Asymmetric variation

A form may be subject to phonological variation in more than one phonologically unrelated "dimension". In this paper we analyse a phenomenon in which the presence/absence of variation in one such dimension nevertheless depends on the presence/absence of variation in another. This is theoretically interesting because (i) it is an "unnatural" type of interaction (cf Hayes et al 2009) that refers not to phonological properties whose interaction is unnatural, but to the interdependence of the occurrence of variation in unrelated dimensions; and (ii) it is problematic for an analysis that derives variation from a single underlying form by optional rules or variably ranked or unranked constraints (Anttila 2007). We propose an analysis that views this interaction as a Paradigm Cell Filling Problem (Ackermann et al 2009), by identifying paradigmatic patterns which licence inferences about the surface properties of the content of the cells of a paradigm and we show that that the unusual interdependence results from an interplay of paradigmatic requirements (prescribing uniformity, markedness, and paradigm class membership).

The Hungarian 3sg possessive morpheme (POSS) is represented by four allomorphs: **-jɑ**, **-jɛ**, **-ɑ**, **-ɛ**, which are selected by two parameters: vowel harmony and yodfulness. Stems may be variable and some are variable in *both* respects, cf (1). Crucially, the latter lack the yodless **-ɑ** allomorph, ie no stem can take all four allomorphs, cf (1f).

Suffix-initial vowels may be low or mid in nominal paradigms. *Low* linking vowels facilitate yodless POSS forms, (2b) and (2c), because the choice of yodless **-ɑ, -ɛ** enhances Paradigm Uniformity (PU). No such preference for yodless POSS forms constrains the choice in paradigms with *mid back* linking vowels since neither the yodless nor the yodful POSS alternant (**-ɑ, -jɑ**) is better for PU, (2a). Only back stems show this difference between mid vs low linking vowel paradigms ("non-lowering" vs "lowering" stems); front stems always have a low **-ɛ**.

Vowel harmony applies variably after "mixed" **Bɛ** stems, (1d–f), and harmonic behaviour is generally consistent across suffixes within a paradigm (Harmonic Consistency, HC). Despite HC, roots like **fotɛl** 'armchair', (1f), which are variable with respect to both harmony and the suffix-initial yod, lack the yodless back harmonic 3sg poss suffix **-ɑ**. That is, variability is suspended in one dimension when it manifests itself in the *other* dimension. We claim that this due to (i) the way PU applies in lowering vs non-lowering stems and (ii) the fact that all **Bɛ** stems are non-lowering.

Tables

(1) Variation in 3sg possessive forms

stems	**forms (number of grammatical forms)**	**harmony**	**yod**
a. motor ‘engine’	motorja, *motorjɛ, *motora, *motorɛ **(1)**	only back	only j
b. va:las ‘answer’	*va:lasja, *va:lasjɛ, va:lasa, *va:lasɛ **(1)**	only back	only no j
c. vira:g ‘flower’	vira:gja, *vira:gjɛ, vira:ga, *vira:gɛ **(2)**	only back	variable
d. patɛnt ‘snap fastener’	patɛntja, patɛntjɛ, *patɛnta, *patɛntɛ **(2**	variable	only j
e. notɛs ‘notebook’	*notɛsja, *notɛsjɛ, notɛsa, notɛsɛ **(2)**	variable	only no j
f. fotɛl ‘armchair’	fotɛlja, fotɛljɛ, *fotɛla, fotɛlɛ **(3)**	variable	variable

(2) Prototypical nominal paradigm classes by the quality of the suffix-initial vowel

backness & height of the suffix-initial vowel:		**a. back & mid**	**b. back & low**	**c. front & low**
Non-possessive	Plural	kar-ok	fal-ak	pɛr-ɛk
	Adjz	kar-oʃ	fal-aʃ	pɛr-ɛʃ
	Verbz	kar-ol	fal-az	pɛr-ɛl
Possessive	1sg	kar-om	fal-am	pɛr-ɛm
	2sg	kar-od	fal-ad	pɛr-ɛd
	3sg	kar-ja / kar-a	fal-a	pɛr-ɛ
uniformity with 3sg		**no / no**	**yes**	**yes**
		‘arm, faculty’	‘wall’	‘trial’

References

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