

On the phonological information of the sokuon in Kushikino Japanese

Michinao F. MATSUI (Osaka Health Science University)

michinao.matsui@ohsu.ac.jp

The principle aim of this study was to verify the finite phonological information of the Sokuon in the non-standard environments. In general, the sokuon (little "tsu") occurs before a voiceless consonant and assimilates with the following consonant perfectly. Therefore, the sokuon can be interpreted as a geminate consonant (a long consonant) in Tokyo Japanese. This phenomenon shows that the standard sokuon has vacuous segmental information except like the CC-slot structure in the CV theory. On the other hand, Kushikino Japanese has the sokuon before every segment, which is a voiced obstruent (/uQdasu/, /koQgo/ etc.), a nasal consonant (/suQna/, /kiQmaQge/, /seNtaQmoN/ etc.), an approximant (/huQyara/, /kiQyoka/, /miQwake-naka/ etc.) and a vowel (/miQarukaN/, /uQageru/ etc.) as well as a voiceless consonant.

The experiment of this study was designed to estimate the articulatory patterns by the physiological methods including EPG, PGG and the oral/nasal acoustic ratio. The outlines of the experiment results are as follows:

- (1) The articulation of the sokuon before a vowel, a nasal consonant (shown in Fig.1), or an approximant is the double articulation with the glottal stop. Therefore, the sokuon is always distinguished from the hatuon (a moraic nasal) in Kushikino Japanese because there is no sound at the part of the sokuon acoustically.
- (2) The articulatory place in the oral cavity of the sokuon before a consonant is determined by the backward assimilation.
- (3) The articulatory place of the sokuon between the preceding vowel and the following vowel is assimilated into the narrower vowel (Fig.2). This assimilation pattern is observed in the hatuon that occurs between vowels. On the other hand, the articulatory place of the sokuon between vowels in Kansai Japanese is sometimes assimilated into the preceding vowel.

The results (1) and (2) show that the features of the sokuon in Kushikino Japanese are underspecified except the feature [-sonorant]. Moreover, the results (2) and (3) provides the evidence that the Sokuon is associated with the coda position of the syllable because the syllabification is determined by the sonority hierarchy and the ground state of the syllable is determined by the vowel at the nucleus position.

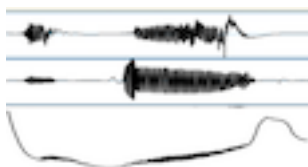


Fig.1 A PGG pattern of /oQmo/

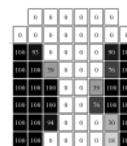


Fig.2 An EPG pattern of /(mi)Q(arukan)/