

**Syllable weight in stress-epenthesis interaction:  
evidence from Mohawk and Selayarese:**

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The paper takes as its focus the stress systems of two unrelated languages: Selayarese, a Makassar language of South Sulawesi, Indonesia (Mithun & Basri 1986; Goldsmith 1990; Broselow 1999; Basri 1999; Piggott 2001), and Mohawk, an Iroquoian language spoken in Quebec (Michelson 1988; Piggott 1995, 1998). Both systems are characterized by canonical penultimate stress accompanied by augmentation in the form of vowel lengthening when the stressed syllable is open as shown in (1a). If the final syllable contains an epenthetic vowel, the stressed syllable is displaced to the antepenult as shown in (1b). (Epenthetic material is given in *italics*.)

- (1) Parallel patterns of stress-epenthesis interaction in Mohawk and Selayarese
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|----|-------------------------|-----------------|-------------|---------------|
| a. | i. <i>Mohawk</i> :      | /ʌ-k-atirut-ʌʔ/ | ʌkatirú:tʌʔ | ‘I will pull’ |
|    | ii. <i>Selayarese</i> : | /golo-ku/       | goló:ku     | ‘my ball’     |
| b. | i. <i>Mohawk</i> :      | /ka-hur-ʔ/      | ká:hureʔ    | ‘gun’         |
|    | ii. <i>Selayarese</i> : | /sahal/         | sá:hala     | ‘benefit’     |

In other contexts, however, the two languages display divergent patterns of stress placement and augmentation. In words with penultimate epenthesis — given in (2a) — stress in Mohawk shifts to the antepenult *without* augmentation, while stress in Selayarese remains on the penult but with augmentation in the form of consonant gemination rather than vowel lengthening, cf. (1).

- (2) Divergent patterns of stress-epenthesis interaction in Mohawk and Selayarese
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|----|-------------------------|-------------|-----------|----------------------------------|
| a. | i. <i>Mohawk</i> :      | /ʌ-k-r-ʌʔ/  | ʌkerʌʔ    | ‘I will put it into a container’ |
|    | ii. <i>Selayarese</i> : | /sahal-ku/  | sahalákku | ‘my benefit’                     |
| b. | i. <i>Mohawk</i> :      | /o-nraht-ʔ/ | ónerahteʔ | ‘leaf’                           |
|    | ii. <i>Selayarese</i> : | /tarpal/    | tarapá:la | ‘tarpaulin’                      |

In words where epenthetic vowels occur in both final and antepenultimate syllables — given in (2b) — stress in Mohawk is manifested on the pre-antepenultimate syllable, again without augmentation, while stress in Selayarese falls on the penult with normal vowel lengthening as in (1), cf. (2a).

Recent analyses of stress-epenthesis interaction have exploited the notion of HEAD-DEPENDENCE (Alderete 1999; Broselow 1999; Mellander in press), a faithfulness constraint which bans the insertion of material into prosodic heads. While languages do appear to respond to such a constraint, the present paper argues that these effects can be captured in terms of independently-required structural well-formedness constraints on prosodic heads, in conjunction with general faithfulness constraints on outputs, thereby eliminating the need for HEAD-DEPENDENCE. Framed in Optimality Theory (Prince & Smolensky 1993), the alternative presented here draws on recent work by Piggott (1998, 2001) and Mellander (In press) exploiting constraints on relative prominence within the foot and on syllable weight. It will be shown that the differences in patterning displayed by the two languages can be accounted for straightforwardly in terms of a minimal re-ranking of the quantitative faithfulness constraint DEP- $\mu$  (McCarthy & Prince 1995) and a constraint militating against the parsing of weightless syllables into a foot.

## References:

- Alderete, John. 1999. Head dependence in stress-epenthesis interaction. In Ben Hermans & Marc van Oostendorp, eds., *The Derivational Residue in Phonological Optimality Theory*, 29-50. Amsterdam: John Benjamins.
- Basri, Hasan. 1999. Phonological and syntactic reflections of the morphological structure of Selayarese. Unpublished Ph.D. dissertation, State University of New York at Stony Brook.
- Broselow, Ellen. 1999. Stress, epenthesis, and segmental transformation in Selayarese loans. In Steve S. Chang, Lily Liaw, & Josef Ruppenhofer, eds., *Proceedings of the 25th Annual Meeting of the Berkeley Linguistics Society*, 311-325. Berkeley: Berkeley Linguistics Society.
- Goldsmith, John. 1990. *Autosegmental & Metrical Phonology*. Oxford: Basil Blackwell.
- McCarthy, John J. & Alan Prince. 1995. Faithfulness and reduplicative identity. In Jill Beckman, Laura Dicky & Suzanne Urbanczyk, eds., *University of Massachusetts Occasional Papers in Linguistics 18: Papers in Optimality Theory*, 249-384. Amherst: Graduate Linguistic Students Association.
- Mellander, Evan W. In press. (HL)-creating processes in a theory of foot structure. *The Linguistic Review*.
- Michelson, Karin. 1988. *A Comparative Study of Lake Iriquoian Accent*. Dordrecht: Kluwer.
- Mithun, Marianne & Hasan Basri. 1986. The phonology of Selayarese. *Oceanic Linguistics* 25: 210-254.
- Piggott, Glyne L. 1995. Epenthesis and syllable weight. *Natural Language and Linguistic Theory* 13: 283-326.
- Piggott, Glyne L. 1998. Foot form and the parsing of weightless syllables. In M. Catherine Gruber, Derreck Higgins, Kenneth S. Olson & Tamra Wysocki, eds., *CLS 34: Main Session*, 315-332. Chicago: Chicago Linguistic Society.
- Piggott, Glyne L. 2001. The phonotactics of a 'Prince' language: a case study. Ms., McGill University.
- Prince, Alan & Paul Smolensky. 1993. Optimality Theory: Constraint Interaction in Generative Grammar. *Technical Reports of the Rutgers Center for Cognitive Science* 2. Piscataway, NJ.