

## **Faithfulness is not Enough: Loanword Specific Markedness**

Peter Jurgec  
CASTL/University of Tromsø, Norway

The core-periphery lexical stratification model, first proposed by Itô and Mester (1995ab, 1999) has been applied to many languages (e.g. Fery 1997, Becker 2003, C. Rice 2006). The fundamental idea of the model is that strata are ranked hierarchically, the native stratum being the unmarked, i.e. its faithfulness constraints are ranked the lowest:

$$(1) \quad F_{\text{UnassimilatedForeign}} \gg F_{\text{AssimilatedForeign}} \gg F_{\text{Native}}$$

Later, the model has been expanded to account for the difference between alternating and non-alternating patterns (K. Rice 1997, cf. Itô *et. al.* 2001, Inkelas and Zoll 2003), specific faithfulness constraints (Fukazawa 1997, Fukazawa *et. al.* 1998), the unmarkedness of the Sino-Japanese stratum (Kawahara *et. al.* 2003), or the fact that relations are not strictly hierarchical (Crawford 2004, Cho 2001, Gelbart 2005). In this paper, we present an analysis of loanword data requiring both domain specific faithfulness and markedness.

In Slovenian, there are at least five lexical strata: Native (N), Pseudo Foreign (PF), Assimilated Foreign (AF), Unassimilated Foreign (UF), and Mimetic (M). In (2), those markedness constraints that dominate the respective faithfulness constraints are indicated by check marks.

There is a tendency for markedness constraints to be violated in the subset relation. For example, N and PF roots must end on a consonant, while roots in other strata can also end on a vowel. Similarly, [w] cannot surface in the N, PF and AF, but it is attested in UF and M. However, there is no hierarchy of domains possible in which there would be a strict progression from the least to the most marked.

Out of 9 possible vowels, only 5 are attested in the AF stratum. Speakers clearly identify foreign low-mid vowels as [ɛ] and [ɔ] and have no difficulties in distinguishing the four degrees of openness in vowels (Tivadar 2004, Huber 2006). Surprisingly, when words are assimilated into Slovenian, they can only surface as [+ATR] mid vowels.

Still, this situation can be accounted for by faithfulness relations only, using foreign-to-native (FN) specific faithfulness (cf. MIMIC type of constraints in Yip 2002, or BESIMILAR in Kang 2003) and building on the assumption that foreign input is perceived with a high tone as a key indicator of the stress (see Yip 2006: 968ff.) (4).

However, in the non-tonal variety of standard spoken Slovenian, a similar pattern is observed, and that cannot be due to faithfulness to tone. Such that the domain specific (co)phonology must also include markedness constraint \*[+RTR], ranked higher in the AF stratum (5). A similar analysis is offered for the tonal variety of Slovenian (6).

The data from Slovenian mid-vowels display overt interaction of domain specific markedness. That suggests that apart from lexically specific faithfulness there must also be lexically specific markedness:

$$(7) \quad F_{\text{UnassimilatedForeign}} \gg F_{\text{AssimilatedForeign}} \gg F_{\text{Native}} \\ M_{\text{AssimilatedForeign}} \gg M_{\text{Native}}, M_{\text{UnassimilatedForeign}}$$

This in turn eliminates the idea of the core-periphery hierarchy. Languages like Japanese are only a sub-type of all possible languages, where markedness is not ranked with respect to stratal affiliation. In effect, both faithfulness and markedness do differ among strata.

(2)

	Native	Pseudo Foreign	Assimilated Foreign	Unassimilated Foreign	Mimetic
*f	✓	✗	✗	✗	✗
PALATALIZATION	✓	✗	✗	✗	✗
*CODA-NC <sub>ROOT</sub>	✓	✗	✗	✗	✗
*CODA-l	✓	✗	✗	✗	✗
FINAL-C <sub>ROOT</sub>	✓	✓	✗	✗	✗
*HIATUS	✓	✓	✗	✗	✗
*dʒ	✓	✓	✗	✗	✓
*CODA-SS	✓	✓	✗	✗	✓
*w	✓	✓	✓	✗	✗
*GLOTTALSTOP	✓	✓	✓	✓	✗
NONFINALITY	✗	✓	✗	✗	✗
*SCHWA	✗	✓	✓	✗	✗
*POSTALVEOLARCLUSTER	✗	✓	✓	✓	✗
SWP	✗	✗	✓	✓	✗
ΔPWd:H	✗	✗	✓	✓	✓

(3)

fléʃ	‘flash’	ˈrɔk	‘rock music’
xoˈtél	‘hotel’	ˈbɔiŋk	‘Boeing airplane’
ˈékstazi	‘ecstasy’	ˈmɔnɪtɔr	‘monitor’

(4)

/fléʃ/	*[+RTR]&ΔPWd:L	FNFAITH(Tone)	FNFAITH(ATR)
→ /fléʃ/			1
a. ~ /fléʃ/	W <sub>1</sub>		L <sub>0</sub>
b. ~ /flèʃ/		W <sub>1</sub>	L <sub>0</sub>
c. ~ /flèʃ/		W <sub>1</sub>	1

(5)

Non-tonal

/ˈrɔk/ <sub>AF</sub>	*[+RTR] <sub>AF</sub>	Id(ATR)	*[+ATR]	*[+RTR]
→ /ˈrɔk/		1	1	
a. ~ /ˈrɔk/	W <sub>1</sub>	L <sub>0</sub>	L <sub>0</sub>	W <sub>1</sub>

(6)

Tonal

/ˈrɔk/ <sub>AF</sub>	*[+RTR]&ΔPWd:L	*[+RTR] <sub>AF</sub>	Id(ATR)	Id(Tone)	ΔPWd:H	ΔPWd:L	*[+ATR]	*[+RTR]
→ /ˈrɔk/			1			1	1	
a. ~ /ˈrɔk/	W <sub>1</sub>	W <sub>1</sub>	L <sub>0</sub>			1	L <sub>0</sub>	W <sub>1</sub>
b. ~ /ˈrɔk/		W <sub>1</sub>	L <sub>0</sub>		W <sub>1</sub>	L <sub>0</sub>	L <sub>0</sub>	W <sub>1</sub>
c. ~ /ˈròk/			1		W <sub>1</sub>	L <sub>0</sub>	1	