

Individual Differences in the Perception of Native and Foreign-Accented Irony

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Research has shown that a foreign accent triggers speaker-specific expectations which alter core language processing mechanisms, such as lexical access, semantic integration, reanalysis, and depth of processing [1,2]. However, psycholinguistic investigations into the processing of foreign accents are relatively recent, and virtually all existing research is on literal language. Our study attempted to fill this gap by examining whether making inferences from non-literal speech is also permeable to such factors as the speaker's accent.

To answer this question, we tasked 96 native speakers of English with listening to short dialogues between native Canadian and foreign-accented (Chinese) speakers and rating them for irony, appropriateness, offensiveness, and one's certainty in the speaker's intent. The two speakers conversed as peers equal in social status. There were 24 experimental dialogues, and each dialogue belonged to one of eight conditions: *native/foreign ironic/literal criticism/praise* (Fig 1). Additionally, we collected the participants' political views, empathy scores, and ambiguity intolerance scores. We hypothesized that, since political views are a robust predictor of anti-immigrant prejudices [3], more conservative listeners may invest less effort in understanding foreign-accented speakers and thus miss the ironic intent of the message more often. High empathy, on the contrary, should facilitate identification of the speaker's ironic intent due to better mentalizing abilities. Finally, high ambiguity intolerance may lead to overconfidence in the achieved interpretation in an attempt to reach the cognitive closure and lessen the load added by ambiguity.

Using generalized additive modelling, we found that foreign-accented irony was indeed considered less ironic than native irony ($p < .001$), and that was true for both criticism and praise (Fig 2). In line with the previous research, ironic praise in general was rated less ironic and less appropriate than criticism, which might be attributed to its surface form violating conversational etiquette. The participants' certainty in the correct interpretation of foreign-accented speech was lower for every condition save literal praise, and the difference between accents was bigger in the ironic conditions. Further, person-based factors significantly affected the ratings and interacted with the type of irony. More conservative participants were worse at detecting irony than their liberal peers but this effect was stronger and more linear for a rarer irony type. In contrast, high empathy facilitated irony detection. We offer several explanations for our findings.

All in all, the results of this study demonstrate that interpersonal variation needs to be accounted for when examining the processing of foreign-accented speech and building the models of speech perception.

References

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2. Romero-Rivas, C., Martin, C. D., & Costa, A. (2015). Processing changes when listening to foreign-accented speech. *Frontiers in Human Neuroscience*, 9.
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	Ironic	Literal
Praise	- I saw on Facebook that you had a cello concert in Vienna. - Yes, they called me for an encore three times, and the applause was so loud. I stayed there till midnight. - I always knew you were hopeless at playing the cello	- I saw on Facebook that you had a cello concert in Vienna. - Yes, they called me for an encore three times, and the applause was so loud. I stayed there till midnight. - I always knew you were gifted at playing the cello
Criticism	- How are your cello lessons going? Are you getting better? - It's torture. Last time the teacher kicked me out. She said she could give me a badge for being her worst student ever. - I always knew you were gifted at playing the cello	- How are your cello lessons going? Are you getting better? - It's torture. Last time the teacher kicked me out. She said she could give me a badge for being her worst student ever. - I always knew you were hopeless at playing the cello

Fig 1. Example materials. Every dialogue in this table was recorded twice, with the native and foreign-accented speakers swapping roles.

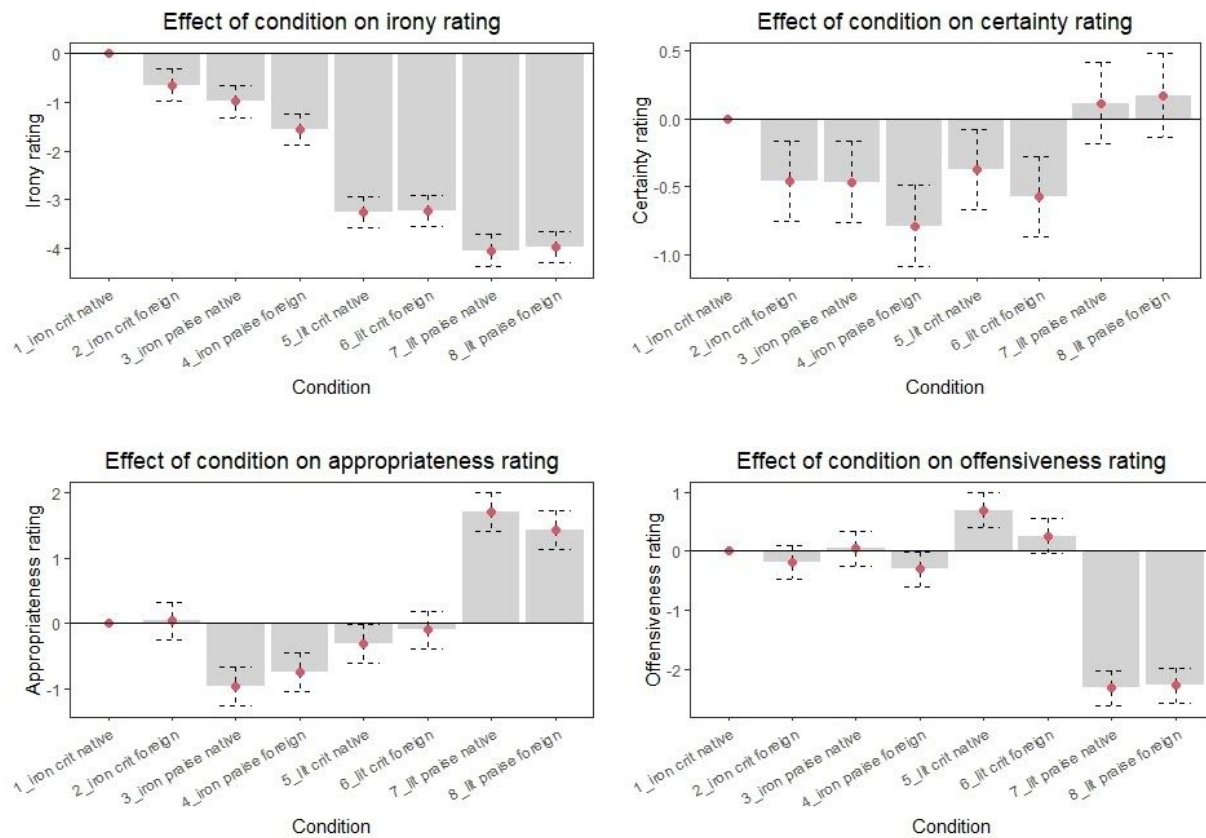


Fig 2. The parametric effect plots for all rating types (irony, certainty in the speaker's intent, appropriateness, and offensiveness).