Variables in the L2 acquisition of Venezuelan Andean absolute interrogative intonation

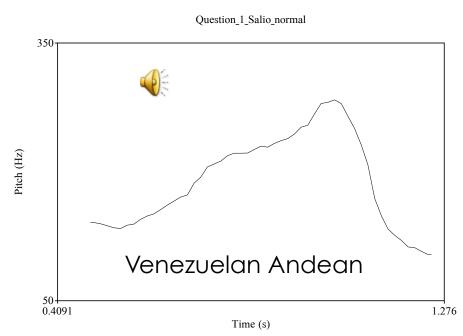
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InToSpan 2014, University of Massachusetts
October 11, 2014

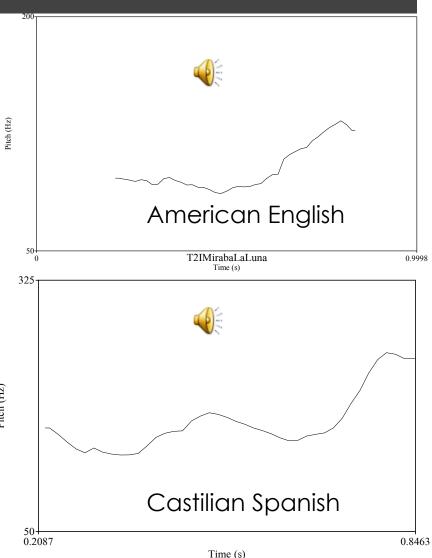
Introduction

- L2 intonation remains highly understudied (Major, 2001)
- L2 intonation has a strong relationship with perception of foreign accent (Anderson-Hsieh, Johnson, & Koehler, 1992; Munro, 1995; Van Els & DeBot, 1987)
- Intonation/prosody may be one of the latest developing aspects of L2 speech (Colantoni & Steele, 2006; Kvavik, 1976; Wells, Peppe, & Goulandris, 2004), and may prevent proficient speakers from feeling completely confident in expressing themselves (Kelm, 1995)
- The study of L2 Spanish intonation is complicated by dialectal variation

Intro - (Variable) Intonation

 Intonation varies by language and geographically within languages:





Absolute interrogative (i.e., yes/no question) variation across English and 2 dialects of Spanish

Selected L2 intonation literature review

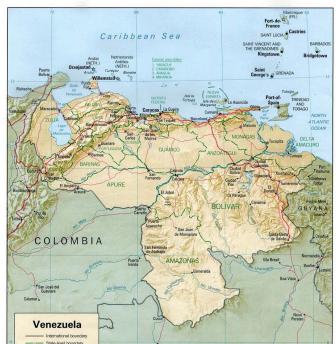
- Examination of cross-linguistic differences: Transfer as a construct that explains interlanguage intonation
 - (Kelm, 1987, 1995; Kimura et al., 2010; McGory, 1997; Mennen, 2004; Nibert, 2005; Ramsey, 1997)
- Increased consistency of L2 intonational pattern use for particular sentence types
 - over the course of a seven week study abroad in León, Spain (Henriksen, Geeslin, & Willis, 2010)
 - over the course of a 15 week study abroad in Mérida, Venezuela (Trimble, 2013)
 - ♦ BUT, with high levels of individual variation
- Stylistic variation in L2 segmental phonology and Study Abroad (Díaz-Campos, 2006).
- During study abroad, high levels of engagement/interaction in the target language community can lead to increased linguistic gains (Lybeck, 2002; Isabelli, 2001)

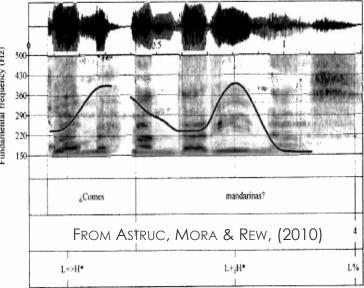
Research Questions

- 1. What is the relationship (if any) between task style/formality and production of L2 intonation?
- 2. How does native speaker interaction affect L2 intonational development?
- Not the focus of today's presentation:
 - How do L2 Spanish intonational patterns change over the course of a semester studying abroad in the Venezuelan Andes (broad focus declaratives and absolute interrogatives)?
 - How do the intonational characteristics of learners' native and target languages contribute to their interlanguage intonational development?

Methodology: participants

- 9 learners of L2 Spanish. A tenth learner's data was discarded
 - Spent Spring 2012 semester (15 weeks) studying abroad in Mérida, Venezuela
 - All were placed in homestays
 - 6 female, 3 male
 - Ages 19 through 21
 - All from Minnesota or Wisconsin
 - Intermediate Spanish level or higher
- 4 native speakers of Venezuelan Spanish
 - 3 were friends of the participants and 1 was instructor and Spanish program director
 - 3 from Mérida and 1 from Caracas
 - 2 female, 2 male
 - Between the ages of 20 and 32





Methodology: tasks

- 1. Formal production task
- 2. Informal production task
- 3. 11 item grammar task
- 4. Native Spanish speaker language background questionnaire
- 3 modified learner language contact profiles (adapted from Freed et al., 2004): week 0, week 8, week 15
- Learners performed all Spanish language tasks 3 times:
 - 1. before the students traveled to Venezuela (week 0)
 - 2. from Venezuela during the 8th week of the program (week 8)
 - 3. during the last week (15^{th}) of the program abroad (week 15)
- Learners also performed English versions of intonation tasks before their trip.

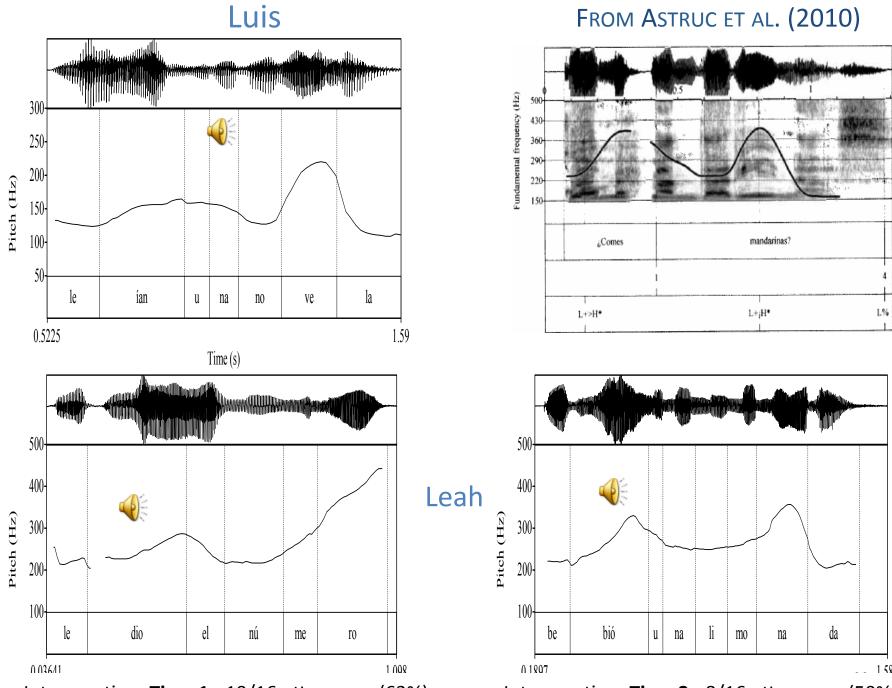
Formal contextualized reading

- PowerPoint presentation to facilitate an imaginary conversation between the subject and his or her friend Juan
- Includes background knowledge establishing
 - a relationship between the learner and Juan
 - information about what the learner did the previous day
- Slides
 - 6 practice slides, 24 target slides:
 - 8 declaratives,
 - 8 absolute interrogatives, and
 - 8 distracters (4 declaratives, 1 pronominal interrogatives, and 3 exclamations)
 - Target slides repeated (participants went through target slides twice)

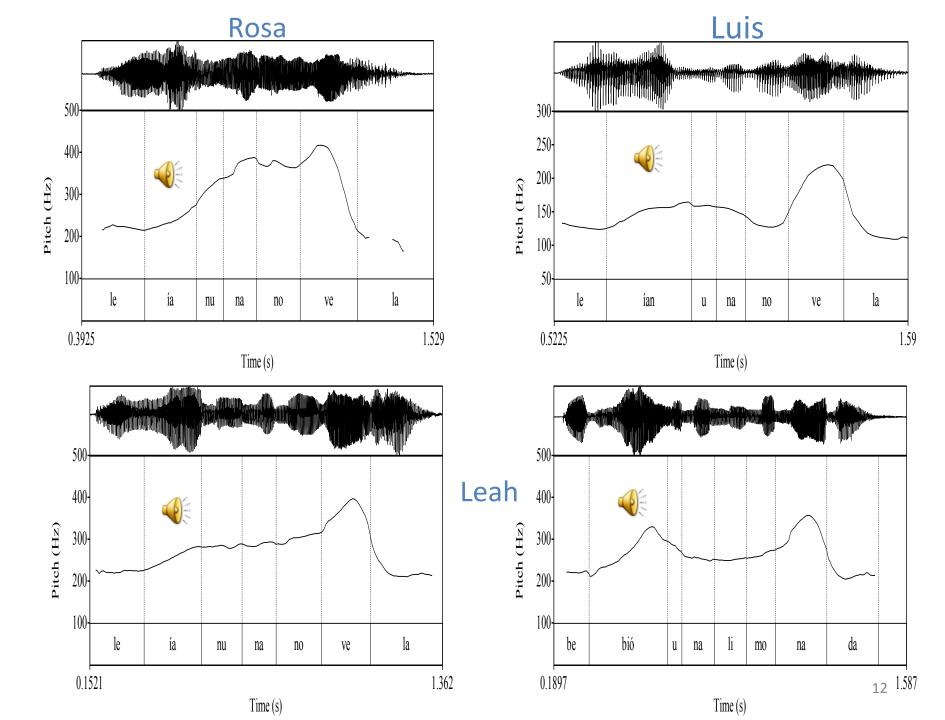
Informal hint and question game

- Inspired by 'twenty questions' game
- Learners were provided with a famous person, place, or thing.
- One player asked yes or no questions, the other gave hints (cf. Simonet, 2009)
- Ideally, this sort of task requires collaboration (negotiation) between the learners and a focus on the task at hand (as opposed to on language production)

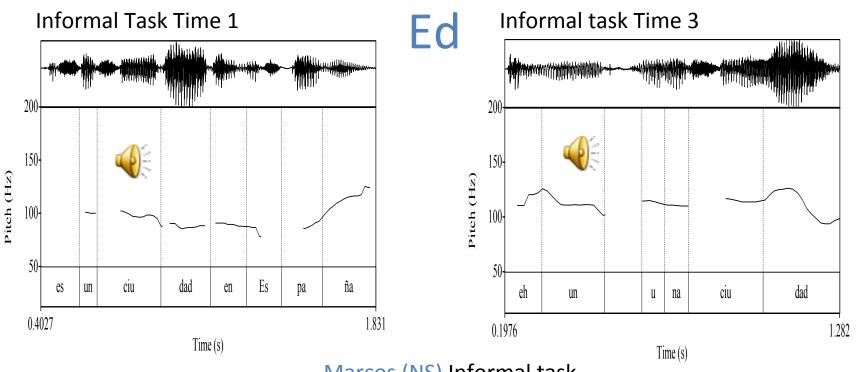
Results: Formal Abs. Interrogatives



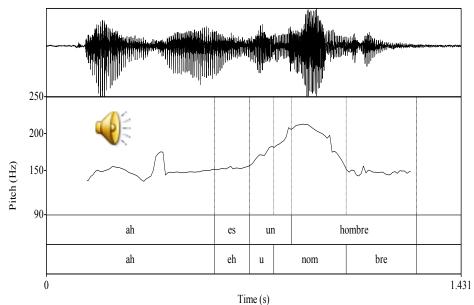
Interrogatives **Time 1** - 10/16 utterances (63%) Interrogatives **Time 3** - 8/16 utterances (50%)



Results: Informal Abs. Interrogatives







Results: Stylistic/task Variation

	Tiı	me 1	Time 2				Time 3			
	Formal	Informal	Formal		Informal		Formal		Informal	
Learner	Rise	Rise	Rise	Circumflex	Rise	Circumflex	Rise	Circumflex	Rise	Circumflex
Ed	13	12	15	0	17	0	16	0	7	6
Leah	16	9	11	5	8	12	8	8	10	6
Linda	14	8	14	1	12	1	15	1	9	5
Kayla	16	7	12	4	15	3	11	4	9	3
Gavin	15	7	9	3	11	6	13	2	6	6
Anna	14	8	15	0	17	0	15	0	13	0
Matt	12	10	14	0	17	0	16	0	17	0
Haley	16	8	16	0	14	0	16	0	9	0
Emma	14	10	16	0	16	0	16	0	12	0
Total	130	79	122	13	127	22	126	15	92	26
%	100%	100%	90%	10%	85%	15%	89%	11%	78%	22%

Results: Stylistic/Task Variation

		Tin		Time 3				
	Formal		Informal		F	Formal	Informal	
Learner	Rise	Circumflex	Rise	Circumflex	Rise	Circumflex	Rise	Circumflex
Ed	100%	0%	100%	0%	100%	0%	54%	46%
Leah	69%	31%	40%	60%	50%	50%	63%	38%
Linda	93%	7%	92%	8%	94%	6%	64%	36%
Kayla	75%	25%	83%	17%	73%	27%	75%	25%
Gavin	75%	25%	65%	35%	87%	13%	50%	50%
Total	79%	21%	65%	35%	81%	19%	61%	39%
	Time	e 2 Totals: Ris	Circ. 22%	Time 3 Totals: Rise 72%, Circ. 28%				

- A 2 (time) x 2 (task) x 2 (pattern) repeated measures ANOVA showed significant interactions:
 - time and pattern (p=.048)
 - task and pattern (p=.038)
 - ♦ but, there was not a significant 3-way interaction (p=.137)
- In other words, the frequency of a particular pattern (final rise versus circumflex)
 - depended on the week of the recording (week 8 versus week 15)
 - and, was significantly different depending on the task (formal versus informal)

Discussion: Stylistic/Task Variation

- By Time 3 (week 15), the 5 learners who produced any circumflex patterns used the circumflex in 39% of informal interrogatives versus only 19% of formal ones.
- Study abroad learners showed more native-like segmental production (for word-initial voiceless stops & syllable-final laterals) in an informal task (Díaz-Campos, 2006)
- Learners pay relatively more attention to form during formal contexts and more attention to meaning during informal contexts (Bayley & Tarone, 2012; Dickerson & Dickerson, 1977; Tarone, 1979)
- □ Innovative L2 phonological features may develop first in informal contexts and then spread to formal ones (cf. Liu, 2000).
- Ok, but how do we explain individual variation and why did four of the nine learners not produce any circumflex patterns during any of the elicited speech?

Results: Native Speaker Interaction

	F	irst 8 weel	ζS	Sec	Total		
	Spa hrs/	Eng hrs/	Ratio	Spa hrs/	Eng hrs/	Ratio	Spa:Eng Ratio
Learner	dy	dy	Spa:Eng	dy	dy	Spa:Eng	Tano
Ed	4-5	1-2	3:1	6+	1-2	5:1	4:1
Leah	3-4	5-6	2:3	3-4	3-4	1:1	3:4
Linda	2-3	2-3	1:1	3-4	3-4	1:1	1:1
Kayla	1-2	1-2	1:1	2-3	2-3	1:1	1:1
Gavin	1-2	1-2	1:1	2-3	2-3	1:1	1:1
Anna	6+	4-5	3:2	6+	4-5	3:2	3:2
Matt	1-2	2-3	2:3	1-2	2-3	2:3	2:3
Haley	2-3	5-6	1:2	1-2	1-2	1:1	2:3
Emma	0-1	6+	1:6	2-3	5-6	1:2	1:4

TABLE. REPORTED LANGUAGE USE FOR THE 1^{ST} & 2^{ND} HALVES

Results: Native Speaker Interaction

- Native speaker interaction was a significant factor in L2 intonational development of target dialect features:
 - Higher Spanish to English ratios significantly correlated with more L2 Spanish target dialect development. (p=.028)
- Higher amounts of native speaker interaction provide more opportunities to practice and increased access to target dialect features (cf. Isabelli, 2006; Lybeck, 2002)

Discussion: Native Speaker Interaction

- Varying levels of native speaker interaction was significant, but there were still high levels of individual variation
 - For example, Anna reported spending lots of time speaking Spanish and established friendships, but she did not produce any circumflex patterns. Anna reported less interest in sounding like any particular native speaker, whereas other learners (Ed, Leah, Linda & Gavin) mentioned a conscious effort to listen carefully and sound like their friends.
- "When I speak I try to sound like a native without an American accent. I mimic any Spanish terms or pronunciation I hear on the streets or when I travel (emphasize mine). My goal is to become completely proficient and fluent in the Spanish language so I am always listening to little things in speakers' tones and pronunciation that I copy to sound more native to the language. I would think I am mostly influenced by one of the friends I made during the semester. I was with him all the time." (Ed)

Summarized Results

- Target language geographic variation is an important factor in L2 Spanish intonational development, especially during study abroad
- L2 intonation is conditioned by speech style/task variation
- The proportion of time learners spent speaking Spanish: English and interacting with native speakers is also an important factor
- □ It is likely that learners play an active role in choosing the L2 intonational target and determining what and how they use their L2 (cf. Bayley & Tarone, 2012; Hansen Edwards, 2008; Lafford, 2006)

Conclusions

- As style seems to be a significant factor, L2 Spanish intonation research should incorporate a variety of styles and use caution with read speech.
- The L2 acquisition of intonation undoubtedly involves countless variables,
 - both those covered here (NL & TL characteristics, Stylistic Variation, Geographic Variation, NSp interaction, individual learner choices)
 - and others (e.g., learner attitude, motivation, level of Spanish).

Limitations/Future research

- □ Limited number of participants (n=9), relatively homogenous group
- Compare study abroad versus at home
- Investigate L2 intonation with a variety of interlocutors (here, all recordings were with peers)
- Production vs. perception in L2 intonation
- Exploring techniques in teaching intonation
 - beginning-advanced
 - phonetics classes
 - conversation classes

Thank you!

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Bibliography

- Anderson-Hsieh, J., Johnson, R., & Koehler, K. (1992). The relationship between native speaker judgments of nonnative pronunciation and deviance in segmental, prosody, and syllable structure. *Language Learning*, 42, 529-555.
- Astruc, L., Mora, E. & Rew, S. (2010). Venezuelan Andean Spanish intonation. In P. Prieto & P. Roseano (Eds.). *Transcription of intonation of the Spanish language* (pp. 191-226). Lincom Europa: München.
- Bayley, R. & Tarone, E. (2012). Variationist perspectives. In S. Gass and A. Mackey (Eds.), Handbook of second language acquisition (pp. 41-56). New York: Routledge.
- Colantoni, L., & Steele, J. (2006). Native-like attainment in the L2 acquisition of Spanish stop-liquid clusters. In C. A. Klee & T. L. Face (Eds.), Selected proceedings of the 7th Conference on the Acquisition of Spanish and Portuguese as First and Second Languages (pp. 59-73). Somerville, MA: Cascadilla.
- Collentine, J., & Freed, B. F. (2004). Learning context and its effects on second language acquisition: Introduction. *Studies in Second Language Acquisition*, 26, 153-171.
- De Bot, K. (1986). The transfer of intonation and the missing data base. In E. Kellerman & M. Sharwood Smith (Eds.), Crosslinguistic influences in second language acquisition (pp. 110-133). New York: Pergamon Press.
- DeKeyser, R. (1986). From learning to acquisition? Foreign language development in a U.S. classroom and during a semester abroad (Unpublished doctoral dissertation). Stanford University, CA.
- Derwing, T. M., & Munro, M. J. (1997). Accent, intelligibility, and comprehensibility: Evidence from four L1s. Studies in Second Language Acquisition, 19(1) 1–16.
- Díaz-Campos, M. (2006). The effect of style in second language phonology: an analysis of segmental acquisition in study abroad and regular classroom students. In C. A. Klee & T. L. Face, (Eds.), Selected proceedings of the 7th Conference on the Acquisition of Spanish and Portuguese as First and Second Languages (pp. 26-39). Somerville, MA: Cascadilla.
- Dickerson, L. B., & Dickerson, W. B. (1977). Interlanguage phonology: Current research and future directions. In S. P. Corder & E. Roulet (Eds.), Actes du 5ème colloque de linguistique appliqué (pp. 18-29). Neuchâtel, Switzerland: Faculté de Lettres.
- Ellis, R. (1999). Item versus system learning: Explaining free variation. Applied Linguistics, 20(4), 480-480.
- Face, T. L. (2007). The role of intonational cues in the perception of declaratives and absolute interrogatives in Castilian Spanish. Estudios de Fonética Experimental, XVI, 185-225.

Bibliography

- Flege, J. E. (1987). The production of "new" and "similar" phones in a foreign language: Evidence for the effect of equivalence classification. *Journal of Phonetics*, 15, 47-65.
- Freed, B. F. (1995). What makes us think that students who study abroad become fluent? In B. Freed (Ed.) Second language acquisition in a study abroad context (pp. 123-148). Amsterdam/Philadelphia: John Benjamins.
- Freed, B. F., Dewey, D. P., Segalowitz, N., & Halter, R. (2004). The language contact profile. Studies in Second Language Acquisition, 26, 349-356.
- Hansen Edwards, J. G. (2008). Social factors and variation in production in L2 phonology. In J. G. Hansen Edwards & M. L. Zampini (Eds.), *Phonology and second language acquisition* (pp. 251-279). Amsterdam/Philadelphia: John Benjamins.
- Hansen Edwards, J. G., & Zampini, M. L. (2008). Theoretical issues and frameworks in L2 phonology: Introduction. In J. G. Hansen Edwards & M. L. Zampini (Eds.), *Phonology and second language acquisition* (pp. 1-11). Amsterdam/Philadelphia: John Benjamins.
- Henriksen, N. C., Geeslin, K. L., & Willis, E. W. (2010). The development of L2 Spanish intonation during a study abroad immersion program in León, Spain: Global contours and final boundary movements. Studies in Hispanic and Lusophone Linguistics, 3(1), 113-162.
- Isabelli, C. L. (2001). Motivation and extended interaction in the study abroad context: Factors in the development of Spanish language accuracy and communication skills. Dissertation abstracts international, 61(11), 4362.
- Kelm, O.R. (1987). An acoustic study on the differences on contrastive emphasis between native and non-native Spanish speakers. Hispania, 70(3), 627-633.
- Kelm, O.R. (1995). Acoustic measurement of Spanish and English pitch contours: Native and non-native speakers. Hispanic Linguistics, 6(7), 435-448.
- Kimura, T., Sensui, H., Takasawa, M., Toyomaru, A., & Atria, J. J. (2010, September). A pilot study on perception of Spanish stress by Japanese learners of Spanish. Papers presented at the Interspeech 2010 satellite workshop on "Second Language Studies: Acquisition, Learning, Education and Technology", Tokyo, Japan. Paper retrieved from http://www.gavo.t.u-tokyo.ac.jp/L2WS2010/papers/L2WS2010_O1-04.pdf
- Kvavik, K. H. (1976). Research and pedagogical materials on Spanish intonation: A re-examination. Hispania, 59, 406-417.
- Ladd, D. R. (2008). Intonational phonology (2nd ed.). Cambridge: Cambridge University Press.
- Lafford, B. (2006). The effects of study abroad vs. classroom contexts on Spanish SLA: Old assumptions, new insights and future research directions. In C. A. Klee & T. L. Face (Eds.) Selected proceedings of the 7th Conference on the Acquisition of Spanish and Portuguese as First and Second Language, (pp. 1-25).

Bibliography

- Levis, J. M. (2002). Reconsidering low-rising intonation in American English. Applied Linguistics, 23(1), 56-82.
- Liu, G.-q. (2000). Interaction and second language acquisition: A longitudinal study of a child's acquisition of English as a second language. Beijing: Beijing Language and Culture University.
- Lybeck, K. (2002). Cultural identification and second language pronunciation of Americans in Norway. Modern Language Journal, 86(2), 174-191.
- Major, R. C. (2001). Foreign accent: The ontogeny and phylogeny of second language phonology. Mahwah, New Jersey: Lawrence Erlbaum Associates Publishers.
- McGory, J. T. (1997). Acquisition of intonational prominence in English by Seoul Korean and Mandarin Chinese speakers (Unpublished doctoral dissertation). Ohio State University.
- Munro, M. J. (1995). Non-segmental factors in foreign accent: Ratings of filtered speech. Studies in Second Language Acquisition, 17, 17-34.
- Munro, M., & Derwing, T. (1995a). Foreign accent, comprehensibility, and intelligibility in the speech of second language learners. Language Learning, 45(1) 73-97.
- Munro, M., & Derwing, T. (1995b). Processing time, accent, and comprehensibility in the perception of native and foreign-accented speech. Language and Speech, 38(3) 289-306.
- Nibert, H. J. (2005). The acquisition of the phrase accent by intermediate and advanced adult learners of Spanish as a second language. In D. Eddignton (Ed.), Selected proceedings of the 6th Conference on the Acquisition of Spanish and Portuguese as First and Second Languages (pp. 108-122). Somerville, MA: Cascadilla Proceedings Project.
- Preston, D. R. (1993). Variationist linguistics and second language acquisition. Second Language Research, 9(2), 153-172.
- Tarone, E. (1979). Interlanguage as chameleon. Language Learning, 29, 181-191.
- Van Els, T., & De Bot, K. (1987). The role of intonation in foreign accent. Modern Language Journal, 17(2), 147-155.
- Woolsey, D. S. (2006). Second language acquisition of the Spanish verb 'estar' with adjectives: An exploration of contexts of comparison and immediate experience. Dissertation abstracts international, 67(04), 1317.