## The sociolinguistics of variable adaptation in English loanwords in Mirpuri Pahari

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This paper offers a phonological analysis of the position of stress in English loanwords into Mirpuri Pahari (MP), framed within Optimality Theory (OT), to illustrate competition between 'faithfulness' to stress position in English as source language (SL) and markedness constraints governing position of stress in MP as target language (TL) (Davidson & Noyer, 1997; Broselow, 2009). Instances of variable adaptation, according to age and/or level of education of the MP speaker, are then presented, and an alternative phonological analysis, within Message Oriented Phonology (Hall, Hume, Jaeger, & Wedel, 2016), is proposed to capture both sets of data without direct recourse to external sociolinguistic factors.

Mirpuri Pahari (MP) is a non-tonal variety of Western Punjabi spoken by approx. 4 million in Pakistan, and 500K in the UK, and has no written form (Stow, Pert, & Khattab, 2012). Stress in MP is assigned to a final superheavy syllable, otherwise to the penult (Shafi, in preparation); a ban on degenerate feet prevents open light syllables from bearing stress, and monomorphemic words are maximally trisyllabic. A corpus of 1200 loanwords was created by the first author, who is a native speaker of MP, based on elicitation of data from family members living in Pakistan of different generations. Taking position of stress as a case study (in a subset of the corpus), we find four adaptation patterns, shown in Table 1 below:

- a) no competition: SL stress rules met and TL stress rules met
- b) competition: faithful to SL stress, structure adjusted to meet TL stress rules
- c) competition: faithful to SL stress, TL stress rules violated
- d) competition: TL stress rules met, SL stress rules violated

These generalisations are amenable to phonological analysis within OT, by means of ranked constraints: loan-specific faithfulness (to SL input) and markedness (as operating in TL).

The data in Table 1 was elicited with younger MP speakers in Pakistan educated to high school level at least and who thus learned English as a foreign language at school. Older speakers with a lower level of education, who have not learned English at all, produce some loanwords differently, as illustrated in Table 2. For the educated speakers in Table 1, the proportion of loanwords in which the position of stress in the SL is preserved (by some means or another), i.e. the sum of tokens within categories 1a)-1c), is 85% (306 cases out of 361 total). In the smaller set of data from less educated speakers, as illustrated in Table 2, who use loanwords less, the proportion of loanwords in which SL stress is preserved is lower; instead, in 100% of cases the TL phonology is respected.

This variation can be modelled within OT by proposing that less-educated speakers have a different grammar, in which constraints are re-ranked so as to results in a different outcome in c) cases where competition was resolved in favour of the SL for educated speakers. In this analysis, the choice of which ranking holds is driven by external factors (age/level of education). A more promising approach is to model this variable adaptation in terms of degree of 'mere exposure', and specifically, in terms of the contents of each speaker's lexicon (Hall et al., 2016). We assume a shared lexical space, between SL and TL; as the proportion of SL lexical items in the lexicon grows, so the influence of the stress patterns in those words on the stress rules increases. This approach predicts both inter-and intraspeaker variability in the realisation of stress in MP loanwords, which we expect to be able report at the workshop (arising from data collection taking place in April-May 2017).

	gloss	SL English	TL2 educated speakers	
1a)	inspector	ın. <sup>1</sup> spɛk.tə	əns. pæk.tər	
	public	'рлb.lık	r 'pəb.lək	
	refuse	rı. ˈfjuːz	rəf.'ju:z	
1b)	appendix	ə. pen.dıks	'pæn.dəs	
	decision	dı.'sı.ʒən	də.ˈsi:.ʒən	
	pencil	ˈpæn.səl	ˈpæn.səl	
1c)	stadium	'ster.drəm	n sə. te:.dɪəm	
	terrorist	ˈtɛ.rə.rɪst	'tæ. ra:.rɪst	
	vaccine	'væk.si:n	ˈvæk.si:n	
1d)	glucose	ˈglu:.kəʊz	gəl.ˈkoːz	
	department	'dı.pa:t.mənt	də. ˈpaːt.mĩt	
	impact	' ım.pækt	əm.'pækt	

Table 1: TL2 younger/educated speakers

	gloss	SL English	TL3 less-educated speakers	TL2=TL3?
2a)	inspector	ın. ¹spɛk.tə	əs. pæk.tər	*
	public	'рлb.lık	'pəb.lək	=
	refuse	rı.¹fju:z	rə.¹fu:z	*
2b)	appendix	ə. pen.dıks	'pæn.dəs	=
	decision	dı.'sı.ʒən	də. si:.zən	=
	pencil	ˈpæn.səl	ˈpiːn.səl	*
2c)				
2d)	stadium	'ster.drəm	əs. tə. drəm	≠
	terrorist	te.rə.rıst	tə.ˈrɪst	<b>≠</b>
	vaccine	'væk.si:n	vək.ˈsiːn	<b>≠</b>
	forest	'fɒ.rɪst	fə.ˈræst	<b>≠</b>
	hospital	'hɒs.pɪ.təl	həs.pə. ta:1	≠
	negative	ne.gə.tiv	'næg.trv	<b>≠</b>

Table 2: TL3: older/less-educated speakers

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