Towards an objective and controlled way of studying linguistic alignment in spontaneous interactions

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In this talk I will discuss two methods designed to enhance the study and analysis of linguistic alignment in natural settings, and their current implementation in a study dealing with second language (L2) acquisition.

The Ventriloquist Paradigm (Felker, Troncoso-Ruiz, Ernestus & Broersma, 2018, JASA-EL) is an innovative new method used in speech processing studies that allows researchers to, unbeknownst to participants, execute exhaustive phonetic control over the input participants receive in a semi-spontaneous conversation. This method successfully reconciles ecological validity in psycholinguistic studies with full experimental control.

The Automatic Accent Rater was developed with the aim of automatising speech perception tasks. This methodology could potentially predict native speakers' judgement over the phonetics of non-native speech. The Automatic Accent Rater can provide native-like judgements faster than human raters on larger corpora. Furthermore, using human raters requires a high level of complexity in the experimental design in order to avoid, for instance, the effects of frequency, tiredness, awareness to the aim of the experiment or distractions. The Automatic Accent Rater could potentially overcome all of these obstacles.

Both the Ventriloquist Paradigm and the Automatic Accent Rater have been implemented in a study about L2 sound learning. In this study, we investigated which conversation-intrinsic factors trigger linguistic alignment at the phonetic level. We found that Dutch speakers of Dutch in conversation with a British English speaker align to the native production of vowels when they are exposed to the native pronunciation of these sounds. We also found that implicit negative feedback fosters a more native-like production of L2 sounds.