Differences of tone representation between younger and older speakers of Nanjing dialect

This article investigates differences of tone representation between younger and older speakers of Nanjing dialect. Nanjing dialect is spoken in the city Nanjing, located along the east coast of China. The Atlas of *Chinese Dialects* describes that dialects spoken in Jiangsu Province can be divided into three parts: Zhongyuan Mandarins, Jianghuai Dialects and Wu Dialects. Nanjing dialect belongs to the Hongchao subgroup within Jianghuai dialects.

Nanjing dialect has five basic tones and five tone sandhi rules, which are reported in Sun (2003). The basic tones have the following values: T1(31), T2(13), T3(22), T4(44), T5(55). The specific value of each tone may vary in different research. Both Song (2006) and Liu (1995) reported phonetic production differences among different ages. This paper proves the difference in basic tone production within different age groups in addition to tone sandhi production mentioned in Song (2006).

Nineteen native Nanjing speakers divided into two groups according to their ages were recruited and recorded reading monosyllabic and disyllabic words. After vowel segmentation and extraction of F0 points, statistic analysis was performed in the slope, maximum, minimum and mean value of tones to explore age differences.

The result shows that among single tones, tone one and four have statistically significant differences between these two groups. For the old group, T1 has lower max and mean points and T4 has higher mean and minimal points. Other tones do have differences in max, mean, minimal points and slope, but they are not statistically different.

For disyllabic combinations, there are three combinations that have the most differences and nine other combinations that differ to some extent. In the combination T2+T1, the young group creates a new value which has a shallower slope than the single T2, and the max point is lower than the single T2 as well. In contrast, the old group does not create a new value but remains the same. To compare the two groups, the old group has a deeper slope and higher mean and max points.

In the combination T3+T1, the young group does not have a sandhi rule since the slope and all the points are similar to single T3. On the other hand, the old group has a sandhi rule which changes T3 to T2.

In the combination T3+T5, neither of the two groups has a sandhi rule, but phonetically, the old group is lower in max and mean and has a shallower slope.

The article also proves the loss of one tone sandhi in the younger group, which may be due to the influence of standard Mandarin.

Reference

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