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Effects of attention on pronunciation: Chinese learners of Spanish

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This study investigates the effect of attention, understood as the focus on stimuli, on the production of L3 Spanish by Mandarin Chinese speakers. Chinese learners show two main difficulties in the acquisition of Spanish consonant: stops and rhotics. Whereas they tend to devoice the voiced stops, their performance on the rhotics shows a replacement by the lateral [l] (Cortés, 2013).

Two groups of participants took part in a word reading task: 10 Mandarin native speakers (intermediate L2 English and L3 Spanish learned in a formal setting) and 3 Spanish native speakers. Stimuli were Spanish disyllabic non-words which contain voiced/voiceless stops at initial position and lateral/rhotics at intervocalic position.

Stimuli were presented in two slightly different tasks for data collection. Participants were asked to focus on the letter which was marked in red and bold. In the first task the targets were marked (**d**ara) and in the second, they were not. Production of stops and rhotics was categorized as correct or wrong applying acoustical criteria. Data were analyzed using chi-square tests. Results in two tasks were compared between groups and within group.

Results showed that learners failed to acquire the L3 contrast even at an intermediate level, presenting more mispronunciations in both tasks and there is an effect of learner's attention on production. The segments were pronounced better when learners were instructed to focus on them than in a less attended situation. This matches Major's Ontogeny and Phylogeny Model (Major, 2001) that speech formality, attention in this study, shows an influence on L3 production. The results did not seem to suggest a positive relationship between situations in which learners focus on the target sounds and situations in which they do not. Teacher may have to develop other activities rather than only emphasizing on segmental pronunciation practices (Levis & Grant, 2003).

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Pronunciation errors - A systematic approach to diagnosis

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The accurate diagnosis of segmental pronunciation errors by non-native speakers of English has been a longstanding goal in pronunciation teaching. Most lists of typical pronunciation errors for speakers of a particular first language (L1) are based on the experience of expert linguists or ESL/EFL teachers. Even though such lists are useful, they can also create blind spots for other important errors while

suggesting that salient errors are frequent and important for intelligibility. This exploratory study hypothesized that the use of a corpus of read sentences by advanced proficiency Arabic learners of English would confirm expert opinions about some errors, disconfirm other opinions, and reveal recurrent errors that had previously been overlooked. We offer a systematic error analysis of advanced L1 Arabic learners of English (N = 4) using the L2-Arctic corpus (Zhao et al., 2018), a publicly available corpus of 1132 phonetically balanced English sentences read aloud by 20 speakers of five language backgrounds. We focused on Arabic speakers' sentence readings (n = 600), which were annotated in Praat for pronunciation deviations from General American English. The findings give an empirically supported description of persistent pronunciation errors for Arabic learners of English. The study also interprets the findings for segmental priorities in pronunciation instruction for Arabic speakers of English. The study provides a method of analyzing L2 speech which can be applied to similar datasets regardless of the L1 being investigated. The results help us to more narrowly identify the errors in pronunciation that are likely to contribute to improvement, helping teachers focus their limited classroom time for optimal learning.

Keywords: *pronunciation teaching, pronunciation corpus, Arabic learners, diagnostic, segmental errors, substitution, deletion, insertion, teaching priorities*

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Updating phono-lexical representations: an L2 vowel training study

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High-variability phonetic training has been shown to lead to robust gains in the perception and production of L2 vowel contrasts [1,2], especially for pairs of sounds that are likely to be mapped onto a single L1 category by L2 learners [3]. Such gains have been typically taken as learning evidence; however, it is still unknown whether they extend to the lexical encoding of phonological contrasts [4] and result, in turn, in pronunciation improvement for words embedded in sentence contexts [5]. The present study examines whether phonetic training gains might lead to a change in the lexical encoding of phonological contrasts through different types of training stimuli.

L1-Spanish-Catalan EFL learners were randomly assigned to different groups differing in the lexical status of the training stimuli. Whereas one group was exclusively trained on nonwords (N=14), the other was trained on words (N=12). All of them were trained (4 x 45-minute sessions) on the perception and production of English /æ/-/ʌ/ through identification, AX discrimination, and immediate repetition tasks. Gains in lexical encoding were assessed through a lexical decision task, whereas pronunciation improvement was assessed through duration and spectral distance scores between learners and native-speaker baselines for /æ/ and /ʌ/. These scores were obtained from untrained minimal-pair words embedded in sentences elicited through a meaning-focused delayed repetition task. A control group (N=15) was also pre- and post-tested.

The results revealed significant gains in the lexical encoding of the contrast for the group trained on words but not for the group trained on nonwords. In production, however, participants trained on nonwords obtained larger spectral distance gains in relation to native-speakers than those trained on words. These findings suggest that training L2 learners with high-variability lexical speech materials is effective in updating the lexical encoding of phonological contrasts but such gains did not generalize to production.

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