Multiple-Feature Mutation and Realize Morpheme

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Wolf (2005) argues that the realization of featural affixes in mutation is governed by the constraint in (1a) specific to subsegmental morphology, and provides mutation data involving multiple phonological features as evidence for assuming MaxFlt instead of the weaker and more general constraint in (1b). In this talk, I show that attested data of this type follow from independently motivated morphological operations and Realize Morpheme can fully replace MaxFlt for mutation.

(1) a. MaxFlt: All autosegments that are floating in the input have output correspondents. (Wolf, 2005)

b. Realize Morpheme: For every morpheme in the input, some phonological element should be present in the output. (van Oostendorp, 2005; ≈ Akinlabi's, 1996 Parse-Morph)

Problem: Wolf cites the Texistepec Popoluca data in (2), where 1st person agreement is realized by nasalizing, 2nd person by nasalizing and palatalizing, and 3rd person by denasalizing and palatalizing the initial root consonant, giving rise to the morphemes 1P:[+nasal], 2P:[+nasal –back], and 3P:[–nasal –back], where +/-nasal and –back are floating features. Crucially, for 2P and 3P, Realize Morpheme would not enforce realization of both phonological features inside the root, and other constraints such as Ident and root-prominent faithfulness constraints would favor an incorrect output where only one floating feature for each morpheme is present. Hence high-ranked MaxFlt seems to be necessary which requires that all floating features of an affix are realized.

(2)

Inf. —	**1P** [+nasal]	**2P** [+nasal –back]	**3P** [-nasal –back]	
d*astah*	***n****astah*	***ɲ****astah*	***dʲ****astah*	'dig'
n*aj*	—	—	***dʲ****aj*	'sprout'

Background: Morphological research of the last decades (e.g. Noyer, 1992) has shown that descriptive morphosyntactic terms such as 2nd person must be decomposed into more atomic features which may be expressed separately by different morphemes. Thus Müller (2005) shows that in Sierra Popoluca, a closely related language, in a verb as (3) *i-* is a [-1] affix (present also in 3rd person agreement, but not in 1st person exclusive and inclusive), while *m-* realizes the feature [+2] also present in 1st person inclusive forms.

(3) *m-i-nɨk-pa* 'you are going'
[+2]-[-1]-go-Imperfective (Sierra Popoluca; Müller, 2005)

Analysis: Assuming that featural affixes have the same morphological status as segmental ones, Texistepec Popoluca instantiates the same type of expressing person categories as Sierra Popoluca, where the morphemes are specified as in (4):

(4) a. [-3]:[+nasal] b. [-1]:[-back] c. [+3]:[-nasal]

In 2P/3P forms Realize Morpheme enforces realization of two phonological features since there are two corresponding morphemes (for 2P: (4a) and (4b)). The same approach extends to other categories. Thus Wolf cites Nuer where negative past participles impose the features [–voiced –continuant] on the final root consonant and present participles [-voiced +continuant]. Here I take [-voiced] as the marker for [+participle] and the voicing contrast as the correspondent of additional features distinguishing participle types.

References

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