

Bilateral Perception of Spanish and Japanese Word Accent by L2 Learners

It is generally accepted that second-language speech perception and production are affected by the characteristics of the native language. Most research in the area has focused on the influence L1 has on the perception of L2 segments, but this influence from L1 has also been reported for L2 suprasegmentals. A perception experiment reported in Kimura et al. (in press) using Spanish minimal triplets differing in stress position showed that Japanese students of Spanish (JLS) had difficulties perceiving the position of the stress when the target words were presented in certain sentence contexts, but had comparable results to native speakers when the words were presented in isolation. Nishinuma et al. (1996) tested American English speakers studying Japanese, reporting significantly lower scores for accent recognition of words in isolation as those reported by Kimura et al. (in press). They hypothesized that the difficulties they found in accent perception for English speakers were explained by the use of different acoustic cues to mark stress in both languages. However, the results by Kimura et al. (in press) seem to contradict this, since words in isolation posed no difficulty for JLS even though Spanish stress involves similar cues to those of English – such as increased intensity and f_0 and vowel lengthening – which are not used to mark Japanese tonal stress.

This study aims to extend and further explore the findings of Kimura et al. (in press) regarding stress perception for JLS and contrast them with responses from native Spanish speakers studying Japanese. We present the results of two experiments designed to do this. The first experiment is an extension of the original study using stimuli recorded from a larger number of speakers, as well as using Chilean instead of Peninsular Spanish. The second, with a similar experimental design but adapted for the Japanese language, is a parallel study of the perception of Japanese tonal accent by Chilean students of Japanese (CLJ).

Both experiments were designed and deployed using the LimeSurvey online platform. The Spanish stimuli are sets of 3-syllable accentual minimal triplets, with each having an oxytone, a paroxytone and a proparoxytone lexical item. The Japanese stimuli are sets of 2-mora accentual minimal triplets with initial-accented, final-accented and unaccented words. All stimuli have a CV syllable structure, and were presented in isolation and in final and non-final position in declarative and interrogative utterances, for a total of five contexts. The participants are recruited from Japanese and Chilean universities. To our knowledge, this is the first study to examine the perception of word stress bilaterally for Spanish and Japanese.

Since f_0 is involved in accent perception for both Spanish and Japanese, we predict that, as was the case in Kimura et al. (in press), target words in interrogative sentences will be the most difficult for JLS as well as for CLJ. We also expect to find similar results for JLS regarding accent position as those found by Kimura et al. (in press), who found that, at least in interrogative sentences, participants had a tendency to identify Spanish paroxytone words as oxytones, and to present a similar response pattern for oxytone and proparoxytone words despite them having radically different accent positions. Since the Spanish stress system does not have an unaccented class, we predict this will be the most difficult for CLJ.

Furthermore, the bilateral approach of this study will allow us to more confidently hypothesize about the cause for the effects we find, in the assumption that whatever condition acts upon one group of language learners, will also – and similarly – affect the other.

References

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