

## The effects of language on person perception: Heritage language and English on Chinese Americans

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Abstract. Language not only facilitates communication but also constructs social identities through listeners' perceptions and language ideologies. This study examines how listeners perceive second-generation Chinese Americans when they switch between English and Mandarin Chinese. Using a matched-guise perception task, 22 advanced-level English-speaking learners of Mandarin evaluated speakers on attributes of friendliness, confidence, meticulousness, and rationality. Results showed that speakers were rated as significantly more friendly and confident when speaking English than when speaking Mandarin, while no significant differences were observed for meticulousness and rationality. These findings suggest that language choice influences perceived identity traits, with English aligning speakers more closely with dominant American cultural norms, while Mandarin indexes different cultural associations.

**Keywords**. Language perception; Chinese American; Identity construction; Indexicality

## 1. Introduction.

1.1. LANGUAGE AND PERCEPTION. Numerous studies have shown that linguistic cues do more than facilitate communication, they reveal an interaction between a speaker's language use and identity construction. Language conveys social meanings that listeners interpret through societal language ideologies, which, in turn, influence listeners' perceptions and social evaluations of speakers. It reflects underlying ideologies and biases toward language and can affect social interactions.

Labov's (1966) seminal study on language variation and social stratification demonstrated how linguistic variables signal social identities, laying the groundwork for exploring how listeners assign social meaning to speech. Building on this, Giles and Powesland (1975) highlighted how linguistic behavior both reflects and shapes interpersonal evaluation based on identity. More recently, Bucholtz and Hall (2005) proposed their influential framework for identity and interaction, emphasizing that identity is constructed in the moment, through language use, and mediated by listeners' ideologies. This aligns with Purnell, Idsardi, and Baugh's (1999) study on linguistic profiling, which showed that listeners can form biases based solely on speech cues, reflecting deeply ingrained language ideologies.

Building on these foundational studies, we turn to a specific question: how listeners evaluate language spoken with an accent.

1.2. THE SOCIAL IMPACTS OF ACCENTS. Previous research highlights how accents can signal social categories like ethnicity, class, and education. For example, speakers with non-native or non-standard accents are often seen as less competent or less authoritative (Labov, 1966; Thomas, 2004). Additionally, accents linked to higher socioeconomic status are generally evaluated more

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favorably, while those associated with minority or lower-status groups often face negative stereotypes (Eckert, 2008, Purnell, Idsardi, & Baugh, 1999).

Besides, listeners' evaluations are also affected by factors such as the context of the interaction, and the listener's own linguistic background (Fought, 2006; Lippi-Green, 2012). While accents provide lens into broader social attitudes, bilingualism introduces an additional layer of complexity, especially regarding identity and perception.

1.3. BILINGUALISM. When it comes to bilingual speakers, studies have shown that speaking a minority or heritage language can lead to perceptions of solidarity with that cultural group, while using a dominant language might be interpreted as signaling assimilation or authority (Bucholtz & Hall, 2005).

Underlying societal attitudes towards the languages themselves influence how bilingual speakers are perceived. For example, speakers of globally dominate languages, such as English, paired with minority or regional languages, may experience different biases depending on the prestige associated with those languages. As it was shown in Cargile and Giles (1998), though speakers with accents are often rated less favorably in social status-related traits, English speakers with a moderate Japanese accent were perceived more favorably on social status, which might be related to the Americans' perception of Japanese as a competitive and equal-status outgroup.

To understand these dynamics more deeply, we focus on a specific bilingual community, Chinese Americans. The current study examines the English and Mandarin spoken by Chinese Americans. Previous sociolinguistic studies of this bilingual group have focused on their integration into and participation in regional sound changes of English (Hall-Lew, 2009; Wong, 2015; Zheng, 2017). Only a limited number of studies examine evaluations of Chinese Americans' English. Bauman (2013) focused on native speakers of Chinese and Korean who were recent arrivals to the United States to attend graduate school, the results showed that Asian-accented speakers were evaluated more negatively compared to native speakers of English. Research on how listeners perceive Chinese Americans as true bilinguals is even more limited. The current study aims to address this gap by exploring the sociolinguistic dynamics of second-generation Chinese Americans switching between the two languages, with a focus on indexicality and identity construction.

- **2. The current study.** The question we intended to answer through this study is: how do listeners perceive Chinese Americans when they use their heritage language, Mandarin Chinese, versus their native language, English?
- 2.1. METHODS. To address the research question, we employed a matched-guise perception task, a methodology originally introduced by Lambert, Hodgson, Gardner, and Fillenbaum (1960). In our task, participants listened to four audio recordings produced by two speakers alternating between their heritage language, Mandarin Chinese, and English.

We recruited 22 participants who were English-speaking learners of Mandarin Chinese, aged between 21 and 40. All the participants took a Chinese proficiency test and reached advanced level, suggesting their Chinese proficiency levels were limited working proficiency or above. Their language background enabled them to fully understand the recordings of both languages without any difficulty.

The materials we used included audio recordings based on an "apartment description" prompt, and such task has been used in sociolinguistic research since Linde and Labov's work in

1975 (Linde & Labov, 1975). This prompt aimed to elicit relatively casual speech samples of similar content.

For the recordings, we recruited two second generation of Chinese Americans from a liberal arts college, one female and one male. They described the house or apartment they lived in, once in Chinese and once in English, creating four audio guises: male in English, male in Mandarin, female in English, and female in Mandarin. The lengths of the guises varied between 50 seconds and 75 seconds. These guises provided the foundation for the matched-guise perception task.

Before the matched-guised perception task, we conducted an open-ended pilot study to select the social attributes for evaluation. Six Chinese-English bilinguals participated in this phase. Four of them were native speakers of Chinese residing in the U.S., and two were native speakers of English who lived in China for an extended period. Participants listened to four guises and provided three to five descriptive words for the speaker after hearing each recording. Based on their responses, we identified four commonly mentioned attributes to be used as evaluative categories in the subsequent matched-guise perception task, which were: friendliness, meticulousness, confidence and rationality.

After the piloting, in the matched-guise perception task, the 22 participants completed an online survey hosted on Microsoft Forms. They listened for the four guises, and after each guise, they rated the speaker on the four attributes using a 5-point semantic differential scale, in the way that higher ratings indicated higher level of the attribute.

2.2. RESULTS. We conducted a mixed-effect linear regression analysis on each of the four evaluative categories, with language spoken in the recordings as a fixed effect. We also included by-speaker and by-listener random intercepts to account for speaker and listener variability. The plots below show participants' rating on the four evaluative categories.

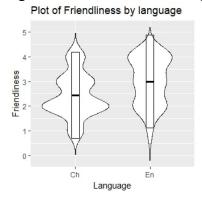


Figure 1. Ratings for Friendliness

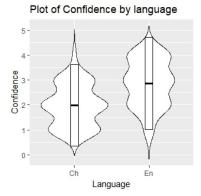


Figure 2. Ratings for Confidence

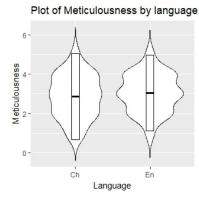


Figure 3. Ratings for Meticulousness

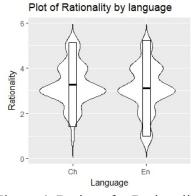


Figure 4. Ratings for Rationality

The data revealed that, as it is shown in Figure 1., speakers were rated as significantly more friendly when they spoke English compared to when they spoke Chinese (p=.003). Similarly, as Figure 2. demonstrates, speakers were perceived as significantly more confident when speaking English than when speaking Chinese (p<.001).

For the attributes of meticulousness and rationality, participants' ratings showed greater variability across the two language conditions. Unlike the attributes of friendliness and confidence, no significant differences were observed when speakers spoke English and Chinese, either for the attribute of meticulousness (p=.34), or for rationality (p=.39). This suggests that participants

did not consistently perceive speakers as more meticulous or rational in one language compared to the other.

## 3. Discussion.

- 3.1. IDENTITY SHIFTS THROUGH LANGUAGE. The different perceptions of Chinese Americans when speaking English versus Mandarin can be attributed to the possibility that bilingual speakers often embody different aspects of their identity when switching between languages. This phenomenon is rooted in how language choice aligns with cultural norms and personal expression. For Chinese Americans, speaking English might reflect an identity emphasizing expressiveness and confidence, traits commonly associated with American cultural norms. On the other hand, speaking Mandarin could evoke an identity tied to cultural values like modesty and restraint, reflecting norms more typical of traditional Chinese society. These shifts in identity representation provides insight into how bilingual individuals navigate and express their dual cultural affiliations.
- 3.2. PERCEPTION SHAPED BY LANGUAGE. For listener, these identity shifts manifest as varying perceptions depending on the speaker's language choices. When Chinese Americans switch to English, listeners often perceive them as aligning with dominant cultural norms, enhancing attributes such as friendliness and confidence. In contrast, speaking Mandarin may evoke perceptions of a less familiar or less relatable language. These evaluations are shaped by societal attitudes toward language and culture, highlighting how language choice influence the social dynamics between speakers and listeners.
- 3.3. CULTURAL SIGNIFICANCE AND INDEXICALITY. From the lens of indexicality, language choice is tied to broader cultural associations. English, in the American context, often indexes qualities such as confidence and friendliness. In contrast, Mandarin indexes cultural norms and values that may not align with these traits in the minds of American listeners. These linguistic cues act as social signifiers, shaping how bilingual speakers are perceived and reinforcing the deep connections between language, identity, and language ideologies.
- 3.4. OTHER INFLUENTIAL FACTORS. Besides our discussion above, other influential factors include speakers' heritage language backgrounds. One of our Chinese American speakers also speaks Malay and Teochew, which is a southern Chinese dialect; while the other speaker's father speaks Mandarin and Cantonese. In addition, both speakers were U.S. college students at the time, their formal educational experience in Mandarin is unknown. These factors could have impacted the results of this study.

For further directions, in addition to better control of the audio stimuli, we would also like to expand our listener groups to include Mandarin-speaking Chinese Americans and native speakers of Chinese who are proficient in English. Including more groups of listeners can potentially provide more information on the different effects of speakers' language choice and listeners' relatedness to different languages, and offer a fuller picture of how language ideologies and identity perceptions are shaped across diverse listener backgrounds.

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