Adapting stop-liquid clusters into Cantonese

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Linguists have observed that stop-liquid (T-L) cluster are adapted into two syllables in Cantonese. These adaptations possess epenthetic rhymes/codas, underlined below in (1) and (2), that do not have any correspondence in the source. More often than not, these epenthetic rhymes are the same as the following syllables', while the epenthetic codas are all identical to the follow syllables'.

(1) Adapting historical *T-L clusters from Old Chinese (Chan 1984):

角 'horn, corner'	*kl- or *kr-	> k**ɔk**³ lɔk⁵	
胳 'arm pit'	*klak	> k**ak**³ lak⁵	
凡 'all, completely'	*bl-	> p**aŋ**²² laŋ²²	
筆 'writing brush, straight'	*pl or *pr	> (tsɪk²) p**ɐt**² lɐt²	

(2) Adapting English T-L-clusters in loanwords (Tsui 2006)

'brake'	[bɹeɪk]	> p**ɪk**² lɪk⁵
'clutch'	[kʰlʌtʃ]	> k**ɪk**² lɪk⁵ tsi³⁵
'cracker'	[ˈkʰɹækəɹ]	> h**ɐk**⁵ lɪk² ka³⁵

Tsui (2006) proposed that these consonants are inserted to supply another mora. This allows the preceding epenthetic vowel to be short, and thus matching the zero input of the source. This proposal, however, did not explain why the epenthetic coda/rhyme is exactly the same as the following syllable's.

The alternative proposal here is that Cantonese has a phonological preference towards reduplication-like doublets in words (Zuraw 2002). Such identical codas and rhymes are inserted to not only keep the epenthetic vowels short, but also fulfill the preferences for doublets in Cantonese.

The current study uses the Hong Kong Cantonese Corpus (Luke 1997) to examine the occurrences of such reduplication-like doublets in word formation in Cantonese. Disyllabic word types are extracted from the corpus, and the expected frequencies and observed frequencies of such rhyme/coda-doublets are calculated (cf. Kawahara 2007).

The results show that, in Cantonese word formation, 5 (-p, -t, -k, -n, -ŋ) out of the 6 possible coda types appears in doublets more than expected. Also, out of the 16 possible closed rhymes, 10 of them (-ap, -ɐp, -at, -ɐt, -it, -ut, -ɛk, -ik, -ɔk, -ʊk) appears in doublets more than expected. These affirms the moderate preference for reduplication-like doublets in Cantonese words. This preference in turns could be the reason for inserting an identical rhyme when breaking down T-L-clusters.

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