Phonemic Instability: A butterfly effect

In phonology, minimal pairs illustrate phonemic contrast. However, a closer look often reveals that the contrastive distribution is restricted to particular phonological environments. Or rather, as McCarthy and Prince (1994) propose in their paper *The Emergence of the Unmarked*, that while a markedness constraint C 'in the language as a whole, may be roundly violated, but in a particular domain it is obeyed exactly'. In other words, certain domains that are prosodically or morphologically more marked, have a propensity for enforcing phonological well-formedness conditions, the violation of which is otherwise tolerated in the language.

The paper explores a range of morpho-phonological phenomena in Meiteilon that have at its core the potential instability of the phoneme /l/ in the language. In the root-initial position the coronal sonorants /l/ and /n/ are in contrastive distribution, and therefore typologically characterized as distinct phonemes in the literature such as Nonigopal Singh (1987), Bhat and Ningomba (1997), Chelliah (1997), Singh (2000), Rajkumar (2013) and Takhellambam (2015).

1.	Nouns		Verbs	
i.	lɑ	'banana leaf'	lɑn-k^{h}i	'pass.past'
ii.	nɑ	'ear'	nɑn-k^{h}i	'rub.past'

However, the same sources also note that in word-final position these /l/ and /n/ are in free variation.

2.	Nouns		Verbs	
i.	lən~ ləl	'war'	pun~ pul	'tie'
ii.	tin~ til	'insect'	čen~ čel	'run'

In addition to these un-derived environments, there are two distinct derived morpho-phonological environments, a) inflectional and b) compounding, where the sound /l/ is at a morphological juncture.

3.					
i.	Inflected	[CVC-] + [-**l**V]	[lɑk-] + [-li]	lɑk-i	'coming'
			come +Prog.	come.prog	
ii.	Compound	[CVC] + [**l**V]	[puk] + [li]	puk-li	'intestine'
			stomach +line		

For example, in (3) when the phoneme /l/ is preceded by the phoneme /k/ across a morphological boundary, to form a prosodic word, we find two different results. In case of the inflectional /l/-initial morpheme the /l/ deletes, while it remains unchanged in case of the compound.

Further, we show that deletion of /l/ is not the only l-avoidance strategy in the inflectional environment of Meiteilon. In fact it is the last resort strategy. The preferred strategy could be a general process and need not be a process restricted to the particular morphological domain either. For example, it has been widely noted that the sound /l/ is in complementary distribution with the coronal rhotic /r/.

4. /l/ → /r/ / V___V (/l/ changes to /r/ intervocalically)

čɑ- + -li →	čɑ-ri	'eating'
eat	prog	

When a vowel-final root takes a /l/-initial inflection it creates an intervocalic environment and we expect the /l/ to change to /r/, like in all other environments, and it does. However, when a consonant-final root takes a /l/-initial inflection, we do not have such general distributional generalizations to fall back on. Consequently the particulars of the domains attain significance.

In our analysis we show that the language has a phonological well-formedness condition that wants contiguous consonantal segments to AGREE (have the same value) with respect to the features of voicing, place and manner. However, elsewhere in the language, this preference is barely discernable, since the markedness constraints that would incur violations for their non-compliance are ranked quite low. It is in these inflectional environments that such constraints become visible and result in consonantal feature assimilation.

Actually, the environment where a C-final root is followed by a l-initial inflection is the only environment in Meiteilon where complete assimilation takes place.

5. i. kɑp- + -li ➔ kɑp-pi ‘crying’
   cry prog
   ii. ŋɑŋ-+-li ➔ ŋɑŋ-ŋi ‘speaking’
   speaking prog

But, even in this environment, it is unable to apply uniformly to all consonants. This is because the morphological constraint that incurs a violation in case of potential homophony within the inflectional paradigm of the same verb (Sanyal 2010), outranks the phonological well-formedness and blocks any process that could result in homophonous outputs. For example, since [-ti], [-te] and [-tu] exist as independent inflectional morphemes in the language, the morphemes [-li], [-le] and [-lu] do not assimilate with the last consonant of a verb root ending in /t/. Further, we explain the role of paradigm uniformity in inducing variation in strategy in environments where the inflectional /l/ fails to assimilate, such that it either remains as-is or completely deletes.

Based on the analyses of a variety of such evidence we show that the degradation of the phonemic contrast between the coronal sonorants /n~l~r/ in Meiteilon, has highlighted phonological well-formedness preferences in the language, that were hitherto invisible.

Abbreviation: Prog: Progressive marker.

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