## Free classification of Spanish regional dialects by L2 Spanish learners Steven Alcorn Indiana University - Bloomington

In addition to acquiring the rules and structures of their second language (L2), learners must develop the ability to recognize patterns of L2 sociophonetic variation. Previous work has shown that while L2 learners are capable of developing such representations, these representations are less consistent than those of native listeners (Clopper & Bradlow, 2009) and are likely affected by degree of exposure to different dialects (Stephan, 1997).

Work on L2 Spanish learners' ability to recognize dialectal varieties of Spanish has been limited. While an increase in proficiency appears to facilitate *comprehension* of different dialects, a similar effect of proficiency on dialect *identification* ability has not been found (Schoonmaker-Gates, 2018). This finding is at odds with the observation that advanced learners of Spanish develop more robust representations of allophonic variants which serve as socioindexical cues, such as aspirated and elided realizations of /s/ (Schmidt, 2018). It has also been shown that explicit instruction on dialectal variation does not lead to gains in identification accuracy, although exposure to different varieties of Spanish via study abroad or social contacts does (Schoonmaker-Gates, 2017; 2018). Crucially, these studies have relied on identification tasks, which require learners to recognize socioindexical variables and then match them to a specific dialect from a list of choices provided.

This study adopts a different approach by using an auditory free classification task (Clopper, 2008) to examine perception of dialectal variation. Two groups of L2 Spanish learners were tested. The first group (n=30) was enrolled in a first-semester Spanish language course (Elementary Spanish, ES), while the second group (n=28) was enrolled in a fifth-semester language course (Intermediate Spanish, IS). Listeners were presented with recordings from 12 native Spanish talkers reading the same sentence from a modified Spanish version of The North Wind and the Sun. Three regions were represented by four talkers from each region: Spain, Argentina and Puerto Rico. The listeners were only informed that the talkers were from different regions and were asked to group talkers with similar accents together. No limitations were placed on the number or size of the groups. After finishing the perception task, listeners completed a follow-up task in which they explained the rationale for their groupings.

A two-way ANOVA was conducted with Accuracy as the dependent variable and Listener Group and Talker Dialect as independent variables. The analysis revealed main effects of both Listener Group ( $F_{1,57}$  = 18.79, p<.0001) and Talker Dialect ( $F_{2,57}$  = 9.214, p<.001). Tukey's posthoc comparisons showed that for Listener Group, IS listeners were more accurate than ES listeners (p<.0001). For Talker Dialect, Spain talkers were correctly paired together more often than Argentine and Puerto Rican talkers (p<.01), but there was no significant difference between accuracy for Argentine and Puerto Rican talkers.

A comparison of the qualitative responses from the follow-up task revealed that the two proficiency groups employed different strategies for making their groupings: while 86% (24/28) of IS listeners identified a particular word containing a salient phonetic feature for at least one dialect (e.g. "fuer[ $\theta$ ]a" for Spain, "e[ $\int$ ]os" for Argentina or "discutía[ $\eta$ ]" for Puerto Rico), the ES listeners were unable to verbalize such strategies, instead frequently alluding to less defined characteristics like voice quality and clarity. Listeners in both proficiency groups also indicated that they relied on speaking rate (27% of IS and 50% of ES listeners) for making grouping decisions, even though it was not a reliable indicator of talker dialect in this study.

These results suggest that learners begin to develop representations of L2 dialectal variation during their initial semesters of L2 study, although some dialects are more accurately classified than others, possibly due to patterns of asymmetrical exposure to certain dialects. Further analyses will be performed using listeners' biographical data regarding their exposure to specific dialects through travel, instructors and social contacts to determine whether individual differences in language experience affect learners' representations of regional L2 dialects at these lower proficiency levels.

## References

Clopper, C.G. (2008). Auditory free classification: methods and analysis. *Behavior Research Methods*, 40, 575-581.

Clopper, C.G. & Bradlow, A.R. (2009). Free classification of American English dialects by native and non-native listeners. *Journal of Phonetics*, *37*, 436-451.

Schmidt, L.B. (2018). L2 development of perceptual categorization of dialectal sounds: a study in Spanish. *Studies in Second Language Acquisition*, FirstView Article, 1-26.

Schoonmaker-Gates, E. (2017). Regional variation in the language classroom and beyond: mapping learners' developing dialectal competence. *Foreign Language Annals, 50*, 177-194.

Schoonmaker-Gates, E. (2018). Dialect comprehension and identification in L2 Spanish: familiarity and type of exposure. *Studies in Hispanic and Lusophone Linguistics, 11*, 193-214.

Stephan, C. (1997). The unknown Englishes? Testing German students' ability to identify varieties of English. In E. W. Schneiter (Ed.), *Englishes around the World* (pp. 93-108). Amsterdam: John Benjamins.