

The effect of foreign accent and political ideology on irony (mis)understanding

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Previous studies [1] suggested that ironic praise (but not criticism) is rated less ironic when delivered in a foreign accent, but the subject remains virtually unresearched. We recorded more naturalistic conversations with prosodic cues and used several rating scales to get a multi-faceted insight into the phenomenon. We predicted that any type of irony will be considered less ironic when spoken with a foreign accent, even when sufficient contextual and prosodic cues are available (Hypothesis 1). Additionally, we hypothesized that irony processing will be modulated by such listeners' traits as political ideology [2] (correlates with anti-immigrant biases), the need for cognitive closure [3] (discomfort with ambiguous stimuli), and empathy [4] (an ability to mentalize other people's states of mind) (Hypothesis 2).

Native speakers of Canadian English (N=96) listened to dialogues between Canadian and foreign-accented (Chinese) speakers and rated targets for irony, appropriateness, offensiveness, and certainty in the speaker's intent. Since irony perception is affected by the relationship between the derider and the derided [5], our speakers conversed as peers equal in social status. There were 192 experimental dialogues, and each dialogue belonged to one of eight conditions: *native/foreign ironic/literal criticism/praise* (Table 1).

Using generalized additive mixed modelling, we found substantial support for Hypothesis 1 and weaker support for Hypothesis 2. Irony in non-native speech was missed more often than in native speech for both criticism ($p = .008$) and praise ($p = .044$) (Fig 1). Crucially, accent had no effect on literal conditions (all $ps > .7$) indicating no comprehension difficulties. The results can be explained through linguistic mechanisms (hampered pragmatic inferencing in adverse listening conditions or qualitatively different pragmatic inferencing due to different expectations about non-native speakers' language proficiency) and cultural stereotypes (listeners' estimation of how frequently irony is used in China and Canada). Political ideology, but not empathy or need for cognitive closure, modulated irony detection aptitude across the board: More conservative participants showed poorer irony detection overall and tended to misinterpret literal praise as sarcastic. One possible explanation that warrants further research is that right-leaning participants incorrectly inferred the "relationship affect" between the speakers due to stronger anti-immigrant biases, erring on the negative side, which has been previously shown to make literal praise sound sarcastic [6].

In conclusion, we showed that even an intelligible foreign accent affects irony comprehension, and that irony detection skills are in turn affected by political ideology.

References

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Table 1. Experimental conditions with examples. Every dialogue was recorded twice, with the native and foreign-accented speakers swapping roles. The order in which the participants started reading the dialogues was counterbalanced.

	Ironic	Literal
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 <u>gifted</u> 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 <u>hopeless</u> at playing the cello
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 <u>hopeless</u> 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 <u>gifted</u> at playing the cello

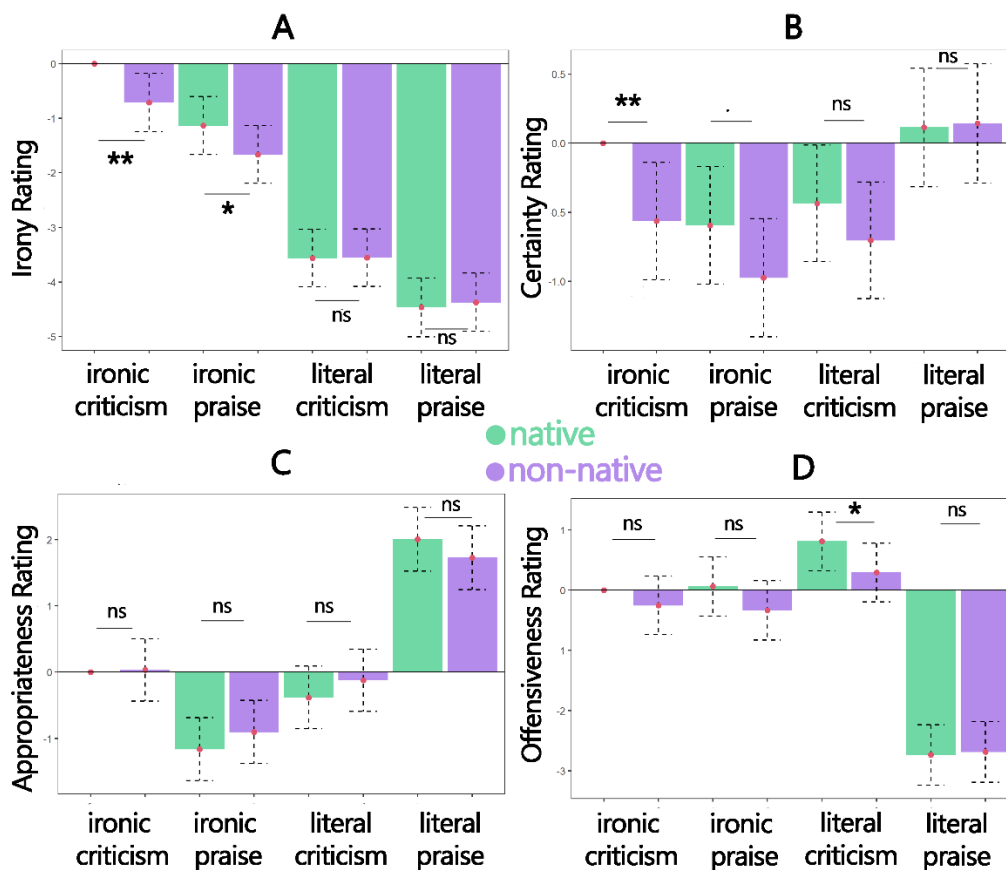


Fig 1. The parametric effects plots for all rating types (irony, certainty in the speaker's intent, appropriateness, and offensiveness). Stars indicate significant differences between the accent conditions (< 0.001 '****', < 0.01 '***', < 0.05 '**', 0.09 '.', > 0.09 'ns') which were calculated by choosing different native conditions to estimate the intercept.