## Social evaluations of speech vary as a function of perceived speaker nativeness

Wai Ling Law<sup>1</sup>, Olga Dmitrieva<sup>2</sup>, Lan Li<sup>3</sup> & Jette Hansen Edwards<sup>4</sup>

<sup>1</sup>The Hong Kong University of Science and Technology (Hong Kong), <sup>2</sup>Purdue University (USA), <sup>3</sup>The Chinese University of Hong Kong, Shenzhen (China), <sup>4</sup>The Chinese University of Hong Kong (Hong Kong) lcclaw@ust.hk, odmitrie@purdue.edu, lanli@cuhk.edu.cn, jhansen@cuhk.edu.hk

Foreign accented speakers and speakers of regional varieties are consistently rated less favorably on competence traits than native speakers and speakers of standard varieties, although they can be rated more favorably on solidarity traits (see [1] for a meta-analysis). However, the relationship between raters' own linguistic group membership and their social evaluations of talkers with different linguistic backgrounds remains unclear. It is also unclear whether and how prestige associated with different languages within a speech community affects social evaluation of speech. Therefore, the present study investigates the effects of listeners' native-speaker status and perceived nativeness of the talkers on the social evaluations of talkers' speech.

Following a matched-guise approach, we recorded four speakers from Hong Kong who are trilingual in Cantonese, English and Mandarin (in this proficiency order) reading a semantically neutral text in each language. All four spoke Cantonese as their first language (L1) and varied in the degrees of Cantonese accent in their English and Mandarin pronunciation. We recruited 576 trilingual participants from Mainland China to act as raters in the study. They were asked to evaluate the recordings on competence and solidarity traits using a seven-point semantic differential scale. The raters were also asked to judge how native they thought each talker sounded in each of the three languages. Among the raters, 378 spoke Cantonese as L1 and Mandarin as L2, while 198 spoke Mandarin as L1 and Cantonese as L2. Raters were not made aware that the same four speakers provided speaking samples in the three languages.

The evaluation of perceived talker nativeness was not affected by the raters' native language. All four talkers were perceived as native Cantonese speakers. Talker 1 was judged to speak both Mandarin and English with a strong Cantonese accent. Talker 3 was rated as near native-like in English and heavily Cantonese-accented in Mandarin. Talkers 2 and 4 were rated as near-native in English and moderately (Talker 2) to mildly (Talker 4) Cantonese-accented in Mandarin.

Separate repeated measures ANOVAs with competence and solidarity ratings as dependent variables and guise (Cantonese, English, or Mandarin) as well as talker identity as independent factors revealed significant main effects for guise and for talker identity, and significant interactions between the two in each model. The rating patterns were not visibly affected by raters' native language. That is, both native speakers of Cantonese and native speakers of Mandarin were affected by guise and talker identity/perceived accentedness in similar ways in their evaluations. Specifically, Mandarin guise elicited the lowest ratings on both solidarity and competence, while English guise received the highest ratings on both attributes, with Cantonese guise occupying the middle position (see Fig. 1 and Fig. 2). The pattern may reflect a combination of the effect of perceived accentedness of the talkers as a group and the perceived prestige of the language spoken. The majority of the speakers were perceived as strongly to moderately accented in Mandarin, leading to low social evaluations. While all were perceived as native in Cantonese, most were also perceived as near-native in English, which, combined with the prestige of English, could have resulted in higher ratings.

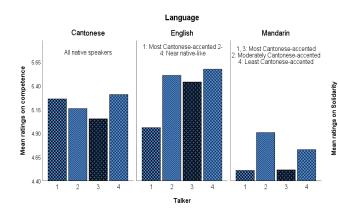
As to the effect of the talker identity, on average, Talker 4 was ranked the most favorably, in agreement with this talker's lowest perceived degree of accentedness in both Mandarin and English. In contrast, Talker 1 was rated the lowest on average, in accordance with the high degree of accentedness perceived in this talker's Mandarin and English speech. The remaining two talkers patterned in the middle.

Nevertheless, the interaction between guise and talker identity indicated that these two factors were not independent of each other. The interaction pattern that emerged suggested that talkers' levels of accentedness in each specific guise is what guided listeners' evaluations. For

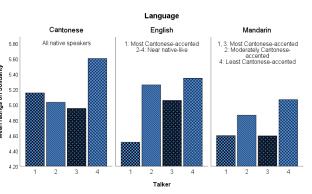
example, in the English guise, talker 1 (perceived as strongly accented in English) was consistently ranked the lowest on both solidarity and competence, while the three remaining talkers (all judged to be near-native in English) received higher ratings. In the Mandarin guise, talkers 1 and 3 (perceived as strongly accented in Mandarin) were judged less favorably on solidarity and competence than talkers 2 and 4. In each language, talkers who are perceived to be more native-like are considered more competent and more attractive.

Interestingly, despite the equally native Cantonese speech, the four talkers received different competence and solidarity ratings in their Cantonese guises, as well as in their Mandarin and English guises. This result suggests that evaluations were not affected by the perceived accentedness alone and that other qualities of the talkers' voices contributed to their ratings on solidarity and competence.

Overall, these findings suggest that listeners use exemplars associated with social and linguistic groups as a reference in social evaluations of speech [2]. Listeners' evaluation of the talkers' personal attributes is strongly affected by the perceived nativeness of the talkers' speech, independently of the listener's own nativeness status. That is, both native and non-native speakers of Mandarin penalize perceived accentedness in Mandarin speech. In addition, the prestige associated with different languages in a given speech community plays an important role. Speakers demonstrating native-like competence in prestigious languages such as English may be evaluated more favorably than native speakers of less prestigious languages such as Cantonese even by the L1 listeners of these less prestigious languages.



**Fig. 1** The mean ratings of each talker in each language on competence (collapsing across L1 Cantonese and L1 Mandarin listeners).



**Fig. 2** The mean ratings of each talker in each language on solidarity (collapsing across L1 Cantonese and L1 Mandarin listeners).

## References

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