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## **EPIP8: English Pronunciation: Issues & Practices**

## Dynamic Approach to Comprehensibility Assessment in Foreign Language Pronunciation Training

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## **Presentation format:** oral presentation

Abstract (max. 400 words, excluding references):

In foreign language acquisition, being easily understood stands as the primary objective in pronunciation training. The term commonly associated with this ease of understanding is "comprehensibility," denoting the effort a listener exerts to understand a speaker. While it is relatively straightforward to measure the deviation between a learner's speech and a reference model, gauging the degree of effort required by the listener is considerably more challenging, if not impossible.

Conventional methods involve soliciting listener ratings on a scale to assess the perceived ease or difficulty in understanding the speaker. However, such global judgments often overlook the dynamic nature of effort perception throughout the speech, hindering the identification of phenomena influencing this perception. Addressing this limitation, Nagle et al. (2018) pioneered a dynamic approach to comprehensibility rating. They enlisted 24 native Spanish speakers to assess comprehensibility on a +5 to -5 scale while listening to recordings from three L2 Spanish speakers. Despite a significant individual variation in rating behaviors, the study revealed that low comprehensibility judgments significantly impacted global ratings, with positive judgments not necessarily correlating with improved overall ratings. Post-experiment, listeners attributed positive judgments to discourse and fluency, while negative judgments were often linked to lexical and grammar errors.

Our study replicates this dynamic rating protocol within the context of an investigation on pause patterns and lexical stress realization by French-L1 speakers of English. Eighty monolingual English native speakers were tasked with dynamically rating 16 short excerpts of spontaneous speech from French-L1 speakers of English at CEFR B1 and B2 levels. These excerpts, selected from 1,577 recordings by 176 speakers, were chosen based on pause distributions and lexical stress quality. Transcription, pause



identification, and lexical stress labeling were conducted using the Pauses and Lexical Stress Processing Pipeline (Coulange et al., in press).

Differing from Nagle et al. (2018), our raters were equipped with a unique button to press when they felt difficulty understanding the speaker. Each recording, lasting between 30 and 60 seconds and featuring different speakers to prevent habituation, was presented in random order. Following each recording, raters globally assessed the speaker's performance on pronunciation accuracy, fluency, and ease of understanding on a scale of 0 to 100. Raters were also given the option to specify, in optional comments, the pronunciation features they believed contributed to increased difficulty in understanding. Our presentation will delve into rater behaviors under this protocol, exploring convergence patterns, linguistic features around which ratings coalesce, and correlations with global assessments.

## **References** (please follow APA 7<sup>th</sup> ed.):

Coulange, S., Kato, T., Rossato, R., Masperi, M. (in press). Enhancing Language Learners' Comprehensibility through Automated Analysis of Pause Positions and Syllable Prominence. In Mairano, P. & Schwab, S (eds.) Languages, Special Issue "Speech Analysis and Tools in L2 Pronunciation Acquisition".

Nagle, C., Trofimovich, P., & Bergeron, A. (2019). Toward a dynamic view of second language comprehensibility. *Studies in Second Language Acquisition*, *41*(04), 647–672.

**Keywords** (up to 5, separated by commas): comprehensibility, dynamic rating, crowd-sourcing, pause patterns, lexical stress