

## The morphologically regressively assimilated consonants

**Phenomenon:** All the verbs whose ‘non-past’ form ends with the geminate consonant if followed by a consonant (or the glottal stop if followed by a vowel or sentence-final) in Japanese-Saga western dialect, corresponding to /ru/ in standard Japanese, are the so-called vowel /e/-final base verbs and the strong base verbs, as exemplified.

verb class, meaning	Standard	Saga western dialect	Takeo dialect
C(/r/)-final, ‘when ... sell ...’	ur <u>u</u> toki	u: <u>t</u> oki	u <u>tt</u> oki
/e/-final, ‘when... sleep...’	ner <u>u</u> toki	n <u>u</u> ttoki	n <u>u</u> ttoki
/i/-final, ‘when... wear...’	kir <u>u</u> toki	ki: <u>t</u> oki	ki <u>tt</u> oki
strong, ‘when... come...’	kur <u>u</u> toki	k <u>u</u> ttoki	k <u>u</u> ttoki

On the other hand, the geminate consonant (or glottal stop) occurs in place of /ru/ in standard whichever morphological type the verb is in Japanese-Takeo dialect (Hayata 1998), as exemplified. Note that the immediately previous vowel will be lengthened in place of /ru/ if the verb is consonant-final or vowel /i/-final in Saga western dialect.

**Previous studies:** Arguing that the underlying form of the ‘non-past’ affix is /ru/, but NOT ? or any geminate consonant, Hayata 1998 analyzes the geminate consonant as deriving from /ru/ on the assumptions of stem final /e/ to /u/ change [1], verb final /u/ elimination ( $u \rightarrow \emptyset / r\_ ]_{verb}$ ) [2], /r/ to C regressive assimilation [3].

ne ru toki	oki ru toki	UR
nuru toki		[1]
nur toki	okir toki	[2]
nut toki	okit toki	[3]
nuttoki	okittoki	

Hayata 1998 would make incorrect predictions since the vowel lengthening, but NOT the consonant gemination, occurs if the verb stem is vowel /i/-final or consonant-final in Japanese-Saga western dialect. **Analysis:** We propose a morphologically conditioned geminate consonant, as formalized, on the assumptions of Koga and Ono’s 2010 tense expletive repetition in conjunction with Hayata’s 1998 verb final /u/ elimination.

$r \rightarrow C_i / \#$	$\# \_ \# C_i$	They assume: Each lexeme of the so-called vowel /e/-final base verbs and the strong base verbs is associated with another stem with the final vowel (/e/ or /o/) absent as well, as in /ne/ and /n/ ‘sleep’. The tense expletive / $(r)u$ / selects
$\left[ \begin{array}{c} cat \\ \text{HEAD } [t(ense)] \end{array} \right]$		the shorter stem, and the tense expletive / $(r)u$ / further selects the whole, as in $[[[n]_{v[bse]} u]_{tense} ru]_{tense}$ ‘sleep-Non-past’. Our proposal is restrictive, no verbal morphological class being used, and is explanatory adequate, being able to speculate that the outer tense expletive /ru/, required for the prosodic minimality, but is contracted being too long in the dialect. For the lengthened vowels, if the immediately preceding segment is NOT associated with tense, then the vowel there will be lengthened. <b>References:</b>

Hayata, Teruhiro. 1998. Saga-hoogen no dooshi mikanryo-rentaiji no kiteekke. *Report from Linguistic Laboratory at Kyushu University*, 19: 1-4.

Koga, Hiroki and Koji Ono. 2010. Surface constraints on multiple occurrences of the tense expletive, *International Workshop on Morphology and Formal Grammar*, 36-40. July, Université Paris IV-Sorbonne.