

# **Teaching the expression of emotion in English to native speakers of tone languages: a gamified approach**

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While the acquisition of purely linguistic aspects such as stress by native speakers of tone languages has been investigated extensively (Yuan & Cheng 2017, Liu 2017), far fewer studies have focused on the ways in which paralinguistic information varies across languages. For example, it is not clearly understood whether the expression of emotion in English by native speakers of tone languages is perceived appropriately by native English listeners. This is particularly important since it has been reported that tone language speakers use less F0 related cues in the production of verbal expressions of emotions (Annoli et al. 2008, Chong et al. 2015). At the same time, a restricted pitch range can be associated with psychological conditions such as depression (Ellgring & Scherer 1996) and misinterpreted as such, eliciting less responsiveness on the part of conversational partners. It is thus important to address the acquisition of paralinguistic cues in the ESL classroom.

In this study, we propose to test out a new approach for teaching English intonation (and specifically the expression of emotion) to native speakers of tone languages, by using a professionally trained voice to produce exaggerated intonation patterns (i.e. sad, happy, and angry) in sentences that are context-appropriate (e.g. the sentence "I won the lottery" coupled with a happy rendition) or context-neutral (e.g. "I just saw your friend" coupled with a happy rendition). Our approach is justified by the fact that exaggerated intonation shares certain similarities with Motherese/Parentese (Fernald & Kuhl 1987), and may be more enjoyable to listen to for extended periods of time, as well as more salient to non-native speakers.

The participants will be 10 ESL students who speak a tone language natively. They will be trained by first listening to and then imitating each sentence. Another 10 ESL students will be trained with sentences bearing natural, non-exaggerated intonation in order to serve as a control group. For both groups, we will utilize a gamified approach in which the sentences are accompanied by appropriate smiley faces and points are gained for extended practice. The participants will be tested prior to beginning the training (for baseline recordings), after the first training session (conducted under the researchers' supervision), and after one week of daily practice. The testing phase will consist of reading sentences meant to express one of the three emotions they were taught in the absence of any audio prompts - a visual prompt will indicate the emotion with which the sentence should be read.

Following the training and testing, we will conduct a perception experiment in which 20 monolingual native speakers of English will listen to the productions of non-native

speakers and identify the emotion expressed in each sentence in a forced-choice task. This will enable us to assess the initial performance of non-native speakers, as well as the success of our training method after the first training session and one week later.

In conclusion, our method combines some of the latest trends reported to enhance learning in the literature (Adank et al. 2010, Takahashi 2010, Corcoran 2010) with the goal of improving the participants' expression of emotion in spoken English. Identifying effective language learning strategies has important implications for language teaching in the future and for the success of ESL learners' interactions with native conversational partners.

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