Tonal Neutralization in Kagoshima Japanese

This paper examines how tonal patterns are neutralized in Kagoshima Japanese, a dialect where tonal neutralization is generally believed not to take place, irrespective of the length of the word. This dialect has two contrastive tonal patterns generally known as Type A and Type B, which have a high pitch on the penultimate and final syllable, respectively, as shown below (Hirayama 1951). Capital letters and dots indicate high pitch and syllable boundaries, respectively.

(1) a. Type A  TOo ‘ten’, A.me ‘candy’, a.ka.SIN.goo ‘red signal’
   b. Type B  TOO ‘tower’, a.ME ‘rain’, a.o.sin.GOO ‘green signal’

Our field work in Kagoshima City and its surrounding areas has revealed that the two tonal patterns tend to be neutralized in the following three contexts. Tonal neutralizations in (2a) and (2b) are characteristic of young speakers’ speech, while neutralization in (2c) is observed in the speech of all generations. In this talk, we focus on (2a) and (2c) to see how tonal neutralization actually occurs in this dialect.

(2) a. monomoraic words
   b. compound words (Kubozono 2007)
   c. vocative intonation

As for (2a), all monomoraic nouns tend to show the tonal pattern of Type B. Thus, /hi/ ‘sun’ (Type A: falling pitch) and /hi/ ‘fire’ (Type B: level pitch) are both pronounced with a level pitch in youngsters’ speech when they are pronounced in isolation. However, the original contrast is often preserved when the nouns are followed by a particle like the nominative particle /ga/: /HI.ga/ ‘sun-NOM’ vs. /hi.GA/ ‘fire-NOM’. This analysis further reveals that neutralization tends to occur most frequently in monomoraic nouns, e.g. /hi/, less frequently in monosyllabic bimoraic nouns, e.g. /too/ and /kan/, and least frequently in disyllabic bimoraic nouns, e.g. /ha.na/. It also shows that tonal neutralization does not result in a free variation between the original two tonal patterns, but involves a merger into one of the two patterns, i.e. Type B in the case of monomoraic nouns.

The two tonal patterns are also neutralized in vocative intonation, that is, in the intonation patterns that one uses to call somebody else’s name to draw his/her attention. Our analysis has revealed two neutralization patterns. First, Type B words are often pronounced with the tonal pattern of Type A (3b), whereas Type A remains intact as shown in (3a).

(3) a. Type A: na.TU.o → na.TU.o!
   b. Type B: ha.ru.O → ha.RU.o!

In the other neutralization pattern, final syllables are lengthened and a pitch drop occurs between the final two moras (not syllables) in both Type A and Type B:

(4) a. Type A: na.TU.o → na.tu.Oo!
   b. Type B: ha.ru.O → ha.ru.Oo!

Interestingly, some vocative intonation patterns are identical to interrogative intonation patterns, too. For example, the vocative pattern in (3a) cannot be distinguished from the question form of the same Type A word, i.e. /na.TU.o?/. Moreover, the pattern in (4b) is identical to the question form of the same Type B word, i.e. /ha.ru.Oo?/.