

## An Element Theory analysis of the Japanese verb -te form

Xiaoliang Luo

Ecole Polytechnique / Université de Tours

xiaoliang.luo@polytechnique.edu

The onbin (euphony) is a widely spread phenomenon in Japanese concatenative morphology, at the surface level, the choice of the allomorph depends on the phonological form of the stem, in other words, they are phonologically conditioned. Barillot et als (2016) shows that allomorphy in Somali verb is in fact only at surface level and it's conditioned by the Elements at an infrasegmental level. In this contribution I will adopt a similar view on Japanese onbin and argue that Japanese verbs have their underlying forms constantly.

Japanese verbs have two categories, C-final stem and V-final stem<sup>1</sup>. The citation form of V-final stem is followed by “-ru”, while that of C-final stem by “-u”. The TAM of both of them is formed by the suffixed “-te”, before adding other suffixes. For V-final stems, “-ru” is replaced by “-te”. For C-final stems, the phonotactics give rise to different strategies, shown in (1) : the final consonant of the stem may 1) remain and be followed by /i/; 2) fall and be replaced by /i/; 3) become moraic /N/; 4) the fusion and gemination of /t/ of the “-te” suffix.

(1)

final consonant of the stem	+ suffix “-te”
/k/, /g/	i-te / i-de
/s/	si-te
/ts/, /r/, /w/	t-te
/n/, /m/, /b/	N-de

In order to reduce the surface allomorphy to the same constant underlying form, I argue in CVCV framework (Lowenstamm 1996; Scheer 2004) and Element Theory (Bacley 2011) . C-final stem will thus have an empty final V position, while V-final stem has a final filled final V position, in the template. In “-te” suffix /t/=|I|+|ʔ|.

For V-final stems, there is no contact of two consonants thus no onbin but just simple concatenation.

(2) mi-ru / mi-te      ‘look’

m	i	t	e
C	V	+ C	V

For C-final stems, I propose a parameter of Japanese in (3)

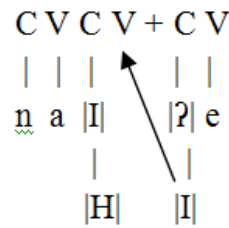
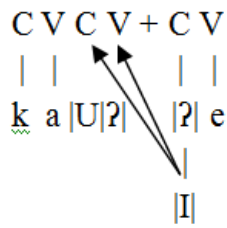
(3) The hierarchy of the Elements in Japanese are: |L| > |I| > |ʔ| > |U| > | |.

For kak / kai-te, k>i, |I|>|ʔ|>|U|, since k=|U|+|ʔ| and /t/=|I|+|ʔ|, |I| will win shown in (4).

(4) kak-u / kai-te      ‘write’                      (5) hanas-u / hanasi-te      ‘speak’

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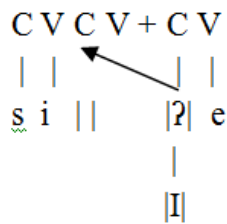
<sup>1</sup> Nasukawa (2010) challenges this view and claims that all stems are V-final. However, this will not affect the claim of this contribution.



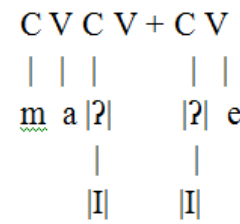
For hanas-u / hanasi-te, where /s/=[I]+[H] and /t/=[I]+[?], since [I]=[I], /s/ will remain, but [I] will fill the empty V position, shown in (5).

For sir-u / sitte, where /r/=[ ] and /t/=[I]+[?], since [I]>[?]>[ ], /t/ will spread as a whole and give the gemination, shown in (6).

(6) sir-u / sit-te ‘know’



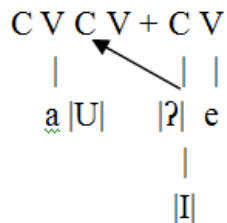
(7) mats-u / mat-te ‘wait’



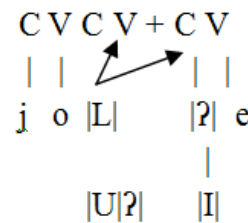
For mats-u / mat-te ([ts] is phonologically /t/=[I]+[?]), since we have two /t/, thus gemination, shown in (7).

For aw-u / at-te, where /w/=[U] and /t/=[I]+[?], since [I] > [?] > [U], /t/ will also spread as a whole and thus gemination. Furthermore, since /t/ contains [?] Element, it cannot spread on the empty V position, but has to replace [U] on the C position, shown in (8).

(8) aw-u / at-te ‘meet’



(9) yom-u / yon-de ‘read’



For the moraic nasal, yom-u / yonde, where m=[L]+[U]+[?] and /t/=[I]+[?], since [L] > [I] > [?], [L] will spread; since [I] > [?] > [U], [U? ] Elements in /m/ are expelled by [I]. Without the [?] Element, [L] which remains has to be moraic, and thus migrate to the empty V position. Finally, since [L] > [I] > [?], and [I?]=/t/, [L] will also spread on /t/ and give thus a [d]. This is shown in (9).

By one single parameter in (3), all forms are predicted correctly. This proposition also explains why sometimes the final stem consonant remains consonant, and sometimes gives a vowel.

Notice that unlike “-te”, the volitive auxiliary “-tai” does not trigger the onbin. A morphological explanation would be that “-te” is purely functional, while “-tai” is a non-functional morpheme with an independent semantic interpretation.

I will also propose a comparison with the traditional treatment of the -te form (McCawaley 1968; Itô & Mester 1986).

### References:

Backley (2011); Barillot, Bendjaballah & Lampitelli (2016); Itô & Mester (1986); Labrune (2006); Lowenstamm (1996); McCawaley (1968); Nasukawa (2010); Scheer (2004)