

Do they hear smiles and frowns in their L2?

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Emotions have shown to impact language processing and affect its comprehension in many ways (cf. Armony and Vuilleumier 2013). Previous research showed that audible smiles and frowns affect speech comprehension in the native mind, such that hearing a smile combined with positively valenced word meaning facilitates the comprehension of spoken words, while hearing a smile paired with a negatively valenced word impedes the comprehension (e.g. Pell et al. 2009; Quene et al. 2012).

The present study investigated whether comprehenders in their non-native language (Polish users of English) understand spoken words slower when the phonetic form of a word is incongruent with its affective meaning, and exhibit facilitated processing if the phonetics and valence are congruent. We employed phonetic Stroop paradigm to test the phonetic and semantic interference effects, and asked participants to perform emotive decision task while they were listening to valenced words pronounced with audible smiles or frowns.

Our results show a phonetic Stroop effect evidencing facilitation for congruent phonetic and semantic valence (e.g. positive word spoken with a congruent smile) and hindrance for incongruent phonetic and semantic valence (e.g. positive word spoken with an incongruent frown). Significant interference effects that were obtained suggest that affective phonetic cues contribute to speech comprehension not only in one's native language, but in a non-native language too. Additionally, the present study shows that comprehension of speech is not merely based on what is said, but also on how it is said. Speech comprehension shows to be modulated by the speakers' affective expressions, such as smiles and frowns, which accompany speech to significantly and non-redundantly influence its comprehension.

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Quene, H., Semin G.R, Foroni, F. 2012. "Audible smiles and frowns affect speech comprehension" *Speech Communication* 54,7 :917-922.