



PHONETICS OF SECOND LANGUAGE ACQUISITION LING 598/LC 596 Spring 2014

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Office Hours: Thu 2:30 pm – 4:30 pm Class Time: Thu 12:00-1:15 pm Classroom: Heavilon Hall 206

COURSE OBJECTIVES

- To acquire theoretical and experimental insight into the phonetic aspects of second language acquisition
- To get acquainted with original research literature (journal articles) in the area of phonetics of second language acquisition
- To learn how to critically analyze, summarize, and present professional research articles
- To get acquainted with research methods and approaches applied in the professional literature in order to use these methods in one's original research
- To develop original research ideas in the area of phonetics of second language acquisition

COURSE POLICIES

Students with Disabilities: If you believe you have a disability, medical condition or other special circumstances that may affect your participation in this course please contact the Dean of Students Office (Schleman 207, 4-1747) so that suitable arrangements can be made.

Attendance: Students are expected to attend all class meetings. If you must be absent you are still responsible for all of the material covered during that lecture. I recommend you make arrangements with your colleagues to borrow their notes and find out about the assignments if you miss class. You are expected to know and understand all material covered in the course, whether it is presented in class or assigned readings.

Reading assignments: All reading assignments for a given day should be completed before you come to class on that day. Readings will follow the attached schedule unless stated otherwise in class.

Research analysis and presentation assignments: Readings will be arranged into a number of themed sections and students will alternate in leading class discussions on individual sections. In addition to the assigned readings, student responsible for a particular section is requited to find two additional readings appropriate for the section's theme (if you need help with literature search, let me know). These readings are to be sent to me at least a week in advance in order for them to be made available for all the students in class. All the students are to complete all the readings (i.e. the fact that

you are presenting a particular section does not mean that you are the only student to read the articles in this section).

Research project and final paper: There are two options for the main research requirement of the course: a student may choose to design (and, time allowing, complete) an individual research project and submit the write-up of the project as the final paper. A section of your Ph.D./ M.A. thesis, provided the topic is relevant, is eligible as a research project requirement for the class. A second alternative: students may choose to participate in a group project. In this case, participating students in the class jointly develop a research idea, design, and (time allowing) implement a research project. In this case, a final write-up of the project can be produced jointly as well. We will discuss in the beginning of the class which option is more suitable for current class participants.

Exceptional circumstances: Exceptional circumstances include religious obligations, serious personal illness or injury, sudden hospitalization or death of an immediate family member, and illness requiring home-stay of a dependent. If the absence can be anticipated (e.g. religious obligation), you must notify me at least one week prior to the date of absence. Unanticipated absences may be excused only within 1 week following the date of the absence and upon presentation of verifiable written documentation. If you have questions about this policy, please ask. You may also refer to the website http://www.purdue.edu/studentregulations/regulations_procedures/classes.html

Grading: Course grade will be based on the performance in the literature-based research presentation (including literature search) and the quality of the final research project/paper. Final grades will be weighted as follows: Research literature presentations: 40%, final project/paper: 60%.

Group work: Group work is encouraged in this course. You are welcome to discuss the assigned readings and your interpretations of the research presented in the readings, you are welcome also to discuss your final projects, although, needless to say, if you are working on the individual project the final write-up must be your own.

Student Academic Misconduct: **Do not present the work of others as your own.** Please review carefully the brochure "Academic Integrity: A Guide for Students" available at the Dean of Students Office (Schleman 207) or online at: http://www.purdue.edu/odos/osrr/academicintegritybrochure.php

Student Rights and Complaints: The official policies of the University concerning student rights and complaints, honesty and academic misconduct can be found in the *Academic Procedure Manual*, and in *University Regulations*, available from the Office of the Dean of Students or at: http://www.purdue.edu/studentregulations/student_conduct/studentrights.html

Any concerns about grades given on a particular assignment must be put in writing and given to the course instructor along with a copy (or the original) of the graded assignment. Your written statement should include a description of why you believe the grade to be incorrect, and what you believe the grade should be. The course instructor is the final arbiter on all such decisions. The only exception to this rule is obvious errors in arithmetic, which may be brought to the instructor's attention directly.

Campus Emergency: In the event of a major campus emergency, course requirements, deadlines and grading percentages are subject to changes that may be necessitated by a revised semester calendar or other circumstances. Here are ways to get information about changes in this course: Blackboard web page and my email address: odmitrie@purdue.edu.

Tentative course timetable (subject to change!)

WEEK Week 1	DATE Jan 14	TOPIC Introductions No class on Jan 16	READING		
PART I: OVE Week 2	RVIEW Jan 21, 23	Overview	Flege (2003)		
Munro & Bohn (2007) PART II: ACOUSTICS					
Week 3	Jan 28, 30	Production of L2 sounds: transfer and the role of phonetic similarity	Major (1987) Flege (1987) Zampini (1994) Eckman, et al. (2003)		
Week 4	Feb 4, 6	Intermediate categories in L2 production	MacKay, et al. (2001) Flege, et al. (2003) Wang & Behne (2007)		
Week 5	Feb 11, 13	Acoustics of code-switching	Bullock & Toribio (2009) Antoniou, et al. (2011) Olson (2012) Olson (2013)		
Week 6	Feb 18, 20	L2 effects on L1	Pavlenko (2000) Lord (2008) Chang (2013) Dmitrieva, et al. (2010)		
Week 7	Feb 25, 27	Foreigner-directed speech	Uther, et al. (2007) Scarborough, et al. (2007) Sankowska, et al. (2011)		
PART III: PERCEPTION					
Week 8	March 4, 6	Perception of L2 The role of L2 experience	Bohn (2000) Strange and Shafer (2008) Bohn & Flege (1990) Flege, et al. (1997)		

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Week 9	March 11, 13	Perceptual category boundaries in L2 learners	Williams (1977) Flege & Eefting (1987) Garcia-Sierra (2009) Antoniou, et al. (2012)		
Week 10	March 18, 20	NO CLASS – Spring break			
Week 11	March 25, 27	Secondary cues in L2 perception	Bohn (1995) Kondaurova&Francis (2008) Escudero, et al. (2009) Llanos, et al. (2013)		
Week 12	April 1, 3	Perception of accented speech Non-native – non-native perception Benefits of L2 exposure	Perrachione et al., (2011) Bialystok, (2011) Baese-Berk et al., (2013)		
Week 13	Apr 8, 10	Clear speech and noise	Bradlow&Bent (2002) Smiljanic&Bradlow(2011) Garcia&Cooke (2006) Garcia, et al. (2010)		
PART IV: THE RELATIONSHIP BETWEEN PERCEPTION AND PRODUCTION IN L2					
ACQUISITION Week 14	ON Apr 15, 17	Production and Perception Effect of training	Bradlow, et al. (1997) Sheldon&Strange (1982) Ingvalson&Holt (2011)		
Week 15	Apr 22, 24	Final project presentations			
Week 16	Apr 29, May 1	Final project presentations			
Week 17	Finals week	Final project is due May 8 by 5pm			

READING LIST:

Antoniou, M., Best, C., Tyler, M., & Kroos, C. (2011). Inter-language interference in VOT production by L2-dominant bilinguals: Asymmetries in phonetic code switching. *Journal of Phonetics*, 39(4), 558–570.

Antoniou, M., Tyler, M. D., and Best, C. T. (2012). "Two ways to listen: Do L2-dominant bilinguals perceive stop voicing according to language mode?" *J. Phon.* 40(4), 582-594.

Baese-Berk, M. M., Bradlow, A. R., and Wright, B. A. (2013). Accent-independent adaptation to foreign accented speech. *Journal of the Acoustical Society of America*, 133(3), EL174-EL180.

Bohn, O.-S. & Flege, J. E., 1990, Interlingual identification and the role of foreign language experience in L2 vowel perception. *Applied Psycholinguistics* 11, 303-328.

Bohn, O.-S., 2000, Linguistic relativity in speech perception: An overview of the influence of language experience on the perception of speech sounds from infancy to adulthood. In: Niemeier, S. & Dirven, R., eds., *Evidence for Linguistic Relativity*. Amsterdam and Philadelphia: J. Benjamins, 1-28.

Bohn, O.-S., 1995, Cross-language speech perception in adults. In Strange, W., ed., *Speech perception and linguisic experience*. Timonium, MD: York Press, 275-300.

Bradlow, A. R., & Bent, T. (2008). Perceptual adaptation to non-native speech. *Cognition*, 106, 707–729.

Bradlow, A. R., and Bent, T. (2002). The clear speech effect for non-native listeners. *Journal of the Acoustical Society of America*, 112(1), 272-284

Bradlow, A. R., Pisoni, D. B., Yamada, R. A., and Tohkura, Y. (1997). Training Japanese listeners to identify English /r/ and /l/: IV. Some effects of perceptual learning on speech production. *Journal of the Acoustical Society of America*, 101(4), 2299-2310

Bullock, B., & Toribio, A. J. (2009). Trying to hit a moving target: On the sociophonetics of code switching. In: L. Isurin, D. Winford, & K. De Bot (Eds.), *Multidisciplinary approaches to code switching* (pp. 189–206). Philadelphia, PA: John Benjamins.

Chang, C. B., (2012), Rapid and multifaceted effects of second language learning on first language speech production, *Journal of phonetics* 40(2): 249–68.

Clarke, C. M., & Garrett, M. F. (2004). Rapid adaptation to foreign-accented speech. *Journal of the Acoustical Society of America*, 116, 3647–3658.

Eckman, F., Elreyes, A., & Iverson, P. (2003) Some principles of second language phonology, *Second Language Research* 19, 3: 169-208.

Escudero, P. (2001) The role of the input in the development of L1 and L2 sound contrasts: language-specific cue weighting for vowels. In Do, Anna H.-J., Laura Dominguez, and Aimee Jahansen (eds.). *Proceedings of the 25th Annual Boston University Conference on Language Development*. Pp. 250-261. Cascadilla.

Escudero, P., Benders, T., & Lipski, S. (2009) Native, non-native and L2 perceptual cue weighting for Dutch vowels: The case of Dutch, German, and Spanish listeners. *Journal of Phonetics*, 37, pp. 452-466.

Flege, J. (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.

Flege, J. (2003). Assessing constraints on second-language segmental production and perception. In A. Meyer and N. Schiller (Eds) *Phonetics and Phonology in Language Comprehension and Production, Differences and Similarities*. Berlin: Mouton de Gruyter, pp. 319-355.

Flege, J. E., Bohn, O.-S. & Jang, S., 1997, Effects of experience on non-native speakers' production and perception of English vowels. *Journal of Phonetics* 25, 437-470.

Flege, J.E., Eefting, W. (1987). Cross-language switching in stop consonant perception and production by Dutch speakers of English. *Speech Communications* 6 (3), 185–202.

Flege, J.E., Frieda, E.M., Walley, A.C. and Randazza, L.A. 1998. "Lexical factors and segmental accuracy in second language speech production". *Studies in Second Language Acquisition* 20: 155-187.

Flege, J. E., Schirru, C., MacKay, I. R. A. 2003. Interaction between the native and second language phonetic subsystems. *Speech Communication* 40, pp. 467-491.

Garcia-Sierra, A., Diehl, R. L., and Champlin, C. (2009). "Testing the double phonemic boundary in bilinguals," *Speech Communication* 51, 369–378.

Ingvalson, E. & Holt, L. L. (2011). Perception-production relationships for /r-l/ by native Japanese speakers. *Proceedings of the International Congress of Phonetic Sciences*, Hong Kong, 2011.

Jongman, A., and Wade, T. (2007). Acoustic variability and perceptual learning: The case of non-native accented speech. O-.S. Bohn and M. Munro (Eds.), *Language Experience in Second Language Speech Learning*. Amsterdam: John Benjamins.

Knightly, L.M., Jun, S.A., Oh, J.S., and Au, T.K. (2003) Production benefits of childhood overhearing. *J. Acoust. Soc. Am.* 114(1), pp. 465-74.

Kondaurova, M.V., & Francis, A.L. (2008). The relationship between native allophonic experience with vowel duration and perception of the English tense/lax vowel contrast by Spanish and Russian listeners. *Journal of the Acoustical Society of America*, 124(6), 3959-3971.

Llanos, F., Dmitrieva, O., Shultz, A.A., & Francis, A.L. (2013). Auditory enhancement and second language experience in Spanish and English weighting of secondary voicing cues. *Journal of the Acoustical Society of America*, 134(3), 2213-2224.

Lord, G. (2008) Second language acquisition and first language phonological modification. In: J. B. de Garavito, Y E. Valenzuela (Eds.), *Selected proceedings of the 10th Hispanic linguistics symposium* (pp. 184-193). Somerville, MA: Cascadilla Proceedings Project.

M. Luisa García Lecumberri, Martin P. Cooke (2006). Effect of masker type on native and non-native consonant perception in noise. *Journal of the Acoustical Society of America* 119 (4): 2445-2454.

Major, R.C. (1987) "Foreign Accent: Recent Research and Theory", *IRAL*, *International Review of Applied Linguistics* 25, 3: 185-202.

MacKay, I.R.A., Flege, J.E., Piske, T., Schirru, C., 2001. Category restructuring during second-language (L2) speech acquisition. J. Acoust. Soc. Am. 110, 516–528.

Garcia Lecumberri, M. L., Cooke, M., Cutler, A. (2010). Non-native speech perception in adverse conditions: a review. *Speech Communication* 52: 864-886.

Munro, M. J., & Bohn, O.-S. (2007). The study of second language speech learning: A brief overview. In O.-S. Bohn & M. J. Munro (Eds.), *Language Experience in Second Language Speech Learning* (pp. 3-12). Amsterdam: John Benjamins.

Munro, M. J., & Derwing, T. M. (1995b). Processing time, accent, and comprehensibility in the perception of foreign-accented speech. *Language and Speech*, 38, 289–306

Olson, D. (2012). The Phonetic Correlates of Insertional Code Switching: Suprasegmental analysis and a case for hyper-articulation. *Linguistic Approaches to Bilingualism*, *2*(4), 439-457.

Olson, D. (2013). Bilingual Language Switching and Selection at the Phonetic Level: Asymmetrical transfer in VOT production. *Journal of Phonetics* 41, pp. 407-420.

Pavlenko, A. 2000: L2 influence on L1 in late bilingualism. Issues in Applied Linguistics 11, 175–205

Sankowska, J., Garcı'a Lecumberri, M. L., and Cooke, M. (2011). Interaction of intrinsic vowel and consonant durational correlates with foreigner directed speech, *Poznan Stud. Contemp. Ling.* 47, 109–119.

Scarborough, R, Brenier, J., Zhao, Y., Hall-Lew, L., Dmitrieva, O. (2007) An Acoustic study of real and imagined foreigner-directed speech. *Proceedings of the 16th International Congress of Phonetic Sciences*, Saarbrucken, pp. 2165-2168.

Perrachione, T. K., Del Tufo, S. N., & Gabrieli, J. D. (2011). Human voice recognition depends on language ability. Science, 333(6042), 595-595.

Bialystok, E. (2011). Reshaping the mind: the benefits of bilingualism. Canadian Journal of Experimental Psychology/Revue canadienne de psychologie expérimentale, 65(4), 229.

Sheldon, Amy, with W. Strange (1982). The Acquisition of /r/ and /l/ by Japanese Learners of English: Evidence that Speech Production Can Precede Speech Perception. *Applied Psycholinguistics*, 3.3., 243-61.

Smiljanic, R. and Bradlow, A. R. (2011). Bidirectional clear speech perception benefit for native and high proficiency non-native talker-listener pairs: Intelligibility and accentedness. *Journal of the Acoustical Society of America*, 130(6), 4020-4031

Strange, W., & Shafer, V.L. (2008). Speech perception in second language learners. In J. G. Hansen Edwards & M. L. Zampini (Eds.), *Phonology and Second Language Acquisition* (pp. 153-191). Amsterdam: John Benjamins.

Sumner, M. (2011). The role of variation in the perception of accented speech. *Cognition*, **119**, 131-36.

Uther, M., Knoll, M.A., Burnham, D. 2007. Do you speak E-NG-L-I-SH? A comparison of foreigner-and infant-directed speech. *Speech Communication* 49, 2-7.

Wang, Y. & Behne, D. (2007). Temporal remnants from Mandarin in nonnative English speech. In O.-S. Bohn & M. J. Munro (Eds.), *Language Experience in Second Language Speech Learning: In Honor of James Emil Flege. Language Learning and Language Teaching*, Vol. 17 (pp. 167–184). Amsterdam: John Benjamins.

Zampini, Mary L. (1994). "The Role of Native Language Transfer and Task Formality in the Acquisition of Spanish Spirantization." *Hispania* 77.3: 470–81.