

The Putonghua standard variety of Mandarin Chinese, with Beijing dialect as its representative, contrasts dental and retroflex sibilants. However, some southern varieties of Mandarin Chinese do not make this contrast, and early dialect surveys suggest that this contrast does not exist in Northeastern Mandarin either. Specifically, the CITATION claims that speakers in the area adjacent to Korea have only dental sibilants corresponding to both dental and retroflex in the Beijing dialect, whereas speakers in the Manchu area have only retroflex sibilants, and speakers in intermediate regions vacillate between the two pronunciations. Today, after 50 years of propagation of Putonghua and the Pinyin system, the original picture probably is even more complicated. This two-part study uses the Songyuan dialect, a Mandarin variety from the Manchu area of Northeastern Mandarin, to evaluate the status of the contrast in two generations of speakers: an older group of 45-50 year olds and a younger group of 18-25 year olds. The first part is a production experiment, which examines the productions of the two groups of SY dialect speakers and also of six young speakers of the Beijing dialect who are included as a control group. This part has two aims. First, the Beijing dialect productions are used to determine a good acoustic phonetic representation of the contrast. The centroid, skewness, and lowest peak of spectra taken at the frication midpoint were measured and compared between the dental and the retroflex tokens. Second, the same acoustic measures were also used to see whether there is any generational difference in the Songyuan area in productions of words with corresponding dental and retroflex sibilants in Putonghua. Results showed that the centroid value is a reliable correlate of the contrast both for the Beijing speakers and for the younger Songyuan speakers, who were all transcribed as clearly differentiating dental from retroflex by two younger Songyuan speakers (who were not among younger speakers studied). The older male Songyuan speakers, however, produced acoustically intermediate tokens, and two transcribers had difficulty categorizing these tokens, perceiving them as intermediate between the dental and the retroflex categories. Most of the difficult tokens were productions of words with a corresponding dental in Putonghua. The second part of the study is a perception experiment, which also has two aims. First, more Songyuan speakers were recruited as transcribers to rate the older speakers' productions, and their ratings were correlated with the different acoustic representations, to see which parameter best predicted the percept of dental versus retroflex versus some other articulation intermediate between the dental versus retroflex categories. This new group of young transcribers agreed in giving intermediate ratings for the same productions, and the centroid value was a good predictor of the perceptual categorization. These results are interpreted in terms of the idea that Songyuan dialect had only retroflex sibilants and no dental ones historically, but has developed a dental category in the last half century, perhaps under influence of the propagation of Putonghua.