## The social benefits of being a non-native speaker

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Speaking in a foreign accent has often been thought to carry several disadvantages. Compared to native speech, accented utterances are less intelligible<sup>1</sup> and may make the non-native speaker appear more unpleasant<sup>2</sup>. Foreign-accented speakers are more likely to face workplace discrimination<sup>3</sup> and are less likely to be considered reliable or 'morally upright'<sup>4</sup>. Even infants are less likely to learn from, and be friends with, social partners who speak in a foreign accent<sup>5,6</sup>.

Here we take the position that non-native speech sometimes carries a social *advantage*. We examined how listeners process underinformativeness, the pragmatic phenomenon of saying less than is conversationally required. Speakers are underinformative either because they are unable or unwilling to say more<sup>7</sup>. A recent study found that readers were more likely to seek information from an underinformative character after they read that she had a heavy foreign accent compared to a character with a native accent, presumably because underinformativeness is linked to inability in the non-native character<sup>8</sup>. Here, we probe the social evaluation of foreign-accented vs. native speakers more directly, using spoken stimuli to test if listeners form different impressions of underinformative native and non-native speakers.

**EXPT1.** Monolingual English speakers (N = 576, age range: 19-84 years) from MTurk viewed an illustrated story. The story took place in a mansion that had been robbed and vandalized and showed a woman calling the owner to tell her about the robbery. Her utterances were recorded by the same bilingual speaker, who produced three different speaker versions: native-accented (NS), non-native accented without grammatical errors (NNS), and non-native accented with grammatical errors (NNS with errors). We manipulated informativeness at the end of the story, where the young woman saw crates of apples and pineapples in an otherwise empty kitchen and said (referring to the robbers): "They left some apples and pineapples" (informative) or "They left some apples" (underinformative). This critical utterance was identical across all conditions. Both Speaker and Informativeness were between-speakers factors. Participants saw a single story and had to rate the woman (1-7 scale) on various personal attributes (i.e., honesty, likability, competence, likelihood of becoming their friend, and a good witness for the police). An ANOVA for each attribute with Informativeness and Speaker as factors revealed only an interaction of the two factors in honesty ratings. F = 7.63, p = .001(Fig.1); the NS and NNS - but not the NNS with errors - were judged to be less honest when being underinformative compared to informative. A final question confirmed that people explained underinformativeness differently across Speaker types (Table 1).

**EXPT2**. We replicated Exp.1 with a new set of participants (N = 576, age range: 14-83 years) but replaced pineapples with money (a more desirable object). The interaction of Informativeness and Speaker for honesty remained, F = 9.10, p < .001 (Fig.2); the NNS and the NNS with errors showed smaller decreases in honesty ratings compared to the NS (cf. Table 1: unwillingness/deception was less likely to be invoked as the reason for omitting the money for the two NNSs). Additionally, participants indicated that they were less likely to be friends with the woman in underinformative contexts, but such a dip in likelihood was smaller when she was a non-native speaker, F = 9.34, p = .015 (Fig.3). Underinformativeness also led to lower competence, F = 19.15, p < .001, likeability, F = 86.25, p < .001, and witness potential ratings, F = 120.34, p < .001, but these did not vary by Speaker. Speaker type also affected likability, F = 5.24, p = .006, with the NNS with errors being better liked than both the NNS and the NS. At the end of both our experiments, listeners rated the woman's English to be better in the NS case than in the NNS case, which in turn was better than the NNS with errors, F = 178.85, p < .001.

Our findings show that listeners are less suspicious of underinformative speakers with heavy foreign accents, even in contexts where not saying what is required can be detrimental to or misleading for the listener. Contrary to previous studies, we also show no consistent global bias against non-native speakers. Thus the fact that non-native speakers have imperfect control of the linguistic signal can affect pragmatic interpretation and lead to unexpected social benefits.





Table 1. Percentage of responses invoking unwillingness and incompetence as explanations for the omission of the second object (pineapples/money) in Experiments 1 and 2.

EXPT1	Unwilling	Unable	Other
NS	14.89%	21.27%	63.84%
NNS	7.95%	39.77%	52.25%
NNS Errors	4.00%	57.00%	39.00%
EXPT2	Unwilling	Unable	Other
NS	83.33%	2.08%	14.59%
NNS	73.96%	7.29%	12.79%
NINS Errors	53 13%	12 50%	34 37%



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