

Does music education facilitate the perception of prosodic prominence in a foreign language?

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Despite the growing body of research on speech prosody, there is still a restricted amount of information available about the acquisition/learning process of prosodic phenomena (stress, accent, tone, rhythm, intonation) in a second/foreign language (L2). This holds true for both non-native speakers' production and perception of prosody. In this respect, there has been – and still is – a long-standing debate in the literature about the potential benefit of music education in the L2 acquisition of prosody. Although recent treatments provide some positive evidence for the existence of a link between music and (various aspects of) “prosodic proficiency” in an L2 – thereby pointing towards a potential advantage for musicians over non-musicians – more research is needed to assess this relationship with regard to a wide(r) range of prosodic phenomena and/or learning contexts. So, to our knowledge, no research has been done so far on (non-)musicians' perception of prosodic prominence in an L2.

In the first part of the paper, we review the relevant literature on the role of music education in the L2 acquisition of prosody. Then we set out to investigate the perception of prosodic prominence in Dutch by native and non-native listeners (whose L1 is French), both with and without music education (at least 8 years of music lessons).

The data on which our perception experiment is based, were gathered in a picture naming task and consist of noun phrases of the type “indefinite article + adjective + noun” (e.g. *een rode driehoek* ‘a red triangle’, *een blauwe cirkel* ‘a blue circle’). The noun phrases that were used in the perception experiment were selected so that three accent patterns – single accent on the adjective (with deaccented noun), single accent on the noun (with deaccented adjective), accent on both the adjective of the noun – would occur in equal proportions in the stimuli. There were two versions of each stimulus: the first one was produced with a falling boundary tone and the second one with a rising boundary tone. In a perception test, we asked our native and non-native listeners (with and without music education, i.e. 4 groups of ca. 10 participants each) to evaluate the relative degree of prominence of both the adjective and the noun on a 10-point scale. Then we analyzed the listeners' identification of the accent patterns represented in the data and their judgments of perceived prosodic prominence. It was hypothesized that there would be no significant difference between the two groups of Dutch native listeners, whereas we expected the French-speaking non-native listeners with music education to take on an in-between position between the Dutch native listeners and the French-speaking learners without music education.

Our preliminary exploration of the data suggests that there are indeed perception differences between native and non-native listeners and that these differences can be related to differences in musical background in the case of the non-native listeners. These findings will be discussed in the second part of the paper.