Complexity and distinctiveness in the possessive allomorphy of Hungarian

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Our aim is to describe the distribution of the glide-initial allomorph of the third person singular possessive suffix in Hungarian. From a phonological point of view, this distribution is mostly arbitrary. We argue that this is so because the main conditioning factor is the similarity of possessive forms to other, already existing forms in the lexicon.

The third person singular possessive suffix has four allomorphs in total. It agrees with the stem in the backness of the vowel (-a/e (-A)), and potentially contains an initial glide (-ja/je (-jA)). The glide always shows as a hiatus filler after vowels, but never after sibilants and palatals. After other consonants, however, its behaviour is non-categorical, sometimes even showing variation with individual stems (Table 1).

	FRONT		Васк
$egin{array}{lll} V\# & resti \ \text{pub} \\ C\# & n\acute{e}met \ \text{German} \\ S\# & mez \ \text{jersey} \\ \end{array}$	restije pub.3PP német(j)e German.3PP meze jersey.3PP	$k\acute{a}d$ bathtub	$falum{ja}$ village.3PP $k\acute{a}d(m{j})m{a}$ bathtub.3PP $h\acute{a}zm{a}$ house.3PP

Table 1: Allomorphs of the 3rd person singular possessive

Papp (1975) lists the conditioning factors of the glide's appearance. The two most robust ones are that back vowel stems and CC-final (CC#) stems prefer -jA more. The latter preference is stronger for stems ending in a dental stop. (Table 2 illustrates these tendencies on data drawn from the Hungarian Webcorpus (Halácsy et al., 2004).)

	All C#	nouns	Back V	$7 { m stem}$	Front V	<i>I</i> stem	CT	#	VT	' #
-jA	889197	13.79%	772440	22.58%	116757	3.70%	323772	84%	6984	0.6%
-A	5500215	86.21%	2643648	87.42%	2856567	97.57%	60763	16%	972832	99.4%
Sum	6389412	100%	3416088	100%	2973324	100%	384535	100%	979816	100%

Table 2: Possessive distribution in C-final word sets, excluding final sibilants and palatals (token frequency, percentage)

We claim that it is impossible to explain these tendencies if one assumes that allomorph selection is driven by notions of phonological markedness (cf. Bye 2008), since there is no factor of phonological markedness which would warrant the assignment of the more complex suffix to these particular classes. According to Papp, the preference for the more complex -jA form is due to the need to enhance distinctions in the nominal paradigm. That is to say, -jA is better at making a possessive form more different, and hence, more recognisable, since it is more complex.

We argue that a contrast enhancement view is oversimplified. Firstly, the large difference between VT# and CT# stems is not merely a sign of a tendency enhancing distinctions between basic forms of the nominal paradigm. Rather, it is the first sign of a general re-lexicalisation of a morpho-phonological distinction, with CC# stems taking ¬jA, and VC# stems taking ¬A. This difference is near-categorical, and can be regarded as a new, phonologically predictable (though unmotivated) allomorphy (similar to examples of lexicalisation discussed by Bybee 2006).

Secondly, the back V stems' preference for -jA is due to an independent factor, the overall tendency towards similarity between forms in the lexicon (cf. Kálmán & Kertész 2008; Rebrus & Törkenczy 2008), which operates solely on the grounds of formal similarity and sheer numbers. As seen in Table 3, the nominal possessive and the verbal definite paradigms are similar in the singular. The only difference is in the third person, where back V verbs take the suffix -jA (identical to the possessive allomorph), but front V verbs take -i. The result is that in third person, back V nouns are affected by the similar verbal paradigm, opting for -jA more than their front V counterparts, which show no such effect. The observed parallel is not the only argument for the influence of the verbal paradigm on the nominal one, as the definite forms have a high enough token frequency to serve as a base for an analogy.

	FR	ONT	Back		
	Noun.Poss	Verb.Def	Noun.Poss	Verb.Def	
	kert	ért	part	tart	
1sg	kertem	$\operatorname{\acute{e}rt}\mathbf{em}$	partom	tartom	
2sg	kerted	$\operatorname{\acute{e}rt}\mathbf{ed}$	$\operatorname{part}\mathbf{od}$	tartod	
3sg	$\text{kert}\mathbf{je}$	$\operatorname{\acute{e}rt}\boldsymbol{i}$	part ja	$\mathrm{tart}\mathbf{ja}$	
Gloss	'garden'	'understand'	'riverbank'	'hold'	

Table 3: A partial comparison of the nominal possessive and the verbal definite paradigms

A system where such effects are present is not neccessarily based on on-line computation. If we assume listener misperception as a source of sound change (Ohala, 1981; Blevins, 2004), such a system can emerge based on the principles of contrast enhancement and the preference for similarity between existing forms. These principles, as in the case of Hungarian possessive allomorphy, are not solely based on formal similarity, but also on statistical data, which allow us to posit directions for changes in allomorphy distributions.

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