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To cite this version:

Daniel J. Hirst. On the automatic comparison and cloning of native and non-native speech prosody. Speech Prosody 2016, May 2016, Boston (MA), United States. ISCA, pp.1038-1042, 10.21437/SpeechProsody.2016-213. hal-04537626

HAL Id: hal-04537626
https://hal.science/hal-04537626
Submitted on 8 Apr 2024

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On the automatic comparison and cloning of native and non-native speech prosody.

Daniel Hirst
Laboratoire Parole et Langage, CNRS & Aix*Marseille University
5 avenue Pasteur, BP 80975, 13604 Aix en Provence, France
daniel.hirst@lpl-aix.fr

Notoriously difficult to evaluate L2 prosody objectively - little consensus as to what constitutes a correct prosody for a given utterance.

Automatic procedure: compare non-native speaker's production with 10 instances of the same utterance, taken from the OMPProDat database, and read by native speakers.

Pitch and relative syllable duration normalised and compared - version from native speaker most closely correlated with that of the non-native speaker chosen as a model.

Normalised pitch and syllable durations of native speaker's recording cloned and transferred to the L2 utterance.

The original and re-synthesised versions of the learner's utterance can then be used to provide both visual and auditory feedback to the language learner.

• All of the steps described here can now be carried out fully automatically with freely available tools.

• The tool is necessarily limited to read speech, because of the need for pre-recorded models. It seems likely, though, that this type of feedback could be extremely beneficial to language learners at all levels.

• Apply the technique systematically to larger samples of L2 speech
• quantify the automatic evaluation of an L2 speaker’s prosody and look at how well this automatic evaluation corresponds to the subjective evaluation by language teachers.
• Investigate the effectiveness of a tool such as this in providing visual and auditory feedback to a language learner.

future work