On the syllable-internal falling tone and empty consonants in Hatoma (Southern Ryukyuan)
Wayne P. Lawrence
The University of Auckland

Empty consonant slots (consonant slots with no gestural features) have been proposed in a number of languages to account for a number of segmental processes observed in subsets of vocabulary which would otherwise be classed as irregular. These include triggering of gemination (e.g. in Finnish (Rotenberg 1978: 206), Seri (Marlett & Stemberger 1983) and Aranese Gascon (Hualde 1992)), blocking vowel deletion, triggering allomorphy and vowel epenthesis (Marlett & Stemberger 1983), and triggering glide epenthesis (Marlett 1997). This presentation argues it is necessary to postulate the existence of an empty consonant in the Southern Ryukyuan dialect of Hatoma, but on the basis of the tone contour, i.e. suprasegmental evidence.

The Hatoma dialect has two main word-pitch contours, and a small number of peripheral contours (Lawrence 1997, 2012). The two main contours are an all-High contour and the unmarked phrase-final-syllable-Low contour (in compounds the fall in pitch in the unmarked class depends on the foot structure of the compound-final morpheme). (In all words an initial light syllable is pronounced on a Low tone, except if the second syllable is voiceless.)

> all-High: ⌐*mai* 'rice', *hu*⌐*ci* 'mouth', *ka*⌐*mai* 'structure', ⌐*uuru* 'coral',
>   *su*⌐*buru* 'gourd', *su*⌐*kurai* 'pretence', ⌐*huNsukuru* 'pocket'
> unmarked: ˈ*mai* 'front', ˈ*huci* 'comb', ˈ*kamai* 'boar', ⌐*uu*ˈ*ru* 'cucumber',
>   *su*⌐*bu*ˈ*ru* 'head', *su*⌐*ku*ˈ*rai* 'mending', *si*⌐*tumu*ˈ*ti* 'morning'

The negative ending is pronounced as *-anu* in absolute clause-final position or before the conjunctive particle *-nu* 'but', and it is reduced to *-aN* elsewhere. Although all-High class *pa*⌐*ranu* (attach-NEG) becomes *pa*⌐*raN*, in the unmarked class *pa*⌐*ra*ˈ*nu* (go-NEG) also becomes *pa*⌐*raN* and not the expected *ˈ*paraN* (with the Low initial light syllable and Low final syllable of the unmarked tonal contour; cf. the affirmative form ˈ*paruN*) or *pa*⌐*ra*ˈ*N* (with the same tone contour of the pre-reduction form). This form shows that (i) the tonal contour comes from that of the unreduced *pa*⌐*ra*ˈ*nu* and (ii) a contour tone is being avoided.

However, although relatively rare, there are surface contour tones (falling tones which derive from level tones) in the Hatoma dialect. The falling tone is most commonly encountered on the superheavy final syllable of the conclusive form of adjectives, such as *a*⌐*gaa*ˈ*N* 'red' (with the all-High class stem *aga-* as evidenced by *a*⌐*ga-daikuni* 'beet') and *ta*⌐*kaa*ˈ*N* 'high' (with the unmarked tonal class stem *taka-* as in *ta*⌐*ka-maf*ˈ*fa* 'high pillow'). A clue to how this contour tone should be analysed is provided by a much rarer environment of the contour tone. Note the following forms:

> | ˈjama | ˈjamaa | ja⌐maa | ja⌐maˈa |
> |---|---|---|---|
> | 'mountain' | mountain-TOP | mountain-ALL | mountain-ALL-TOP |

The allative morpheme *=a* does not usually produce a High tone (e.g. ˈ*maci* 'town', ˈ*macee* (town-ALL(-TOP)); *ja*⌐*ku*ˈ*ba* 'village office', *ja*⌐*ku*ˈ*baa* (village office-ALL)). In order to obtain *ja*⌐*maa* (mountain-ALL) from ˈ*jama* by adding *=a* which is not marked for a High tone, it is necessary to assume that a syllable is being added to ˈ*jama* to produce *ja*⌐*ma*ˈ-CV. This points to an allative form of *=Ca*, where the C is an empty consonant, so the derivation becomes ˈ*jama* → *ja*⌐*ma*ˈ-C*a* → *ja*⌐*ma*ˈ*a* → *ja*⌐*maa* where the last step is the same as is observed in the derivation of the negative form *pa*⌐*ra*ˈ*nu* → *pa*⌐*ra*ˈ*N* → *pa*⌐*raN*. *ja*⌐*ma*ˈ*a* (mountain-ALL-TOP) will be derived as

ꜜjama → jaꜛmaꜜ-Ca → jaꜛmaꜜ-Ca-a → jaꜛmaꜜaa → jaꜛmaaꜜa → jaꜛmaꜜa. Evidently the High tone only spreads one mora to the right within the syllable, so that a contour tone will only be found on superheavy syllables (as in the adjectival conclusive form) or heavy syllables which derive from superheavy syllables (as in jaꜛmaꜜa (mountain-ALL-TOP)).

A by-product of this analysis is that it provides an explanation the seemingly irregular relationship between ꜛmaa 'where' (all-High tonal class) and ꜛmaaꜜru (where-FOC), ꜛmaaꜜnu (where-NOM) (unmarked tonal class) (Kajiku 2020:1541). ꜛmaa ceases to be irregular if it is recognised as being the allative form which is derived as ꜜmaa → ꜛmaaꜜ-Ca → ꜛmaaꜜa → ꜛmaaa → ꜛmaa.

This presentation will also demonstrate that, in order to account for the tonal contour, the adjectival conclusive form is not simply stem + -aN (cognate with the existential verb ꜜaN (unmarked tonal class)), but must contain an empty consonant (i.e. aga-Ca-aN, taka-Ca-aN, etc. where -Ca is an adverbializer).

References

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