
Inflectional tones and morpheme expression in Limburg Dutch

Limburg dialects of Dutch have two distinctive tonal contours on syllables with primary stress, which serve to distinguish e.g. between *bíí* ‘with’ (a level H tone) and *bîî* ‘bee’ (a HL contour) (Hermans, 1994). The distinction is also used to in inflectional morphology, e.g. to differentiate between neuter and feminine forms of adjectives (1a); if the neuter is level high (*wíís*), the feminine has a falling tone (*wîís*). If the neuter itself has a falling tone, nothing happens to the feminine, which still has a falling tone (1b).

We argue that these facts need a sophisticated representational analysis rather than one defined in terms of interparadigmatic (anti)faithfulness.

Our analysis is that the feminine inflection for adjectives is an empty syllable position plus a low tone (cf. (2)). The empty position does not surface because it would have to be filled by vocalic material and faithfulness prevents this. However, every morpheme has to be realized in some way, and in this case this can be done by docking the Low tone on the stressed syllable. The difference between neuter and feminine thus is a difference in lexical specification of the respective morphemes.

Interestingly, the feminine form of the adjective is different from the neuter also in another respect: stem-final underlying /d/ lenites to [j] (1c). Lenition of this type usually only happens to /d/’s in onset position in dialects of Dutch (Zonneveld, 1978). This provides evidence for the representation in (2); the feminine provides an (empty) syllable which allows the /d/ to lenite.

Further evidence is provided by the examples in (1d). Here the Low tone cannot show up on the stressed syllable for phonological reasons, having to do with the underlyingly voiceless obstruent (syllables of this type *never* have a falling tone, cf. van Wijk (1935)). Because the feminine morpheme has to be realized somehow (because of a constraint REALIZE-MORPHEME) in this case faithfulness is violated, and the empty position gets filled (3). The required visibility is abstract; it can be fulfilled by the Low tone in the feminine of *kalm* in (1b), even though this is phonetically indistinguishable from the neuter.

The problem for paradigm uniformity accounts (e.g. Alderete, 1999, who discusses the Limburg phenomena in (1a)) is that they do not have a possibility to generalize over the different phenomena involved. We need to take into explain why level H and /d/ are changed, but falling tone is not, but there is no formal connection between the phenomena. On a formal level, we argue that interparadigmatic faithfulness is too powerful a device to handle similarities and dissimilarities between different forms. Representations such as those in (2) might be slightly less ‘concrete’, but they are computationally more tractable and in this sense a more ‘realistic’ model of phonological knowledge.

(1)		neuter	feminine	masculine	
	a.	wíís	wîís	wîzə	‘wise’
		dóúf	dóùf	dóùvə	‘deaf’
		láám	láàm	láàmə	‘lame’
	b.	káím	káím	káímə	‘calm’
	c.	róòd	róòj	róòjə	‘red’
	d.	ríík	rííkə	rííkə	‘rich’
		zóót	zóótə	zóótə	‘salted’

(2)	neuter	feminine	masculine
		σ	σ
		μ	μ
			\emptyset
	\emptyset	L	L

(3) *Constraints rankings*

- a. $L \triangleright [+voice] \gg \text{FAITH}(\text{Tone})$
 (Legenda: $L \triangleright [+voice]$ is a markedness constraints disallowing low tone in syllables which have voiceless obstruents)
- b. $\text{REALIZE-MORPHEME} \gg \text{DEP-V} \gg * \text{EMPTYMORA}$

Bibliography

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