Linguistics 251A/B: Topics in phonetics & phonology   Winter 2021

Phonetics & phonology of code-switching/code-mixing

SYLLABUS

Time	Thursdays 12:00-2:50 PM	**Professor**	Kie Zuraw [ˈkʰaj ˈzɝˌɔ], pronoun *she*
Place	Zoom—see CCLE for link	**E-mail**	kie@ucla.edu
		Student hours	Tuesdays 1:00-3:00
			See CCLE for my Zoom "office" link
Web page	log in to ccle.ucla.edu and you should see Ling 251A/B in your list of courses		

Code-switching—there's so much to say about it! Sociolinguistics, psycholinguistics, syntax… But what about phonetics and phonology ? The literature there isn't vast, and there's a lot of room for new research.

Some of the big questions

- In a mixed utterance, what are the sociolinguistic and linguistic factors that affect which phonology is applied to which word?
- How do phonological factors affect switchability, within and across words?
- How does the delay caused by "switching cost" affect cross-word phonological rules?
- What can we learn about multi-lingual/multi-variety phonetic categories?
- What can we learn about the control mechanisms for language production?
- What can we learn about perceivers' expectations and how they navigate violations of those expectations?

Join me in exploring this literature and coming up with some new research directions.

Course goals

- Get a handle on the literature
- Generate some research ideas !

Readings

- We will use **perusall.com** to collaboratively annotate readings before class
  - Make an account
  - See CCLE for the code needed to sign in to our course
  - All readings are uploaded there

CCLE

- This is our home base: handouts, weekly checklists, surveys, discussion forum…

Requirements

- For 0 units: you're welcome to attend and participate as much or as little as you like
- For 2 units:
  - Read the readings
  - Take turns facilitating discussion
  - Contribute 2-3 readings to our list (or just 1, if many enrolled)—this will help tailor the readings to students' interests
  - Participate in a small (re)writing exercise we'll do
- For 4 units:
  - All of the above plus a project (see below for ideas)

Project ideas

- Replicate a finding using a corpus
  - Maybe vary languages or some other factor
  - E.g., VOTs in German-English corpus: www.idiap.ch/dataset/code-switching
- Design an experiment, including generating some fake data to analyze.
  - E.g., extend some VOT method to pair of languages that have a different number of VOT contrasts (e.g. Hindi-English)
- Do a literature review and synthesis of a specific sub-topic. E.g., what do we know about…
  - the intonation of code-switch sentences?
  - the phonetics and phonology of code-switching between AAE and MAE?
  - the effects of code-switching on lexical tone?

Dissertation ideas

As an exercise, I brainstormed 10 dissertation ideas that could come out of this course. Not all are equally feasible/interesting…

- Phonetic and phonological effects of code-switching in [a tone language]
- Phonetic and phonological effects of code-switching between [two sign languages]
- Phonetic effects of code-switching with mismatched contrast
  - e.g. one language has a 2-way VOT contrast and the other has a 3-way VOT contrast
- How sociolinguistic factors affect degree of phonetic/phonological switch in code-switching
- How degree of phonetic/phonological switch affects comprehension
- How degree of phonetic/phonological switch affects perceivers' sociolinguistic impressions
- In code-switching, what phonological factors determine whether a word from Language B can bear morphology from Language A?
- Methods for identifying switch points in closely related varieties or languages
- The phonetics and phonology of genuine vs. mock code-switching
- Modeling diachronic convergence as a result of code-switching
  - i.e., languages in contact that, over time, develop similar phonetics and phonology

Writing exercise

- Part I: We each take a paragraph from a publication and make a version that is worse, and a version that is better
- Part II: Later in the course, we each do the same for one of our own paragraphs (ulp!)
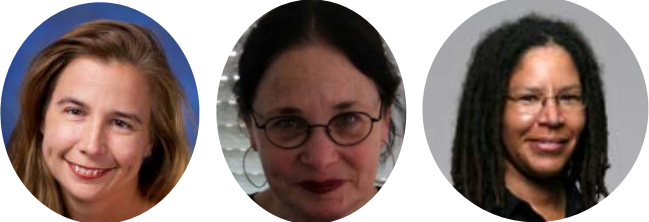
Discussion format

- We'll be trying out the method from Soranno 2010 for student facilitation of discussion
  - I'll explain in class the how and why
  - May be less work than typical proseminar format, if we don't make handouts?

PAROSL

- I'm participating in UCLA's "Peer-Assisted Reflection on Student Learning" program this quarter
  - Goal is to get support implementing the discussion method
  - A facilitator from the program will attend at some point
  - My faculty partner, Harold Torrence, may attend briefly but because of a scheduling conflict I'll need to record some classes for his personal use

Mask celebrating Montreal's unofficial (and officially disapproved) greeting. Available from store.teganandsara.com . Size is a bit small. 100% of proceeds go to Native Women's Shelter of Montreal and Resilience Montreal.

Week	Topic	Probable readings
1 April 1	• Introduction • Why do this • Issues and definitions • General background on code-switching	(none—you can just show up)
2 April 8	• Sociolinguistic and psycholinguistic background	1. Valdés 1981: microanalysis of Spanish/English requests 2. Kachru 1983, ch. 7: code-mixing in India 3. Houston Stanback 1983, ch. 4: code-switching in Black women's speech (results chapter) 4. Tsiplakou 2009: language-switching vs register variation in Greek-speaking Cyprus 5. Grieser 2013: style-shifting in Washington, D.C. 6. Schwartz & Kroll 2006: bilingual language processing 7. Griffin 2012: *very* short encyclopedia entry on planning in language production *Why all the pictures? It's an ongoing project; I can elaborate in class…*

| 3 April 15 | • Psycholinguistic, syntactic, and phonetic background

plus room for a couple of your picks! | 1. Sridhar & Sridhar 1980: syntax and psycholinguistics of code-mixing
2. Bokamba 1988: how universal are the syntactic constraints? Bantu evidence
3. Gollan & Goldrick 2018: syntactically driven switches
4. Aboh 2020; code-switching in broader cognitive context
5. Sundara, Polka & Baum 2006: phonetic categories in bilinguals (English/French t/d)

 |

4 & 5 April 22 April 29	• Getting started with a very popular dependent variable: Voice Onset Time (VOT)	1. Goldrick, Runnqvist & Costa 2014: Spanish/English, forced switching in experimental task 2. Piccinini & Arvaniti 2015: Spanish/English, spontaneous code-switching 3. Balukas & Koops 2015: Spanish/English, spontaneous code-switching 4. Toribio et al. 2005: Spanish/English 5. Uribe 2020: Spanish/English 6. Bullock & Toribio 2009: Spanish/English, read sentences 7. Olson 2016: Spanish/English

8. Antoniou et al. 2011: Greek/English, varying language of experimental instructions
9. Tsui, Tong & Chan 2019: Cantonese/English, compares balanced vs unbalanced bilinguals
10. Amengual 2012: Spanish/English, compares different types of bilinguals
11. Brown & Amengual 2015: Spanish/English, focus on cognates vs. non-cognates
12. Li & Gollan 2021: Spanish/English—this is reaction time in reading aloud, not VOT, but focusses on cognates, so I'm putting it here

(no pic of Chan)

6 May 6	• Vowels: getting multi-dimensional • Cross-word phenomena • Prosody	1. Ojeda, Pérez & Wayland 2018: English/Spanish heritage speakers, vowels 2. Elias, McKinnon & Milla-Muñoz 2017: English/Spanish heritage speakers, vowels 3. Olson 2019: English/Spanish cross-word phonology, like spirantization 4. Muldner et al. 2019: English/French, vowel quality, duration & pitch 5. Olson 2016: Spanish/English, pitch & duration 6. Holliday 2016: Biracial men's use of peak delay as function of listener's race 7. Aly 2017a: Miami English/Spanish intonation 8. Aly 2017b: Intonation in Spanish/Basque code-switching

(no pic of Hoiting or Sanger)

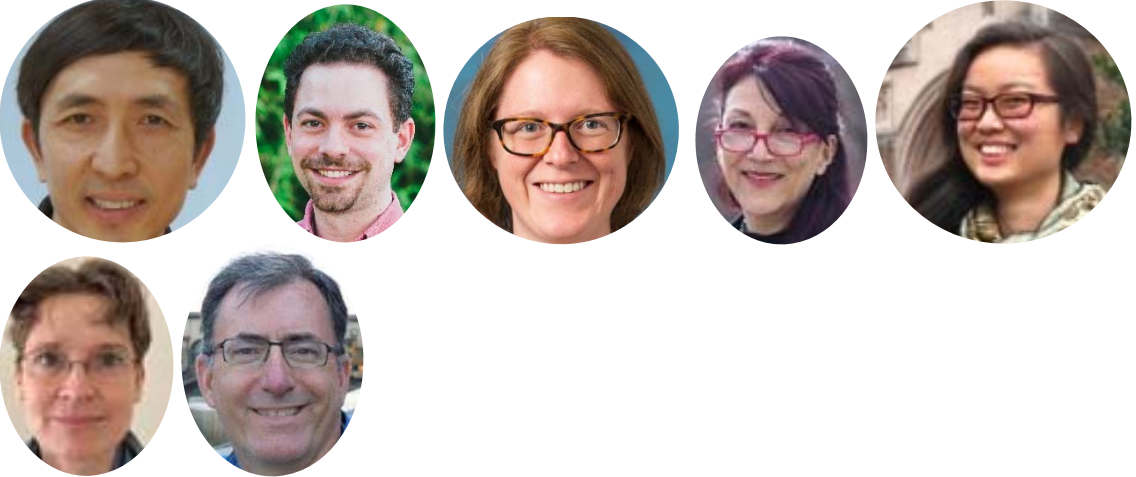| 7 May 13	• Word-level issues *plus room for a couple of your pics*	1. Poplack et al. 2020: phonetic integration as a strategy for distinguishing loans vs code-switching 2. Zabrodskaja & Verschik 2014: Russian/Estonian, code-switching between two heavily inflected languages 3. Ntihirageza 2009: English/Kirundi and French/Kirundi: morphophonological integration 4. Stefanich & Amaro 2018: /z/ in Spanish-English word-internal code-switching 5. Stefanich et al. 2019: Can you code-switch inside a word? Distributed Morphology approach (no pic of Hilderman)

8 May 20	• Miscellaneous *and space for some of your picks*	1. Quinto-Pozos 2008: American Sign Language/Mexican Sign Language phonetic "interference" 2. Khattab 2013: English/Arabic, children's phonetic choices 3. Wilson Ian & Gick Bryan 2014: articulatory setting (English/French) 4. Shary 2016: articulatory setting (Spanish/English) 5. Goldrick, Putnam & Schwarz 2016: modeling code-switching phonetics/phonology with Gradient Symbolic Representations

9 May 27	• Perception *and space for your picks*	1. Li 1996: listeners' ability to identify switched words in a gating task (Chinese/English) 2. Piccinini & Garellek 2014: listeners exploit prosody of code-switching to aid comprehension (English/Spanish) 3. Fricke, Kroll & Dussias 2016: listeners exploit duration and VOT cues to upcoming switch (English/Spanish) 4. Shen, Gahl & Johnson 2020: effect on listener of withholding phonetic cues to switch (Chinese/English)
10 June 3	• Space for more papers of your choosing	

Full bibliographic info

Aboh, Enoch O. 2020. Lessons From Neuro-(a)-Typical Brains: Universal Multilingualism, Code-Mixing, Recombination, and Executive Functions. *Frontiers in Psychology* 11. https://doi.org/10.3389/fpsyg.2020.00488. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7191110/ (21 March, 2021).

Aly, Ann M. 2017a. Code-Switching in Miami Cuban Spanish: A Preliminary Study of Suprasegmental Effects. In *Cuban Spanish dialectology: variation, contact, and change.*

Aly, Ann M. 2017b. *Prosodic effects of code-switching in Spanish-Basque bilinguals*. UCLA. https://escholarship.org/uc/item/1pz4v3bn (22 March, 2021).

Amengual, Mark. 2012. Interlingual influence in bilingual speech: Cognate status effect in a continuum of bilingualism. *Bilingualism*. Cambridge, United Kingdom: Cambridge University Press 15(3). 517–530. http://dx.doi.org/10.1017/S1366728911000460.

Antoniou, Mark, Catherine T. Best, Michael D. Tyler & Christian Kroos. 2011. Inter-language interference in VOT production by L2-dominant bilinguals: Asymmetries in phonetic code-switching. *Journal of Phonetics* (Cross-Language Speech Perception and Variations in Linguistics Experience) 39(4). 558–570. https://doi.org/10.1016/j.wocn.2011.03.001.

Balukas, Colleen & Christian Koops. 2015. Spanish-English bilingual voice onset time in spontaneous code-switching. *International Journal of Bilingualism*. SAGE Publications Ltd 19(4). 423–443. https://doi.org/10.1177/1367006913516035.

Bokamba, Eyamba G. 1988. Code-mixing, language variation, and linguistic theory:: Evidence from Bantu languages. *Lingua* 76(1). 21–62. https://doi.org/10.1016/0024-3841(88)90017-4.

Brown, Esther L. & Mark Amengual. 2015. Fine-grained and probabilistic cross-linguistic influence in the pronunciation of cognates: Evidence from corpus-based spontaneous conversation and experimentally elicited data. *Studies in Hispanic and Lusophone Linguistics*. De Gruyter 8(1). 59–83. https://doi.org/10.1515/shll-2015-0003.

Bullock, Barbara E & Almeida Jacqueline Toribio. 2009. Trying to hit a moving target: on the sociophonetics of code-switching. In *Multidisciplinary approaches to code switching*. John Benjamins Publishing Company.

Elias, Vanessa, Sean McKinnon & Ángel Milla-Muñoz. 2017. The Effects of Code-Switching and Lexical Stress on Vowel Quality and Duration of Heritage Speakers of Spanish. *Languages*. Multidisciplinary Digital Publishing Institute 2(4). 29. https://doi.org/10.3390/languages2040029.

Fricke, Melinda, Judith F. Kroll & Paola E. Dussias. 2016. Phonetic variation in bilingual speech: A lens for studying the production-comprehension link. *Journal of memory and language* 89. 110–137. https://doi.org/10.1016/j.jml.2015.10.001.

Goldrick, Matthew, Michael Putnam & Lara Schwarz. 2016. The future of code mixing research: Integrating psycholinguistic and formal grammatical theories. *Bilingualism*. Cambridge, United Kingdom: Cambridge University Press 19(5). 903–906. http://dx.doi.org/10.1017/S1366728916000390.

Goldrick, Matthew, Elin Runnqvist & Albert Costa. 2014. Language Switching Makes Pronunciation Less Nativelike. *Psychological Science*. SAGE Publications Inc 25(4). 1031–1036. https://doi.org/10.1177/0956797613520014.

Gollan, Tamar H. & Matthew Goldrick. 2018. A switch is not a switch: Syntactically-driven bilingual language control. *Journal of Experimental Psychology: Learning, Memory, and Cognition*. US: American Psychological Association 44(1). 143–156. https://doi.org/10.1037/xlm0000462.

Grieser, Jessica. 2013. Locating Style: Style-shifting to Characterize Community at the Border of Washington, D.C. *University of Pennsylvania Working Papers in Linguistics* 19(2). https://repository.upenn.edu/pwpl/vol19/iss2/10.

Griffin, Zenzi M. 2012. Planning in language production. In Harold Pashler (ed.), *Encyclopedia of the mind*. SAGE Publications.

Holliday, Nicole. 2016. Identity Performance among Black/Biracial Men through Intonation: Examining Pitch Accents and Peak Delay. *University of Pennsylvania Working Papers in Linguistics* 22(2). https://repository.upenn.edu/pwpl/vol22/iss2/9.

Houston Stanback, Marsha. 1983. Code-switching in Black Women's Speech. *Doctoral Dissertations Available from Proquest* 1–236.

Kachru, Braj B. 1983. *The Indianization of English :the English language in India /*. Delhi : Oxford University Press,. http://hdl.handle.net/2027/uc1.32106006814757.

Khattab, Ghada. 2013. Phonetic convergence and divergence strategies in English-Arabic bilingual children. *Linguistics*. De Gruyter Mouton 51(2). 439–472. https://doi.org/10.1515/ling-2013-0017.

Li, Chuchu & Tamar H. Gollan. 2021. What cognates reveal about default language selection in bilingual sentence production. *Journal of Memory and Language* 118. 104214. https://doi.org/10.1016/j.jml.2020.104214.

Li, Ping. 1996. Spoken Word Recognition of Code-Switched Words by Chinese–English Bilinguals. *Journal of Memory and Language* 35(6). 757–774. https://doi.org/10.1006/jmla.1996.0039.

Muldner, Kasia, Leah Hoiting, Leyna Sanger, Lev Blumenfeld & Ida Toivonen. 2019. The phonetics of code-switched vowels. *International Journal of Bilingualism*. SAGE Publications Ltd 23(1). 37–52. https://doi.org/10.1177/1367006917709093.

Ntihirageza, Jeanine. 2009. Context sensitive morphology: adaptations of English and French verbs into Kirundi. *Concentric: Studies in Linguistics* 35(1). 65–86.

Ojeda, Adriana, Ana de Prada Pérez & Ratree Wayland. 2018. Heritage Speakers and their Language Use: A Phonetic Approach to Code-Switching. *Florida Linguistics Papers* 5(1). https://journals.flvc.org/floridalinguisticspapers/article/view/107103 (22 March, 2021).

Olson, Daniel. 2016a. The impact of code-switching, language context, and language dominance on suprasegmental phonetics: Evidence for the role of predictability. *International Journal of Bilingualism*. SAGE Publications Ltd 20(4). 453–472. https://doi.org/10.1177/1367006914566204.

Olson, Daniel. 2016b. The role of code-switching and language context in bilingual phonetic transfer. *Journal of the International Phonetic Association*. Cambridge University Press 46(3). 263–285. https://doi.org/10.1017/S0025100315000468.

Olson, Daniel. 2019. Phonological processes across word and language boundaries: Evidence from code-switching. *Journal of Phonetics* 77. 100937. https://doi.org/10.1016/j.wocn.2019.100937.

Piccinini, Page & Amalia Arvaniti. 2015. Voice onset time in Spanish–English spontaneous code-switching. *Journal of Phonetics* 52. 121–137. https://doi.org/10.1016/j.wocn.2015.07.004.

Piccinini, Page & Marc Garellek. 2014. Prosodic cues to monolingual versus code-switching sentences in English and Spanish. *Proceedings of the 7th International Conference on Speech Prosody* 885–889.

Poplack, Shana, Suzanne Robillard, Nathalie Dion & John C. Paolillo. 2020. Revisiting phonetic integration in bilingual borrowing. *Language*. Linguistic Society of America 96(1). 126–159. https://doi.org/10.1353/lan.2020.0004.

Quinto-Pozos, David. 2008. Sign Language Contact and Interference: ASL and LSM. *Language in Society*. Cambridge University Press 37(2). 161–189.

Schwartz, Ana I & Judith F. Kroll. 2006. Language processing in bilingual speakers. In Matthew J Traxler & Morton A Gernsbacher (eds.), *Handbook of psycholinguistics*. 2nd edn. Academic Press.

Shary, Merrily. 2016. Interspeech Posture in Spanish-English Bilingual Adults. *Graduate Theses and Dissertations*. https://scholarcommons.usf.edu/etd/6388.

Shen, Alice, Susanne Gahl & Keith Johnson. 2020. Didn't hear that coming: Effects of withholding phonetic cues to code-switching. *Bilingualism: Language and Cognition*. Cambridge University Press 1–12. https://doi.org/10.1017/S1366728919000877.

Soranno, Patricia A. 2010. Improving Student Discussions in Graduate and Undergraduate Courses: Transforming the Discussion Leader. *Journal of Natural Resources and Life Sciences Education* 39(1). 84–91. https://doi.org/10.4195/jnrlse.2009.0019g.

Sridhar, S. N. & Kamal K. Sridhar. 1980. The syntax and psycholinguistics of bilingual code mixing. *Canadian Journal of Psychology/Revue canadienne de psychologie*. Canada: University of Toronto Press 34(4). 407–416. https://doi.org/10.1037/h0081105.

Stefanich, Sara & Jennifer Cabrelli Amaro. 2018. Phonological factors of Spanish/English word internal code-switching. *Code-switching – Experimental Answers to Theoretical Questions*. John Benjamins 195–222.

Stefanich, Sara, Jennifer Cabrelli, Dustin Hilderman & John Archibald. 2019. The Morphophonology of Intraword Codeswitching: Representation and Processing. *Frontiers in Communication*. Frontiers 4. https://doi.org/10.3389/fcomm.2019.00054. https://www.frontiersin.org/articles/10.3389/fcomm.2019.00054/full (16 March, 2021).

Sundara, Megha, Linda Polka & Shari Baum. 2006. Production of coronal stops by simultaneous bilingual adults. *Bilingualism: Language and Cognition*. Cambridge University Press 9(1). 97–114. https://doi.org/10.1017/S1366728905002403.

Toribio, Almeida Jacqueline, Barbara E. Bullock, Christopher G. Botero & Kristopher Allen Davis. 2005. Perseverative Phonetic Effects in Bilingual Code-Switching. *Theoretical and Experimental Approaches to Romance Linguistics*. John Benjamins 291–306.

Tsiplakou, Stavroula. 2009. Code-switching and code-mixing between related varieties: establishing the blueprint. *The International Journal of Humanities* 6(12). 49–66.

Tsui, Rachel Ka-Ying, Xiuli Tong & Chuck Siu Ki Chan. 2019. Impact of language dominance on phonetic transfer in Cantonese–English bilingual language switching. *Applied Psycholinguistics*. New York, United Kingdom: Cambridge University Press 40(1). 29–58. http://dx.doi.org/10.1017/S0142716418000449.

Uribe, Mike. 2020. *VOT Variance in Sponateous Spanish/English Code Switching*. United States -- Wyoming: University of Wyoming M.A. https://search.proquest.com/docview/2430107971/abstract/7BB43E7156414183PQ/1 (16 March, 2021).

Valdés, Guadalupe. 1981. Codeswitching as deliberate verbal strategy: a microanalysis of direct and indirect requests among bilingual Chicano speakers. In *Latino language and communicative behavior*, 95–108. Ablex.

Wilson, Ian & Bryan Gick. 2014. Bilinguals Use Language-Specific Articulatory Settings. *Journal of Speech, Language, and Hearing Research*. American Speech-Language-Hearing Association 57(2). 361–373. https://doi.org/10.1044/2013_JSLHR-S-12-0345.

Zabrodskaja, Anastassia & Anna Verschik. 2014. Morphology of Estonian items at the interface of Russian-Estonian language contact data. *Sociolinguistic Studies*. Galicia, United Kingdom: Equinox Publishing Ltd. 8(3). 449–474.