

'Initial' geminates initially and medially

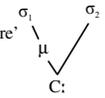
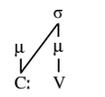
Nina Topintzi, UCL, i.topintzi@ucl.ac.uk

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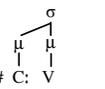
Aims

- ❖ **Main claim:** if a geminate is underlyingly moraic (Ham 2001) and if moraic onsets exist (Topintzi 2006), then tautosyllabic onset geminates should also be available
- ❖ **Empirically** verify this with data from Pattani Malay and Marshallese
- ❖ **Advantage:** Fills in a logical possibility and also accounts for initial geminates, whose representation has so far been a problem in moraic theory

The theory

- ❖ Standard medial-geminate representation – the 'flopped structure' (Hayes 1989):
 
- ❖ Problem: initial geminates → no coda available → no 'flopped' structure available
- ❖ Some alternatives & their problems:
 - Davis (1999): μ is unlinked to higher prosodic structure, thus cannot contribute to weight for e.g. WdMinimality
 
 - Curtis (2003): resembles representation of unsyllabified consonants, but no evidence for lack of syllabification
 

A solution

- ❖ Initial geminate as a **moraic onset** (cf. Hajek and Goedemans 2003 (henceforth H&G))
 
- ❖ **Advantages**
 - Avoids problems of Davis and Curtis
 - Is consistent with Ham (2001): a geminate is underlyingly moraic. Thus, the 'flopped' structure is not necessary, but achieves better syllabification (cf. CVC_iV vs 'flopped' CVC_iC_iV ; N.B. $C=C_iC_i$ =geminate). Initially then, single linking is permitted
 - Is compatible with other data suggestive of moraic onsets, cf. Pirahã, Karo, Arabela stress or Bella Coola WdMin (Topintzi 2006)
 - Accounts for data such as Trukese WdMin (Davis and Torretta 1998, Muller 1999), Pattani Malay stress (H&G, see below)

A prediction

- ❖ Moraic onset geminates will also be possible medially
- ❖ Importantly, they will render the C_iV syllable heavy, rather than the preceding one as in the flopped CVC_iC_iV
- ❖ Empirical evidence: Marshallese (see below)

Pattani Malay initial geminates

- ❖ Consonant length only contrasts initially; vowel length is not phonemic. In open syllables V =long, in closed ones V =short. Exception: /i/=always short
- ❖ Stress in non-geminated words (1a): primary on final σ ; secondary on remaining ones (1a.i), unless they include /i/ in which case they are stressless (1a.ii&iii)
- ❖ Stress in geminated words (1b): primary *always* on first σ (1b); even if it includes /i/ (1b.iii); secondary stress on remaining syllables
- ❖ The data (Yupho 1989, H&G):
 - (1) *Geminates and stress*
 - a. Non-geminated words
 - i. [bùwòh] 'fruit'
 - ii. [pimàtʃ] 'road, path'
 - iii. [kídá] 'shop'
 - b. Geminated words
 - i. [bùwòh] 'to bear fruit' [from /b+i+buwòh/]
 - ii. [m:átb] 'jewellery'
 - iii. [k:íðá] 'to the shop' [from /k+i+kíðá/]

Sketch of the analysis

- ❖ $CV(V)=1\mu$, $CVC=1\mu$ (because vowel length is not phonologically contrastive), $C:V(V)=2\mu$ (because of the moraic onset geminate)
- ❖ Primary stress is normally word-final (AlignHdr), when all syllables are monomoraic. A $C:V(V)$ attracts stress due to $WSP \gg \text{AlignHdr}$
- ❖ Secondary stress assigned on remaining syllables unless they include /i/. Avoidance of stressed central vowels (*P/i), cf. quality-sensitive stress (Kenstowicz 1994, de Lacy to appear)
- ❖ However, $WSP \gg *P/i$: weight takes priority over quality, e.g. k:íðá
- ❖ Analysis improves on H&G, who treat $C:V=CVV=2\mu$ and make no use of *P/i. They thus predict *[k:í:ðá], instead of [k:í:ðá]
- ❖ Their solution: prioritize onset weight over nucleic one and introduce *ad hoc* constraints. **BUT:** this predicts unattested systems and employs unwarranted machinery. Both problems avoided in current analysis

Marshallese medial geminates (1)

- ❖ Stress and reduplication data support a moraic onset analysis
 - ❖ Distributive reduplication (Ralik dialect) via consonant doubling (and/or final syllable doubling. The status of the prefix yV- is unclear)
- | | | |
|----------|--------------|----------------------|
| (2) Root | Distributive | Gloss |
| korap | yokkoraprap | 'gecko' |
| diylah | yiddiylahlah | 'nail' |
| nib | yinnibnib | 'preemptive' |
| reja | yerrejaja | 'shave (from Engl.)' |
- ❖ In Ralik, reduplication is by means of consonant doubling. In the Ratak dialect, it is CV- reduplication, e.g. diylah → didiylahlah. Generalisation: reduplication= 1μ . Ralik opts for the absolute minimum, Ratak avoids geminates and prefers supraminimal CV
 - ❖ A moraic geminate reduplicant wholly syllabified in the same σ captures this straightforwardly

Marshallese medial geminates (2)

- ❖ Trisyllabic window for stress (Zewen 1977). (Final) codas are non-moraic
 - If all σ s are light, then stress on antepenult, e.g. ékajet 'to judge'
 - Heavy σ s attract stress, e.g. je.ú.rur 'commotion, excitement'
 - If σ s are equally heavy/light, leftmost gets stress, e.g. má:ja:j 'to be clear of underwood'
- ❖ Stress in words with medial geminates falls on $C:V$ syllable: jibbúñ 'morning'; (y)emñán 'good'
 - If syllabification was [jib.buñ], then stress should be initial under any assumption, namely: a) if codas are not moraic, then leftmost stress, b) if medial codas are moraic, then again leftmost stress, since this hosts the heavy syllable
- ❖ Only way to produce correct stress: syllabification is j*̣*ib*̣*.b*̣*uñ*̣*, i.e. with a moraic onset geminate. Final stress accounted for since the syllable is heavy

Conclusion

- ❖ Geminates as moraic onsets solve the long-standing problem of how to represent initial geminates
- ❖ Medially, languages can either have CVC_iC_iV or $CV:C_iV$ geminates. The latter avoid extra codas at the expense of *Moraic Onset violations. Since most languages ban moraic onsets, it follows that usually medial geminates are heterosyllabic

Selected References

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