important support for an operand theory of morphology in which a language's morphotactics consists of the systematic combinations into which its rules of affixation enter.

## References

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- Dambriūnas, Leonardas; Antanas Klimas; & William R. Schmalstieg. (1972). *Introduction to modern Lithuanian*. New York: Franciscan Fathers.
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- (1) Suffix counterposition arising through the diachronic reanalysis of an auxiliary element as a carrier prefix

Stage I: Affix *Y* appears in the patterns ‘[V-*Y*]’ and ‘[**Aux**-*Y*] [V]’



Stage II: Affix *Y* appears in the patterns ‘[V-*Y*]’ and ‘[**pref**-*Y*-V]’

[*Y* is uniformly suffixal in Stage I; in Stage II, *Y* is suffixed to V but is counterposed to the prefix **pref** when this is present.]

**Table 1.** Examples of suffix counterposition in three languages

	(i)	(ii)	
	[Affix] is suffixed by default.	[Affix] is counterposed to a particular <b>prefix</b> .	
Fula	' <i>o-warii</i> [- <i>no</i> ] SBJ.AGR-come[-PRETERITE] 's/he had come'	' <i>o-don</i> [- <i>no</i> ]- <i>wara</i> ' SBJ.AGR-ASP[-PRETERITE]-come 's/he was coming'	(a)
Lithuanian	<i>lenki-uo</i> [- <i>si</i> ] bend-SBJ.AGR[-REFLEXIVE] 'I bow'	<i>ne</i> [- <i>si</i> ]- <i>lenki-u</i> NEG[-REFLEXIVE]-bend-SBJ.AGR 'I don't bow'	(b)
Swahili	<i>a-soma</i> [- <i>ye</i> ] SBJ.AGR-READ[-RELATIVE] 'who reads'	<i>a-taka</i> [- <i>ye</i> ]- <i>soma</i> SBJ.AGR-FUT[-RELATIVE]-read 'who will read'	(c)

- (2) a. Rule  $\llbracket X \rrbracket$  realizes property set A through the prefixation of *X*.  
 b. Rule  $\llbracket Y \rrbracket$  realizes property set B through the suffixation of *Y*.  
 c. The aggregated rule ( $\llbracket Y \rrbracket \textcircled{A} \llbracket X \rrbracket$ ) realizes the property set A+B through the prefixation of *XY* (= the formulaic prefix that results from the suffixation of *Y* to *X*).
- (3) Sketch of suffix counterposition in Swahili verb inflection  
 a. Rule  $\llbracket -ye \rrbracket$  realizes the property set {class I relative concord} through the suffixation of *-ye*.  
 b. Rule  $\llbracket taka- \rrbracket$  realizes the property set {future tense} through the prefixation of *taka-*.  
 c. The aggregated rule ( $\llbracket -ye \rrbracket \textcircled{A} \llbracket taka- \rrbracket$ ) realizes the property set {future tense, class I relative concord} through the prefixation of *takaye-*.

**Table 2.** Two dimensions of variation among instances of suffix counterposition

Dimension of morphotactic variation	Fula preterite suffix <i>-no</i>	Lithuanian reflexive suffix <i>-si</i>	Swahili relative concord suffixes (e.g. <i>-ye</i> )
a. Suffixes that may be counterposed	only <i>-no</i>	only <i>-si</i>	all twelve relative concord suffixes
b. Prefixes that may serve as carriers for counterposed suffixes	only the aspectual prefix <i>don-</i>	negative, modal, aspectual, & Aktionsart prefixes, alone or in combination	individual tense and negation prefixes