

# Characteristics of L2 prosodic production of Mandarin Chinese in continuous speech by French native speakers from Belgium.

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## Abstract

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It has been shown that the phonetic realization of the tone patterns of Mandarin (standard Chinese) is not only based on the temporal evolution of the  $F_0$ , but also relies on different complementary acoustic strategies relating to the use of the other acoustic correlates in native Chinese speakers. These results led us to take an interest in the productions made by L2 learners of Mandarin in relation to the various aspects of the productions, that is, at a macroscopic level, possible prosodic transfers from L1 to L2 (with particular regard to stress and tone-intonation interaction); and at a more microscopic level, possible error patterns in the production of both pitch height and pitch contour.

Based on a corpus of continuous speech recorded with 22 French-speaking learners of Mandarin (of which 7 first-year and 15 second-year students from the Chinese department of Mons University at the time of recording), the present study aims, more precisely, to identify and to describe the errors in L2 production of tonal categories, and to better characterize learner-specific production strategies from diverse acoustic measurements of different parameters such as  $F_0$ , formant frequencies, and syllabic duration. In addition, by using statistical indices of the ISI (Inter-Syllabic Interval) distribution, an assessment of these learners was made in terms of prosodic acquisition of Mandarin, in correlation with global discourse fluency. 1) Considerable variability of strategies was observed in L2 prosodic productions of Mandarin and 2) negative L1 transfer was found to have a significant influence on the accuracy of L2 production of a given tone category, especially at the utterance final position where the final syllable is usually accentuated in French.

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**Key Words:** prosody; tone; L2 acquisition; fluency