A Constraint-based Analysis of the Nasal-laryngeal Sequences within Morpheme in Indonesian

In Indonesian, homorganic clusters occur within morpheme such as in [bumbu] 'condiment', [jumpa] 'meet', [bəŋkak] 'swollen', [bənda] 'thing'. This paper shows interesting evidence that there is no nasal-laryngeal sequences within morpheme, such as [Nh], [Nr], [Nl], [Nw], [Ny], possibly present as the optimum output in Indonesian[1].

In feature geometry framework (Clements 1985), liquids, glides and spread glottis are specified under Laryngeal node. This paper uses *N-[LAR], nasal-laryngeal constraint to block the segments [Nh], [Nr], [Nl], [Nw], [Ny] within the root. Kurniawan (2009) used this constraint to block any nasal-laryngeal sequence when the nasal prefix encounter root in Jakarta Indonesian, such as in: /N+lamar/ → [ŋəlamar] 'to apply'. The occurrence of epenthetic schwa violates DEP while *N-[LAR] active to block [Nl] sequence in *[ŋlamar] occurs as the optimum output. *N-[LAR] constraint is also efficient to block [Nh], [Nr], [Nl], [Nw] and [Ny] appear within morpheme as described in the following tableaus.

*N-LAR >> HAVEPLACE and NPA

/jaNbu/ (guava)	*N-[LAR]	HAVEPLACE	NPA
→ a. jambu			*
b. jaNbu		*	
c. jamlu	*!		

NPA faithfulness constraint from Padgett (1995) is used to assign one violation mark for every NC segment occurs. NC occurs in (a) as the maximum output, therefore NPA is violated. HAVEPLACE from Itô and Mester (1993), Lombardi (1995) as cited in Padgett (1995) is used as a faithfulness constraint which requires that every segment must have some *Place.* The nasal segment in candidate (b) is placeless and so HAVEPLACE is violated. *N-[LAR] blocks the candidate (c) [jamlu] that has nasal-laryngeal sequence [ml] to surface as the optimum output. *N-[LAR] therefore dominates HAVEPLACE and NPA. HAVEPLACE and NPA show no tension in tableaus above, therefore they are not ranked.

---

[1] Note that the [Nh], [Nr], [Nl], [Nw], [Ny] occur in blendings and borrowings such as [danru] 'komandan regu' (group commander), [kemlu] 'kementrian luar negeri' (ministry of foreign affair) and [kimlo] (from Chinese), sometimes pronounced [kimblo], [comro] (from Sundanese), sometimes also pronounced [combro].

References

Clements, G.N. (1985). 'The Geometry of Phonological Features'. *Phonology Yearbook* 2, 225-52.

Kurniawan, F.(2009). The behavior of nasal glottal fricative and nasal glottal stop segments in Jakarta Indonesian: an OT analysis. Paper presented in International Symposium of Mala/Indonesian Linguistics (ISMIL), Senggigi, Lombok, Indonesia.

Pagett, J. (1995). Partial class behavior and nasal place assimilation. In *Proceedings of the Arizona Phonology Conference: Workshop on Features in Optimality Theory*, Coyote Working Papers, University of Arizona, Tuscon.