ENGLISH LOANWORDS IN CANTONESE Daniel Silverman, UCLA

A) Introduction

- Cantonese speakers do not have access to English phonological representation
- Cantonese speakers must provide the phonetic string with prosodic structure in accordance with their indigenous phonological system
- When the indigenous phonology is ill-equipped to provide structure, appeals to universally unmarked settings must be made
- Evidence from truncation strategies indicates Cantonese speakers perform multiple scansions on incoming forms
- There is a strong preference for forms to possess two syllables
- B) Cantonese Segment Inventory and Relevant Phonotactics

- The syllable is superficially (C)VX (no branching onsets, no branching codas (cf. English))
- Acceptable codas are p, m, t, n, k, ng, y, w
- The tonal inventory:

55 (H) 53 (HM) 33 (M) 35 (MH) 22 (L) 24 (LM) 21

- Contour tones may associate only with -VV and -VS rimes (i.e. sonorant-final syllables possess two TBUs)
- The relevant surface tones are L, M, H
- The Cantonese morpheme is almost exclusively monosyllabic
- Cantonese has no indigenous operations of epenthesis/syncope

(morphemes always surface fully intact, even when concatenated)

- There is a "preference" for bisyllabic words in Cantonese

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C)
     The Analysis of Pitch Contrasts: Stress - to - Tone
     - primary stress
                                   [H] tone
                              ->
     - other syllables
                              ->
                                   [M] tone
          a. [gin] -> [tsin[H]]
                                   b. [cigar] -> [syt[M] ka[H]]
     1)
             [band] -> [p n[H]]
                                      [buffet] -> [pou[M] fei[H]]
             [jam] -> [ts m[H]]
                                      [guitar] -> [kit[M] t'a[H]]
     - English consonant clusters are either truncated
         (C_1C_2->C_1), or repaired via epenthesis (CC->CVC)
     - Derived syllables
                              -> [L] tone
     2)
          [stick] -> [si[L] tik[H]]
                                       [fluke] -> [fu[L] luk[H]]
                                       [cream] -> [kei[L] lim[H]]
          [smart] -> [si[L] mak[H]]
          [stamp] -> [si[L] tam[H]]
                                       [break] -> [bik[L] lik[H]]
     - A [H] boundary tone normally attaches form-finally (Yip
         1981)
     3)
          a. [motor] -> [m [H] ta[MH]]
             [soda] -> [s [H] ta[MH]]
             [letter]-> [l t[H] t'a[MH]]
             [party] -> [p'at[H] t'i[MH]]
          b. [lace] -> [lei[H]si[MH]]
             [film] -> [fei[H] l m[MH]]
             [tips] -> [tip[H] si[MH]]
             [file] -> [fai[H] lou[MH]]
          c. [cherry]-> [ts [H lei[M] - tsiMH]]
             [X-ray] \rightarrow [ek[H] si[L] kang[H]]
     - [L] -> [M] / ____H]_s
     - Tonal suffixation applies after word-building operations
        (C)
     - English /s/ is always perceived syllabically before a
        consonant, and word-finally
                    [store] ->
     4)
                                   [si[L] t [H]]
               a.
                    [spare] ->
                                   [si[L] p [H]]
                    [bus]
                                   [pa[H] si[MH]]
               b.
                          ->
                    [cheese]->
                                   [tsi[H] si[MH]]
     - The domain of pitch contrast analysis (PCA domain) is the
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English free morpheme

PCA domain: <English free morpheme>

 Pitch contrasts are preserved within the PCA domain, within tonological limits

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5) [<dock><yard>] -> [t k[H] ja[H]]
[<floor><show>] -> [f [H] sou[H]]
[<side><board>] -> [sai[H] put[H]]
[<hi><fi>] -> [hai[H] fai[H]]
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- D) Multiple Scansions, and Syllable Structure
 - truncation normally reduces a form to a single binary foot

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[full form] -> [{single binary foot}]
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- 6) [economics] -> [i[M] k' n[M]]
 [sociology] -> [sou[M] si[M]]
- The PCA domain is established before truncation
- The boundary tone attaches before truncation
- Pitch contrasts are neutralized as necessary due to constraints of indigenous toneme inventory
- --> The full form is scanned before truncation applies
- Syllabification is maximal up to well-formedness
- --> Within the indigenous phonology, there are no syllable restructuring operations. Therefore, appeals to UG must be made for syllable-building operations on loanwords
- English stop-liquid cluster repair strategy is crucially dependent upon a full syllable count
- 8) [printer] -> [p n t'a] [print] -> [pi lin] [broker] -> [puk k'a] [break] -> [pik lik]
- 9) [printer] [print] [jam]

 - b. s s s s s |x| + |x|

- --> On the initial scansion, syllable nodes are provided for sonority peaks within the phonetic string.
- --> Monosyllabic English forms will achieve bisyllabicity whenever possible
- --> Final obstruents in form-final clusters presumably are not represented by Cantonese speakers

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10) a. [pleat] -> [pi lit] [band] -> [p n]
b. [fluke] -> [fu luk] [length] -> [l n]
c. [shaft] -> [s p]
d. [film] -> [fei l m]
[kiln] -> [ki loen]
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- --> Bisyllabicity is preferred.
- If the input has more than two sonority peaks, bisyllabicity is forfeited ([professor] ->

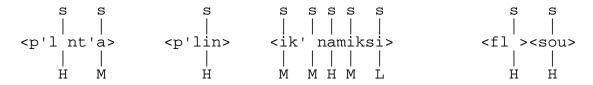
[pou fa sa], [office] -> [fi si], [physics
chemistry biology] -> [fi k' m pai])

E) Sample Derivations

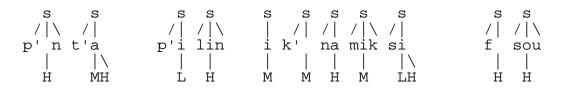
11) Input:

[printer] [print] [economics] [floorshow]

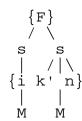
Initial Scansion:



Second Scansion:



Truncation:



Surface:

[p' n[H] t'a[MH]]
[p'i[L] lin[H]]
[i[M] k' n[M]]
[f [H] sou[H]]

F) General Conclusions

- Cantonese speakers do not have access to English phonological representaion
- Appeals to universally unmarked settings are made when the indigenous phonology is ill-equipped to licence material
- Multiple scansions are performed on loanwords
- The binary foot may play a limited role in Cantonese

phonology