

Exploring phonetic predictors of intelligibility, comprehensibility, and foreign accent in L2

Spanish speech

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Current approaches to second language (L2) pronunciation underscore that instruction should concentrate on pronunciation features that help learners become more intelligible and not necessarily more nativelike (Levis, 2020), but there is little empirical evidence as to what those features are, especially in L2s other than English. In Spanish, a pair of studies have shed light on phonetic predictors of comprehensibility and foreign accent in read speech (McBride, 2015; Schoonmaker-Gates, 2015). However, no research has examined phonetic predictors in spontaneous speech, where grammar and vocabulary may alter the relative weights of pronunciation-based variables. What's more, no study has addressed phonetic predictors of intelligibility, even though doing so would be a starting point for determining priority targets for pronunciation instruction. To address these gaps, in this exploratory study we examined phonetic predictors of intelligibility, comprehensibility, and foreign accent in L2 Spanish speech.

Forty-two Spanish learners of varying proficiency completed a picture description task. Following previous intelligibility research (e.g., Munro & Derwing, 1995), we sampled two utterances per speaker and presented them to 80 native Spanish listeners for rating. We coded the sampled utterances for phonemic and grammatical errors and analyzed them for a range of pronunciation features known to be challenging for English-speaking learners (e.g., voice onset time of initial stops and lenition of medial stops, accurate production of the tap and trill, diphthongization of word-final /e/ and /o/, rising intonation). We fit mixed-effects models to the data to examine relationships between the phonetic features and the listener-based dimensions. Results revealed that rising intonation and diphthongization of word-final /o/ predicted intelligibility, rising intonation predicted comprehensibility, and a variety of features were associated with foreign accent. Overall, results confirm that the non-targetlike production of L2 pronunciation does not necessarily lead to intelligibility and comprehensibility issues.

## References

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