

## Two Loci of Morphological Neutralization

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In Distributed Morphology (DM: Halle & Marantz 1993), the neutralization of morphological contrast is derived by a post-syntactic feature-deletion operation termed *impoverishment* (Bonet 1991; Halle 1997; Noyer 1992; Harley 2008). This talk provides data from two dialects of Slovenian (South Slavic), which reveal that there must in fact be two loci of morphological neutralization in the grammar, contra the standard claim in DM. One dialect provides concrete evidence of *post-syntactic* neutralization and the other evidence of *pre-syntactic* neutralization.

Post-syntactic contrast neutralization is well established in DM. Such neutralization follows from the application of impoverishment (Harley 2008; Nevins 2011), but should be distinguished from Vocabulary Item underspecification (mapping the same exponent to two or more categories), which entails no loss of contrast. Harley (2008) notes that the diagnostic for actual neutralization is *meta-syncretism*, i.e. syncretism of two morphological categories that is expressed with more than a single phonological exponent, where this occurs across all the relevant paradigms. According to Harley (2008), such neutralization represents a truly ‘deep property’ of a grammar, and she speculates whether it might not stem from *pre-syntactic* restrictions on feature-bundling in the *Numeration set* (Chomsky 1995). We will show that in fact *both* options (pre- and post-syntactic) must exist as sources of morphological neutralization.

Slovenian has a three-way number contrast (SG vs. DU vs. PL) and a three-way gender contrast (MASC vs. FEM vs. NEUT). The two dialects that we shall consider are Ljubljana (LJ) Slovenian and Novo mesto (NM) Slovenian. The neutralization of  $\phi$ -contrast in LJ Slovenian has been discussed before (Nevins 2011), but only for non-verbal structures. LJ and NM Slovenian both reveal a neutralized number contrast for feminine non-singular forms – the paradigms are the same for both dialects here:

(1)	<i>Nouns</i>	SG	DU	PL		<i>Participle</i>	SG	DU	PL
	MASC	stol- $\emptyset$	stol-a	stol-i	‘chair’	MASC	jokow- $\emptyset$	jokal-a	jokal-i
	FEM <sub>1</sub>	miz-a	miz- <span style="border: 1px solid black; padding: 0 2px;">e</span>	miz- <span style="border: 1px solid black; padding: 0 2px;">e</span>	‘table’	FEM	jokal-a	jokal- <span style="border: 1px solid black; padding: 0 2px;">e</span>	jokal- <span style="border: 1px solid black; padding: 0 2px;">e</span>
	FEM <sub>2</sub>	kost- $\emptyset$	kost- <span style="border: 1px solid black; padding: 0 2px;">i</span>	kost- <span style="border: 1px solid black; padding: 0 2px;">i</span>	‘bone’		‘cry’		
	<i>Adjectives</i>					<i>Verbs</i>	<b>(gender</b>	<b>not</b>	<b>coded!)</b>
	MASC	lep- $\emptyset$	lep-a	lep-i		1P	joka-m	joka-va	joka-mo
	FEM	lep-a	lep- <span style="border: 1px solid black; padding: 0 2px;">e</span>	lep- <span style="border: 1px solid black; padding: 0 2px;">e</span>		2P	joka-š	joka-ta	joka-te
		‘pretty’				3P	joka- $\emptyset$	joka-ta	joka-jo

This lack of contrast does appear to be an instance of real morphological neutralization: not only is this lack of contrast present throughout both the dialects, but it is even *meta-syncretic*: there are two paradigms of feminine nouns in LJ and NM Slovenian, FEM<sub>1</sub> and FEM<sub>2</sub>, and they both show the same neutralization of non-SG number contrast, but through different exponents, rendering this a non-superficial property (Harley 2008) of these two grammars. Notice, however, that verbs do not code gender at all, and as a result they also show no number neutralization, fully expressing DUAL contrasts. A standard analysis is one where the *presence of gender*, specifically feminine  $\phi$ -features, creates an illicit configuration with non-SG features: this is resolved by deleting the feature that induces non-SG contrast (Nevins 2011).

For a post-syntactic impoverishment operation, we expect to find some syntactic reflex of the *later* neutralized contrast. This is precisely what happens in LJ Slovenian (2a): with a DUAL-interpretation of the DP, the verb shows dual agreement, but with a PLURAL-interpretation, it shows plural agreement. The syntax of LJ Slovenian shows full number contrast. The neutralization here *cannot* be pre-syntactic.

(2) a. LJ Slovenian

Vran-e	leti-jo.	Vran-e	leti-ta.	
crow:NOM.F. <u>NON-SG</u>	fly:3P.PL	crow:NOM.F. <u>NON-SG</u>	fly:3P.DU	verbal agreement
‘The crows are flying.’		‘The two crows are flying.’		~~~~~→ PL and DU

b. NM Slovenian

Vran-e	leti-jo.	Vran-e	leti-jo.	
crow:NOM.F. <u>NON-SG</u>	fly:3P.PL	crow:NOM.F. <u>NON-SG</u>	fly:3P.PL	verbal agreement
‘The crows are flying.’		‘The two crows are flying.’		~~~~~→ only PL

NM Slovenian (2b), on the other hand, only shows plural agreement on the verb, with DUAL as well as PLURAL interpretations of the DP. When the DP contains non-feminine genders, the regularly expected dual contrasts begin to be reflected on the verb. The NM Slovenian type of neutralization cannot be derived by impoverishment, because the non-SG contrasts, in the presence of feminine gender, have to be absent in the syntax to trigger plural agreement on the verb. The neutralization here needs to be *pre-syntactic*. This duality of neutralization has implications for the status of morphology in a Minimalist Y-model theory of grammar, which we consider here, along with additional evidence from the two dialects.