An Analysis of Tonal Assignment on Japanese Loanwords in Thai

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0. Introduction

The number of Japanese loanwords in Thai is not as high as that of English loanwords. In fact, only five words originally from Japanese are found in The Thai National Language dictionary published by the Royal Institute (ราชบัณฑิตยสถาน) in 1982. Nevertheless, Thai native speakers must have heard more than these five Japanese loanwords, if one considers the influx of Japanese words which have been absorbed into Thai through the mass media. Japanese proper names that sound familiar to us are famous cartoon and TV characters such as "โดราเอมอน" /doru:me:n/, "โนบิตะ" /no:bita:/, "นินจ่าเก๋ได้" /ninji:ga:ki:dei/, or "โตชิ่น" /to:chi:n/. We are also familiar with company names such as "นินจ่าฮ่า" /ninji:hâ:/ or "โตจิ่น" /to:ji:n/, as well as food items like "สุกี้ยำ" /sûkî:yi:ka:/ or "ทงมุสไต่" /to:mu:stai:/ in this paper, I will examine whether the tones assigned on these Japanese loanwords are phonetically motivated. In addition, I will look at the main factors that determine the tonal assignment on them.

In the first section, I explain the phonological structure of Japanese, in order to understand how its structure is transformed into the Thai phonological system. In section two, I compare the Thai tones on Japanese loanwords with the original pitch accent of the same forms in Japanese (i.e., the "standard" Japanese). Section three discusses the Thai syllable structure in correlation with the tones assigned on Japanese loanwords. I also discuss the role of the Royal Institute in Japanese loanwords. The last section is a conclusion.

1. Japanese pitch-accent

The syllable structure of Japanese is canonically CV. Each CV sequence is called a mora, a timed unit which is smaller than a syllable. For example, the word /sinbun/ 'newspaper' in Japanese has two syllables (/sin/ and /bun/) and is counted as having four morae; /sil/ /ni/, /ibu/, and /ni/. It is important to separate the moraic level from the syllabic level because pitch distinction can take place at both levels. For example, at the moraic level the word /kan/ has two meanings, depending on the pitch pattern. If this

1This is a revised version of my term paper for Ling 770: Areal Linguistics in Spring 1995 at the University of Hawaii. I would like to express my gratefulness to Dr. Patricia Donceman and Mr. Hideaki Sugui of the University of Hawaii for their encouragement. I also would like to thank my colleagues at Thammasat University--Mr. Gwyn Williams, Miss Donna Nelesen, and Mr. Toshino Tanaka for their comments.

2These are คิมอน /ki:môno:/, คิมายะ /ki:ma:yâ:/, ฟูจิยะ /fu:ji:ya:/, เซน /sen/, and ปูดิ /judô/.

3A nasal, as well as a geminate, can form a single mora in Japanese.
word has a falling-pitch pattern (i.e., a sequence of high and low on each mora respectively), it means "completion". On the other hand, if it has a rising-pitch pattern, with a sequence of low and high, it refers to "sense" (Comrie 1990:868). It is well-known that Japanese is a pitch-accented language because each word can have no more than one pitch drop. The basic pitch patterns are H(igh)L(ow), LHL, and LH. The following are examples of different pitch patterns on /hasi/: /hasi/ HH 'edge', /hasi/ LH 'chopsticks', and /hasi/ HL 'bridge' (Comrie 1995:869). The HL and LHL pitch patterns have one pitch drop, whereas the LH pattern has none. In other words, a sequence of pitches which shows more than one pitch drop such as HLHL is not possible in Japanese.

2. Tones on Japanese loanwords in Thai

To see whether the pitch accent in Japanese has any affect on the tonal assignment on loanwords in Thai, we need to compare the pitch accent of the original Japanese words with the Thai tones of the same forms. Each mora in Japanese has its own pitch (see Appendix). The number of pitches on each Japanese word depends on the number of morae. When they become loanwords in Thai, the pitch changes to be syllabic, since the syllable is the tone-bearing unit in Thai. For example, /ikkyuu/ 'the name of a famous monk' in Japanese consists of four morae; /i/ /k/ /kyu/ and /u/, having a sequence of HLLL. However, in Thai this loanword is made up of two syllables, /ki/ and /khu/, with a sequence of high and mid tones. Thai speakers seem to perceive the moraic nature of the Japanese language as a short vowel with a final glottal stop (ë), whereas a sequence of VV, which equals two morae in Japanese, becomes a smooth syllable in Thai.

I pay more attention to the tones assigned on the final syllable of Japanese loanwords, because it is a position where we find many tonal variations. On the other hand, most of the non-final syllables ending with a glottal stop tend to have a mid tone in casual speech. For example, the syllable /kiri/ of /kirimono/ 'a Japanese traditional costume' has a low tone, but in casual speech the low tone is neutralized into a mid tone, as in [kimono:]. Similarly, the second syllable of 'sakura' has a low tone in careful speech (/sakura/), but in casual speech it becomes a mid tone (/sakurâ/). However, the non-final checked syllables ending with /p,t,k/ maintain a high tone in casual speech, such as /nihon/ 'name of a painting company' and /daijibutsu/ 'name of a car company'.

Gandour (1979) suggests that English loanwords in Thai are phonetically motivated (with some exceptions), because the tones assigned on them follow the stress pattern of the original English words. If primary stress is on the first syllable of a bisyllabic word in English, a falling tone would be assigned to the last syllable of the same English loanword in Thai. This is because a bisyllabic word with primary stress on the first syllable in English has an overall falling stress pattern. For example, the last syllable of /wisa:/ 'visa' has a falling tone because in English, the same word has initial stress /vi:/ which has an overall falling pitch. On the other hand, if primary stress is on the second syllable of a bisyllabic word in English, a mid tone, not a falling tone, would be assigned to the last syllable of that English loanword, since it has an overall rising stress pattern. For example, the last syllable of /tche:mpu:/ 'shampoo' has a mid tone,

4LL and HH are possible as well.
not a falling tone (*/tcheːmphûː/), because the stress of the original form falls on the last syllable (/ʃæm'pu/) and does not create an overall falling contour.

If the tones assigned on each Japanese loanword in Thai are phonetically motivated, they should correlate with the pitch accent of the original Japanese form. That is, the tonal assignment on Japanese loanwords in Thai should at least reflect the original pitch pattern of the original Japanese forms. However, the Japanese loanwords presented in this paper do not clearly show such evidence. The tones of Japanese loanwords will be described in the next section.

3. Discussion

The tones on Japanese loanwords in Thai do not occur randomly; they are quite systematic, depending on the syllable structure and the initial consonant which is described below:

3.1. Tones on the non-final syllable of Japanese loanwords

- All non-final smooth syllables have the mid tone, except /sâː/ of /sâːkeː/ 'หน้าสาท' and /kiâw/ of /kiâwsâː/ 'เกณฑ์' (see Appendix).

- Short-checked syllables with the initial /b/ in Japanese loanwords have both low and high tone:
  /noːdïːŋâː/ (<JP. nobita/ HLL) /dajhûtsuː/ (<JP. daibutsu/)
  - A short-checked syllable with the initial /s/ in Japanese loanwords has the low tone:
  /sâːrki:jaːkâː/ (<JP. sukiyaki/ LHHH)
  - A short-checked syllable with the initial /t/ in Japanese loanwords has the low tone:
  /tchangtûkuː/ (<JP. shinjuku/)
  - Short-checked syllables with the initial /k/ in Japanese loanwords have the low tone:
  /kûːrkiːkôː/ (<JP. guriko/ HLL) /a:kûːrhaː:râː/ (<JP. akihabara/)

- Short-checked syllables with the initial /m/ have the high tone:
  /mûsûːtchîː/ (<JP. mitsubishi/ HLLL) /khaːmûkâːsː/ (<JP. kamikaze/ LLLL)
  - Short-checked syllables with the initial /tʃ/ have the high tone:
  /tchangtûkuː/ (<JP. sizuka/ HLL) /tchîːkôːkûː/ (<JP. sikoku/ HLL)
  - Short-checked syllables with the initial /n/ have the high tone:
  /nûtsûːs:kaː/ (<JP. nisshi/ HLLL) /nûpûːn/ (<JP. nippon/ LLLL)
  - A short-checked syllable with the initial /r/ has the high tone:
  /naːrûː/ (<JP. narita/ HLL)
  - A short-checked syllable with the initial /l/ has the high tone:
  /kôːrîkoː/ (<JP. guriko/ HLL)
  - Short-checked syllables with the initial /h/ have the high tone:
  /hîraːtchîː/ (<JP. hitachi/ HLL) /dajhûtsuː/ (<JP. daihatsu/)
  - A long-checked syllable with the initial /m/ has the high tone:
  /mûːtaː/ (<JP. matsuda/ LHH)
The tones on non-final syllables of the Japanese loanwords above are summarized in Chart I:

<table>
<thead>
<tr>
<th>Smooth syllables</th>
<th>All smooth syllables are assigned the mid tone except: /sãːkãː/ and /kiáwsãː/</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short-checked syllables</td>
<td>Tones</td>
</tr>
<tr>
<td>Low</td>
<td>/b/, /c/, /s/, /k/</td>
</tr>
<tr>
<td>High</td>
<td>/b/, /m/, /tch/, /n/, /r/, /l/, /h/</td>
</tr>
<tr>
<td>Long-checked syllable(s)</td>
<td>Tone(s)</td>
</tr>
<tr>
<td>High</td>
<td>/m/</td>
</tr>
</tbody>
</table>

Chart I: Summary of tones on the non-final syllable of Japanese loanwords

3.2. Tones on the final syllable of Japanese loanwords

- Short-checked syllables with the initial /k/ in Japanese loanwords all have the low tone:
  /thaːnaːkãː/ (JP/tanaka/ LHH) /tchíusukãː/ (JP/sizuka/ HLL) 
  /khaːwasaːkãː/ (JP/kawasaki/ LHHL) /suːsukãː/ (JP/suzuki/ LHH) 
  /nːaːsaːkãː/ (JP/nagasaki/ LHLL) /hajkãː/ (JP/haiku/ LHH) 
  /tchíkãː/ (JP/sikoku/ LHL) /tchíntcukãː/ (JP/sinjuku/ LHHH) 
  /khaːraːkãː/ (JP/karaoku/ LHLL) /joːkãː/ (JP/youko/ HLL) 
- Smooth syllables with the same initial consonant have the falling tone:
  /oːsaːkãː/ (JP/oosaka/ LHHH) /sûkijaːkãː/ (JP/sukiyaki/ LHHH) 
  /saːkãː/ (JP/seiko/ HHH) 
- Checked syllables with the initial /s/ have the low tone:
  /isusãː/ (JP/isuzu/ LHH) /dajhåtsãː/ (JP/daihatsu/ HHHL) 
  /dadžûtsãː/ (JP/daibutsu LHHH) 
- Smooth syllables with the same initial consonant have the falling tone:
  /kiāwãː/ (JP/gyouza/ LH) /kinşãː/ (JP/ginza/ LHH) 
  /aːsaːkãːsãː/ (JP/asakusa/ LHLL) /jaːkuːsãː/ (JP/yakusa/ LHH) 
  /khaːmîkãːsãː/ (JP/kamikaze/ LHLL) 
- Checked syllables with the initial /tch/ have the high tone:
  /suːtchíː/ (JP/susi/ LH) /thaːkheːtchíː/ (JP/takesi/ HLL) 
  /mitusubîtchíː/ (JP/mitsubisi/ LHLL) /hitatçhíː/ (JP/hitachi/ HLL) 
- A smooth syllable beginning with the same consonant has the mid tone:
  /kçːiːtçhãː/ (JP/geisha/ LHH)