

PROGRAM BOOKLET

November 3, 2017



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<https://english.wisc.edu/nwav46/>



nwav46



@nwav46

Look, folks, this is an **electronic** booklet. This Table of Contents gives you clues for what to search for and we trust that's all you need.

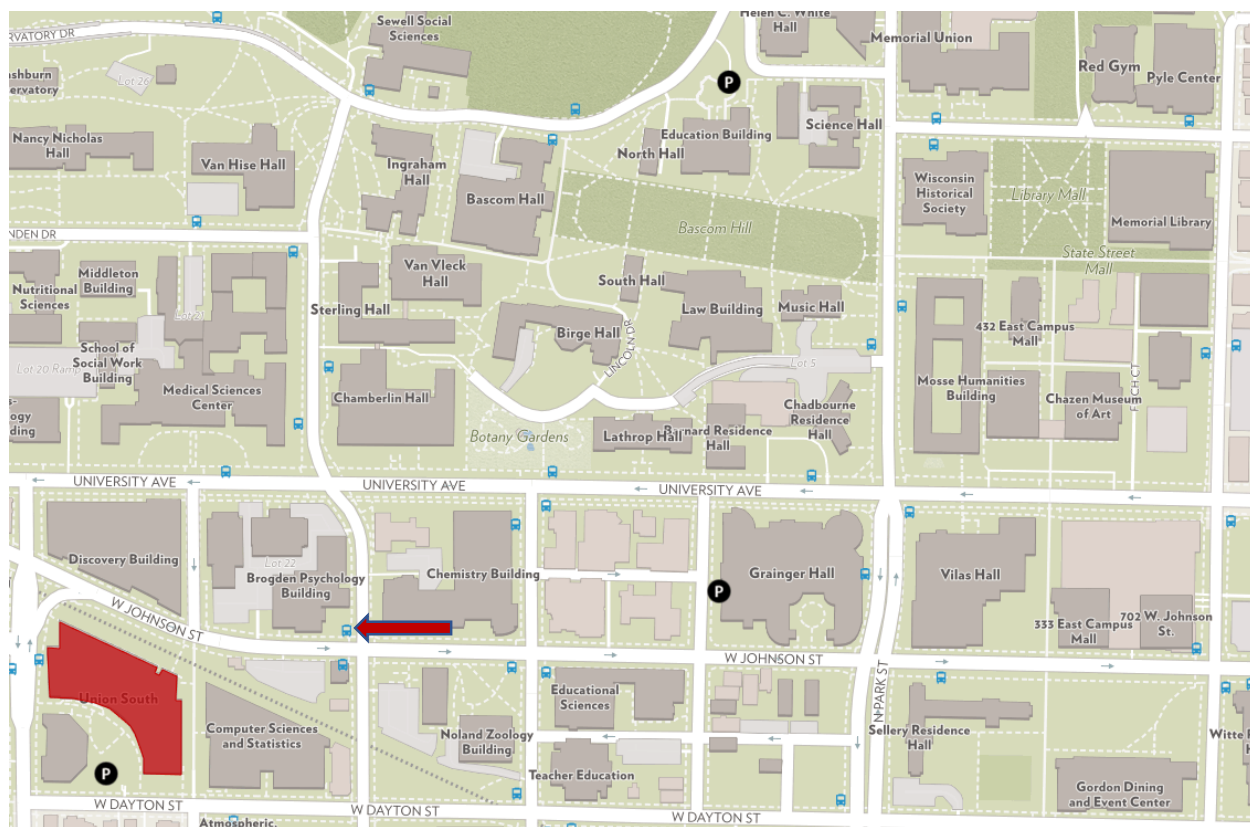
We'll have buttons with sets of pronouns ... and some with a blank space to write in your own set.



The venue and the town

We're assuming you'll navigate using electronic devices, but here's some basic info.

Here's a good campus map: <http://map.wisc.edu/>. The conference will be in Union South, in red below, except for Saturday talks, which will be in the Brogden Psychology Building, just across Johnson Street to the northeast on the map. There are a few places to grab a bite or a drink near Union South and the big concentration of places is on and near State Street, a pedestrian zone that runs east from Memorial Library (top right).



The program

NWAV 46 2017 Madison, WI				
Thursday, November 2nd, 2017				
12:00 pm-6:00 pm	Registration – 5th Quarter Room, Union South			
	Industry	Landmark	Northwoods	Agriculture
1:00- 3:00	Progress in regression: Statistical and practical improvements to Rbrul <i>Daniel Ezra Johnson</i>	Discourse analysis for variationists <i>Scott Kiesling</i>	Sociolinguistics and forensic speech science: Knowledge- and data-sharing <i>Vincent Hughes, Jessica Wormald, Tyler Kendall, Yvan Rose, Natalie Schilling & Erica Gold</i>	Texts as data sources for historical sociolinguistics <i>Joshua Bousquette, Rob Howell & Mark Richard Lauersdorf</i>
3:00- 3:15	Break			
3:15- 5:15	Guidelines for statistical reporting of multivariate analysis <i>William Labov, Robin Dodsworth, Josef Fruehwald, John Paolillo, James Stanford, Sali Tagliamonte & Rena Torres Cacoullos</i>	Progressing from dialect awareness to critical language awareness and pedagogy: Equipping teachers to interrogating language, dialects, and power <i>Jeffrey Reaser, Mary Hudgens Henders & Amanda J. Godley</i>	The sociolinguistics of bad data <i>Raymond Hickey, Valerie Fridland, Matthew J. Gordon, Tyler Kendall, Samantha Litty, Natalie Schilling, Christopher Strelluf & Erik Thomas</i>	Complex systems and chain shifts: How big data affects our analyses <i>Michael L. Olsen, Allison Burkette & William A. Kretzschmar, Jr.</i>
5:15- 5:30	Break			
5:30- 5:45	Welcome Anja Wanner, Chair of the University Committee Collin Ludwig, Co-president, Wunk Sheek			
5:45- 6:45	Plenary I Varsity Hall I+II Monica Macaulay University of Wisconsin-Madison <i>Whence and whither Menominee? Tracing 125 years of variation and change</i> Introduced by Alexandra D'Arcy			
6:45- 8:45	Reception Varsity Hall I+II			

Friday, November 3rd, 2017

7:00 am -6:00 pm	5th Quarter Room
7:00 am -8:30	Industry Grant Writing for Early Career Researchers Alexandra D'Arcy, Robin Dodsworth and Monica Macaulay [Sponsored by Duke University Press. Breakfast provided]

	Industry	Landmark	Northwoods	Agriculture
	Chair: Tom Purnell	Chair: Sarah Benor	Chair: Patricia Cukor-Avila	Chair: Robert Bayley
8:30-8:55	212. Production planning effects in Sandhi: A corpus study using automated classification. <i>Jeffrey Lamontagne & Francisco Torreira</i>	152. The relationship between iconicity as motor-sensory analogy and social meaning: Evidence from creaky voice. <i>Emily Lake</i>	134. English variation in the Dutch Caribbean: Evidence of Dutch substrate in Saban English? <i>Caroline Myrick & Lars Naborn</i>	137. Cross-community variation in onset /l/ among California Latinx speakers. <i>Robert Podesva, Frankie Conover, Alma Flores-Perez, Chantal Gratton, Aurora Kane, Daisy Leigh, Julia Mendelsohn, Carra Rentie & Anna-Marie Sprenger</i>
8:55-9:20	124. Variation in filled pauses across speaking styles and boroughs within West Yorkshire: Implications for forensic speaker comparisons. <i>Erica Gold, Sula Ross & Kate Earnshaw</i>	218. LOT-raising and toughness in a California high school. <i>Teresa Pratt</i>	194. 'I feel like' and 'it feels like': Two paths to the emergence of epistemic markers. <i>Marisa Brook</i>	232. Experimental evaluations of Chicano English sh~ch variation in El Barrio, Texas. <i>Isla Flores-Bayer</i>
9:20-9:45	67. Variation in Hasidic Yiddish syntax: A corpus study of language change on the internet. <i>Isaac L. Bleaman</i>	56. Attentional load and style control. <i>Devyani Sharma & Kathleen McCarthy</i>	94. Habitual behaviour: Teasing apart the variable contexts of the English past habitual. <i>Derek Denis, Alexandra D'Arcy & Erika Larson</i>	122. Categoricity and graduality: Progress in the analysis of /ʃ/ in Spanish. <i>Manuel Díaz-Campos & Eliot Raynor</i>
9:45-10:10	226. A diachronic BNC – construction of balanced		130. Social capital far from	29. Ethnic identity construction: The

	sociolinguistic sub-corpora & case study. <i>Susan Reichelt</i>		the capital: Verbal –s in Corner Brook, Newfoundland. <i>Gerard Van Herk & Becky Childs</i>	interlocutor effect on the TOOTH vowel in Chinese American English. <i>Mingzhe Zheng</i>
10:10-10:30	Break			
	Chair: Sali Tagliamonte	Chair: Gerard Van Herk	Chair: David Bowie	Chair: Manuel Díaz-Campos
10:30-10:55	American Dialect Society Session 143. Rootedness and the spectral dynamics of /aɪ/ monophthongization. <i>Paul E. Reed</i>	200. Where sociolinguistics and speech science meet: The physiological and acoustic consequences of underbite in a multilectal speaker of African-American English. <i>Alicia Wassink</i>	39. Mandarin dialect contact and identity construction: The social motivation and meanings in the variation of Taiwan Mandarin (r) in an immigrant setting. <i>Yu-Ning Lai</i>	197. The persistence of dialectal differences in U.S. Spanish: /s/ weakening in Boston and NYC. <i>Daniel Erker & Madeline Reffel</i>
10:55-11:20	128. Progressive outliers in listener perception of sound change. <i>Sayako Uehara & Suzanne Evans Wagner</i>	28. Dialect contact and linguistic accommodation: Standard Seoul Korean speakers in Gyeongsang Province. <i>Yoojin Kang</i>	149. Would You Like Fry With That?: Exploring Perceptual Variation of Vocal Fry <i>Rae Vanille</i>	246. Explaining cross-generational differences in subject placement and overt pronoun rates in New York City Spanish using mixed-effect models <i>Carolina Barrera Tobón, Rocío Raña Risso & Christen Madsen</i>
11:20-11:45	71. Boston dialect features in the Black/African American community. <i>Charlene Browne & James Stanford</i>	89. Tracking phonetic accommodation: An analysis of short-term speech adjustments during interactions between native and nonnative speakers. <i>Cecily Corbett</i>	238. Aesthetic judgments of self and other: Dialect attitudes in the Spanish of Argentina. <i>Jennifer Lang-Rigal</i>	108. Examining the relegation of language contact in language change: The “naturalness” of contact-induced variation in Catalanian Spanish. <i>Justin Davidson</i>

11:45-12:10	224. Gender assignment to English noun insertions in New York Dominican Spanish. <i>Tara Feeney, Lotfi Sayahi & Cecily Corbett</i>	165. Statistical tracking and generalization: Dual strategies in bidialectal acquisition. <i>Alexandra Pfiffner</i>	38. "They just had such a sweet way of speaking": Affective stance, identity, and prosodic style in Kodiak Alutiiq. <i>Julia Fine</i>	172. How Black does Obama sound now? Testing listener judgments of intonation in incrementally manipulated speech. <i>Nicole Holliday & Dan Villarreal</i>
12:10-1:30	Lunch			
12:00-2:00	Bowling with the editors! [Union South Bowling Alley]			
1:30-2:50	Poster Session I Varsity Hall I+II			
	87. The study of optional realization of the French negative particle (ne) on Twitter: Is sociolinguistics compatible with the big data? <i>Jacobo Levy Abitbol, Jean-Pierre Chevrot, Marton Karsai, Jean-Philippe Magué, Yannick Léo, Aurélie Nardy & Eric Fleury</i>	136. Hoosier Talk – Acoustic work in Western Indiana. <i>Jon Bakos & Isabelle Goevert</i>	93. Personas, personalities, and stereotypes of lesbian speech. <i>Auburn Barron-Lutzross</i>	6. Degrees of ethnolinguistic infusion: Variation in Hebrew loanword use at American Jewish summer camps. <i>Sarah Bunin Benor</i>
	66. Acquisition of L3 Spanish vowels by heritage speakers of Polish and Ukrainian. <i>Margaryta Bondarenko</i>	48. "Toto, I've a feeli[ŋ] we're no[r] in Kansas anymore": Phonological variation in real and imaginary worlds. <i>David Bowie & Hriana Bowie</i>	95. Mapping perceptions of language variation in Wisconsin: A view from Marathon County, WI. <i>Sarah Braun</i>	85. Canadian raising in the speech of American-born NHL players. <i>Andrew Bray</i>
	40. <i>Madame le/la ministre</i> : Variation and change in gendered terms of address in the French House of Representatives. <i>Heather Burnett & Olivier Bonami</i>	120. Change takes time, ¿cachái? Testing the role of frequency as a driver of change in Chilean Spanish. <i>Matthew Callaghan</i>	42. Probing non-conscious perceptions of Spanish and English in Miami: The implicit association test	121. Youz guyz gotta addz the Z'z at the endz'a yaz woidz, seez!: Metapragmatic commentary on English in New York City.

			in sociolinguistic context. <i>Salvatore Callesano & Phillip M. Carter</i>	<i>Cecelia Cutler</i>
26. #YouAreWhatYouTweet: Identity & vowel devoicing in French-language tweets. <i>Amanda Dalola</i>	41. “I’m Catholic and she’s public”: Education and the Northern Cities Shift in St. Louis. <i>Daniel Duncan</i>	33. The impact of diversity on language regard. <i>Katharina von Elbwart & Jennifer Cramer</i>	214. Northern Cities in the country: TRAP, LOT, and country identity in Northwestern Ohio. <i>Martha Austen, Shontael Elward, Zack Jones & Kathryn Campbell-Kibler</i>	
	44. Saks vs. Macys: (r-1) marches on in New York City department stores. <i>Gregory R. Guy</i>	131. The quotative system in Saipanese English: Contrasting profiles of <i>be like</i> and <i>zero</i> . <i>Dominique B. Hess</i>	102. The California vowel shift in Santa Barbara. <i>Arianna Janoff</i>	
91. "In my mind I was like": Speaker strategies for differentiating thought and speech in the Age of Quotative <i>be like</i> . <i>Taylor Jones & Christopher Hall</i>	32. Variation in the use of <i>ça/c’</i> and <i>il(s)/elle(s)</i> in Parisian French. <i>Kelly Kasper-Cushman</i>	79. Performing class, performing Pittsburghese: Falling question intonation in Pittsburghese videos. <i>Scott F. Kiesling</i>	61. Is (T, D) deletion a single, unified process? New insights from Toronto English. <i>Lex Konnelly, Katharina Pabst, Melanie Röthlisberger & Sali Tagliamonte</i>	
138. The effect of lifetime exposure on perceptual adaptation to non-native speech. <i>Rebecca Larnus</i>	22. " <i>Les jons fon skil veulent</i> ": Reflections of the French nasal vowel shift in variant orthography. <i>Jim Law</i>	77. Subject-verb agreement in Moncton, New Brunswick Acadian French. <i>Emilie Leblanc</i>	119. Frequency and syntactic variation: Evidence from Mandarin Chinese. <i>Xiaoshi Li & Robert Bayley</i>	
223. Sororithroat: The acoustic and ideological	83. Subjunctive/indicative	16. Preliminary evidence of	127. Same name, same thing?	

	properties of an emerging voice quality. <i>Jessica Love-Nichols & Morgan Sleeper</i>	alternation in Ceará Portuguese: Variation, categorical or semi-categorical areas of the subjunctive. <i>Hebe Macedo de Carvalho</i>	Spanish-Kaqchikel language contact in Guatemala: The case of Spanish voiceless stop aspiration in monolingual and bilingual speech. <i>Sean McKinnon</i>	Speakers see distinctions that linguists' labels paper over. <i>Thomas Stewart</i>
	99. The prosodic structure of code-switching. <i>Jonathan Steuck</i>	92. Almost everyone in New York is raising PRICES (but no longer backing PRIZES). <i>Michael Newman, Bill Haddican, Gianluke Rachiele & Zi Zi Gina Tan</i>	7. Social predictors of case syncretism in New York Hasidic Yiddish. <i>Chaya R. Nove</i>	103. Variable direct objects in Brazilian Portuguese. <i>Luana Nunes, Kendra V. Dickinson & Eleni Christodulelis</i>
			104. Future expression in varieties in contact: the Spanish and the Catalan of Catalonia. <i>Silvia Pisabarro Sarrió</i>	69. Changes in the timber industry as a catalyst for linguistic change. <i>Joseph A. Stanley</i>
3:00-4:30	Plenary II Varsity Hall I+II Lauren Hall-Lew University of Edinburgh <i>When does a (sound) change stop progressing?</i> Introduced by Joe Salmons			
4:40-5:50	Poster Session II Varsity Hall I+II			
	264. Quotative markers and the pragmatics of demonstrations. <i>Rebekah Baglini & Emily Lake</i>	151. Past tense reference in American Samoa: Constraints and story-telling conventions.	150. Pinning down social meaning: How listener phonology shapes social perception.	27. A peripheral phenomenon? Variable use of left dislocation in northern colloquial German.

		<i>Anja Auer</i>	<i>Martha Austen</i>	<i>Christine Evans</i>
208. Evidence for the Proteus Effect in a non-laboratory setting. <i>Ross Burkholder & Jason Riggle</i>	213. Sociolinguistically-deduced sound change in Tunisian Tamazight of Zrawa: From interdentals to stops. <i>Soubeika Bahri</i>	141. The myth of the New York City borough accent. <i>Kara Becker & Luiza Newlin-Lukowicz</i>	142. Quantifying the complexity of code-switching for cross-corpus comparison. <i>Barbara E. Bullock, Almeida Jacqueline Toribio, Guzmán, Joseph Ricard & Jacqueline Serigos</i>	
173. 2SG reference and (relative) gender in the Spanish of Salvadorans in Boston. <i>Kendra V. Dickinson</i>	254. German echoes In American English: How new-dialect formation triggered the Northern Cities Shift. <i>Yesid Antonio Castro Calle</i>	140. He said, she said: Exploring the role of gender and gendered attitudes in true and false memories. <i>Katherine Conner & Abby Walker</i>	148. Depronominalization and gender ideology. <i>Kirby Conrod</i>	
5. Linguistic distance and mutual intelligibility among South Ethiosemitic languages. <i>Tekabe Legesse Feleke</i>	179. Dominican perceptions of /s/ in the diaspora. <i>Fiona Dixon</i>	257. A consideration of multiple time points in a longitudinal study. <i>Lewis Esposito</i>	189. Why the long FACE? Ethnic stratification and language variation in a multi-ethnic secondary school. <i>Shivonne M. Gates</i>	
186. Social and distributional predictors of the success of lexical innovations in online writing. <i>Ian Stewart & Jacob Eisenstein</i>	236. <i>Ain't</i> for <i>didn't</i> in African American English: Change vs. age grading. <i>Sabriya Fisher</i>	266. The social meaning of regional and ethnic accent strength in Netherlandic Standard Dutch. <i>Stefan Grondelaers, Paul van Gent & Roeland van Hout</i>		
180. Tense/mood variation and epistemic commitment: Form-function mapping in three Romance languages. <i>Mark Hoff</i>	160. Auxiliary reduction in the Spanish periphrastic past. <i>Chad Howe</i>	248. What it means when you say my name (right): Subjective evaluations of the linguistic reproduction of	245. Can you roll your R's? Phonetic variation in Spanish rhotic productions by heritage speakers in Southern California.	

			names. <i>Zachary Jagers,</i> <i>Anaïs Elkins,</i> <i>Renée Blake,</i> <i>Natalie Povilonis</i> <i>de Vilchez,</i> <i>Luciene Simões &</i> <i>Matthew Stuck</i>	<i>Ji Young Kim &</i> <i>Gemma Repiso</i> <i>Puigdelliura</i>
	164. Regional differences in African American Vernacular English: The production of the /ay/ vowel in Northern and Southern regions of the United States. <i>Eva Kuske</i>	115. Variation in word-initial /ɾ/ in a geographically isolated community: The case of Santa Teresa, Brazil. <i>Sarah Loriato</i>	210. Troppppp loooongueuuuhhhh: Orthographic lengthening across French dialects. <i>Gretchen McCulloch &</i> <i>Jeffrey Lamontagne</i>	198. Language attitudes toward African American English in California public schools. <i>Zion Ariana Mengesha</i>
	201. “¡Estoy cerca tuyo!”: A variationist look at the expression of locatives in Spanish. <i>Angel Milla-Munoz</i>	166. Formal acceptability experiments as a novel measure of variation in flexible constituent order. <i>Savithry Namboodiripad</i>	175. Variable vowel convergence in a cooperative task. <i>Jennifer Nycz &</i> <i>Shannon Mooney</i>	191. Phonological environment conditions social perception of sibilants. <i>Jacob B. Phillips &</i> <i>Hillel Steinmetz</i>
	185. Where does the social meet the linguistic? <i>Mary Robinson & Laurel MacKenzie</i>	182. A man needs a female like a fish needs a lobotomy: How adjectival nominalization leads to innovative reference. <i>Melissa Robinson,</i> <i>Alexis Palmer &</i> <i>Patricia Cukor-Avila</i>	159. Putting the /t/ in politics: Omarosa and hyperarticulated /t/. <i>Rachel Elizabeth Weissler</i>	244. The short- <i>a</i> split among young speakers in the Long Island suburbs of NYC. <i>Allison Shapp</i>
	154. How to be linguistically “glocal” in Singapore: the range of a linguistic repertoire. <i>Priscilla Shin</i>	222. Hot and heavy: The phonetic performance of fatness and <i>fujoshi</i> in 'Kiss Him, Not Me'. <i>Morgan Sleeper</i>	207. How abstract is your variable? Allophonic systems as an intraspeaker variable. <i>Betsy Sneller</i>	241. The effect of gender on variable loanword adaptation of Northern Kyungsang Korean. <i>Jiyeon Song &</i> <i>Amanda Dalola</i>

6:00-7:30	<p style="text-align: center;">Plenary III Varsity Hall I+II</p> <p style="text-align: center;">Almeida Jacqueline Toribio University of Texas at Austin <i>National and diasporic linguistic varieties as evidence of social affiliations: The case of Afro-Hispanics</i> Introduced by Catherine Stafford</p>
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8:00-11:00?	<p style="text-align: center;">Student Mixer The Sett (in Union South)</p>
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Saturday, November 4th, 2017

All Talks—including plenary and movie—take place in the Psychology Building. The Awards Ceremony and Reception take place in Union South

7:00 am – 6:00 pm	<p style="text-align: center;">5th Quarter Room</p> <p>Registration Breaks Book Exhibits</p>
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	Psychology 103	Psychology 107	Psychology 113	Psychology 121
	Chair: Uri Horesh	Chair: Becky Childs	Panel: Social meaning and linguistic variation: A panel in honor of Penny Eckert- Part I	Chair: Alex D'Arcy
8:30-8:55	209. Infinitive verbs, agreement and perceived competence. <i>Ronald Beline Mendes & Fernanda Canever</i>	60. Divergent vs. convergent patterns of variation and change in Montréal and Welland French: The case of consequence markers. <i>Helene Blondeau, Raymond Mougeon & Mireille Tremblay</i>	Pragmatics, the third wave, and the social meaning of definites. <i>Eric Acton</i>	126. Investigating English contact through Spanish subject expression in Georgia. <i>Philip P. Limerick</i>
8:55-9:20	181. Correlating flagging with phonological	57. <i>Tu</i> in Brasília: The advance of a marked pronominal	<i>Totally</i> and <i>-issimo</i> : Intensification, indexicality and	50. Progress in subject pronoun expression research:

	integration to distinguish LOLIs as borrowings or codeswitches. <i>Ryan M. Bessett</i>	form in dialect focusing. <i>Carolina Andrade & Maria Marta Pereira Scherre</i>	markedness in English and Italian. <i>Andrea Beltrama & Laura Staum Casasanto</i>	The effects of the verb revisited. <i>Rafael Orozco & Andreina Colina</i>
9:20-9:45	78. Advancing routinization vs. productivity of the Spanish subjunctive. <i>Rena Torres Cacoullos, Dora LaCasse & Michael Johns</i>	90. <i>Nós</i> and <i>a gente</i> ‘we’ in Brazilian Portuguese: Effect of age in urban and rural areas of Espírito Santo. <i>Lilian C. Yacovenko, Maria Marta P. Scherre, Anthony J. Naro, Alexandre K. de Mendonça, Camila C. Foeger & Samine A. Benfica</i>	Cognitive representations of the sociolinguistic sign. <i>Annette D’Onofrio</i>	19. Transmission of variation between homeland and heritage Faetar. <i>Katharina Pabst, Lex Konnelly, Savannah Meslin, Fiona Wilson & Naomi Nagy</i>
9:45-10:10	250. Going back to the source: A diachronic comparison of the expression of necessity in two varieties of French. <i>Laura Kastronic</i>	146. Variation and clitic placement among Galician neofalantes. <i>Ildara Enríquez García</i>	The cognitive structure behind indexicality. <i>Kathryn Campbell-Kibler</i>	45. ‘ <i>A gente sempre faz</i> ’ – Subject pronoun expression in Brazilian Portuguese. <i>Madeline Gilbert, Gregory Guy & Mary Robinson</i>
10:10-10:30	Break			
	Chair: Charles Boberg	Chair: Rena Torres Cacoullos	Panel: Social meaning and linguistic variation: A panel in honor of Penny Eckert- Part II	Chair: James Stanford
10:30-10:55	233. Two sides of the style coin: Matching morphosyntactic and phonological variation across topic in middle-class African American speech. <i>Jessica Grieser</i>	113. Pragmatic effects on the variable use of 2PL address forms in Andalusian Spanish. <i>Elena Jaime Jiménez</i>	The role of the body in language change. <i>Robert J. Podesva</i>	155. Introducing <i>NordFA</i> : Forced alignment of Nordic languages . <i>Nathan J. Young & Michael McGarrah</i>
10:55-11:20	169. Wh-/u/ participates in vowel changes? Effects of Spanish/English	247. A quantitative look at <i>ir</i> + <i>gerund</i> in Ecuadorian Spanish.	The social meaning of syntax. <i>Emma Moore</i>	217. Linking acoustic correlates of rhoticity to perception: How the

	Bilingualism on Southern California /u/-fronting. <i>Wyatt Barnes & Nicole Holliday</i>	<i>Emily Rae Sabo</i>		past informs the present. <i>Rachel Miller Olsen & Margaret E. L. Renwick</i>
11:20-11:45	228. Residual zeros: Unanalyzed zero forms in accounts of copula deletion. <i>Patricia Cukor-Avila & Guy Bailey</i>	168. Contact-induced majority language change: Quechua influence on the semantics of comitative coordination in Peruvian Spanish. <i>Natalie Povilonis de Vilchez</i>	Scales of indexicality: How biography and migration create social meaning. <i>Devyani Sharma</i>	177. The formative years: Vowel change in a longitudinal study of LDS talks. <i>O'Reilly Miani & Colin Wilson</i>
11:45-12:10	49. AAE Intensifier Dennyamug: Syntactic change in apparent time. <i>Taylor Jones</i>	14. VO vs. OV: What conditions word order variation in Media Lengua? <i>Isabel Deibel</i>	Emergence of social meaning in sociolinguistic change. <i>Qing Zhang</i>	243. Lexical frequency effects on the southern shift in the digital archive of Southern speech. <i>Rachel Miller Olsen & Michael L. Olsen</i>
12:10-1:30	LUNCH			

	Psychology 103	Psychology 107	Psychology 113	Psychology 121
	Chair: Richard Young	Chair: Jeffrey Reaser	Chair: Robin Dodsworth	Chair: Maciej Baranowski
1:30-1:55	100. Directives and gender in the Disney princess films: Progress? <i>Karen Eisenhauer & Carmen Fought</i>	192. Teachers, students, and dialects: Examining individual literacy patterns of African American adolescents. <i>Kelly Abrams</i>	17. Challenges of analysing linguistic variation in a growing metropolis: A trend study of auxiliary alternation in Montréal French (1971-2016). <i>Béatrice Rea</i>	82. The jet set: Articulatory setting and the shifting vowel system of London English. <i>Sophie Holmes-Elliott & Erez Levon</i>
1:55-2:20	65. The phonetics and phonology of New York City English in film. <i>Charles Boberg</i>	158. Sociolinguistic partnerships in the University: The effects of linguistic materials in first	23. Individuals, communities and the sociolinguistic canon. <i>Sali A. Tagliamonte & Alexandra D'Arcy</i>	75. The FOOT-STRUT vowels in Manchester: Evidence for the diachronic precursor to the split? <i>Maciej Baranowski & Danielle Turton</i>

		year composition. <i>J. Daniel Hasty & Becky Childs</i>		
2:20-2:45			35. Diffusion and transmission in local and global linguistic changes. <i>William Labov</i>	
2:45-3:45	Plenary IV Psychology 105 Julie Ann Washington Georgia State University <i>Exploring the Growth of Language and Literacy of African American Children: The Influence of Gender and Dialectal Variation</i> Introduced by Mark Seidenberg			
3:45-4:05	Break			
	Chair: Carmen Fought	Chair: Eric Raimy	Panel: African American language in the public sector: Opportunities and challenges for public education	Chair: Erik Thomas

4:05-4:30	135. /h/ insertion in a Pacific English: The developing methods of understanding a non-standard feature in the Federated States of Micronesia. <i>Sara Lynch</i>	18. Individual variation, community coherence: Patterned variation in an incipient /ay/-raising Dialect. <i>Stuart Davis, Kelly Berkson & Alyssa Strickler</i>	John Rickford	63. Local meanings for supra-local change: A perception study of TRAP backing in Kansas. <i>Dan Villarreal, Mary Kohn & Tiffany Hattesoehl</i>
4:30-4:55	195. Social meaning, style, and language variation in Beijing. <i>Hui Zhao</i>	237. Language at work: Workplace conditioning of language variation in the South. <i>Jon Forrest</i>	Walt Wolfram	112. Escaping the TRAP: Losing the Northern Cities Shift in real time. <i>Anja Thiel & Aaron J. Dinkin</i>
4:55-5:20	203. Quantifying contact through	43. Production and perception of	Sonja Lanehart	221. A Rust Belt Feature?: Economic change and the

	regionality and education: Examples from variationist studies of Arabic dialects. <i>Uri Horesh, Enam Al-Wer & Najla M. Al-Ghamdi</i>	affricate /t/ and /d/ in Northeastern Brazil. <i>Raquel Meister Ko. Freitag</i>		decline of raised TRAP in Lansing, MI. <i>Monica Nesbitt</i>
5:20-5:45	240. Mapping variation in the English-speaking Caribbean: Moving toward a more complete understanding of Caribbean English. <i>Caroline Myrick, Joel Schneier, Jeffrey Reaser & Nicole Eberle</i>	97. Salience and covariation in second dialect acquisition: Northeastern migrants in São Paulo. <i>Livia Oushiro</i>	Discussion facilitated by Nicole Holliday	216. Shifts toward the supra-regional in the Northern Cities region: Evidence from Jewish women in Metro Detroit. <i>Beau-Kevin Morgan, Kelsey Deguise, Eric Acton, Daniele Benson & Alla Shvetsova</i>

6:00-7:30	Screening of <i>Talking Black in America</i> with Executive Producer Walt Wolfram Psychology Building 105
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8:00-11:00	Awards Ceremony and Reception Varsity Hall II
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Sunday, November 5th, 2017	
All talks back in Union South	
7:30 - 8:45 am	Industry Room NWAV Business Meeting
8:00 am - 1:00 pm	5th Quarter Room Breaks

	Industry	Landmark	Northwoods	Agriculture
	Chair: Erez Levon	Chair: Fernando Tejedo	Chair: Sonja Lanehart	Chair: Greg Guy
9:00-9:25	193. Is that an interruption? Depends on who's listening. <i>Katherine Hilton</i>	98. Finding variants in a dynamic feature space: Classification as validation.	68. In town or around the bay? Deontic modality and stative possession in	8. Does language contact lead to simplification or complexification? Evidence from Basque-Spanish contact.

		<i>Jonathan Dunn</i>	Newfoundland. <i>Ismar Muhic</i>	<i>Itxaso Rodriguez</i>
9:25-9:50	227. Media effects on explicit language attitudes. <i>Hayley Heaton & Robin Queen</i>	46. One language, two trajectories: the case of Transylvanian Saxon in the homeland and émigré community. <i>Ariana Bancu</i>	96. Acoustic correlates of perceived prosodic prominence in AAE and EAE. <i>Jason McLarty, Charlotte Vaughn & Tyler Kendall</i>	265. Belgian Standard Dutch is (not) dead (yet). On the omnipotence of zombie varieties. <i>Stefan Grondelaers, Paul van Gent & Dirk Speelman</i>
9:50-10:15	176. Is that a gun? Race, dialect and violence stereotype. <i>Laura Casasanto, Rebecca Rosen, Amritpal Singh & Daniel Casasanto</i>	107. Modeling population structure and language change in the St. Louis corridor. <i>Jordan Kodner</i>	190. African American identity and vowel systems in Rochester, New York. <i>Sharese King</i>	231. Language labels as ethnographic facts in Indonesia. <i>Maya Abtahian, Abigail Cohn & Yanti</i>
10:15-10:40		255. Word frequency in a contact-induced change. <i>Aaron Dinkin, Jon Forrest, & Robin Dodsworth</i>	59. Incomplete neutralization in African American English: The role of vowel duration. <i>Charlie Farrington</i>	147. "Boy vi alltid hundra*" - Comparing 'MAT and PAT' replications between Danish and Swedish multiethnolects. <i>Nathan Young</i>
10:40-11:00	Break			
	Chair: Rajiv Rao	Chair: Josef Fruehwald	Chair: Scott Kiesling	Chair: Eric Raimy
11:00-11:25	153. Acoustic evidence for vocalic correlates of plural /s/ deletion in Chilean Spanish. <i>Mariska Bolyanatz</i>	239. Perceptual dialectology: A sixth vision of America. <i>Gabriela Alfaraz & Alexander Mason</i>	64. Gender effects on inter and intra-speaker variance in sound change. <i>Josef Fruehwald</i>	174. Do speakers converge toward variants they haven't heard? <i>Lacey Wade</i>
11:25-11:50	129. Dialect identification across a nation-state border: Perception of dialectal variants in Seattle, WA and Vancouver, BC.	106. Class, gender and ethnicity in Sydney: Revisiting social conditioning in 1970s Australia. <i>James Grama, Catherine Travis & Simón González</i>	211. Gender normativity and attention to speech: The non-uniformity of gendered phonetic variation among transgender speakers.	125. The changing sounds of exceptionally aspirated stops in Diné bizaad (Navajo). <i>Kayla Palakurthy</i>

	<i>Julia Swan & Molly Babel</i>		<i>Lal Zimman</i>	
11:50-12:15	157. Crossing the line: Effect of boundary representation in perceptual dialectology. <i>Erica Benson & Anneli Williams</i>	105. Who belongs to the mainstream speech community? A report from Vancouver BC. <i>Panayiotis Pappas, Irina Presnyakova & Pocholo Umbal</i>	259. The influence of self-perceived power on gender and sibilant perception. <i>Ian Calloway</i>	88. The soft underbelly of sociolinguistics – NOT! <i>Dennis Preston</i>
12:15-12:40	118. A perceptual dialect map of Indiana. <i>Phillip Weirich & Chelsea Bonhotal</i>	139. Social networks and intra-speaker variance for changes in progress. <i>Robin Dodsworth, Jessica Hatcher & Jordan Holley</i>	145. A certain kind of gay identity: [s+] and contextually mediated variation in gay French and German men. <i>Zachary Boyd</i>	

Welcome to NWAV 46

Welcome to Madison, Wisconsin and NWAV46! We're happy to have you here.

Our theme for the year is “progress”. While the direction of language variation and change cannot be predicted or considered to constitute progress per se, the field of linguistics generally and language variation and change specifically have made strides forward. Borrowing the idea from Robert La Follette, the theme of “Progress” was selected for 2017 both as a call for progress, in terms of how far we’ve come and of the future directions in which the field is moving **forward**.



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Editor: Shobha Satyanath
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This journal aims to report research on the description and analysis of variation and change from the Asia-Pacific region. The journal encourages research that is firmly based on empirical data and quantitative analysis of variation and change as well as the social factors that are reflected and constructed through language variation and change. Though much of the research is expected to be based on new speech data and fieldwork, the language data may be either oral or written, including both modern and historical resources. The unique emphasis of the journal is to promote understanding of the multifaceted linguistic communities of Asia-Pacific.

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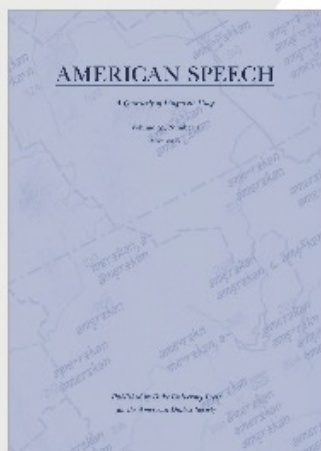
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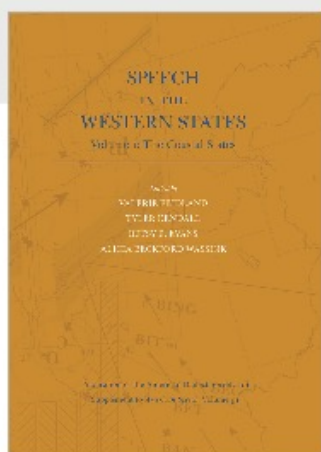
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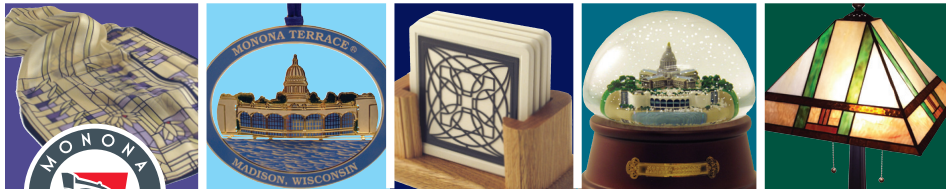
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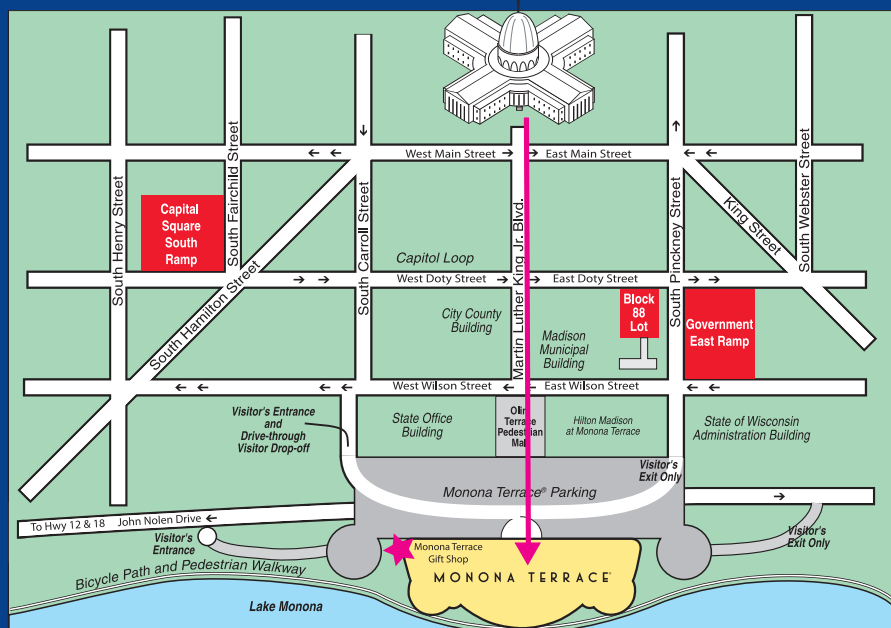
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Student Travel Awards

The Student Travel Awards Committee is delighted to announce the winners of the 2017 NWAV Student Travel Awards. They were selected from among a group of students who submitted exciting and strong abstracts – it wasn't an easy choice. These scholars are members of groups that are under-represented at NWAV. In many cases, they also investigate lesser-studied communities, including Ethiopian, Galician, Latin@, Swedish, trans and Tunisian Tamazight Berber.

This year's winners (listed alphabetically) are:

Student	Institution	Abstract #
Soubeika (Wafa) Bahri	CUNY Graduate Center	213
Sarah Braun	University of Duisburg- Essen	95
Matthew Callaghan	Australian National University	120
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Abstracts

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Plenaries

When does a (sound) change stop progressing?

Lauren Hall-Lew

The University of Edinburgh

While the default model of a sound change is an incremental shift from one variant to another, there are cases when a sound change in progress fails to go to completion, or even reverses. Such cases are surprising if we view the mechanism of sound change propagation to be “an automatic consequence of interaction” (Trudgill 2004:28), interrupted only in exceptional cases by things like “deliberate linguistic divergence.” Our model of sound change must be more nuanced than this, because it seems unlikely that “deliberate,” i.e., conscious, acts of divergence would arrest wide-spread changes in progress. In fact, the “automaticity” of linguistic convergence is itself social, because agency is orthogonal to consciousness and deliberate action (Eckert 2016). What follows from this perspective is that both the steady propagation of sound changes as well as cases in which they slow down, stop before completion, or reverse, are fundamentally social. Further, I suggest that the theoretical contrast between social meaning as a motivating factor and social meaning as parasitic on change (Trudgill 2008) may be a distraction from understanding the “total linguistic fact” (Silverstein 1985). While some have conducted close social analyses of linguistic innovators (e.g., Labov 2001), in this talk I review the current body of evidence on cases where speakers appear to be resisting sound change. Drawing particularly on vowel data from San Francisco’s Sunset District, I argue that cases of sound changes slowing, pausing, or reversing are a part of speakers’ responses to major social changes in their local community. To make this argument, I suggest that a full understanding of sound change is not possible if we cleave to the dichotomies of automaticity and intentionality, positivism and interpretivism, ‘correlational’ and ‘interactional’ sociolinguistics (Gumperz 1972; Gal 2016:456), or one wave and another (Eckert 2012). Rather, progress in the field of language variation and change will be made by taking advantage of the broad range of methodological and theoretical perspectives we now have access to, and applying them with equal respect and rigor to answering our core theoretical questions.

- Eckert, Penelope. 2012. Three Waves of Variation Study: The Emergence of Meaning in the Study of Sociolinguistic Variation. *Annual Review of Anthropology* 41: 87–100.
- Eckert, Penelope. 2016. Variation, meaning and social change. In Nikolas Coupland (ed.), *Sociolinguistics: Theoretical Debates*. Cambridge: Cambridge University Press. 68–85.
- Gal, Susan. 2016. Labov in anthropology. *Journal of Sociolinguistics* 20(4): 453–463.
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- Silverstein, Michael. 1985. Language and the Culture of Gender: At the Intersection of Structure, Usage, and Ideology. In Elizabeth Mertz and Richard Palmentiers (eds.), *Semiotic Mediation*. New York, NY: Academic Press. 219–259.
- Trudgill, Peter. 2004. *New-dialect formation: The inevitability of colonial Englishes*. Edinburgh: Edinburgh University Press.
- Trudgill, Peter. 2008. Colonial dialect contact in the history of European languages: On the irrelevance of identity to new-dialect formation. *Language in Society*, 37(02): 241–254.

Whence and Whither Menominee? Tracing 125 Years of Variation and Change

Monica Macaulay

University of Wisconsin – Madison

In this paper I present a first historical sociolinguistic analysis of Menominee language status from the 1890s onward. I begin with historical characterizations of the speech community, based on data from the 1910 census and other reports. From the early to mid 20th century, evidence is provided by metalinguistic comments and reports of language attitudes, especially including work by the most famous student of Menominee, Leonard Bloomfield. I show how this history is directly relevant to current work by community members to maintain and revitalize their language.

Hoffman (1896) estimates a Menominee population of 1,635, while the 1910 US Census shows only 911, with 296 monolingual Menominees reported (although multilingualism with other indigenous languages was widespread). The Census appears to have primarily counted those on or near main roads, and clearly underreports total population as well as numbers of monolinguals. Most monolinguals listed were age 20 or older, although a good number of young children were still monolingual. Shift likely began in the 1870s, when the first on-reservation boarding schools were established, and gained momentum as higher numbers of children attended. In the 1920s, people over 20 are reported to be speakers but in the 1950s that age threshold rises to over 50. By the 1970s, there were only an estimated 100 speakers, dropping to about 35 in 1996. Today, speaker numbers are beginning to increase if we consider “new speakers” (in the sense of Kasstan 2016) as well as the few remaining first-language speakers.

Bloomfield (1927) explicitly evaluates the speaking abilities of his consultants. What he calls “unapproved,” “ungrammatical,” and “atrocious” Menominee presumably involved forms of the language in flux, perhaps including effects of bi-/multilingualism. Polinsky (to appear) points out that his approving use of terms like “archaic” also suggests change in progress, as well as his attitude towards such change. Goddard (1987) further shows that Bloomfield “normalized” his data, changing what he felt was ‘wrong’. He provides specifics of such changes and adds crucial perspective: “The fundamental difficulty encountered by Bloomfield in his Algonquian work was the determination of the object of study” (1987:181). Bloomfield – in classic pre-variationist fashion – believed that his knowledge of the language enabled him to rise above variation to approximate a community norm, one that exists only in his work and that no individuals used.

Today, there is powerful work underway to revive and reclaim the language. An ironic result of Bloomfield’s extensive documentation and his decision not to document variation is that his “normalized” work now serves as a reference point for revitalization. Weinreich et al. argue that “a model of language which accommodates the facts of variable usage and its social and stylistic determinants ... leads to more adequate descriptions of linguistic competence” (1968:99), with Bloomfield cited as typical of his era in failing to incorporate variation into his analyses. Here we see direct consequences of such analysis.

These historical sociolinguistic findings and understanding of language variation and change have real implications for present-day analysis of the language and its revitalization. What might have been perceived as changes due to ‘attrition’ and a shrinking number of speakers can instead be seen as the continuation of changes already underway almost a century ago.

National and diasporic linguistic varieties as evidence of social affiliations: The case of Afro-Hispanics

Almeida Jacqueline Toribio
University of Texas at Austin

Over the past decades, the presence of Hispanic immigrants and their children has figured centrally in the racial and ethnic reconfiguration of the United States. In turn, the (re)settlement of Hispanics in established enclaves and new destinations has acted upon and influenced their identity and linguistic outcomes. The present plenary focuses on immigrant and U.S.-born groups with origins in the Hispanophone nations of the Greater Antilles —Puerto Rico, Cuba, and the Dominican Republic— as they navigate their oftentimes ambiguous status within U.S. racial divisions and respond to the prevailing linguistic attitudes and ideologies of the larger society. In particular, the discussion probes the social affiliations of Afro-Hispanic groups, as members seek to eschew the fixed categories that are commonly circulated, i.e., the binaries of black vs. white, American vs. ‘hyphenated’ resident, and Spanish-speaker vs. English-speaker. As will be appreciated, many Afro-Hispanics hold distinctive identities that are often at odds with the constructs they encounter in the receiving U.S. society, and as one consequence, they may experience heightened attention to issues of distinctiveness and belonging, enacted in close alignment with language practices. For this reason, specific linguistic features of Spanish may come to serve as emblems of inclusion within a given community, and adoption of other vernaculars or affinity towards English may signal a transition towards a collective affiliation or assimilation with American customs and values. Thus, language variation and language choice may be fruitfully employed as a lens through which to examine identity in Hispanic populations. In brief, the notions of race and ethnicity that shape beliefs about language and language use are altered with movement from the Caribbean to U.S. metropolises, particularly among Afro-Hispanics, an adjustment that must be acknowledged in interpreting their linguistic behaviors in diasporic settings. Envisioned in this way, then, inquiry into the language practices of Caribbean immigrants necessitates an interdisciplinary approach that draws on methods and findings from multiple sub-disciplines, including demography, sociology, history, cultural anthropology, and social psychology, in addition to our point of interest: linguistics.

Exploring the Growth of Language and Literacy of African American Children: The Influence of Gender and Dialectal Variation

Julie Washington

Georgia State University

Literacy attainment has been identified as particularly problematic for African American children growing up in poverty. Approximately 83% of African American 4th graders are reading at a basic level or below (NAEP, 2015). General oral language skills and development have been examined for their influence on the reading trajectory of these students. Not surprisingly, children with strong oral language skills fare better than their peers whose language skills are not age or grade appropriate. Further African American boys have been identified repeatedly as at particularly high risk for failure or low performance on most academic, linguistic, social, and behavioral measures. In this session, the outcomes of a longitudinal project focused on the growth of language and literacy skills in a large sample (N = 835) of 1st through fifth grade, low income African American boys and girls are presented. A critically important variable for interpretation of these outcomes is the presence of dialectal variation within participants and across grades. Using an accelerated cohort design, univariate and bivariate growth models are used to characterize the impact of dialect variation, along a continuum of dialect use from low to high usage in this urban sample of children who were African American English speakers. Findings from this investigation support the presence of an important relationship between dialect and language and dialect and reading such that changes in dialect use may be driven by oral language skills and acquisition of reading skills. Outcomes are discussed relative to the variation that exists within this group of students and implications for identification and placement in academic settings.

Workshops

Texts as data sources for historical sociolinguistics

Joshua Bousquette, Rob Howell, Mark Richard Lauersdorf

University of Georgia, University of Wisconsin – Madison, University of Kentucky

Historical sociolinguists are largely dependent on textual data in their pursuit of sociolinguistic explanations of language variation and change in periods before the current generation of speakers. The use of such data sources requires an understanding of the nature of textual data – what it can tell us and what it can't. This, in turn, requires an understanding of the nature of writing practices and text types, and an understanding of the socio-historical context(s) in which the writing occurs.

Using a “presentation and open discussion” format, this workshop will consider the interpretation of textual data for sociolinguistic investigation along three lines:

Texts as representations of language use (Rob Howell)

While we often find variation in textual data, the question immediately arises: “what does this variation tell us?” We will discuss issues with variation in textual data in the Early Modern period, an era of expanding literacy prior to codified written standards, and then move on to the more modern era, roughly 1700-1920, in which standardization can partly or totally suppress or mask variation present in spoken varieties. Questions of text type will be treated as well as issues arising in the interpretation of actual variation in textual data.

Texts as sources of sociolinguistic context (Joshua Bousquette)

Historical sociolinguists, lacking access to living speakers in field observations, must reconstruct the social component of linguistic community by employing so-called extra-linguistic texts, e.g., government records (census, immigration, judicial, surveyor), church records (baptism, marriage, death), minutes of government and non-government institutions. We will discuss methodologies for mapping historical language contact in social domains, in geographic distribution, and across time, with emphasis on social network theory and community theory (Salmons 2005a, b; Warren 1963), and on social institutions, and the institution of the household, as a locus of language acquisition, a model of cross-generational change, and a dynamic linguistic community with the continuity of subject (Balibar and Wallerstein 2011; Wallerstein 2004).

Texts as datasets for historical corpora (Mark Richard Lauersdorf)

Critical concepts in constructing linguistic corpora include “representativeness”, “balance”, “size” – does your corpus adequately represent the language variety(s) being investigated, in a way that is balanced in the language samples it includes across the variables being considered, including enough data to yield statistically viable results? (cf. Sinclair 2005). In a historical context, the overarching concern is that “[h]istorical documents survive by chance, not by design, and the selection that is available is the product of an unpredictable series of historical accidents” (Labov 1994). We will consider issues of representativeness, balance, and size in constructing textual corpora for sociolinguistic work within the limitations of historical textual data.

Central to these discussions of textual data will be the concept of “informational

maximalism”: “the utilization of all reasonable means to extend our knowledge of what might have been going on in the past...wish[ing] to gain a maximum of information from a maximum of potential sources” (Janda and Joseph 2003). We will consider both methodological concerns and practical implementation, with hands-on examination of sample data to illustrate the concepts.

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The Sociolinguistics of Bad Data

Raymond Hickey, Valerie Fridland, Matthew J. Gordon, Tyler Kendall, Samantha Litty, Natalie Schilling, Christopher Strelluf, Erik Thomas

University of Duisburg and Essen, University of Nevada, University of Missouri, University of Oregon, University of Wisconsin – Madison, Georgetown University, Warwick University, North Carolina State University

In recent years linguists have been examining sources of data which are in themselves fragmentary and less than wholly representative of the communities from which they stem but which nonetheless are worthy of analysis for the insights which they provide into earlier stages of many varieties of languages. The sources in question include both early audio recordings and familiar letters (Hickey 2017, 2018). The audio recordings stem largely from the early twentieth century and hence offer a window on varieties over 100 years ago and the familiar letters present us with textual records of unedited vernacular speech and hence reach a level of authenticity not attainable with other kinds of data.

Analysing such ‘bad data’ in modern sociolinguistic terms requires bearing many caveats in mind. Audio recordings usually have a limited range without social stratification and consist frequently of someone reading a set piece. The quality of the recordings is not always sufficiently good for proper acoustic analysis. However, they may show previously unattested features or at least combinations of features not found later. They may also still show traits which are known to have recently disappeared in varieties. With familiar letters one is often unsure who wrote them, whether they were dictated and the level of education which the writer had. But again, such letters can reveal features and/or combinations of features not otherwise attested and thus increase the insights into variety development.

The aim of this workshop is to bring together a group of scholars, especially those beginning their linguistic careers, to discuss the value of the kinds of documents outlined above for interpretation and analysis and the extent to which they can lead to a revision or confirmation of standard wisdoms on varieties.

Structure of workshop

As the workshops involve two-hour slots, this workshop is to consist of an introductory session (10 mins) by the convener followed by 5 individual presentations on themes within the framework of the workshop. A panel discussion of 10-15 mins should then wind up the workshop.

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Sociolinguistics and forensic speech science: knowledge- and data-sharing

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Aims

This interdisciplinary workshop will explore the benefits of closer collaboration between (socio)linguistics and forensic speech science. Specifically, we will:

- give a **practical introduction** to the application of phonetic and sociolinguistic methods in forensic casework
- discuss **data sharing** and the creation of **resources for storing and analysing recordings** for use in sociolinguistics and in forensic cases
- explore the **reciprocal theoretical and methodological benefits** of greater collaboration between fields.

The workshop fits with the ‘progress’ theme of the conference, as it considers current trends towards big data, which are expanding the possibilities of variationist work. The workshop also considers the societal benefits and impact of sociolinguistic work.

Background

Forensic voice comparison involves the analysis of known and unknown voices to assess whether they belong to the same or different speakers. To do this, it is essential to know the typicality of the features within the speech community. However, there is currently a lack of available data for use as reference material in forensic cases. We, therefore, believe it is essential that forensics and sociolinguistics work more closely to generate appropriate reference data. For such collaboration to work, it is important to discuss how data are collected, stored, accessed, and analysed.

We believe that closer collaboration with forensics will also have substantial benefits for sociolinguistics. The forensic scenario allows researchers to consider within- and between-speaker variation under real-world conditions. Further, forensics places the individual at the centre. For sociolinguistics, this can improve our understanding of how the individual relates to the group and the definition of speech communities, and inform models of sound change.

Contents of the workshop

Practical (60 minutes)

Participants will be provided with two forensically realistic recordings; one of an unknown offender and the other of a known suspect. Participants will be asked to compare the speech patterns with a view to answering the question: do the recordings contain the voice of the same or different speaker(s)?

We will give an overview of how this work is conducted in the UK and USA, focussing on analytic methods and conclusion frameworks. We will also present our plans for greater

collaboration between sociolinguistics and forensics.

Talks (15 minutes each)

Yvan Rose: Building searchable corpora for linguistic and forensic analyses

This paper will discuss the underlying principles and structure of large, searchable corpora of speech recordings, the analytic methods that can be integrated, and consider the value of data-sharing.

Tyler Kendall: Using large corpora in sociolinguistics

This paper will exemplify how large corpora can be used to address novel questions in sociolinguistics and how such corpora can be applied in the forensic domain.

Natalie Schilling: Ethical considerations and implications for the collection of speech corpora for use in forensic casework

This talk will discuss ethical issues associated with allowing access to sociolinguistic corpora for the purposes of forensic analyses, law enforcement, and intelligence purposes.

Discussion (15 minutes)

The remaining time will be used for questions relating to the short talks and general discussion about the issues raised.

Progress in Regression: Statistical and Practical Improvements to Rbrul

Daniel Ezra Johnson

Focus

Rbrul, a user-friendly front-end for regression in R, has become a popular tool that helps variationists analyze data with mixed-effects models, continuous variables, interactions, and other advantages over previous software. The paper introducing Rbrul (Johnson 2009) has been cited over 400 times, and its author has conducted 10 workshops on its use and on statistics, including at NWAV 39 (Johnson 2010a) and two Sociolinguistics Summer Schools. Like those workshops, this one will teach relevant statistical concepts alongside practical uses of the tool.

In its most recent version, the Rbrul program has been completely redesigned. Rather than a text-based menu interface, it is now a browser-based Shiny app. This provides a much more efficient and interactive user experience. Users explore their data, building and comparing models using an intuitive graphical interface. As the user makes adjustments, models update automatically. The interface discourages the habit of stepwise regression, a procedure that is statistically flawed and nearly taboo outside our field (Johnson 2010b). Also, several new practical features have been introduced, including the ability to recode, collapse and un-collapse categories easily.

It is now widely known that when tokens are grouped (e.g. by speaker or word), using mixed models lowers the chance of falsely claiming that predictors are significant (Type I error). Less well known is that Rbrul reports – alongside estimates of individuals' deviations from the community mean – a single number for the variability represented by each random effect. This quantity can be very usefully compared across different data sets. A recent paper (Fruehwald 2017) has given several reasons why variationists today should pay more attention to variance.

The Shiny app version of Rbrul is also able to model categorical dependent variables with three or more variants, something that has only rarely been attempted by variationists in the past. Such (pseudo-)multinomial models are appropriate when a variable is conceived as a choice between three (or more) variants. It is then possible to test whether such a model is better or worse than having two or more binary models arranged hierarchically (Rousseau & Sankoff 1989).

Aims

First, participants will learn how to build and compare models with the Rbrul Shiny app. Second, they will learn the basic statistical theory behind mixed model variance estimation and multinomial logistic regression. In each case, they will practice applying the methods to data that will be provided. Participants are encouraged to bring one of their own data sets to practice with.

Format

There will be four sections of approximately 30 minutes: one demonstrating the basics of the software itself, one on random effect variances, and one on multinomial regression. Each section will begin with exposition, followed by application and exploration (in pairs or individually, with roaming support). The last section will be in question and answer format (live and prepared questions). Participants can also make suggestions for improvements to Rbrul.

Regression Recode Help

Model formula: $r \sim \text{store} + \text{word}$

Choose File

☐ token file

Separator character
☒ comma ☐ semicolon ☐ tab/space

Quote character
☒ double ☐ single ☐ none

Comment character
☐ hash ☐ semicolon ☐ none
☒ file has column headings

r
☐ continuous ☒ categorical ☐ hide

store
☒ categorical ☐ hide
☒ mean | baseline: ☐ Klein's ☐ Macy's ☐ Saks

emphasis
☒ categorical ☐ hide
☒ mean | baseline: ☐ emphatic ☐ normal

word
☒ categorical ☐ hide
☒ mean | baseline: ☐ flooR ☐ fouRth

response outside random intercept = fixed effect inside random intercept = random slope only
overlapping edge of random intercept = both close together = interaction

resting

r **s** **w** **e**

Rbrul 3.0

Output format
☒ Rbrul ☐ R

Factor weights
☒ centered ☐ uncentered

Application value(s) for r
☐ 0 ☒ 1

Non-application value(s) for r
☒ 0 ☐ 1

Wait for Rbrul after (un)checking each box.

\$current.predictors

	d2.loglik	df	p
store	87.181	2	1.17e-19
word	33.231	1	8.18e-09

\$potential.predictors

	d2.loglik	df	p
emphasis	3.378	1	0.0661
store:word	2.135	2	0.3448

```

$misc.1
  n df intercept input.prob grand.proportion
729 4      -0.97      0.275      0.316

$misc.2
neg2.loglik  AIC  AICc Somers.Dxy  R2
793.002 801.002 801.057 0.473 0.23

$store
logodds  n proportion factor.weight
Saks      0.901 177 0.4750 0.711
Macy's    0.436 336 0.3720 0.607
Klein's   -1.337 216 0.0972 0.208

$word
logodds  n proportion factor.weight
flooR    0.493 347 0.412 0.621
fouRth   -0.493 382 0.228 0.379

```

Note: The workshop is pitched towards the relative statistical beginner and/or command-line skeptic, but it will also try to show how Rbrul can be of use to people who are comfortable using R itself. GoldVarb purists and people already using the text-based Rbrul are equally welcome.

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Data: Labov 1962 (thanks to John Paolillo). Bottom: output identical to previous Rbrul versions. Right: significance tests with p-values, either adding or dropping predictors.

Current predictors: store (red) and word (cyan) are significant predictors of post-vocalic /r/ (blue, $p < .05$). Potential predictors: emphasis (green) and the store:word interaction are not significant.

Discourse analysis for variationists

Scott Kiesling
University of Pittsburgh

Discourse analysis can be useful for variationists at a number of points in a variation study. First, it may help discover social categories as speakers orient to them in conversation. Second it may be able to help identify discourse categories themselves. Third, it may help discover what speakers are attending to in interviews. Finally, it may provide qualitative data in support of findings of the indexical meanings of variables.

In this workshop, I present several categories and methods of discourse analysis and show how these discourse methods can be used in analyses in the ways mentioned above, using extensive examples. The first section presents work at a very micro level, focusing on Conversation Analytic concepts such as turn-taking, adjacency pairs, openings and closings, and repair. The second section focuses on interactional sociolinguistic methods for understanding how speakers are orienting to frames and footings in conversations and interviews. Finally, I discuss how an analyst can explicate and discover stancetaking in interviews and conversations, using the techniques already discussed in the workshop.

In the final part of the workshop, I work through two to three examples of using these techniques. I will solicit examples or questions from participants if possible, but I will use my own examples in case there are no specific cases or questions. I'll use materials from teaching discourse analysis to give participants hands-on practice, because really the only way to learn discourse analysis is to *do* discourse analysis. I'm happy to adjust any part of this workshop to better align it with the needs of the participants. Please email me at kiesling@pitt.edu.

I've taught discourse analysis at the graduate and undergraduate level for 20 years. I firmly believe that we learn important, complementary facts about language by looking at specific interactions, especially combined with the power of the quantitative methods of sociolinguistics. I want participants to leave with a small set of powerful techniques as a place to begin doing discourse analysis.

Complex Systems and Chain Shifts: How Big Data Affects Our Analyses

Michael L. Olsen, Allison Burkette, William A. Kretzschmar, Jr.
University of Georgia, University of Mississippi, University of Georgia

This workshop will discuss the impact that our emerging ability to generate Big Data about vowels has about the current standard for discussion of American English vowels, the chain shift model. The first paper, by Michael Olsen, discusses the evidence for the Northern Cities Shift that can be found in a Big Data study of interviews from the Linguistic Atlas of the North Central States (LANCS). The second paper investigates changes in Southern American English, the Southern Shift, that emerge from a comparison of Big Data from the Linguistic Atlas of the Gulf States (LAGS) from the 1970s with data collected more recently as part of Labov's TELSUR project. The final paper presents Big Data from a current NSF-funded project that automatically extracts vowel measurements from interviews from the Digital Archive of Southern Speech, a subsample of LAGS, not only from target items but from all of each speaker's recorded talk. Participants should bring their laptops; we will provide data to be copied.

Utilizing Raven McDavid's Transcriptions in Search of the Northern Cities Shift in Illinois: Complexity in Perception (Michael L. Olsen)

The Northern Cities Shift (NCS), in which the vowel of *bat* rises to cause a restructuring of the phonological system, separates the North and Midland dialect regions in the state of Illinois (Labov 1994; Labov et al. 2006). While assertions of such logic-based chain shifts have been fundamental to shaping sociolinguistic theory, they tend to be based on relatively small amounts of data. Labov et al. (2006), for example, generally interviewed two to four speakers per urban area by telephone. This study utilizes Raven McDavid's impressionistic field transcriptions from LANCS to investigate the NCS and regional boundaries in Illinois. The LANCS data, collected in the early 1960s, offers an opportunity to investigate the NCS and regional boundaries of Illinois speakers born between the 1880s and 1930s. Narrow phonetic transcriptions for vowels in the following lexical items were manually copied from the field notes and documented in Microsoft excel: *half*, *watch* (noun), *fog*, *one*, *ten*, and *eight*. Each of McDavid's transcription frequency profiles displayed the nonlinear distributions discussed by Kretzschmar (2015). When each of the vowels is plotted geographically, there is little evidence of clear dialect boundaries supporting the chain shift perspective. These results provide evidence of language operating as a complex system in McDavid's perception and transcription of his informants' speech.

Emerging mergers? Southern vowels in LAGS and ANAE (Allison Burkette)

The present paper investigates changes in Southern American English (SAE), comparing data from the LAGS from the 1970s with data collected more recently as part of Labov's TELSUR project. Characterizations of SAE phonology include vowel mergers such as the PIN/PEN merger, the FEEL/FILL merger, and the FELL/FAIL merger, all of which are mapped in Labov, Ash & Boberg's (2006) Atlas of North American English (ANAE). The LAGS survey collected pronunciations of PIN/PEN and FEEL/FILL, either directly (with specific PIN and PEN

questions) or indirectly (responses to the WHEELbarrow and HILL questions can be used to look for the FEEL/FILL merger). The state level demonstrates the same kind of variation that we find within the LAGS data as a whole. As with the LAGS total data, the Mississippi speakers who pronounced *pen* and *pin* the same differed as to which vowel that pronunciation merged to: 72% merged to [ɪ], 24% merged to [ɛ], and 4% merged to [i]. Looking to ANAE, if we zoom in on Mississippi, we find that two speakers are merged in production and perception, while two additional speakers are either merged in production or perception or in transition. This presentation will look at additional features of the Southern Shift and their geographic distribution, offering a comparison of LAGS and ANAE Southern vowels and looking to complexity theory for answers about why the variation in vowels – past and present – takes the shape that it does and what the implications are for the concept of chain shifts.

The Fractal Structure of Language: Phonetic Measurements from DASS (William A. Kretzschmar, Jr.)

In previous study of data from the Middle and South Atlantic States (e.g. Kretzschmar 2009, 2012, 2015), the frequency profiles of variant lexical responses to the same cue are all patterned in nonlinear A-curves. Moreover, these frequency profiles are scale-free, in that the same A-curve patterns occur at every level of scale. This paper presents results from a new, NSF-funded study of Southern speech that, when completed, will include over one million vowel measurements from DASS interviews with a sample of sixty-four speakers across the South, a subsample of the LAGS project. These measurements include not just LAGS targets, but all of the speech recorded from each speaker after transcription and forced alignment. Measurements in F1/F2 space are analyzed using point-pattern analysis, a technique for spatial data, which allows for creation and comparison of results without assumptions of central tendency. This Big Data resource allows us to see the fractal structure of language more completely. Not only do A-curve patterns describe the frequency profiles of lexical and IPA tokens, but they also describe the distribution of measurements of vowels in F1/F2 space.

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Workshop on Guidelines for Statistical Reporting of Multivariate Analysis

William Labov, Robin Dodsworth, Josef Fruehwald, John Paolillo, James Stanford, Sali Tagliamonte, Rena Torres Cacoullos

University of Pennsylvania, North Carolina State University, University of Edinburgh, Indiana University, Dartmouth College, University of Toronto, Penn State University

Programs for the analysis of linguistic change and variation offer many options for publishing results. Some are more suitable than others for the typically unbalanced natural production data of linguistic studies. The workshop will discuss guidelines for the preferred format for the description of data sets, calculation of differential weights and reporting statistical significance. The aim is to produce a document that will be useful for authors as well as journal reviewers and editors. The workshop will focus on programs for mixed-level regression analysis and smoothing splines, but will also consider other forms of data output of interest to workshop members.

Progressing from dialect awareness to critical language awareness and pedagogy: Equipping teachers to interrogating language, dialects, and power

Jeffrey Reaser, Mary Hudgens Henderson, Amanda J. Godley
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Linguists and teacher educators have long called for scientific information about language variation to be included in the educational experience of all students (NCTE/IRA 1996, Adger, Snow, & Christian, 2002, Godley et al. 2006, Reaser et al. 2017). Studies have suggested that such “dialect awareness” can improve students’ language attitudes and knowledge (Reaser 2006, Sweetland 2006, Charity Hudley & Mallison 2014, Henderson 2016, etc.). However, it is becoming increasingly clear that awareness is not sufficient to substantially impact the educational practices of teachers (Godley, Reaser, & Moore, 2015). The field of education has increasingly been calling for teachers to be equipped with critical approaches to language (Delpit 1988, Fairclough 1992, Janks 1999, Alim 2005, 2010, Godley & Minicci 2008), but many of these efforts lack the nuanced perspectives of language that linguists have, which may explain why both classroom-based studies (Godley, Carpenter & Werner 2007, Dyson & Smitherman 2009) and surveys of teachers (Cross, DeVaney, & Jones 2001, Blake & Cutler, 2003) continue to find deficit-based beliefs and pedagogies related to teachers’ opinions of vernacular-speaking students (and their academic potential).

To overcome this deficit thinking, teachers need more than awareness of linguistic facts, they need Critical Language Awareness for teaching. Teachers must understand and acknowledge whiteness and Standardized English as non-neutral, and to teach that both whiteness and Standardized English work to reinforce existing systems of power that privilege the language variety spoken by most middle and upper-class whites. They also must be equipped with strategies for moving their students toward this understanding. Such goals dovetail with calls for explicit teaching about and disrupting societal inequalities in education in the hopes of promoting equitable treatment of students with diverse racial, cultural, gender/sexuality and linguistic identities (Alsup & Miller 2014). Linguists are uniquely positioned to help teachers and teacher educators understand and fight largely invisible linguistic prejudice in the classroom. However, in order to effectively equip educators to be more effective agents of change, linguists must learn more about critical theory inspired pedagogies that might be useful in disrupting the linguistic status quo.

This workshop offers for linguists a theoretical explanation of Critical Language Pedagogy (CLP), and, just as important, a detailed description of how linguists can support the teaching of CLP approaches for pre-service teachers. We also examine ways linguists can use their expertise on language diversity to coordinate with colleagues in teacher education programs in mutually beneficial ways. We demonstrate and share successful materials and approaches from a number of projects, including a multi-year study with over 200 secondary-level pre-service English Language Arts pre-service teachers in eleven American universities and a prolonged collaboration with heritage Spanish speakers in New Mexico. The primary goal of the workshop is to help socially-oriented linguists progress from promoting language awareness to enacting the sorts of programs and collaborations that can advance linguistic social justice work in education. Furthermore, this workshop examines how preservice literacy teachers’ engagement with dialect diversity shaped their critical knowledge and CLP. Finally, we detail how these approaches can reframe teachers’ beliefs about language, literacy and their students. This workshop will mix presentation with participant engagement.

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Panels

African American Language in the Public Sector

Walt Wolfram, Sonja Lanehart, John R. Rickford, Nicole Holliday
*North Carolina State University, University of Texas at San Antonio, Stanford University,
 Pomona College*

After a half-century of research and outreach on African American Language (AAL), an enormous challenge still remains to counter enduring public and institutional misconceptions. This panel offers samples of recent opportunities to educate the public about AAL by several prominent scholars engaged in outreach activities, and a fourth, open session to solicit further ideas. The panel presenters are John R. Rickford, Walt Wolfram, and Sonja Lanehart, and the moderator and facilitator is Nicole Holliday.

John R. Rickford, with Sharese King, examined the role of language variation in the testimony of Rachel Jeantel, a leading prosecution witness in the trial of George Zimmerman for killing Trayvon Martin (Rickford and King 2016). Resultant presentations and publications on this case have led to considerable media coverage about criminal justice, linguistic inequality, and language subordination. How do linguists' "15 minutes of fame" translate into teachable moments for public education? From the so-called "Ebonics Controversy" in the mid-1990s to the testimony of Rachel Jeantel in the mid-2010s and the political campaigns of 2016, language issues have come to the fore, but what are the outcomes of such events in terms of opportunities for public education? How can these sociolinguistic firestorms be transformed most effectively into an educational occasion about language inequality and social justice? Panelist John R. Rickford addresses the opportunities and challenges stemming from recent social, legal, and political situations embedded in language variation.

Walt Wolfram and co-producers Neal Hutcheson and Danica Cullinan, with a team of sociolinguistic experts on AAL, recently directed the production of the first documentary ever dedicated exclusively to AAL (Hutcheson and Cullinan 2017). How can a documentary about the varieties of language spoken by African Americans be utilized in formal and informal public education? His presentation elucidates some of the principles that guide film production on a controversial language situation for popular audiences and its potential for popular education, including some practical follow-up activities and discussions.

Sonja Lanehart, who compiled the comprehensive *Oxford Handbook on African American Language* (2015), has been an organizer of national conferences, panels, and meetings on AAL related to broader social and political issues, as well as local campus initiatives related to language advocacy, including experimental courses related to current events (e.g. a "Black Lives Matters" course). She discusses the potential of these initiatives and their possible broad-based effects on campus life and intersectionality related to AAL.

The fourth session of the panel offers an extended opportunity for participants attending the panel to propose and discuss other opportunities for public education related to AAL. This session, facilitated by Nicole Holliday, is offered to compensate for one of the traditional limitations of panels of this type—the restricted time for discussion and the proposal of new ideas and different perspectives. The panel provides a significant opportunity for attendees to react and offer additional strategies for public education about AAL.

Social Meaning and Linguistic Variation: A Panel in Honor of Penny Eckert

This panel examines the encoding of social information in language, the primary concern of what Eckert (2012) describes as the “third wave” of variationist sociolinguistics. While studies have advanced particular aspects of the third wave approach (Zhang 2005; Eckert 2008; Moore and Podesva 2009; Campbell-Kibler 2011; Podesva et al. 2015), its underlying assumptions have not been made explicit in one place, apart from Eckert’s (2012) article-length overview. This panel therefore aims to collectively articulate the theoretical foundations of an approach to variation that centers social meaning.

While the third wave approach has been growing in popularity in recent years, misconceptions about its aims and assumptions have also been developing in parallel. For example, Guy and Hinskens (2016) claim that the construction of styles is “incoherent” from a third wave perspective, that speakers can assemble any combination of linguistic elements into a style in unrestricted fashion. Similarly, Bell (2016) characterizes the third wave as focusing on agency to the exclusion of structure, which could be conceptualized as constraints on agency. The panel further seeks to respond to what we consider to be misinterpretations of the theory.

What is meant by social meaning? First and second wave approaches view linguistic variation as reflecting social structures, both macrosocial (e.g., sex, class) and locally significant (e.g., jocks, burnouts). By contrast, the third wave approach views linguistic variation as a resource for taking stances, making social moves, and constructing identity. If social categories are reflected in language, it is because the use of language itself constructs those categories. These social practices are possible only because linguistic variants carry meaning and take on new meanings in situated interaction.

Each paper in the panel will present new empirical data pertaining to one of four theoretical issues. Papers 1 and 2 draw on insights from semantics and pragmatics to discuss the relation between social meaning and more traditional types of meaning. Papers 3 and 4 use methods from speech perception to investigate the structure of social meaning, picking up where Eckert’s (2008) concept of the indexical field leaves off. Papers 5 and 6 are concerned with style, or how meaning emerges across semiotic channels, both as language is produced in concert with other modalities (paper 5) and across domains of language (paper 6). Papers 7 and 8 investigate how styles emerge over time, as individuals change and communities come in contact with one another (paper 7), and as the sociopolitical contexts in which language ideologies are embedded shift (paper 8).

The papers in the panel will collectively make a case for why attending to social meaning is vital to the study of variation by building on the foundational work of Penny Eckert. The papers presented here are a subset of those to appear in a forthcoming volume for Cambridge University Press. Eckert will be presented with a draft manuscript of the volume and the table of contents will be revealed.

Paper 1: Eric Acton opens the panel with a paper on *Pragmatics, the third wave, and the social meaning of definites*. Despite many similar areas of inquiry, Acton notes how Pragmatics and Third Wave sociolinguistics have developed somewhat separately, and argues for specific ways in which they might be bridged to mutual benefit.

Paper 2: Andrea Beltrama and Laura Staum Casasanto then present on *Totally and -issimo: Intensification, indexicality and markedness in English and Italian*, further exploring how the semantic and pragmatic properties of linguistic expressions underlie their socio-indexical value.

They compare the relationship between semantic/pragmatic scales and variation in social meaning, and argue that semantic and pragmatic analysis can elucidate how social meaning is linguistically grounded.

Paper 3: Annette D'Onofrio's paper on *Cognitive representations of the sociolinguistic sign* follows, focusing on how listeners remember linguistic styles through a study of *TRAP-backing and the Business Professional persona in listener memory*. Her results suggest that the socially meaningful linguistic utterances most memorable to us are those that match our existing ideological associations, and these associations can lead us to attribute utterances to speakers even when they did not occur.

Paper 4: Kathryn Campbell-Kibler similarly presents on *The cognitive structure behind indexicality*, in this case looking at the *Correlations between tasks linking /s/ and masculinity*. Her study asks whether, cognitively speaking, there is a single indexical link between /s/ and masculinity, or whether there are distinct links for different cognitive tasks. She presents data suggesting that multiple cognitive systems are at work in processing indexical meaning.

Paper 5: Robert J. Podesva's paper opens the second half of the panel, with a presentation on *The role of the body in language change*. He analyses vowel variation in California with respect to speaker's mouth posture, including smiling and openness, and theorizes the connections between affect and social persona. He argues that variationists must consider the embodiment of social meanings when seeking explanations for orderly heterogeneity, rather than relegating them to issues of stylistic agency.

Paper 6: Emma Moore will then present on *The social meaning of syntax* with a focus on *Negative concord as social practice*. Following a stylistic approach, her paper explores the ways in which syntax and phonological variants co-occur, and the implications this has for our understanding of the social meaning of syntax and of language more generally. Her work suggests that variationists need to pay more attention to components of the grammar above the level of phonology if we are to provide a complete theory of the social meaning of linguistic variation.

Paper 7: Devyani Sharma's paper on *Scales of indexicality: How biography and migration create social meaning*, considers how social meanings can be interpreted through individual biographical experience. The first part of her analysis considers a single bilingual speaker and his use of a style which Sharma argues conveys 'biographical indexicality'. The second part of her analysis considers how new social meanings are generated through language contact, when new speakers enter a community and reinterpret the indexical space. Together, she takes these cases as ways of expanding our representation of how indexical meanings are generated.

Paper 8: Qing Zhang finishes the panel with a presentation on the similar topic of the *Emergence of social meaning in sociolinguistic change*. In her case, Zhang focuses on the value of metalinguistic discourse as a source of evidence for the generation and negotiation of indexical meanings. Through an analysis of Cosmopolitan Mandarin, she argues that attention to metalinguistic discourses reveals a wider range of social meanings and a more complex and contested indexical field than might be found from an analysis based on production data alone.

Grant Writing for Early Career Researchers

Participants: Alexandra D'Arcy, Robin Dodsworth and Monica Macaulay

Moderator: Eric Raimy

This informal panel brings together experienced grant reviewers to provide early career researchers with insider knowledge of the process and what reviewers and panel members are looking for in fundable proposals. It will cover a wide range of topics, from an introduction to funding opportunities, to creating a coherent narrative, to what elevates (or sinks) proposals, and will also offer advice on grant-crafting best practice. Although the discussion will be contextualized within Canadian and US funding programs, the scope will be broadly applicable. The panel presentations will be followed by a Q&A session.

Breakfast will be provided, courtesy of Duke University Press.

Papers and Posters

The study of optional realization of the French negative particle (ne) on Twitter: Is Sociolinguistics compatible with the Big Data?

Jacobo Levy Abitbol¹, Jean-Pierre Chevrot^{1,3}, Marton Karsai¹, Jean-Philippe Magué^{1,2}, Yannick Léo¹, Aurélie Nardy³, Eric Fleury¹
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From the outset, collecting ecological data has been essential to the empirical and theoretical development of the field of sociolinguistics. It is thus not surprising that the field recently joined the movement of computational social sciences that results from the ability to collect and model vast digital datasets concerning the behavior of individuals in collective contexts. The emerging field of computational sociolinguistics (Nguyen et al., 2016) works on data obtained by sensors (e.g. wearable recorders) or resulting from the digital communication that permits automatic, ongoing and unsupervised recording.

In the present study we used massive datasets to reveal sociolinguistic patterns. More precisely, we analyzed a dataset including 15% of all Twitter communications in France, recorded between June 2014 and January 2017 along with meta information emanating from the profiles of the users. We focused on the variable deletion of the first morpheme of the French negation (Nonstandard: *Je fume pas* vs. Standard: *Je ne fume pas* - *I do not smoke*) (Armstrong, 2001). We then completed our dataset by identifying the home locations of around 300 000 users by studying GPS-tagged tweets. We matched the home places with spatially localized socioeconomic data collected during the census in France. This dataset includes the age structure of the population as well as the average annual income for people located (GPS-tagged) in square areas of 200m per 200m throughout the French territory. People living in these areas are also characterized by other socioeconomic features: the fraction of people owning a household and density of people.

We designed an algorithm for extracting tweets that include a realized negation and we tested it on a corpus of 1000 tweets tagged by informed speakers. We present results in three directions: 1/ the score of (ne) realization varies along a regional axis broadly oriented South-West (28%) to North-East (16%); 2/ the analysis highlights a very regular periodic curve of (ne) realization according to the time of day, every day in the week. As further analyses revealed, this pattern, never seen before, results from confounded factors; 3/ we found surprisingly strong correlations between (ne) variation and socioeconomic features.

Our discussion focuses on the sociolinguistic implications of the results, including close examination of the risk of bias, the explanation of the regional pattern, the hypothesis of the revival of social indexicality of (ne) in the digital communication. As a final argument we defend that thick data should be combined with big data in order to explain such patterns of sociolinguistic variables (Wang, 2013).

Armstrong, N. (2002). Variable deletion of French ne: a cross-stylistic perspective. *Language Sciences*, 24(2), 153–173

Nguyen, D., Dogruöz, A. S., Rosé, C. P., & Jong, F. de. (2015). Computational Sociolinguistics: A Survey. *CoRR*, abs/1508.07544. Retrieved from <http://arxiv.org/abs/1508.07544>

Wang, T. (2013). Why Big Data Needs Thick Data, *Ethnography Matter*.
<https://medium.com/ethnography-matters/why-big-data-needs-thick-data-b4b3e75e3d7#.3bct3tkgl>

Teachers, Students, and Dialects: Examining Individual Literacy Patterns of African American Adolescents

Kelly Abrams

University of Wisconsin – Madison

Linguistic scholars have long debated the extent to which the achievement gap exists due to dialect differences in reading and writing (Labov 1967) and this discussion continues today (Labov & Charity Hudley 2010). Additionally, linguists have encouraged teachers to become aware of nonstandard dialects (Charity Hudley & Mallinson 2015) and to become more culturally competent while closing the achievement gap. This study first considers the influence of dialect in both speaking and writing contexts for the same students longitudinally, and second, asks teachers to respond to the writing samples.

This research examines the differences of AAE in writing and speaking using dialect density measures (DDMs) for the same twenty-nine African American children over a three-year period, assessing their writing in sixth and eighth grade. The results show that students have higher spoken than written DDMs, and have higher DDMs in G6 than G8. One important difference between the oral data and the written data is different features are prominent in writing when compared to speaking. The top three features in speaking for this sample are nasal fronting, copula absence, and modal auxiliary absence in G6 (Renn 2007, 2010) and throughout the childhood trajectory of 48 months to G10 (Van Hofwegen and Wolfram 2010). Two of these are not present in the writing at all, and copula absence has only nine instances (6%) total. Finally, after examining the writing patterns holistically, students were examined individually, revealing significant individual variation. The second part of this study examines survey data from 27 K-12 teachers and 50 students studying to be teachers from the across the US; they were asked to evaluate writing samples of these African American adolescent students. Preliminary results from the second study indicate both teachers and student teachers (and student teachers even more so) evaluate adolescent writers with high numbers of African American English features more harshly than students with low African American features; this is true even when the low-feature AAE writer exhibits high numbers of prescriptive features. In other words, both the teachers and the student teachers evaluate African American English features more severely than prescriptive writing errors, such as orthography.

This study is important to consider individual patterns of oral and written dialect development of adolescent students and to contribute to the understanding of how teachers evaluate dialect and prescriptive writing features. Moreover, this research provides additional findings to support Craig and Washington's (2006) statement: "Improving our understanding of the ways in which African American students manage the increased cognitive demands of a linguistic system rich in optionality, and the timing of these acquisition sub-stages, is of interest to researchers characterizing dialect, and to practitioners involved in language-based academic planning for young children" (p. 33).

Language labels as ethnographic facts in Indonesia

Maya Ravindranath Abtahian and Abigail C. Cohn
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The linguistic landscape of Indonesia is changing. Use of the national language Indonesian continues to expand at the expense of local languages, even those with large populations like Javanese. In this paper, part of a larger project that seeks to understand language shift scenarios at multiple levels of analysis using census, survey, and interview data, we use empirical evidence to argue that a key to understanding linguistic practices, particularly in a complex multilingual landscape, is analyses of how speakers classify and label language varieties. We report on a subsample of survey data (216 surveys from 6 universities in Java), focusing on the labels speakers assign when they answer the open-ended question of what languages they know. In particular we analyze the labels used for varieties of Indonesian and Javanese, in the context of i) a national language that is closely tied to the development of the nation-state; ii) regional Javanese variation associated with differing levels of prestige; and iii) a highly codified system of linguistic registers.

Although predicting linguistic behavior on the basis of speaker-assigned labels for language varieties is not straightforward, the classification and labeling of language varieties plays a crucial role in the process of enregisterment (Agha 2003, Johnstone et al 2006), which in turn informs linguistic practices (Preston 2011). In Indonesia, where Heryanto (2007) argues that even the concept of language was imposed by European colonialism and did not reflect local understandings of language, the (emerging) classification, labeling, and enregisterment of language varieties that are not tied to the nation-state is closely linked with local and ethnic identities. As a demonstration of this, in 216 surveys we find only two variants of the labels used for Indonesian while we find considerable variation in the numerous labels linked to both place and register (and sometimes both) in Javanese.

Furthermore, 30 respondents didn't list Indonesian at all as one of the languages that they know although their language use responses demonstrate that all have some competence in Indonesian. We interpret speakers non-naming of Indonesian as evidence of the status that Indonesian holds as an *un-native* language (Errington 1998), and one that is indexically linked to the ethnic 'other', and as such dis-preferred for intimate interactions even across ethnic lines (Goebel 2010). The lack of variation in the labeling of Indonesian is reflected in cross-speaker consistency in the domains in which Indonesian is used and in Goebel's (2010) observations on language use. Thus we approach labels as ethnographic facts, as 'ground-level interpretations of linguistic practices' (Cornips et al 2015) that inform our understanding of language use and practices. Labels, we argue, are one method of classification on the part of speakers. Variation in labeling both reflects and affects the use of particular language varieties (cf. Preston 2011), and contributes to our understanding of the shifting linguistic landscape of Indonesia.

Perceptual Dialectology: A Sixth Vision of America

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In 1986 Dennis Preston published *Five Visions of America* in which he discussed a new method to study perceptions of regional dialects. Perceptual dialectology, as the approach became known, combined methods from behavioral geography (Gould & White 1974; Lynch 1960) and traditional dialectology (Preston 1999). Over the years, Preston's approach has been used to study many different varieties and regions (Preston 1999, Long & Preston 2002). In the US, it has been used to study perceptions within states (e.g. Bucholtz et al. 2007; Evans 2011). Other studies have followed Preston's original work and examined perceptions of variation across the entire country (Fought 2002; Hartley 2005). The research conducted in the US has traditionally involved Caucasian participants. The perceptions of different ethnic groups have not been studied using the map-drawing methodology, even though ethnicity and culture have been shown to influence spatial narratives in hand-drawn maps (Gillespie 2010, Orleans 1973). In this presentation, we discuss research on Latinx perceptions of US regional dialects.

Our data was obtained following the methods of perceptual dialectology. Participants were asked to identify and label speech regions on a map of the US. Participants then completed a demographic questionnaire and answered questions about their first and home languages. Caucasian and Latinx fieldworkers collected data in classes and student meetings. The first language of the Latinx group was either Spanish or Spanish and English. The maps of 83 Latinx participants were analyzed using ArcGIS to generate heat maps. These results were compared to the maps from a control group of 148 Caucasians who reported English as their first and home language.

Earlier studies showed that European-Americans tended to agree on salient regional varieties and their locations when they drew dialect regions on maps of the United States (Fought 2002; Hartley 2005; Preston 1986). The results for the Caucasian control group were in line with these studies: the Southern US, for instance, was the most frequently identified region. The findings for the Latinx group were distinctly different from results found in studies with Caucasians. One significant difference in the Latinx maps was that the South was often not identified. When the South was marked, it did not match the location or extent of the region as identified in the Caucasian maps.

The map-drawing method of perceptual dialectology revealed differences that we suggest are a consequence of socialization. Attitudes and stereotypes are transmitted implicitly and explicitly from parents to very young children (Castelli, et al. 2009; Segall et al. 2015). However, when parents do not know the attitudes associated with regional varieties of US English, they cannot be transmitted to their children. The findings of this study with young adults suggest that these attitudes may not be learned later. The application of Preston's map-drawing approach to the study of perceptions across ethnic groups represents a new direction in perceptual dialectology.

Tu in Brasília: the advance of a marked pronominal form in dialect focusing

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Brasília, the Brazilian capital founded in 1960, has always been a site of intense dialect contact, with consequent linguistic leveling. Brasília is in central Brazil, a region historically characterized by almost complete absence of the 2sg pronoun *tu*, which is mostly found in the national periphery (Ilari 2007; Scherre et al. 2015).

In the early 2000s, *tu* began to appear in Brasília, producing three-way variation in 2sg pronouns between *você*, *cê*, and *tu*. *Tu* was reported in 2004 in the speech of 15 to 19 year-old males, in solidary interactions, especially in a neighborhood with high immigration from Northeastern Brazil, a region where *tu* is common (Lucca 2005). It was noted in 2006 among female speakers aged 13 to 29, in a neighborhood with less Northeastern immigration (Dias 2007). In 2010 *tu* was observed in the speech of children whose mothers were from the Northeast, spreading also to children aged 5-15 whose mothers were natives of Brasília (Andrade 2010).

This paper presents additional evidence of the social expansion of *tu* in Brasília, focusing on the following variables: gender; age group (5-12 and 13-15); neighborhood; mother's region of origin; type of school attended; discourse context and interaction type. The results come from classic variationist analyses (Labov 2001; Sankoff, Tagliamonte & Smith 2005) of occurrences of *tu/você/cê* recorded in five localities in Brasília, from 2008 to 2015, totaling 1351 tokens, with 30% use of *tu* vs. 46% of *você* and 24% of *cê*.

Male adolescents aged 13-19 still favor *tu* (0.646) more than females of the same age (0.383), but children between 5-12 years, although they use *tu*, do not show as strong a difference between girls (0.455) and boys (0.525). At present, *tu* is also used by daughters speaking to their mothers, who are older than 30, which rarely occurred in 2006.

The Vila Planalto, an area with strong Northeastern ties, favors more *tu* (0.641) than the Pilot Plan region (0.378) and Sobradinho (0.364), but Brazlândia, with a strong history of settlement from the state of Minas Gerais where *tu* is rare, shows intermediate usage (0.460).

Maternal region of origin shows *tu* use expanding from those with Northeastern family backgrounds to those from other regions: children of Northeasterners still favor *tu* most (0.584), followed by children of mothers from Brasília (0.523); intermediate rates are found among children of mothers from Minas Gerais/Goiás (0.408) and Rio (0.419), but rates remain low among those with mothers from São Paulo and Espírito Santo (0.233).

The type of school, public (0.585) or private (0.157), indicates social stratification, which, together with the discourse/interaction factor (symmetrical in play: 0.650, symmetrical in daily life: 0.384, asymmetrical: 0.309), shows the definitive insertion of *tu* in the emergent new dialect of the Brasília speech community.

In sum, the expanding use of *tu* in Brasília constitutes a morphosyntactic element involved in dialect focusing (Kerswill & Trudgill 2005) of a marked pronominal form; it is beginning to index local identity, and participating in social stratification and stylistic marking (Labov 2001; Pagotto 2004).

Trill variation of the Puerto Rican community in Western Massachusetts

Alba Arias

University of Massachusetts-Amherst

The Spanish trill /r/ is described as having two or more brief occlusions between the tongue apex and the alveolar ridge (Martínez Celdrán, 1998). However, outside of the prescriptive description, experimental studies have shown an enormous amount of trill variation (Díaz Campos, 2008; Willis, 2006, 2007). Puerto Rican Spanish (PRS) is not an exception. In fact, as many as eleven realizations have been reported (Graml, 2009; Valentín-Márquez, 2007). Since this variation is attested on the island as well as in the diaspora, the main objective of this project is to provide a comprehensive description of PRS onset trill variation in the cities of Holyoke and Springfield (Western Massachusetts) in order to identify differences between those trill realizations found in the diaspora and in Puerto Rico. Both linguistic and sociolinguistic factors are examined (Delgado et al., 2015; Ramos-Pellicia, 2004). In this manner, the present study helps to address larger questions in the field regarding social factors underlying language variation in diasporic communities.

Given that back and forth migration waves between Puerto Rico and Massachusetts have been in constant increase since 1950 (Center for Puerto Rican Studies, 2016), we predict that the same trill variants found in the aforementioned Massachusetts communities will occur on the island and that the factors that might predict the use of /r/ variants will be similar in both settings. Furthermore, this study focuses on the backed /r/ ([x], [χ]), which is considered a low-prestige variant related to rural origin or lower socioeconomic status (Navarro Tomás 1948).

Three experimental tasks were designed for this purpose: a picture description task, a map task, and a reading task. Participants narrated the children's picture book by Mercer Mayer, *Frog Where are you?* (1969). In the map task, participants worked with the researcher to reproduce a route shown on his/her map (where the participant used words which contain the trill). Afterwards, for the reading task, participants read a total of 40 words (20 target words and 20 fillers).

Two groups of 10 participants took part of the experimental task: one group was recorded for the Mainland US variety of PRS and the other group for the island variety. A total of 1,292 phonemic trills were analyzed phonetically in PRAAT.

Qualitative results point out that the same set of phonetic realizations are found in the two settings under study (trill, approximated trill, backed /r/, pre-breathy trill, tap, pre-breathy tap, and miscellaneous), in line with Ramos-Pellicia's (2004) and Valentín Márquez's (2007) research. As for the predictors of trill variation, contrary to our hypothesis, there are different linguistic and sociolinguistic factors that predict not only the use of normative vs. normative /r/, but also the use of backed vs. non-backed /r/ in the diaspora and on the island. This result might suggest that, in spite of the back and forth migration waves between Puerto Rico and Massachusetts, the socioindexical factors associated with trill realizations on the island may no longer be available in the diaspora, especially across generations (Ramos-Pellicia, 2004).

Past tense reference in American Samoa: Constraints and story-telling conventions

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This paper explores an entirely uncharted variety of English spoken in the US territory of American Samoa. While the Pidgin and Creole languages in the South Pacific have attracted considerable linguistic interest, Pacific L2 varieties, by contrast, have received little to no academic attention. Studying lesser-known varieties not only expands our database of World Englishes by an American-lexified variety, it can also help addressing important issues in linguistic theory, including dialect typology, language spread and contact-induced change.

My analysis focusses on the marking of past temporal reference. Like many other L2 varieties, American Samoan English shows a lack of morphological past tense marking. Preliminary analysis of my data reveals that about 30 % of all verbs with clear past tense reference are morphologically unmarked. These results are in line with Biewer's findings from neighbouring Samoa.

Two linguistic facts point towards L1 transfer as an explanation for the relative frequency of unmarked past tense forms in Samoan English:

- (i) the Samoan verb lacks morphological past tense marking,
- (ii) phonotactic constraints in the Samoan language prohibit consonant clusters

A competing hypothesis leads me to interpret the lack of past tense marking as a result of approximation to native speaker norms. It is well known that consonant cluster simplification and word-final stop deletion are common in ENL varieties, which can result in unmarked past tense on regular verbs. Furthermore, ENL speakers regularly employ the CHP in narrative description of past events. What appears to be a deviation from native speaker norms might thus be the result of approximation processes instead.

I will argue that the interpretation of unmarked past tense verbs as either approximation to an American norm or of L1 transfer is too simplistic. A more nuanced approach, which relies on Mufwene's feature pool, appears to be the most preferable approach to interpret the variability in my data. I consider the following questions:

1. Which varieties contribute to the feature pool? While the educational system follows US models, teachers are mostly Samoan and speak indigenised varieties of English. Furthermore, while American Samoa's ties to the US are very close, most Samoans living in North America tend to live among other minorities and only have limited network ties to speakers of mainstream American English. Pop culture influence – and hence the import of AAVE – should also not be underestimated, especially for the younger generations.
2. Do the selections speakers make from the feature pool vary across age groups? My data show a generational effect, which may be explained by the impact of AAVE.
3. In how far do speakers adjust the selected features to meet their culture specific communicative needs? This question is especially relevant for discourse features such as the CHP. While storytelling is an important part of Samoan culture, narrative structure deviates from the classic template described for US American stories by Labov and Waletzky. I explore the ways in which verbal strategies such as the CHP fit into the structure of Samoan narratives.

PINning Down Social Meaning: How Listener Phonology Shapes Social Perception

Martha Austen

The Ohio State University

To what extent are linguistic and sociolinguistic perception separate processes? Sociophonetic research has shown that social information influences linguistic perception; for example, the perceived gender or age of a talker can shift which phoneme a listener perceives (Strand & Johnson 1996; Hay, Warren & Drager 2006; Koops, Gentry, & Pantos 2008). However, little work has investigated the converse relationship: how does a listener's phonemic system affect their sociolinguistic perception? I examine this question using the PIN-PEN merger: do merged and non-merged listeners differ in their social perception of the merger?

In keeping with previous work (Hazen 2005; Ito and Campbell-Kibler 2011; Baranowski 2013; Yan 2014), non-merged listeners are expected to perceive the merger as low prestige, high in solidarity, Southern, and Black. In contrast, merged listeners should have no way of knowing whether a talker is merged: they do not know that an [ɪ] pronunciation is merged in 'hen' but non-merged in 'sin'. Thus, they should be unable to assign social meaning to the merger itself. Rather, I hypothesize that merged listeners treat pre-nasal [ɪ] and [ɛ] as *subphonemic* variants of a single i/e phoneme. Treating PIN and PEN as one lexical class, they track the frequency with which different groups of speakers produce these variants. Because PEN words occur more often than PIN words, these listeners hear non-merged talkers produce [ɛN] a majority of the time (i.e. when those talkers produce PEN words), but hear most merged talkers produce [ɪN]. Thus, they attach the social meanings associated with non-merged talkers to [ɛN], and with merged talkers to [ɪN], regardless of a word's lexical class: they should perceive both [hen] and [sen] as high prestige/low solidarity, and both [hɪn] and [sɪn] as low prestige/high solidarity.

To test predictions, 371 participants completed a Matched Guise Test with two pairs of guises:

Pair 1: /ɛ/ words	Pair 2: /ɪ/ words
/ɛ/→[ɛ], e.g. <i>She wrote the letter with a gel p[ɛ]n.</i>	/ɪ/→[ɛ], e.g. <i>I have a tw[ɛ]n sister.</i>
/ɛ/→[ɪ], e.g. <i>She wrote the letter with a gel p[ɪ]n.</i>	/ɪ/→[ɪ], e.g. <i>I have a tw[ɪ]n sister.</i>

Participants rated each guise along Likert scales for *educated*, *working/upper class*, *pretentious*, *friendly*, *Southern*, and *Black*, and then completed a word identification task to determine their merger status. Following factor analysis, *educated*, *working/upper class*, and *pretentious* were combined into a “prestige” dimension and modeled using a linear mixed effects model. The “prestige” results matched predictions: non-merged listeners heard the merger as low prestige, whereas merged listeners heard [ɪ] as lower prestige than [ɛ], regardless of the “correct” vowel (i.e. they heard both [hɪn] and [sɪn] as low prestige). In contrast, there was no difference between merged and non-merged listeners on the *Southern* and *Black* scales: both groups heard the merger as more Southern and Black.

These results demonstrate that merged listeners know on some level which lexical class PIN-PEN words belong to, even when they cannot reliably distinguish between the two. The differing results for prestige and Southern/Black suggest that both phonemic and lexical level information contribute to sociolinguistic perception.

Northern Cities in the Country: TRAP, LOT, and Country Identity in Northwest Ohio

Martha Austen, Shontael Elward, Zack Jones and Kathryn Campbell-Kibler

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In the eastern area of Ohio, the boundary between the Inland North and the Midland continues to trace, relatively sharply, the edge of the Western reserve, a highly influential boundary in the settlement of the area (Thomas 2010). In western Ohio, the relationship between the two regions is less well understood, including precisely where the boundary falls, the width of the transitional area and the local social meaning, if any, of the regional differences. This paper draws on a larger study of vocalic variation among men in non-urban areas of Defiance County, Ohio, focusing on TRAP and LOT, the two proposed trigger vowels of the Northern Cities Shift. County residents have a longstanding relationship with Ft. Wayne, Indiana, which raises TRAP but does not front LOT; however, recent highway changes have facilitated access to Toledo, Ohio, which shows both Northern features (Labov, Ash & Boberg 2006). We ask which pattern, if either, residents show and how consistent they are.

In addition to documenting usage in the area, we investigate correlation of the variables with three key social dimensions: engagement with “country” practices and ideology, socioeconomic status and orientation to geographic “localness”. Extensive previous work has linked the NCS with urban areas and identities (Eckert 1989; 2000; Labov, Ash, & Boberg 2006). In research within small Michigan towns, resistance to the shift may be linked to local, small-town identity (Ito & Preston 1998; Gordon 2001). If that pattern has survived in this time and place, we predict avoidance of any features conceptualized as urban, particularly given the powerful state-wide ideology that rural areas are linguistically distinct (Benson 2003; Campbell-Kibler 2012; Campbell-Kibler & Bauer 2015) and a strong local orientation away from urbanness.

Ethnographically-oriented sociolinguistic interviews (including reading passage and wordlist) were conducted with 25 men from non-urban Defiance County, ranging in age from 20 to 74. Degree of country orientation was assessed through engagement in practices such as farming, hunting, fishing and four-wheeling. Localness, as distinct from country orientation, was assessed through self-reported geographic range of comfort and identification with nearby urban Ft Wayne vs. a distant country dweller. Socioeconomic status was measured using occupation, education level, and land ownership.

Vowels from the reading passages and wordlists were forced aligned, hand-corrected, and measured using FAVE (Rosenfelder et al. 2011). Analysis of interview speech and social predictors is ongoing but preliminary results show all participants with TRAP raising, but little to no LOT fronting, matching the Ft. Wayne pattern. However, participants pattern with Toledoans in maintaining a clear distinction between LOT and THOUGHT. That all participants, even the most country-oriented ones, raise TRAP suggests that speakers in this community do *not* associate this NCS feature with urban identity.

Quotative markers and the pragmatics of demonstrations

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Direct speech has long been a topic of interest for iconicity researchers given the non-arbitrariness of expressions involving *say* (2) as a quotative marker. But much recent work focuses on alternative quotatives like *go* and *(be) like* (1), which weaken the verbatim presupposition of (2) but are more likely to involve mimetic enactment through the use of voice effects and gestures (Buchstaller 2001).

(1) She was like, *no way*. (2) She said, "No way!"

Clark and Gerrig (1990) propose that quotative markers can introduce *demonstrations*: performed depictions which selectively map aspects of an utterance to a salient referent via structural analogy. Demonstrations are often invoked in analyses of *go/like* quotatives, but is less commonly for *say* quotatives. We argue that in fact demonstrations are at the heart of all direct speech, and propose the theoretical enrichments necessary to make this extension work while still explaining the observed variation. Empirical support for our claims is drawn from a case study of quotatives in naturally-occurring speech.

Our data comes from a thirty minute video interview of a female British English speaker. In total 42 quotatives marking direct speech were analyzed. (For this initial study, we exclude quotatives introducing reported thought or mood.) Of those, *like* (n=9) and *go* (n=10) introduced the highest rate of gestural (78%; 80%) and intonational (89%; 90%) foregrounding, whereas *say* (n=18) introduced the fewest expressive presentations (44% gesture, 28% intonation). Where *like this/that* (n=5) follows the reported utterance, the rate of gesture (80%) and intonation (80%) were similar to pre-utterance *like* and *go*.

Based on the results of our investigation, we propose that all quotative markers introduce demonstrations, but classify some as 'semantic' and others as 'pragmatic' based on their distinct use-conditions (Gutzmann 2015). Quotatives of the first type, typified by *say*, commit the speaker to produce a demonstration of a linguistic utterance which is semantically (i.e. truth-conditionally) equivalent to the referent. The semantic equivalence constraint reduces the role of contextually-determined analogical mapping in *say* quotatives. Since the demonstration's referent is predetermined and not directly aided by mimetic presentation, expressive features like voice quality and gesture are strictly secondary. It follows that they occur less frequently in *say* quotatives. The second type are pragmatic quotatives (marked by *go* and *like* in English), which make no commitment to semantic equivalence---indeed, the referent may altogether lack accessible semantic content, as with reported thought and mood (Buchstaller 2001). Since pragmatic quotatives introduce a demonstration but are underspecified w.r.t. to the depictive target(s), they place an increased burden on the speaker to assist the hearer's recovery of the intended mappings. This explains their higher rates of intonational and gestural foregrounding.

Direct speech lies at the intersection of semantic, pragmatic, and social meaning. We argue that a demonstration-based approach coupled with an analysis of each quotative marker's semantic content and use-conditional commitments is needed to successfully reflect the empirical landscape.

Sociolinguistically-deduced sound change in Tunisian Tamazight of Zrawa: from interdental to stops

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The aim of this paper is to discuss variations in the use of the interdental variables /θ/ and /ð/ and their respective counterparts /t/ and /d/ in two micro-varieties of Tunisian Tamazight, commonly known as Berber, spoken in the villages of Douiret and Zrawa. While the Douiret variety has no interdental sounds in its inventory as in the Proto-Berber (Koussman 1997, 2013); the Zrawa variety exhibits a process of sound shift, substituting the interdentals with the stops. Research on Tamazight languages demonstrates that similar phonological processes show a reversal change that substitutes synchronic realizations of sounds for historical ones (Saib 1997). In this study, shifting back to the original phonetic realizations is posited to be motivated by sociolinguistic factors such as sex, age and level of exposure to other Tamazight varieties spoken in North Africa, which has increased with the rise of the Amazigh movement in Tunisia.

Data used for this study was collected over four stages. At first, a demographic questionnaire was conducted with twelve Tamazight speakers: six from the village of Douiret and six from the village of Zrawa. Then, a list of ninety words containing the interdental sounds was collected from two dissertations on Tunisian Tamazight (Gabsi 2003; Hamza 2007). Both interdental sounds in the list are treated as one variant. Third, the list was recorded by the twelve speakers. To collect better data, the speakers who are all bilingual in Tunisian dialect and Tamazight did not read from the list. They were rather given each word in Tunisian dialect and had to give its synonym in Tamazight. Following Child (2010), the data was examined at a fourth stage using GOLDVARB X to determine the effect of the external factors (sex, age, and level of exposure to other Tamazight varieties) on the variable realization of the interdental fricatives. For this study 1,080 tokens were included in the analysis.

The analysis confirmed that all the speakers from the village of Douiret show no interdentals in their pronunciations. They, instead, produced the stops /t/ and /d/. The Zrawa speakers, however, displayed socially-conditioned variations in their pronunciations. The results show that old generations of men and women have maintained the interdental sounds while the younger generations show great variability in the use of this variable. Young Zrawa males, in particular, who are found to be more exposed to various Tamazight varieties including the one spoken in Douiret, when encountered with an identity they associate themselves with, they seem to pick up the salient linguistic variant associated with that identity.

The study also proposes that the directionality reversal observed in Zrawa variety is a result of shifting language ideologies in the village. The paper is the first to describe a sound change in a Tunisian Tamazight variety and to attribute it to social factors and ideological shift that could be pertained to the nascent linguistic and social Amazigh movements in Tunisia.

Hoosier Talk – Acoustic Work in Western Indiana

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This talk will present acoustic work from Western-Central Indiana, centered on Terre Haute (Vigo County) and nearby Montgomery, Parke, and Vermillion Counties. This study examines wordlist and reading passage data from 25 respondents, aged 20 to 82. This area of the country has not received acoustic attention apart from the Atlas of North American English (ANAE) (Labov, Ash, and Boberg 2006), and beyond studies such as Jose (2010) on consonant de-voicing and perceptual work on the caught/cot merger by Phillips (2004), has largely not been recently studied by sociolinguists at all. This paper will present initial research and compare it to other scholarship that examined the Midlands, and areas that border the South such as Oklahoma.

Because Terre Haute is a commercial crossroads with many connections to St. Louis and Chicago, it was hypothesized that there might be signs of Northern Cities Shift (NCS) in Hautian (and neighboring) speech. It was also considered that the area might be similar to other border regions to the South, such as Oklahoma or Louisville. However, as can be seen in the plot below, the respondents from these four counties displayed virtually no markers of NCS or Southern dialects in either of the two tasks.

In aggregate, there are no signs of Southern Shift in the front vowels of the system, with neither pair of front vowels showing inversion. /AY/ is strongly diphthongal in both contexts. The only Southern markers within the system are fronted /AW/, which matches the ANAE's finding, and the rising upglide visible in /AO/, described as a Southern feature by Thomas (2001). No NCS features are present, with /AE/ unraised and /AA/ unfronted. Notable is that respondents do not show signs of linguistic insecurity – while the overall RP vowel space is proportionally smaller than the WL, the relative positions of vowels are not noticeably different. This contrasts with Bakos (2013)'s work in Oklahoma, which showed local features generally weakened in the more formal WL task.

Phillips (2004) commented that the caught/cot merger was likely encroaching on Terre Haute, with many respondents reporting that they did not hear differences between words containing /AA/ and /AO/. It is surprising, then, that in 2017, respondents are decidedly unmerged. When comparing the F1 and F2 values of respondents' caught/cot vowels with a 2-sample t-test, they were found to be significantly different in both tasks ($p < .0001$ for F1 AA/AO and F2 AA/AO). In examining individual plots, it does not appear that there is variation on this front, with no respondents showing the merger.

Finally, signs of the pin/pen merger are indicated in many speakers. Respondents are merged on the WL task, with neither F1 or F2 tokens of IH or EH before nasals being significantly different in a two-sample t-test (F1 $p = .262$, F2 $p = .536$). RP pin/pen tokens are not significantly different for F2 ($p = .147$) but are for F1 ($p = .019$).

One language, two trajectories: The case of Transylvanian Saxon in the homeland and émigré community

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This paper considers a series of factors outside of traditional sociolinguistic variables (e.g. age, gender, social class) to examine the progress of contact-induced changes in an endangered language. I exemplify a methodology that can be implemented when few speakers are available, by providing a description of the current status of Transylvanian Saxon (TrSax) in two sites: the home community in Viscri, Romania, in which only 15 speakers are left; and an émigré community of TrSax speakers from Viscri, established 30 years ago in Nuremberg, Germany. TrSax is an endangered minority language, coexisting with varieties of standard German and/or Romanian in both sites. Intense language contact sets the stage for contact-induced changes in an endangered language, however speakers' language attitudes have the ultimate say in how changes advance in their language (Thomason, 2010).

I use sociolinguistic interviews (Tagliamonte, 2006) and a language profile questionnaire (Gertken et. al, 2014), to assess the degree of multilingualism and language attitudes in each site. Seven TrSax native speakers from each site (ages 30 – 78) were interviewed by a native speaker and filled out the questionnaire. All participants were born in Viscri, and also have knowledge of German and Romanian. The interviews provide background data (e.g. domains of language use) used to compare past and current patterns of language use. The questionnaires deliver scores for three modules based on self-reports: (current) language use, proficiency, and attitudes. Linear mixed effects analyses were used to compare the effect of site on each questionnaire module (fixed effects - language and site; random effects - participant and module scores). Results show no significant effect of site on use of TrSax ($p=.98$), proficiency in TrSax ($p=.086$), and attitudes towards TrSax ($p=.94$), i.e. participants from both groups scored similarly for TrSax regardless of site. All participants rank TrSax highest in terms of positive attitudes, however domains of use for TrSax have decreased: participants report using German and/or Romanian at home and in the wider community, instead of or along with TrSax. German is used more than both TrSax and Romanian in Nuremberg ($p<0.05$), and Romanian is used more than both TrSax and German in Viscri ($p<0.05$).

The main differences between the groups are in the use of German and Romanian, but the groups are remarkably cohesive when it comes to TrSax. These findings, taken together with the overall positive attitudes towards TrSax, raise the question whether the two groups are equally able to resist contact-induced changes under the influence of the dominant languages in each community.

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The FOOT-STRUT vowels in Manchester: Evidence for the diachronic precursor to the split?

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This study presents a large-scale investigation of sociolinguistic variation in the phonetic realisation and phonemic status of FOOT and STRUT in Manchester English. As a Northern dialect of English, Manchester speakers typically lack the distinction between the FOOT and STRUT vowels, such that *stud* and *stood* are homophones. The data in the present study reveal that, despite the vast majority of speakers having no difference in production and perception, there is variation both in the phonemic status and the phonetic realisation of the two vowel classes within the speech community.

The study is based on a sample of 123 speakers stratified by age, gender, socio-economic status, and ethnicity, recorded in sociolinguistic interviews, supplemented with wordlist reading and minimal-pair tests. Formant measurements of the informants' complete vowel systems are obtained in Praat by hand for 25 speakers and in FAVE (Rosenfelder et al. 2014) for 98 speakers (including 7653 tokens of STRUT and 4057 tokens of FOOT). The results are analysed in a series of mixed-effects linear regressions in R (lme4), with social (age, gender, ethnicity, social class, style) and internal factors (phonological environment and lexical frequency) as independent variables, and speaker and word as random effects.

Our approach to the analysis considers the vowel classes both as one phoneme, and as the two split lexical sets. The acoustic measurements reveal that tokens in the STRUT category show a monotonic pattern of social class stratification, with higher social classes showing higher F1 values, i.e. having a lower tongue position.

The minimal-pair tests of the FOOT-STRUT distinction reveal that although for most speakers there is no phonemic distinction, for 8 speakers in the two highest socio-economic levels in the sample, the two vowels do form separate categories. This is confirmed by the acoustic measurements of their vowel tokens: there is clear phonetic separation between the two vocalic categories in phonetic space.

Interestingly, even when these 8 speakers are removed from the sample, regression analysis shows that for the sample as a whole, vowel category (i.e. STRUT vs. FOOT) continues to have a significant effect, with STRUT tokens having a higher F1 mean (lower tongue position). This holds in cases where there is complete overlap between the two vowels in phonetic space (also found in Nottingham, Braber & Flynn, 2015). We explore the possibility that this may be due to the different phonological environment in which the two vowel classes tend to be found and that it may shed light on the underlying mechanisms of the historical split between the two vowel classes in the south of England.

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Wh-/u/ participates in vowel changes? Effects of Spanish/English Bilingualism on Southern California /u/-fronting

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Research on the influence of a speaker's L1 on their L2 phonology is popular in the subfield of bilingualism, but comparatively few studies have examined the participation of bilingual speakers in local sound changes. The phenomenon of /u/- fronting is a sound change observed in California since at least the mid-80s (Hinton et al. 1987) but little is known about whether and how bilingual communities participate in this sound change, and the ways in which their productions may be affected by L1 phonology. Previous studies of California /u/ have shown that fronting is found in various degrees in L1 Chicano English (Fought 1999), and Cheng et al. (2016) found that Latinx-identifying individuals have a significantly lower F2 vowels for /u/ than white speakers in California, though the participation of Spanish/English bilinguals in this phenomenon has not been specifically addressed.

The current study was designed to test for differences in the vowel spaces (/i, I, e, ε, æ, a, o, u, ʌ) of L1 English monolinguals and L1 Spanish bilinguals, partially following the methodology of Hillenbrand et al. (1995), with special attention to /u/-fronting as a Southern California feature. 34 participants, 17 white English monolingual speakers and 17 Spanish-English early fluent bilinguals, all from the western U.S. and currently living in California, were recorded reading a word list of 130 CVC words (avoiding preceding/ following liquids), in a quiet room with a Zoom H1N recorder. Recordings and transcriptions were submitted to DARLA for extraction of vowel formant values, which were corrected in Praat by hand. The data was then analyzed with the statistical software package SPSS, in which regression models were conducted to assess the relationship between F2 of /u/ to speaker L1, age of acquisition of English, and speaker gender.

Results indicate a statistically significant difference between F2 values of /u/ for L1 English and L1 Spanish speakers, with F2 consistently higher for English than Spanish speakers ($p = .001$), with a difference of 152.4 Hz in the mean F2 values of the two groups. Of special note is the observation that /u/ is the only vowel showing statistically significant differences in F2 between the L1 Spanish group and the L1 English group. Additionally, and contrary to earlier studies, within the L1 Spanish group, no significant relationship was found between age of acquisition of English and F2 value of /u/.

These results shed additional light on the ways that members of a bilingual community may or may not participate in a locally-salient ethnically-linked sound change. These Spanish-English bilinguals do not participate in /u/ fronting in the same way as the monolingual English speakers, though the rest of their vowel spaces are very similar. One explanation for this pattern could be interference from Spanish phonology, though this explanation would predict an effect of age of acquisition as well as potential effects on other vowels, which were not observed in this study. These results also have implications for understanding bilingual productions, community-level variation norms, and how different ethnic communities may participate in local sound changes.

Personas, Personalities, and Stereotypes of Lesbian Speech

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Though research on stereotypes of sexuality in women is rare in linguistics, recent work has shown that listeners do have expectations about lesbian speech styles. Understanding what these expectations are and how they are processed allows us to understand the complexities of speech variation and how speech styles are adopted and adapted socially. This study combines three experiments to understand what these stereotypes are and how best to study them. The first used techniques found in some related research on language and sexuality. Listening to a set of voices, subjects make judgments of sexual orientation as well as characteristics which are expected to be in some way connected to perceptions of sexual orientation. Subjects in this experiment heard a set of 5 words from a total of 54 speakers and judged each on three of six potential attributes, including likelihood of being a lesbian. A PCA of the perceived attributes demonstrated that sexual orientation is judged not independent of other perceived attributes but part of a larger social persona, such as the “uncaring masculine lesbian”. An ANOVA found that lower pitch, lower F2, wider pitch range, and greater creak all contributed to a higher score for this persona. Results also demonstrated that personal attributes of the listener, specifically familiarity with Queer culture, influence how individuals use relevant phonetic stereotypes.

This method works well for testing anticipated links, but it may not capture the judgments listeners make independently. With sexuality in women, where speech stereotypes are less frequently studied, it is unclear what connections to anticipate. The second experiment used open responses to directly elicit associations made in listening to female voices. Subjects heard single sentences from 48 of the 54 speakers, and for each speaker, provided five adjectives. Responses were analyzed using topic modeling to create a set of seven personality types, with each speaker having a score for each type.

The third experiment tied together the findings of the first two experiments and related research. Using stimuli from the second experiment, subjects in the third judged each speaker as ‘gay’, ‘straight’ or ‘bisexual’, and indicated their confidence in each choice. This method is similar to related studies that ask listeners for a direct assessment of sexual orientation, but is different in two primary ways. First, it collected measurements of confidence, as opposed to other studies that get ratings of “gayness” either on a scale or as a binary. Second, it included bisexuality as a sexual orientation that listeners may perceive separately through speech. The results showed the same phonetic variables from Experiment 1 correlating with higher lesbian ratings. Correlations with certain personality types were also found, with higher lesbian ratings had higher “confident/intelligent” personality scores and lower scores of “kind/feminine”.

The combined findings contribute to work on language and sexuality in multiple ways. Experiment 1 demonstrates a common lesbian speech stereotype, while confirming that this stereotype is intricately tied to perceptions of other social attributes and personas. Experiment 2 demonstrates that this stereotype is not a salient concept in an open answer response, though it may be in responses to male speech. Experiment 3 indicates that, despite the common approach of researchers in language and sexuality, listeners use speech to perceive orientations other than simply straight or gay. Results show that cultural familiarity plays a key role in how we perceive speech and should be studied further. Overall, these different experiments give a fuller picture of speech stereotypes of female sexuality, and demonstrate how different methods can best be applied and combined in future research.

The Myth of the New York City Borough Accent

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A common language ideology in New York City is that New York City English (NYCE) displays reliable geographic variation across the city's five boroughs. In direct contrast, linguists argue that borough accents do not exist, but instead act as a proxy for socioeconomic differences in the NYCE dialect (Labov 1966; Labov et al. 2006: 234). However, no study has explicitly investigated borough differentiation, either in production or perception.

The current study invited listeners to visit an interactive website, www.newyorkcityaccents.com, listen to native NYCE talkers, and assign them to one of NYC's five boroughs. The talkers were six middle-aged, college-educated, white, male New Yorkers from across the five boroughs reading a modified version of the Rainbow Passage. A total of 335 listeners, who self-identified as either native to NYC or from elsewhere, participated in the task. The talkers' samples were quantified for three NYCE variables: non-rhoticity (the ratio of non-rhotic codas to all codas with an underlying coda /r/), BOUGHT height (in normalized Hz), and short-a system (measured as the Euclidean Distance between tense BAD and lax BAT). A combined score for all three features was also devised to investigate feature co-occurrence.

The results confirm that listeners are not able to identify the borough of provenance of NYCE talkers: no talker's correct borough received more than 30% of votes. However, a chi-square goodness of fit test for the votes for each talker verifies that listeners are not guessing, either. We hypothesized that listeners may use some combination of NYCE features to make a borough guess, assigning talkers with lower rates of NYCE features to Manhattan and those with higher rates to the outer boroughs. A mixed-effects logistic regression in R modeled the votes, with talkers' NYCE features and listeners' native status (New Yorkers vs. non-New Yorkers) as fixed effects, and talker as a random effect. Native status was not a significant predictor of votes, suggesting that New York listeners lack any special skills in making borough assignments. Of the NYCE features, only non-rhoticity and the overall NYCE score are significant predictors of votes, with a lower rate of non-rhoticity leading to more Manhattan votes, and a lower overall NYCE score leading to fewer Manhattan votes. The talker sample showed the most variation for non-rhoticity, suggesting this feature plays a crucial role in the lamination of NYCE variation onto borough, a key finding given its continued withdrawal in NYCE (Becker 2014). The results confirm that, in perception, New York City borough accents are not a linguistic reality.

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Degrees of ethnolinguistic infusion: Variation in Hebrew loanword use at American Jewish summer camps

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Recent research on some immigrant and indigenous communities in the process of language shift has found processes of “ethnolinguistic infusion”: leaders encourage the use of loanwords and ritualized code switching among community members who are not proficient in the group’s ancestral language (e.g., Leonard 2011, Avineri 2012, Canagarajah 2013, Ahlers 2017). This paper explores the wide variation possible in situations of ethnolinguistic infusion, focusing on one type of institution: American Jewish summer camps. Data come from observation at 36 camps, 200 interviews, a survey of 103 camp directors, and newsletters sent to parents from 6 camps.

All camps that identify as Jewish use at least some recited Hebrew – in prayers, blessings, or songs – and at least a few Hebrew loanwords. I found 1048 loanwords used at the 36 camps visited, ranging from a few to hundreds at each camp. Loanwords are of two types: (1) Jewish life loanwords (words for ritual and communal life that can also be heard in Jewish schools, synagogues, and homes, e.g., *Shabbat shalom* ‘peaceful Sabbath [greeting],’ *ruach* ‘spiritedness,’ *tefillah* ‘prayer’) and (2) camp life loanwords (words for camp activities, roles, and locations that are generally not heard in other English-speaking Jewish settings, e.g., *chadar ochel* ‘dining hall,’ *chug* ‘elective,’ *rosh edah* ‘unit head’). The use of loanwords pervades camp discourse at many camps, yielding two different (but often overlapping) registers of Hebraized English:

- (1) Jewish life, e.g., “Thank you for a great *parsha* (‘[Torah] portion [of the week]’) discussion. Now I’d like to call up to the *bimah* (‘prayer platform’) all *Torah* readers and everyone with an *aliyah* (‘honor to say blessings’).”
- (2) Camp life, e.g., “Please go back to your *tzrifim* (‘bunks’), get your *bigdei yam* (‘swimsuits’), and then meet at the *brecha* (‘pool’).”

This paper offers analysis of the variation in loanword use at camps of different types, correlating with religiosity and Israel orientation (Zionism). Pluralistic (welcoming Jews of different religiosities) and secular camps use only a few Jewish life words, and Orthodox camps use many. Camps of all religiosities that affiliate with Zionist movements use camp life words, ranging from a few to many. Zionist camps that identify as Reform, Conservative, or Orthodox also use some to many Jewish life words, yielding a register that combines (1) and (2), e.g., “When we finish *Birkat Hamazon* (‘Grace After Meals’), you’re gonna follow your *madrichim* (‘counselors’) to the *teatron* (‘theater’) for *maariv* (‘evening prayer service’).” We also see variation in pronunciation (Ashkenazic vs. Israeli), orthography (Hebrew vs. transliteration), and, especially in parent newsletters, translation practices.

Although Hebrew is the primary language infused into English at American Jewish camps, I also heard other languages in songs, loanwords, and metalinguistic discourse at camps geared toward various Jewish subgroups, including Yiddish, Russian, Spanish, and Ladino (Judeo-Spanish). The findings are discussed in the context of previous research on American Jewish language variation and research on ethnolinguistic infusion and language socialization in other situations of language contact.

Crossing the line: Effect of boundary representation in perceptual dialectology

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We explore the effect of differing representations of state boundaries on perceptions of dialect areas in the U.S. The draw-a-map task in perceptual dialectology has changed little since its modern incarnation in the early 1980s (e.g., Preston 1981). A few studies have examined the effect of differing types of information on maps, e.g., major towns/cities, rivers, (e.g., Montgomery 2007; Lameli, Purschke & Kehrein 2008), and others have altered the scope of the target of perceptions from the U.S. (e.g., Preston 1981) to regions of the U.S. (e.g., Benson 2003; Cramer 2010) to single states (e.g., Bucholtz et al 2007; Evans 2011). No study to date has examined the effect of altering the representation of the borders or outlines of the states. Additionally, we focus on the Midwest and the Upper Midwest as understudied areas in perceptual dialectology in spite of being divided among traditional dialect areas (Carver 1987; Labov, Ash & Boberg 2006) and being the locus of ongoing changes like the *caught/cot* merger, pre-velar /æ/-raising, and the Northern Cities Shift (e.g., Gordon 2001; Ito 2010; Benson, Fox & Balkman 2011). We hypothesize that perceptual dialectology maps with more porous borders will result in more multistate dialect areas drawn by respondents.

We present data from 202 hand-drawn maps of six states in the Midwest and the Upper Midwest (Minnesota, Wisconsin, Michigan, Iowa, Illinois, and Indiana), collected from a relatively homogeneous population of college students at a regional comprehensive university in the Upper Midwest and analyzed using ArcGIS. Respondents were given either a map with bold solid-line borders between the states ($N=131$) or a map with light dashed-line state borders ($N=71$). Of these, 62 (87.3%) solid-line border maps and 122 (93.1%) dashed-line border maps had at least one dialect area drawn on them. The mean dialect areas drawn were similar on both map types: 2.62 for solid-line border maps ($SD=1.90$) and 2.80 for dashed-line border maps ($SD=1.98$). However, the dashed-line maps were more likely to have dialect areas that crossed state borders than the solid-line maps: 64.1% (84) of the dotted-line maps had multistate dialect areas ($M=1.13$, $SD=1.21$) compared to 49.3% (35) of the solid-line maps ($M=.85$, $SD=1.08$) with $p<.05$ on a t-test. These results suggest that the representation of borders in perceptual dialectology studies is worthy of further exploration as we attempt to better understand factors that influence perceptions of dialects and the role such perceptions play in language variation and change.

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Correlating flagging with phonological integration to distinguish LOLIs as borrowings or codeswitches

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Lone other language items have been the focus of multiple variationist studies (Poplack, Sankoff, and Miller, 1988; Sankoff, Poplack and Vanniarajan, 1990; Poplack and Meechan, 1995; Torres Cacoullos and Aaron, 2003a, 2003b; countless others). In each case, researchers work to discern LOLIs' status as either borrowings (morphosyntactically incorporated material) or codeswitches (morphosyntactically unincorporated). It is unanimously agreed upon that LOLIs, in general, are borrowings (Poplack, Sankoff, and Miller, 1988; Sankoff, Poplack and Vanniarajan, 1990; Poplack and Meechan, 1995; Torres Cacoullos and Aaron, 2003a, 2003b; countless others). Phonological integration has been largely removed from the discussion since the work of Poplack and Sankoff (1984) and Poplack, Sankoff, and Miller (1988) who found that phonology is too variable. However, in Bessett (2017), we found a correlation between morphosyntactic and phonological integration of LOLIs. Specifically, it was found that LOLIs that are produced with Spanish phonology are more morphosyntactically similar to Spanish patrimonial nouns and LOLIs that are produced with English phonology are more morphosyntactically similar to English patrimonial nouns. Based on these results, we concluded with the tentative hypothesis that LOLIs that are produced with English phonology behave morphosyntactically more like codeswitches, while LOLIs with Spanish phonology seem to tend to be incorporated also morphosyntactically, and therefore, behave more like borrowings.

In the current study we provide further evidence of this hypothesis by examining the pauses and false starts that are present before LOLIs with Spanish versus English phonology. Given that some psycholinguistic research informs us that pausing can indicate a higher level of cognitive processing (Schilperoord, 2002) and that some research has shown a higher cost in codeswitching (Meuter and Allport, 1999; Thomas and Allport, 2000; Moreno, Federmeier and Kutas, 2002; Navracsics, 2004), it stands to reason that flaggings (pauses and false starts) could be a sign of difficult processing, and as such a sign of codeswitching. In order to explore this notion, nouns from 24 sociolinguistic interviews from 24 Spanish-English bilinguals from Arizona (from Sonoran families) are compared. 756 LOLIs were identified and classified by phonological integration, establishedness and the absence or presence of a pause/false start before the noun was produced.

The results indicate that LOLIs with English phonology are more often preceded with pauses and false starts (38.8%) than LOLIs with Spanish phonology (11.9%). We determine that this finding most likely attests to the fact that LOLIs with English phonology, LOLIs that are unincorporated phonologically, are most likely codeswitches. We also compare the correlation between flagging and phonological integration to the correlation between flagging and establishedness and find that phonological integration explains more of the variation (13.4%) than establishedness (3.9%). This provides even more evidence that phonological integration is a key factor when discerning LOLIs' status as a borrowing or a codeswitch.

While these findings may not hold true in the community in general, for other communities, or for larger data sets, there is enough evidence here to warrant further investigation into how phonology affects the incorporation of LOLIs into a recipient language. Future studies should include phonological integration into their analyses and further explore its correlation with the presence of preceding flaggings.

Variation in Hasidic Yiddish syntax: A corpus study of language change on the internet

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The use of “big data” from social media sites has enabled sociolinguists to investigate patterns of variation at unprecedented scales. However, researchers of minority languages -- who stand the most to gain from increased sample sizes -- have been slow to pursue projects incorporating large online corpora. This paper presents a multivariate analysis of particle verb variation in Yiddish, using a 22-million-word corpus scraped from a popular discussion forum, *Kave Shtiebel* (‘the coffee room’; www.kaveshtiebel.com), whose membership is made up almost exclusively of Hasidic Jewish men living in the New York area.

Particle verbs are combinations of verbs and preposition-like words that function semantically as a single lexical verb (e.g., *throw up*, *work out*). In Yiddish, particles always precede verbs in infinitives (e.g., *arayn-shikn* inward-send ‘to send in’). In non-finite tense phrases, an additional overt tense marker *tsu* ‘to’ is licensed, which can be realized in one of two places: either between the particle and the verb (PtoV, e.g., *arayn-tsu-shikn* inward-to-send ‘to send in’) or before both elements (toPV, e.g., *tsu arayn-shikn*). Note that native speakers of Hasidic Yiddish consider the first variant to be normatively correct; the second is considered non-standard, and may in fact be an innovative feature of American Yiddish.

Non-finite particle verbs were extracted from the *Kave Shtiebel* forum, yielding 28,017 tokens across 956 users. A mixed-effects logistic regression model reveals a strong effect of particle type, with directional particles (e.g., *arayn* ‘inward,’ *arop* ‘downward’) significantly favoring the PtoV order compared to aspectual or idiomatic particles (e.g., *funander* ‘apart’). This finding corroborates previous research on particle verb variation in English, showing that particles and verbs tend to be adjacent (here: toPV) when there is a non-compositional semantic dependency between them (Kroch & Small 1978, Gries 2001). The toPV order is favored by low-productivity particles (those that appear only with a small number of different verbs), by longer verbs (in number of segments), and when there is a previous token of the toPV order in the same post (a persistence effect; Tamminga 2016).

The analysis also finds a significant effect for the age of the writer’s account at the time of posting, and for the age of the forum: Writers increasingly favor the standard PtoV variant the longer their accounts remain open, even as newcomers bring about a forum-wide increase in the rate of the non-standard toPV variant. These quantitative results support ethnographic evidence from offline interviews with ten *Kave Shtiebel* writers, highlighting the role of the internet in spreading norms of language use among Hasidic Jews.

Divergent vs Convergent Patterns of Variation and Change in Montréal and Welland French: The Case of Consequence Markers

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This paper examines variation and change in the use of the vernacular markers of consequence *ça fait que* and *so* and of their standard counterparts *donc* and *alors* in varieties of French spoken in Montréal and in Welland, Ontario, where French is a minority language. The study is based on corpora collected in the 1970s (Sankoff-Cedergren 1971 and Mougeon & Beniak 1975) and 2010s. The 2010s corpora are part of the FRAN corpus (Martineau & Séguin 2016). Given that previous research by Mougeon et al. (2016), based on 1970s corpora had found Welland and Montreal French to share the same sociolinguistic norms, we have the opportunity to check if, roughly four decades later, this pattern of convergence still holds true. Thus, the main goal of our study is to assess the impact of time and speaker social characteristics on variation and to look for patterns of linguistic divergence vs convergence between these two genetically-related varieties of Canadian French. Statistical analysis of the data was carried out with GoldVarb.

The analysis of the effect of time on overall variant frequency reveals sharply divergent patterns of change. In Montreal (*ça fait (que)* rises (55%>75%), *so* remains absent, *alors* decreases sharply (44%>6%) and *donc* increases markedly (1%>19%). In Welland (*ça fait (que)* decreases (45%>32%), *so* rises sharply (2%>30%) and both *alors* and *donc* undergo a moderate decrease (37%>29% and 16%>9%). Analysis of the effects of speaker SES revealed several convergent patterns of social stratification. In both communities (*ça fait (que)* is the preferred variant of speakers from the lower social strata, and *alors* and *donc* are associated with speakers from the higher social echelons. However, analysis of the combined effects of SES, gender and age in Montreal and of SES and age in Welland also reveal intriguing patterns specific to each community. For instance, in Montreal, among the older generations (*ça fait (que)* is disfavored by higher SES females but among males this variant is not socially-stratified and is perceived instead as a covert symbol of masculinity. The pattern is reversed among the younger speakers, i.e. SES has no significant effect among females, who lead the change with overall rates of (*ça fait (que)* nearing 90%, but among males (*ça fait (que)* has become socially-stratified. In Welland, among the older generations, higher SES speakers display almost categorical avoidance of the innovative variant *so*, reflecting the ‘traditional’ stigmatization of borrowings from English in Canadian French. However, among the younger generations, the social constraint on *so* disappears and higher SES speakers make frequent use of this variant. All of the younger speakers are now born in Welland and are either balanced or English dominant bilinguals, suggesting that use of *so* has become emblematic of the bilingual identity of the locally born speakers. The results of our comparative research highlights the emergence of divergent endogenous norms in Montréal and Welland which stand in contrast with the pattern of sociolinguistic convergence documented by earlier research based on corpora from the 1970s.

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The Phonetics and Phonology of New York City English in Film

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This paper examines variation and change in the phonetics and phonology of New York City (NYC) English in two important periods of American film: the 1930s-40s and the 1970s-80s. It is part of a larger project that examines variation and change in the language of North American film and television from the 1930s to the present day. Here, we focus on thirteen actors who grew up in the NYC region: from the earlier period are Groucho Marx in *Duck Soup* (1933), Mae West in *I'm No Angel* (1933), Humphrey Bogart in *Casablanca* (1941), James Cagney in *Yankee Doodle Dandy* (1942), Edward G. Robinson and Barbara Stanwyck in *Double Indemnity* (1944) and Lauren Bacall in *The Big Sleep* (1946); from the later period are Al Pacino in *The Godfather II* (1974), Woody Allen in *Annie Hall* (1977), John Travolta in *Saturday Night Fever* (1977), Robert De Niro and Joe Pesci in *Raging Bull* (1980) and Billy Crystal in *When Harry Met Sally* (1989). Two main research questions are addressed: 1) are the main features of NYC English consistently present in the film speech of NYC-raised actors; and 2) does the frequency of these features shift over the course of the 20th century as the prestige of NYC speech declines?

The analysis focuses on three definitive features of NYC English identified by Labov (1972, 1991): vocalization of /r/ and phonemic distinctions in the low-front (TRAP-BATH) and low-back (LOT-THOUGHT) corners of the vowel space. A total of 7,412 tokens, an average of 570 per subject, were extracted from the film sound tracks and analyzed in Praat. Acoustic, quantitative and statistical analyses were used to establish the frequency of /r/ vocalization and mean F1/F2 values of the low-front and low-back vowels for each subject; *t*-tests were used to assess phonemic contrast.

As might be expected in light of Labov's work, vocalization of /r/ declines from an average of 85% in the earlier period (remaining high even in *Double Indemnity*, set in Los Angeles) to 72% in the later period: it reaches a low of 46% in Billy Crystal's speech, compared to 100% for Groucho Marx. More surprisingly, the vocalic features not only survive, but strengthen. All 13 actors maintain a low-back distinction and the phonetic distance between the vowels gets larger over time in both height and advancement (LOT and THOUGHT get farther apart). In the low-front corner, all but three actors maintain a distinction between lax and tense short-a and two of the exceptions are from the early period; the distance between the vowels doubles between periods in both dimensions. Two levels of prestige appear to be involved: /r/-vocalization follows national norms, whereas phonemic contrasts adhere to local norms, perhaps reflecting the shift of NYC English from the mainstream to the margins of American popular culture. By the 1970s, it is associated in film with working-class characters and particular ethnic groups (especially Jews and Italians), which enhances its covert, local prestige.

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Acquisition of L3 Spanish Vowels by Heritage Speakers of Polish and Ukrainian

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This study provides an acoustic analysis of vowels in narratives produced by heritage speakers (HS) of Polish and Ukrainian residing in the Midwestern US who are beginning and intermediate-level learners of Spanish. Our goal is to examine if the production of their Spanish vowels relies more on their heritage language (HL) phonology, which, like Spanish, avoids unstressed vowel reduction, or if they show evidence of transfer of unstressed vowel reduction from their dominant language, English. In order to shed light on any potential advantage our HS have in their acquisition of Spanish, their data is compared to those of L1 English L2 Spanish learners.

Data from eleven Polish and six Ukrainian HS with beginning or intermediate levels of Spanish proficiency were analyzed. Ten participants were recruited to serve as control groups: five L1 English L2 Spanish speakers (L2 acquisition baseline) and five L1 Spanish L2 English speakers (L1 Spanish baseline). The speakers watched a five-minute silent film and were recorded describing the events they observed. The HS performed the task in Polish or Ukrainian, English, and Spanish, while the control groups only did it in the latter two languages.

A subset of English, Polish, Spanish, and Ukrainian vowels in stressed and unstressed syllables were extracted (per speaker averages to this point: 40 English, 90 Polish, 90 Spanish, 147 Ukrainian) and the first two formants of each token were analyzed in *Praat*. The analysis of all three groups remains in progress, but the preliminary findings indicate less vowel reduction in unstressed syllables in Spanish vowels by the HS in comparison to the L2 Spanish learners. This would suggest that our HS rely on their HL's vowel phonology rather than on that of their dominant language when producing L3 Spanish.

This study fills research gaps in heritage and L3 phonetics/phonology through its focus on the effects of a HL on the acquisition of subsequent sound systems in adulthood. Our early results suggest that language typology, rather than order of acquisition or dominance, is the most crucial factor in L3 phonological acquisition, which is insight that further informs existing theories of L3 acquisition.

**“Toto, I’ve a feeli[ŋ] we’re no[r] in Kansas anymore”:
Phonological variation in real and imaginary worlds**

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A number of recent studies have analyzed sociolinguistic variables in feature films, but these have generally looked at “macro”-level phenomena, such as gender-directed compliments (Fought & Eisenhauer 2016), amount of speech by gender and age (Anderson & Daniels 2016), or ways in which legal language is used (Forchini 2017). We opt instead to look at a more “micro” level, conducting a preliminary study to investigate the extent to which it is worth looking more closely at whether actors’ sociophonetic variation correlates with setting.

There are a number of movies in which the same actors play multiple roles, and others in which part of the movie takes place in a “real-world” setting, part in a fantasy setting. In the case of the 1939 movie *The Wizard of Oz*, both of these are the case: part of the movie is set in Kansas and part in the fantasy world of Oz, and at least six actors play roles in both settings, with five of them portraying different characters in each. We tracked (ing) and (t,d) variation (that is, respectively, variation between [ŋ] and [n] in word-final /ɪŋ/ sequences, and deletion or retention of word-final [t] and [d]) for each of these actors, including (alongside the usual factors such as relative age, sex, preceding and following sounds, and so on) whether each utterance was spoken in Kansas or Oz.

We found that, for both variables, actors were significantly more likely to use the citation forms—that is, [ŋ] for (ing) and a fully realized stop for (t,d)—in the Oz setting than the Kansas setting, and effect size testing show that this is a medium- to large-sized effect for most of the actors. Further, for those actors who have enough lines in the Kansas setting for a full analysis to be made, the factors influencing (ing) and (t,d) show that the same systems were used in each setting, so the differences really are simply frequency. Perhaps most intriguingly, Judy Garland, the one actor who plays the same character in both settings, also exhibits the same behavior (that is, a preference for the citation form in Oz), showing that the differences are an issue of setting, not characterization.

This difference in frequency occurs even though there were no instructions given to the actors in the movie about what accents to use (to the extent that some online commentary about the film remarks on the “Brooklyn accents” of the Kansan characters), and the one actor who clearly chose a marked accent for one character (Bert Lahr as the Cowardly Lion) still shows the same difference in frequency between settings.

Although this study deals with a profoundly artificial linguistic situation (the scripted portrayal of fictional characters by experienced actors), we suggest that these findings nonetheless support previous research indicating a need for sociolinguistic researchers to carefully consider the effect of such often-unreported environmental factors such as the location of data collection when analyzing linguistic behavior, and particularly when comparing the results of different studies.

A certain kind of gay identity: [s+] and contextually mediated variation in gay French and German men

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Studies have shown /s/ variation to be a powerful social cue, indexing gender, social class, and age (Stuart-Smith 2007), as well as sexual orientation or non-normative masculinity (Pharao et al. 2014; Zimman 2017). Based on speech data from nineteen gay and straight French and German bilingual men this paper explores the social meaning of /s/ variation across three task types: an L2 (English) sociolinguistic interview, an L2 reading passage, and an L1 reading passage. Furthermore, I examine shifts in /s/ productions related to topics discussed within the sociolinguistic interview (*i.e.* LGBT+ community involvement, coming out, and demographics).

Results reveal two subgroups of speakers: a group of gay speakers producing /s/ CoG averaging above 7,000Hz ([s+] speakers), and a heterogeneous group of gay and straight speakers with /s/ productions of approximately 5,500-6,700Hz ([s] speakers). Regardless of nationality, [s+] speakers not only exhibit significantly higher CoG values, but differences seen in task type and topic are shown to be greater for [s+] speakers than differences seen for [s] speakers. Furthermore, [s+] speakers produce significantly higher /s/ CoG when discussing their coming out stories and involvement within the LGBT+ community than topics of demographics. Speakers without this as a marked feature show no topic based style shifting.

I argue that these results, specifically those seen in the conversational topic shifts, not only indicate that /s/ is a socially meaningful marker for some gay French and German men, but that these differences are highlighted by a process of ideological stance taking by the [s+] speakers to, at least in part, construct their gay identity. This [s+] variant is only produced by some gay men as an act of constructing a contextually variable and specific kind of gay identity. It is not necessarily the case that those gay speakers without the [s+] variant are not linguistically constructing a gay identity, but rather /s/ is not a feature which is part of that linguistic construction. Conversely, the subtle shifts in conversational topic produced by the [s+] speakers, specifically relate to their own gay identity and reveal an association between the social meaning established through this stance taking and the linguistic construction of this identity.

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Mapping Perceptions of Language Variation in Wisconsin: A View from Marathon County, WI

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Wisconsin English has long been recognized by scholars as being its own dialect of American English (e.g. Remlinger, Salmons & von Schneidmeyer 2009: 179). Moreover, Wisconsinites themselves appear to be well aware of their own distinctive speech (Schuld *et al.* 2017: 26f.). The present study expands on this finding by investigating whether Wisconsinites from one central Wisconsin community perceive any language variation within their own state. It follows the perceptual dialectology paradigm (e.g. Preston 2002) in that it studies how non-linguists view language variation within Wisconsin. Respondents from the state's biggest county, Marathon County, WI, completed Preston's draw-a-map task, which required them to indicate on a blank map of Wisconsin where they believe regional speech zones to exist. The aim of this task is to access the respondents' mental maps of language variation. These maps were then digitalized using ArcGIS to allow systematic comparison. In a further step, demographic characteristics of the respondents, such as age, gender, and educational level, were taken into consideration to see if these have any effect on the spatial perception of Wisconsinites from Marathon County.

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Canadian Raising in the Speech of American-Born NHL Players

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Hockey has long been viewed as a minority sport in the United States, while it is a national symbol of Canada. Although the National Hockey League (NHL) predominantly comprises teams in major American cities, most players are Canadian. Canadian influence means that a Canada-centric identity is tied to the sport, which manifests in the linguistic behavior of players, specifically through the phonological process of Canadian Raising (CR). CR, the raising of the nucleus in the diphthongs /ay, aw/ to /ʌy, ʌw/ before voiceless consonants, has been heavily studied and documented (Chambers 1973; 1979; 2006; 2012). While /ay/ raising does occur in some parts of the United States, /aw/ raising is the most identifiable feature of Canadian English (CE) (Chambers and Hardwick 1986). This paper shows that American hockey players currently use CR as a second-order index (Silverstein 2003) to show membership within the larger hockey community of practice (CofP).

Bray (2015) noted that numerous Canadian players mentioned, in sociolinguistic interviews, the adoption by American players of a pseudo-Canadian accent. The present study tests for CR in the speech of ten American-born NHL players from different regions of the United States with variable exposure to CE elements. While some of these players come from regions where /ay/ raising is attested, there is little to no evidence of /aw/ raising occurring in the United States. This study hypothesizes that American players will have CR in their speech as a second-order index of membership in the hockey CofP. 10 to 15 minutes of players' speech was gathered from interviews with the media, downloaded from YouTube and converted to .wav files, then transcribed into Praat TextGrids (Boersma and Weenink 2017). The audio and TextGrid files were uploaded to the Dartmouth Linguistic Automation website (DARLA) (Reddy and Stanford 2015) for forced alignment and extraction of acoustic vowel data. F1 formant values, associated with vowel height, of the CR vowels /aw, ay/ were compiled at 20% and 35% of vowel duration to test for raising before voiceless consonants. The data returned by DARLA was analyzed by comparing F1 values between unraised and raised /ay/ and /aw/.

Results for Seth Jones, a Texas-born player, indicate statistically significant differences ($p < 0.05$) between pre-voiced and pre-voiceless F1 values in /ay, aw/ at both the 20% and 35% points. Boxplots of Jones' F1 at 20% and 35% points are given in Figure 1 and Figure 2 respectively. The Wilcoxon test was used to establish statistical significance between Jones' unraised and raised variants. Jones' use of CR suggests that he has adopted this element of CE. However, he is not using it to identify as Canadian, but rather as part of a larger hockey identity. Acoustic data from additional players is expected to confirm that these Americans have placed socio-indexical value on CR as a representation of hockey community of practice membership, providing further evidence for the relevance of indexical order on identity formation as it is manifest in spoken language.

Figure 1 CR Vowels at 20% Duration

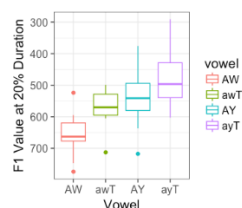
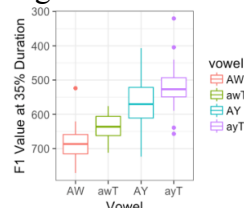


Figure 2 CR Vowels at 35% Duration



I feel like and it feels like: Two paths to the emergence of epistemic markers

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The verb *feel* uniquely overlaps with two distinct classes of verbs that take finite subordinate clauses in present-day English. The experiencer structure *I feel (that/Ø/as if/as though) [CP]* – the "propositional attitude use of *feel*" (Asudeh and Toivonen 2012:325) – fits into the *I think* class of epistemic markers (Thompson 2002:138; Denis 2015:169; see also Thompson and Mulac 1991). The other is an expletive structure, *it feels (as if/as though/like) [CP]*, with unrealized copy-raising (see Rogers 1974, Heycock 1994, Potsdam and Runner 2001, Asudeh 2002, Asudeh and Toivonen 2012, etc.). This construction is related to the phrases *(it) seems like*, *(it) looks like*, and *(it) sounds like*, which are themselves showing signs of grammaticalizing into epistemic markers (López-Couso and Méndez-Naya 2014; see also Kärkkäinen 2003:45). In both *feel* constructions, the complementizer *like* has been catching on in apparent time in Canadian English as with *seem*, *look*, and *sound* (Brook 2011, 2014, 2016). It is reasonable to expect that *I feel like* and *it feels like* are becoming established as epistemic markers (Brook 2011:65). Two related questions arise: why they both remain in the system, and what differentiates them in use.

I employ several large sociolinguistic corpora of spoken Ontario English (Tagliamonte 2003-2006, 2006, 2017-2010, 2014, 2010-13, Tagliamonte and Denis 2014) to examine *I feel like* (N = 245) and *it feels like* (N = 34) before finite subordinate clauses. In spite of the asymmetry in the token numbers, the rates of the two structures are stable in apparent time, and distributional results show no effect of sex, tense, or polarity. Given the small size of the data-set, I conduct a fixed-effects logistic regression in Goldvarb X (Sankoff et al. 2005), yielding a significant effect of level of metaphoricality of the subordinate clause (Brook 2011, 2014). *I feel like* is favoured relative to *it feels like* when the embedded clause is concrete, and disfavoured when it is metaphorical.

I propose that this semantic effect and the stable difference in proportions share an explanation. *I feel like* is a context where the complementizer *like* has overtaken four alternatives: *as if*, *as though*, *that*, and \emptyset (Brook 2011, 2014). In other words, *I feel like* is essentially the same epistemic marker as *I feel* was before, except with an increasingly inevitable *like* complementizer (Brook 2011, 2014). *It feels like* is different. Two of the earlier complementizers were unavailable in this context – **it feels that/Ø* is ungrammatical – so *it feels like* is the successor of only *it feels as if* and *it feels as though*. Both *as if* and *as though* after perception verbs in early Canadian writing prefer metaphorical over concrete subordinate clauses (Brook 2011, 2014); *it feels like* has retained a semantic association predating *like*. I conclude that while *I feel like* is an altered version of an existing (and already grammaticalized) epistemic marker, *it feels like* is still grammaticalizing and maintains a niche in the grammar (Torres Cacoullos and Walker 2009; see also Hopper and Traugott 1993:28) centered on an older semantic preference.

Acoustic evidence for vocalic correlates of plural /s/ deletion in Chilean Spanish

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Several 20th century scholars hypothesized on the basis of impressionistic observations that vowels preceding weakened or deleted plural /s/ in certain dialects of Spanish differed from the final vowels of singular words in duration, quality, and/or breathiness (Navarro Tomás 1966; Honsa 1965; Alonso, Zamora Vicente, and Canellada de Zamora 1950; Alvar 1991; Oroz 1966; Cepeda 1990). Previous studies aimed to verify these acoustic differences experimentally (cf. Resnick and Hammond 1975; Figueroa 2000; Carlson 2012), but these previous studies only examined differences in laboratory speech and found no differences in plural /s/ production as compared to singular production.

To test whether /s/ weakening is correlated with final vowel alternations in natural Chilean Spanish production, I collected sociolinguistic interview data from 60 male and female residents of two Santiago neighborhoods. Using Praat (Boersma and Weenink 2015), I segmented the final vowels of the first 50 singular and 50 plural determiners, nouns, and adjectives beginning after the first 10 minutes of the interview. I then excluded all overtly plural items, and the remaining 2499 singular vowel tokens and 1846 plural vowel tokens were analyzed in Voicesauce (Shue et al. 2011), providing the vowel's duration, corrected formant values, and corrected H1-H2 values.

To examine whether speakers produced their singular and plural vowels with any differences, I ran four generalized linear mixed-effects models from the lme4 package (Bates et al. 2015) in RStudio (RStudio Team 2015), each with a random effect of participant.

Results show that all members of the high SES group use increased breathiness on their plural vowels, and that younger members of the lower SES also use this strategy. I therefore posit that this is a change from above, indexed with the prestige of these high SES speakers, currently being adopted by members of the low SES neighborhood who wish to align themselves with this prestigious cue.

Results also demonstrate that all members of the middle age group (ages 25-41) across genders and SES groups shorten their plural vowels in utterance-medial position, demonstrating the stable variation pattern known as age-grading (Wagner 2012:371). Duration was also used in utterance-final position to signal plurality, but only by young females in the low SES group. These young females are the only speakers to lengthen their utterance-final plural vowels, and I hypothesize that this is a nascent change in progress from below.

Finally, young male speakers in the high SES lower their plural vowels in accordance with the previously formed impressionistic hypotheses. Conversely, older speakers in the low SES *raise* their plural vowels. I posit that younger speakers in the low SES are merging their singular and plural vowels along the F1 dimension, but that vowel lowering in the high SES group remains a salient cue of plural marking for young male speakers.

This study provides the first acoustic evidence for impressionistic hypotheses of the singular~plural contrast in this dialect of Spanish. It is also the first study to utilize sociolinguistic interview data to verify these hypotheses in order to more closely approximate how speakers are producing this contrast in their vernacular speech. These results provide evidence that this contrast is not only signaled via multiple acoustic dimensions, but that each of these dimensions may progress independently from one another.

Boston Dialect Features in the Black/African American Community

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The African American (AA) and Caribbean American (CA) communities of Greater Boston are very underrepresented in sociolinguistics research (Nagy & Irwin 2010:250; Labov et al. 2006; Laferriere 1979). Prior work includes Nagy & Irwin's analysis of rhoticity in 15 AA speakers. We take the next step: acoustic sociophonetic research on Eastern New England (ENE) vowel features of 28 AA and CA speakers. We compare our results to 69 White speakers in a nearby neighborhood, South Boston. US census maps show a large, relatively concentrated population of self-reported Black residents (e.g., Dorchester, Hyde Park, Roxbury) in close proximity to White neighborhoods like South Boston. Research question: Does the Boston-area Black/African-American community participate in the ENE features described in Kurath (1939), Labov et al. (2006), Nagy & Roberts (2004), Dinkin (2005), Johnson (2010), Nagy & Irwin (2010), Stanford, Severance & Baclawski (2014), and others?

Methods: We conducted field recordings (word list/reading passage/free speech) of 28 AA and CA people (16 women, 12 men) raised from early childhood in the area. 9,562 vowel tokens were aligned and extracted with FAVE-Extract (Rosenfelder et al. 2011) and Lobanov-normalized (Kendall & Thomas 2010). Rhoticity was coded auditorily. We used Linear Mixed Effects in Rbrul (Johnson 2009) on age, sex, ethnicity, education, occupation, phonetic environment, with speaker and word as random effects. This AA/CA dataset was compared to recent data from White speakers in South Boston whose speech was recorded and analyzed with identical materials and methods (Stanford et al.). ENE features studied were /r/-lessness, fronted-START and PALM, MARY/MARRY/MERRY distinction, NORTH/FORCE distinction, LOT/THOUGHT merger, nasal split short-a. Among these features, we note that r-lessness may be shared with AAL/AAVE (Rickford 1999). Vowel distinctions/mergers were quantified with Euclidean F1/F2 distance.

Results: For AA/CA speakers, we found clear distinctions in both NORTH/FORCE and MARY/MARRY/MERRY (e.g., Figure 1), and split short-a (nasal/non-nasal), all of which were stable in apparent-time. Speakers did not have fronted-START or fronted-PALM. Surprisingly for this region, LOT/THOUGHT were unmerged (and stable in apparent-time, $p=0.264$ for age). Many AA/CA speakers were largely r-less, but this is receding (-1.2% per year younger, $p=0.0034$, $R^2=0.27$, Figure 1). In these analyses, we did not find statistical differences between AA and CA speakers. Finally, we compared this AA/CA dataset to South Boston White speakers (36 women, 33 men). In the Rbrul results, we find that ethnicity is a key factor: AA/CA speakers had less START- and PALM-fronting, less rlessness, less MARY/MARRY/MERRY distinction, and less LOT/THOUGHT merger than the White speakers.

Conclusion: Black/African-American communities in Boston participate in some traditional regional features (NORTH/FORCE, MARY/MARRY/MERRY, nasal split short-a, some r-lessness) but not others (fronted-START/PALM and LOT/THOUGHT merger). Moreover, they are leveling toward supra-regional forms faster than nearby White neighborhoods. The quantitative results, combined with participant-observation, suggest these Black communities may not be as sociolinguistically insular as nearby enclaves like South Boston, whose strong regional features are often viewed as “quintessential Boston,” even though they only represent one aspect of Boston.

Quantifying the complexity of code-switching for cross-corpus comparison

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Adamou (2016) underlines the need for a quantitative scale of language mixing to test typologies of language contact and hierarchies of language interaction (Myers Scotton 1993, Thomason & Kauffman 1988, Poplack & Sankoff 1988, Muysken 2000). Our aim is to provide the quantitative tools for this task. We use a set of metrics rather than a single measure of complexity to computationally characterize the nature of code-switching (CS) across various dimensions. We present our metrics, which can be applied to any language-tagged corpus, including those with more than two languages represented. We exemplify how these measures can be used to differentiate types of CS across corpora. We use four different corpora of Spanish-English that are known to be multilingual. Killer Crónicas (KC) is a 40K-word novel written entirely in ‘Spanglish’. Yo-yo Boing! (YYB) is a 58K-word collection of poetry and prose that alternates chapters in English, Spanish, and ‘Spanglish’. Spoken corpora include Solorio 7K, a 7K-word transcript of a conversation between Spanish-English bilinguals (Solorio & Liu 2008) and the 500K words of the online SpinTX corpus. We include the French-English transcript of the Canadian film Bon Cop, Bad Cop (BCBC) (13K) to show the language-independence of our methods. We tagged each token in the corpora for language using automatic methods (Authors). From these tags, we calculate the ratio of each language using an M-Index (Barnett et al. 2000). The probability of CS, computed as an I-index, characterizes the integration of languages in the corpus (Authors). Finally, we use formulas for Burstiness and Memory that apply to complex systems of all types, to measure the intermittency vs. regularity of CS (Goh & Barabási 2008). Results are in Table 1.

Table 1: *Corpora Metrics*

Corpus	M-index	I-index	Burstiness	Memory	LE	SE
Yo-Yo Boing!	0.95	0.03	0.37	-0.12	0.98	5.27
Killer Crónicas	0.99	0.23	0.02	-0.03	0.99	3.36
Bon Cop, Bad Cop	0.87	0.10	0.44	-0.06	0.95	4.00
SpinTX	0.07	0.02	0.48	-0.11	0.22	5.58
Solorio7k	0.60	0.06	0.32	-0.11	0.81	4.85

The M-index (\approx LE) shows YYB and KC to be nearly perfectly balanced between Spanish and English. The I-Index of KC differentiates it from YYB in that languages in KC are highly mixed whereas YYB alternates long stretches of each. The measures for Burstiness (\approx SE) indicate that the frequent CS in KC is also highly regular; in all other corpora considered, it is sporadic, or marked. KC, then, is characterized by unmarked, alternational CS. With its high Burstiness value coupled with low I-Index, SpinTX has a matrix language and sporadic insertions from another. Solorio 7K, like BCBC, is more bilingual, but the languages are not highly mixed and CS occurs in bursts. The advantages to our metrics are multiple: they can quantify the nature of CS in a language-independent way, can be fit as continuous variables in statistical models, and can be applied to any grammatical component annotated for language (morpheme, conversational turns, etc.). With them, we can test whether these quantifiable dimensions of mixing predict other contact phenomena (borrowing and calquing) and outcomes (fused or mixed languages) or correlate with social variables.

Evidence for the Proteus Effect in a non-laboratory setting

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Overview: Previous research on the proteus effect has shown that the attributes of an avatar, or character in a virtual world, have an affect on the behavior of the person controlling it. Until this point however, the proteus effect has been demonstrated exclusively in controlled laboratory settings (Yee & Bailenson, 2007; Peña, Hancock, & Merola, 2009). The current project furthers research on the proteus effect by showing supporting evidence from a novel, non-laboratory context.

Context & Data Set: The data for this paper come from a corpus of online chats recorded from the game Dota 2, a popular multiplayer online battle arena (MOBA) game released in 2013. In this game two teams of five players compete against each other, attempting to destroy the other team's base. At the beginning of the match each player selects one of 113 'hero' characters to control. Each hero character has a unique

set of traits and is designed to play one of many roles in the game. For this project 13,539 games of Dota 2 were analyzed, providing a corpus of 172,013 individually sent messages.

Hypothesis: The hypothesis for this paper is that players who control heroes from different roles will use language differently. Support for this hypothesis will be demonstrated by contrasting the language use of the support role with that of the pusher role. The support role is designed to heal and otherwise aid the friendly players, pusher heroes are designed to put pressure on the enemy structures.

Findings: On a lexical level, supports use the positively-oriented words gg 'good game', wp 'well played', and lol 'laughing out loud', more than pusher heroes (16%, 13%, 12% more, respectively), and pushers use the negatively-oriented words ez 'easy' and report less often than pushers (24% and 25% less respectively). These words have no practical in-game function, nor do they pertain to the roles themselves, but rather serve a social function. Thus the existence of these differences demands a social explanation, which the proteus effect provides. In addition, these findings suggest that players recreate social categories from the non-virtual world and transpose them onto categories in the virtual world. It is proposed that players in Dota 2 project perceived attributes from non-virtual categories, such as health professionals onto the support role due to shared function, such as healing and providing aid.

Conclusions and future work: This paper provides evidence from linguistic behavior that supports the claim that attributes of a virtual character can have effects on the behavior of the people controlling them. Critically, this evidence comes from a naturally occurring context, rather than a laboratory setting, which strengthens the validity of the proteus effect as a naturally occurring phenomenon. Furthermore, it is hypothesized that these effects are caused by players actively recreating and transposing social categories from the non-virtual world onto the categories in the virtual world. This is an ongoing project. As the corpus grows, the findings will become more robust and additional correlations can be highlighted.

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***Madame le/la ministre* : Variation and Change in Gendered Terms of Address in the French House of Representatives**

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Institutions have long recognized the potential of language change for facilitating social change, and many have formulated language use guidelines aiming to reduce various kinds of inequality among their members. Although there has been some investigation for English (Ehrlich & King 1992, Cameron 1995, a.o.), the role of explicit prescription in triggering changes ‘from above’ (Labov 1966) is still not completely understood (see Pauwels 1999).

This paper presents the first empirical study of a change that has been the focus of much language planning: the replacement of grammatically masculine terms (eg. *Madame le ministre* ‘Madam Minister’) to refer to female politicians by feminine terms (*Madame la ministre*) in transcripts of the *Assemblée Nationale* (French House of Representatives). Until the mid 1990s, female politicians were categorically referred to with masculine expressions (1). In 1986, the Fabius (left-wing) government instituted a directive to replace masculine forms with feminine forms (1’); however, this prescription appears to have had no effect: all 59 occurrences of *Madame le/la N* in the 1986 Spring term are masculine.

(1)	a.	le ministre	a’.	la ministre	‘minister’
	b.	le député	b’.	la députée	‘deputee’
	c.	le président	c’.	la présidente	‘president’
	d.	le garde des sceaux	d’.	la garde des sceaux	‘justice minister’
	e.	le secrétaire d’état	e’.	la secrétaire d’état	‘deputy minister’
	f.	le rapporteur	f’.	la rapporteure	‘rapporteur’

By comparison, in the most recent transcripts (2012), all but 6 of the 2591 occurrences of *Madame le/la N* are feminine. So why did the change instituted by Fabius occur a decade after the policy was made?

To investigate this question, we extracted the occurrences of *Madame le/la N* from 50 sessions of the Fall and Spring terms from 1996-1999 (N=3947). Since morphological research has shown that a noun’s grammatical gender depends on both the phonological properties of its ending and its meaning (Corbett 1991), we coded for the identity of the function noun. We performed mixed effects logistic regression in R (with debate as random effect and noun and time as fixed effects).

Both function noun and time were significant ($p < 0.001$), with nouns compatible with strongly feminine cueing endings (Culbertson et al. 2017 (eg. *présidente*)) favoring feminine gender and nouns with strongly masculine cueing endings (eg. *rapporteur*) resisting the change at every time point. Our data also show an abrupt increase from Spring 1997-Fall 1997, which coincides with the passage from a right-wing to left-wing government (Jospin). This suggests that changing left-wing ideologies play a role in the rise of feminine grammatical gender, which is supported by a follow-up study of variable *président(e)* in 1996 (N=342) in which feminine is significantly conditioned by political leaning (left-wing: 32% feminine, non-left wing: 7%). We also find a large increase in Winter 1998, which coincides with Jospin’s re-issuing of Fabius’ directive. Thus, the policy that was ineffective in 1986 speeds up change in the new ideological context. Our results thus suggest that language policies can facilitate substantive language change, but only when they build on dominant speaker ideologies.

Advancing routinization vs. productivity of the Spanish subjunctive

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In this paper we skirt the enduring but fruitless discussion on the essential meaning of the subjunctive by relying on distribution patterns in natural production data. Following Poplack and colleagues (e.g., Poplack 1992, Poplack et al. 2013), we use frequency measures and regression analysis within a variable context for choice of subjunctive vs. indicative: complement clauses of main verbs that occur at least once with a subjunctive complement clause, as in (1). Here semantic import and productivity of the Spanish subjunctive is assessed in diachronic perspective through comparison of pre-modern (13th -16th century) texts (N = 1,032) with a present-day speech corpus (N = 1,153).

- (1a) **no puedo creer** que embalde *pintasse*_[SUBJ] Dios unos gestos más perfectos
 ‘I **cannot believe** that God *painted*_[SUBJ] in vain some countenances more perfect’
 (15th c., *Celestina*, 4.160)
- (1b) **no creo** que *hay*_[IND] otro soberano en el cielo
 ‘I **do not believe** that **there is**_[IND] another god in heaven’
 (15th c., *Celestina*, 1.95)

Evidence for the use of the subjunctive as a concomitant of subordination irrespective of semantic contribution (Bybee, Perkins, and Pagliuca 1994: 214) already in the pre-modern texts is that it is favored in the absence of the complementizer *que* ‘that’ and with the second of a series of subordinate clauses, both contexts in which the subordinate status of the clause is less apparent. Productivity as measured by type frequency of main-clause verbs remains mostly unchanged in comparison with the modern data, though one expanding niche is a broad class of expressions anchored in *ser* ‘to be’, e.g., *es bueno* ‘it’s good’ (increasing from 14%, 83/606, to 23%, 101/430 of subjunctive occurrences). A second indication of productivity is the favoring of the subjunctive by non-frequent main verbs (those with fewer than ten occurrences).

Nevertheless, *lexical routinization* is revealed in the tendency toward a bimodal distribution of main-clause verbs: most either hardly ever take the subjunctive or do so categorically (of 23 frequent verbs, nine have a subjunctive rate under 20% and another nine over 90%). Furthermore, verbs that invariably take the subjunctive account for most of the main verb types (75%, 103/137) and more than half the subjunctive tokens (61%, 287/606). *Structural routinization* takes the form of the subjunctive being favored with main-clause negation and interrogatives. While these contexts are semantically harmonic with the (presumed) irrealis meaning of the subjunctive, the effects may be interpreted as structural because they are stronger in the modern data. In sum, as in other Romance languages (Poplack et al. 2017) choice of the Spanish subjunctive in complement clauses is largely driven—even in pre-modern texts and despite pockets of productivity—by the lexical identity of the main-clause verb, abetted by local structural elements.

Change takes time, ¿cachái?

Testing the role of frequency as a driver of change in Chilean Spanish

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Chilean Spanish is characterised by the co-existence of two second-person singular (2sg) familiar paradigms, the prestigious *tuteo* (illustrated in (1)) and the historically stigmatised *voseo* (2). This system has undergone rapid change in the last 40 years, as *tuteo* forms have given way to virtually categorical *voseo*. Particularly noticeable is the coinciding rise of the highly frequent fossilised *voseo* construction, *cachái* ‘you know’ (3). This paper sets out to test whether *cachái*, as a highly frequent form, may have played a role in this change, specifically through entrenchment and priming (as demonstrated for *key* in English, De Smet 2016, *LVC*).

- (1) *No po si tú tienes razón.*
No you-TÚ have-TÚ the reason (i.e. you are right).
- (2) *O sea vos no tenís ningún concierto*
In other words, you-VOS don’t have-VOS any concert
- (3) *O sea igual llega de todo, ¿cachái?*
Well, in any case, all sorts [of people] arrive, you-VOS catch-VOS (i.e. know)?

The analyses presented here are based on two sub-corpora of spontaneous conversational Spanish from 1970s and 2010s Santiago. A real-time comparison of young educated speakers across these two corpora reveals that *voseo* was virtually absent in the recorded speech of the 1970s (just 2/700 2sg verbs), but is overwhelmingly preferred today, at over 90% (683/751) – it is frequent for young and old speakers, and across the social spectrum.

Cachái is unquestionably the most common form in the 2010s data, representing one in every five (355/1990) 2sg forms and a third (355/1125) of *voseo* verbs. It is clearly a new form: in the 1970s data, *cachái* does not occur, and in the 2010s data, it is particularly frequent among young speakers. Given its high frequency, invariability, and recent appearance coinciding with the rise of *voseo*, *cachái* is a prime candidate for testing the role of frequency in language change.

The *entrenchment* hypothesis predicts that speakers who use more *cachái* are more likely to use *voseo* forms overall. To test this, speakers were categorized into ‘high’ (N=9) and ‘low’ (N=8) *cachái* users (>/<30% of their 2sg tokens). The ‘high’ group was found to use proportionally more *voseo* verb forms (independently of *cachái* itself) than ‘low’ *cachái* users ($\chi^2, p < 0.01$), supporting the notion that this high frequency form may have advanced the change.

According to the *priming* hypothesis, *voseo* forms are more likely to occur when *cachái* has recently been used (within the previous 5 clauses). First, strong priming effects are observed in these data. The overall rate of *voseo* of 80% (770/964) rises to 92% (245/265) in the context of a preceding *voseo* (setting aside tokens of *cachái* as prime and as target), and significantly, but perhaps unexpectedly, plummets to just 28% following a preceding *tuteo* (17/60). Following a preceding *cachái* the rate of *voseo* is no higher than following any other *voseo* form, at 86% (36/42), suggesting that *cachái* does not prime more strongly than other *voseo* forms.

Thus, overall frequency (entrenchment) appears to have played a role, while frequency at the local level (priming) does not. One explanation for this may be that the change from *tuteo* to *voseo* is too far advanced to capture *cachái* exhibiting its own, strong priming effect; conversely, the strong *tuteo* priming effect may be slowing down the change by retaining older forms.

German echoes in American English: How new-dialect formation triggered the Northern Cities Shift

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I use historical demographic data and studies on the acquisition of English by L1 speakers of German to argue that the Northern Cities Vowel Shift (NCS, Fasold 1969, Boberg 2000, Labov et al. 2005) is a result of two factors: (1) an increase in the population of German immigrants in Upstate New York, and (2) the properties of L2 German-accented English. (1) follows from Trudgill's New-dialect Formation Theory (2004) and (2) from Flege's Speech Learning Model (1990, 1992).

According to Trudgill's New-Dialect Formation (NDF) theory, NDF takes place in three phases, aligning with the first three generations after the settlement of a community. Each phase is characterized by a specific process: first, levelling of linguistic features by adults; then, levelling of linguistic features that were not present in sufficient quantities to be noticed by children; and finally, establishment of communalect norms. Flege's Speech Learning Model (SLM) (1990, 1992) predicts that without years of experience, learners will have trouble acquiring phonemes for which their L1 has no counterpart. Bohn and Flege found that /æ/ lacked a counterpart for L1 German speakers, which led them to completely merge /æ/ with /ɛ/ (1990, 1992). Combining Trudgill's NDF theory with Flege's SLM, a scenario of the evolution of the NCS emerges: as the Erie Canal's construction attracted hundreds of thousands of German immigrants the population of the cities in upstate New York ballooned, their original settlers became less relevant, and German-accented English heavily influenced the forming dialect.

An overview of the literature on German and English phonetics and phonology (Reed 1947, Wiese 2000, Labov et al. 2005, Johnson 2007) confirms that the nineteenth-century dialects of southwestern Germany, where most immigrants came from, lacked the low front vowel phoneme /æ/ which would have made it incompatible with the phonology of nineteenth-century American English. To assess the effect of German immigration on the NCS, the historical population of various cities was analyzed. I selected cities based on the NCS features they exhibit: the NCS core consistently exhibits seven features—/æ/= /æh/, /o/≠ /oh/, $F2(\Lambda) < F2(o)$, $F1(\æ) < 700$ Hz, $F2(o) < 1450$ Hz, $F2(e) - F2(o) > 375$ Hz, $F1(e) > F1(\æ)$, and $F2(e) < F2(\æ)$ —and several cities outside of the core variably exhibit some features. The results indicate that between 1790 and 1890, the cities that experienced dramatic growth (>200% increase) during the formative period after their settlement exhibit the most NCS features. Cities which received significant numbers (>10% increase) exhibit some NCS features, while cities that remained relatively constant in population (<10% increase) over this time period acquired no NCS features.

NDF and SLM together correctly predict the first steps of the NCS, and this study's findings support the hypothesis that this combined theory can accurately model the developments in the NCS. These results imply that this theory can also model the spread of the NCS from its core in Upstate New York; further investigation is needed to explain the effects of migration on the developments of the NCS in the Midwest.

Probing Non-Conscious Perceptions of Spanish and English in Miami: The Implicit Association Test in Sociolinguistic Context

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In this paper we contribute to the growing literature on sociolinguistic cognition (Labov 2014) by presenting the results of three experiments using the Implicit Association Test (IAT) (Greenwald, McGhee, and Schwartz 1998). These experiments were designed to explore non-conscious linguistic perceptions in multilingual sociocultural contexts, such as the one documented in Miami, Florida, where sociolinguists have found evidence of the loss of Spanish across generations (Zurer-Pearson and McGee 1993; Portes and Schauffler 1996; Lynch 2000; López-Morales 2003, *inter alia*), despite the ostensible ubiquity and cache of the language in the region. The sociolinguistic situation of Spanish/English bilingualism in Miami provides an ideal site for linguists to probe non-conscious representations of language(s) in multilingual settings as they play out in the context of automatic biases (Garrett 2010).

In the experiments presented here, we used IAT methods to measure the time it takes participants to associate structural elements from a given language with nonlinguistic sociocognitive attributes (e.g. ‘good’ or ‘bad’). Each experiment made use of novel linguistic stimuli. In Experiment #1 (E1), participants were presented with semantically-neutral lexical terms in English and Spanish (e.g. English – *table*; Spanish – *mesa*) in orthographic form. In Experiment #2 (E2), participants listened to recordings of U.S. city names produced with Spanish and English phonology (e.g., English – [ʃi. 'ka.go:]; Spanish – [tʃi. 'ka.ɣo]). In Experiment #3 (E3), participants were presented with nonce words constructed using phonotactic constraints of Spanish and English (e.g., Spanish - *culda, solgues*; English - *snickly, throcker*). In E1 and E2, the good/bad attribute was represented using words in English. In E3, the good/bad attribute was represented with standard picture images representing the general affect categories of “good” (e.g., happy baby) and “bad” (e.g. angry dog). In total, 91 participants were recruited for the experiments (N= 46 (E1); 30 (E2); 15 (E3)), and all participants also responded to a language attitude survey, the results of which allowed us to explore the relationship between non-conscious perceptions (experimental results) and language attitudes (survey responses).

All experiments were programmed using Inquisit by Millisecond, which calculates automatic bias scores (“D-scores”) based on accuracy and reaction time. These scores indicate associations between the language and the good/bad attribute along a four-point scale from -2 to 2, with more positive scores representing stronger associations of *English* and *good*. Results from E1, E2, and E3 show similar perceptual patterns: participants overwhelmingly demonstrated automatic, non-conscious preferences for English, though the strength of these preferences varies significantly according to ethnicity (Latino v non-Latino) and first language learned (Spanish, English, simultaneous bilingual). While the results from E3 (nonce words) are less strong than in E1 and E2, the perceptual patterns are the same. To answer the question about how non-conscious perceptions correlate with explicit language attitudes, we ran linear regression models and correlation analyses in R between reported D-scores and the Likert scale ratings from the attitude survey. While most analyses show that explicit attitudes do not correlate with implicit biases, we do find some examples of positive correlations.

The influence of self-perceived power and gender on sibilant categorization

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Contemporary literature suggests that listeners use auditory and visual gender cues during /s/-/ʃ/ categorization. For example, listeners presented with a naturalistic vowel spliced with a synthesized sibilant ambiguous between /s/ and /ʃ/ indicate hearing /s/ more often for male-sounding speakers (Strand and Johnson 1996). Similarly, when speakers' vowels are equalized in F0 and apparent vocal tract length, variables associated with speaker physiology, listeners indicate hearing /s/ more when a word is paired with an image of a male face (Munson 2011).

This study builds upon previous research on sibilant categorization by investigating whether *self-perceived power*, “an individual’s relative capacity to modify others’ states by providing or withholding resources or administering punishments” (Keltner et al. 2003), can serve as a mediating factor in gender and linguistic perception. Social processing seems to show some sensitivity to one’s degree of self-perceived power. High-power individuals tend to attend less to new information in conflict with their expectation of another according to the other’s social category. (Goodwin et al. 2000). I report whether the congruity of presented gender cues and the primed degree of self-perceived power shapes the outcome of /s/-/ʃ/ categorization.

45 undergraduates were primed for high or low self-perceived power with a technique first applied in Galinsky et al. 2003. In this task, participants randomly assigned to the high-power group wrote about a time when they had power over others, while participants assigned to the low-power group wrote about an occasion when others held power over them. Participants then performed a forced-choice identification task. During each trial, participants first saw the image of a male or female face, selected from the Chicago Face Database (Ma 2015). After 500ms, participants heard one of a continuum of words ranging from “sigh” to “shy”. Each word was spliced together from a synthesized nine-step continuum ranging from [ʃ] to [s] and an [aɪ] produced by a male or female speaker. Vowels were manipulated in PRAAT (Boersma 2002) to have equal F0 (135Hz) and apparent vocal tract length (16.2cm). Participants were randomly assigned to one of two conditions: whether the gender of the pictured individual always (gender congruous) or never (gender incongruous) matched that of the producer of the vowel. After hearing the word, participants indicated whether they heard “sigh” or “shy”, responding to each pairing of voice and sibilant continuum step 12 times.

A set of mixed logistic regressions revealed differing influences on the outcome of sibilant categorization. Participants across both power-priming groups were significantly more likely to respond “sigh” for a male voice ($p < 0.001$). For low-power participants, the pairing of auditory and visual cues also significantly influenced the likelihood to respond “sigh” ($p < 0.001$): a given voice receives fewer “sigh” responses when paired with a female face and more when paired with a male face. High-power listeners’ responses, however, did not vary significantly according to the pairing of cues ($p = 0.30$). As hypothesized, high-power participants’ responses show less sensitivity to cue congruity than do those of low-power participants.

Subjunctive/Indicative alternation in Ceará Portuguese: Variation, categorical or semi-categorical areas of the subjunctive

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Several sociolinguistic studies (Barbosa, 2013; Carvalho, 2007; Oliveira, 2007; Pimpão, 2012; Poplack, 1992; Rocha, 1997) have investigated the alternation of the indicative and subjunctive forms in the context of completive sentences in Brazilian Portuguese. This study starts from the observation that, in the spoken variety of Brazilian Portuguese, considering completive sentences introduced by the particle “que”, the indicative (1) may occur in contexts for which the subjunctive (2) is traditionally expected, the subjunctive (3) alternates with the indicative (4) or the use of the indicative (5) is categorical.

- (1) Eu **QUERO** que você **FICA** mais em casa.
‘I want you to stay at home’.
- (2) Meu pai **QUER** que eu **ESTUDE**.
‘My father wants me to study’.
- (3) Eu **ACREDITO** que **SEJA** caro.
‘I believe it's expensive’.
- (4) Eu **ACREDITO** que **É** caro.
‘I believe it's expensive’.
- (5) Eu **SEI** que você não **COME** carne.
‘I know you do not eat meat’.

This study analyzed, based on the theory of Language Variation and Linguistic Change (Labov, 1972; 2001; 2003), data from Fortaleza and Cariri – a microregion South of the state, which presents clear specific linguistic traits. From Cariri, we analyzed 429 data from the indicative and the subjunctive, extracted from sociolinguistic interviews from the project “Estudos da língua oral do Ceará”, with 60 speakers in three age ranges (15-25; 26-49; above 50 years old), both sexes and five levels of education (no education; 1 to 4; 5 to 8; 9 to 11; more than 11 years). From Fortaleza, we analyzed 263 data extracted from 24 interviews from NORPOFOR (ARAÚJO, 2011), with speakers of two levels of education (0-4; 9-11), both sexes and same age range as those from Cariri. The questions of this study are two: (I) What is the tendency of use of the indicative/subjunctive, in terms of frequency, in the two samples? (II) What is the motivation of linguistic and social factors? The data were run through the program GoldVarb X (Sankoff, Tagliamonte & Smith, 2005), with linguistic factors such as type of verb in the matrix sentence, verb tense in the matrix/embedded sentence, negative polarity and classic social factors such as sex, age and level of education.

We have found systematic variation in percentile terms in both samples: 27.7% and 72.3% and 22.4% and 77.6%. Results show that sentences with volitional verbs are of categorical use of the subjunctive form; cognitive verbs correspond to the variation area and factual verbs disfavor the subjunctive form. Past verb tenses favor the subjunctive form over non-past verb tenses in the embedded sentence. The phenomenon is not sensitive to the level of education of the speaker. Overall data analysis revealed areas of categorical use (Labov, 2003) and subjunctive mode variables in Ceará's speech, following the trend of other Northeastern speech community that showed more conservative than other regions of the country (Southeast, for example), given that the results, in terms of trend, are similar to the grammatical normative tradition.

He said, she said: Exploring the role of gender and gendered attitudes in true and false memories

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In the false memory paradigm (Roediger & McDermott 1995), listeners are played lists of words semantically linked by a single, unsaid word (the “lure”). Listeners are then asked to recall what they heard, and often include the lure: a false memory. Recent work using this paradigm has found differences in the number of true and false memories depending on speaker dialect and listener differences (Walker et al. 2015), in ways that suggest that listeners might be encoding speech differently depending on the prestige of the dialect (Sumner & Kataoka 2013). Given evidence from a variety of sources that the same materials are evaluated differently coming from men or women (Moss-Racusin et al. 2012), we sought to investigate whether rates of true and false recall were affected by the gender of the speaker, and the gender and gendered attitudes of the listener.

112 native speakers of U.S. English (27 M, 85 F) listened to 18 lists of 15 words that were found to elicit high false recall rates (Roediger et al. 1999). Three male and three female speakers read the lists, and which speaker read which list was counterbalanced across participants. Once they had completed the list recall task, participants answered questions adapted from the Ambivalent Sexism Inventory (Glick & Fiske 1996), as well as questions to ascertain their scores for the Big Five personality types (Goldberg 1990), and their mood. They also rated the six speakers in terms of masculinity, femininity, education and authority.

Participants on average correctly recalled 6.57 (44%) of the 15 words they heard, and recalled the lure at a rate of 44%. We modeled true and false recall rates separately, using linear and binomial mixed effects models respectively. For true recall, the best fit model includes a significant interaction between speaker gender and listener gender: female listeners did better than male listeners, and both groups had higher recall for female vs. male speakers, but female listeners significantly more so. There is also an interaction between speaker gender and gendered voice rating: the more feminine a male speaker was rated as sounding, the fewer words the listener correctly recalled from him. For false memory, there was a significant main effect of speaker gender: male speakers were more likely to elicit the lure. This effect holds if we include true recall rates in the model, which negatively predict false recalls.

These results suggest that speaker gender affects both true and false recall rates, and listeners arguably do better with female voices: true recall is higher, and false memories are lower. This may be related to other findings that women tend to be more intelligible than men (Bradlow et al. 1996). However, the interactions in the true recall model, and the fact that higher false recall rates for male speakers hold independently of true recall rates, all suggest that other factors may also be at play: it appears that we may perform better listening to speakers of the same gender, and to listeners whose voices are more prototypically gendered.

Depronominalization and Gender Ideology

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Background. Depronominalizations, or pronouns used with articles (1)-(2), are not widely studied in English, but are quite common. In this paper, I examine the relationship between depronominalization and metapragmatic commentary challenging presuppositions about gender. I follow Simpson (1997) in her theoretical treatment of metapragmatic commentary on pronouns as a site of competing ideologies (Luong 1990).

In a Twitter corpus study of gendered pronouns referring to a transgender referent I found that pronouns and names don't always match in gender, and that the use of gendered pronouns and attitudes towards the referent are related (Conrod 2017). I also found instances of metapragmatic commentary addressing pronoun usage:

- (1) Please stop referring to Chelsea Manning as "him," **she is a "her"**
- (2) Bradley Manning **is a HE**, regardless of whether he likes it or not. Conrod (2017)

Cowper and Hall analyze depronominalizations as nouns meaning *male* or *female* (2009). There are two competing socioculturally active definitions of these words: gender identity, and biological sex. In this study, I show the relationship between depronominalization and sociopragmatic negotiation between these two competing frameworks of gender.

Methods. To examine attested uses of depronominalization in context, I pulled 10,000 tweets from the Twitter API containing the string "a she" and 9,899 tweets containing "a he." After eliminating duplicates, leaving 5,836 tweets with "a he" and 4,041 with "a she," I randomly sampled 300 tweets from each group. I tagged these for: 1) depronominalization; 2) comments on the gender of some referent; and 3) comments on pronoun use. I also tagged for copula constructions, the most common syntactic context for depronominalizations.

Results. Most tweets that included depronominalizations commented on gender and/or on others' pronoun use, and were overwhelmingly used in copular constructions:

	Depronominalized	Gender comment	Pronoun comment	Copula
<i>A he</i>	94	80	60	77
<i>A she</i>	140	119	95	108

Many depronominalizations referred to transgender referents, including metapragmatic comments on what pronouns to use (3).

irritating to hear news people calling brad /csea manning a she, NOPE, **it's a he**

Due to the copula construction, many tweets like (3) include different pronouns referring to the same referent (bolded).

Discussion. These data support Cowper and Hall's (2009) proposal that depronominalization demotes a feminine pronoun to a noun meaning "*female*." The context of these uses suggests that depronominalizations are deployed to assert or challenge the gender of a referent. The sociopragmatic meaning of pronouns is at stake: whether *she* means *someone who identifies as a woman* or *someone who is assigned the female sex* has consequences for the transgender community. (3) is one such assertion of the latter ideology intended to combat the former. The ambiguity that arises from competition between ideologies about gender necessitates an explicit negotiation of meaning, which is given form in depronominalization.

Tracking Phonetic Accommodation: An analysis of short-term speech adjustments during interactions between native and nonnative speakers

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This paper contributes to the variationist understanding of the process of phonetic accommodation through the analysis of syllable-final consonant reduction in the speech of native speakers of New York Dominican Spanish (NYDS) during their interactions with second language learners of Spanish. The data analyzed in this study come from conversations between eight informants—native speakers of NYDS—and four different interlocutors, one of whom is a fellow native speaker of NYDS and three who are second-language learners of Spanish with varying degrees of Spanish-language competence (Intermediate, Advanced, and Superior).

Building upon the success of other investigations of accommodation in the short-term, this paper contributes to the development of the accommodation theoretical model by not only analyzing natural speech in dyadic conversations with different interlocutors, but also by tracking the accommodative process as it happens in real time and taking measurements of final-consonant reduction versus retention rates at three different time points during each interaction.

Accommodation scholars have expanded upon the theoretical model, demonstrating the agentive role that speakers play during interactions. NYDS is chosen as a medium through which the links between linguistic actions and social outcomes can be explored, owing to its covertly-prestigious status. The dynamics between the c/overt prestige associated with the Dominican variety of Spanish in New York make for the use of its marked phonetic features to be emblematic, and endows these speech features with a certain weight for its speakers to deploy as they navigate social interactions.

Analyses demonstrate a statistically significant relationship between the target language competence level of one's interlocutor and the rate of final consonant reduction or retention. NYDS-speaking informants are observed converging with Intermediate- and Superior-level second-language Spanish speaking interlocutors. This short-term accommodation

to a normative variety of Spanish across these two interlocutor competence groups is dual purpose—it both mitigates possible comprehension difficulties that could arise during interactions with Intermediate-level learners, and demonstrates the NYDS informants' ability to match the Superior-level learners' high competence in a standard, academic variety of Spanish. Comparable accommodation was not discovered however during interactions with Advanced-level learner interlocutors of Spanish.

The principal conclusion drawn from this study is that short-term accommodation seems to meet several communicative and social goals during interactions with the NYDS, Intermediate, and Superior interlocutors. However, short-term accommodation is not found as NYDS informants navigate their social identity and relationship to their interlocutor during interactions with Advanced-level learners—the overt prestige that is sacrificed by reducing final consonants only gains them social standing as they index their Dominican-ness with mid-proficient speakers of Spanish as a second language.

Residual Zeros: Unanalyzed Zero Forms in Accounts of Copula Deletion

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Labov's (1969) analysis of zero copula in African American Vernacular English (AAVE) is a cornerstone of the development of quantitative sociolinguistics and this feature remains among the discipline's most frequently studied phenomena today. Labov's analysis posited that zero forms represent copula deletion, essentially a phonological process, and that deletion is simply an extension of the contraction process that occurs in all English varieties. Subsequent research has modified the original envelope of variation that Labov used in reaching these conclusions, has developed alternative ways of calculating deletion, and has argued that deletion is a key to AAVE's origins. Researchers have also noted that the variable context used in most studies excludes a significant portion of the typical copula corpus. What they have failed to note, though, is that this envelope of variation excludes a significant number of zero forms as well. Although the Principle of Accountability requires a full accounting of every form under investigation, most work on copula deletion excludes large numbers of zero itself. In fact, our research suggests that more than one in five zero forms is excluded in a typical copula analysis. Thus, traditional studies account for only about 80% of the forms under investigation in a given corpus; the other 20% – the residual zeros – remain unanalyzed.

This study examines those residual zeros with data from a 2,000,000 word corpus of rural AAVE to determine the distribution of zero copula forms, if constraints on residual and non-residual zeros are similar, and if not, what the source of residual zero forms might be. Our analysis reveals that the forms most often used in the envelope of variation for the analysis of zero copula only comprise a little over a third of the total corpus of finite, present tense, copula forms (excluding *ain't* and tokens before sibilants). Eliminating negatives and questions reduces the corpus by more than 15%, while another 14% of the copula tokens are excluded because they are first person forms. Invariant *be*, which is also typically excluded, comprises 3.95% of the total, while emphatic and clause final tokens comprise an additional 2.76%. Finally, excluding forms following *it*, *that*, and *what* eliminates more than a quarter of the corpus. Omitting some of the contexts most often categorized as “don't count” forms (Blake, 1997) not only substantially reduces the corpus of overt copula forms, but it also eliminates a significant number zero forms. A distributional analysis of zero copula forms in our AAVE corpus shows that while zero accounts for less than two-thirds (60.55%) of the forms in contexts that are typically included in the envelope of variation, it also comprises 42.86% of the question tokens and 13.87% of the negatives. Further, our analysis shows that the distributional constraints for zero copula in negatives and questions parallels those found in our data for finite, present tense forms, suggesting they reflect a similar source and should not be excluded from studies of zero copula in AAVE.

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Youz guyz gotta addz the Z'z at the endz'a yaz woidz, seez!:
Metapragmatic commentary on English in New York City

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How can we theorize the existence of a language or speech variety from the perspective of speakers? Sociolinguists have long challenged the grammar-centric idea that a language or speech variety can be identified as having discrete boundaries, and argued for viewing language as a socially constructed rather than a linguistic object. In *Sociolinguistic Patterns*, Labov asserted that the “speech community is not defined by any marked agreement in the use of language elements, so much as by participation in a set of shared norms; these norms may be observed in overt types of evaluative behavior and by the uniformity of abstract patterns of variation which are invariant with respect to particular levels of usage” (120-1; cf. Agha 2008, Heller 2007; Jørgensen et al. 2011; Makoni and Pennycook, 2010). This perspective suggests a way for variationists to expand their understanding of dialect and language variety going forward. The challenge to the field inherent in questioning the empirical existence of languages and speech varieties prompts us to look beyond positivist methods and goals to a broader understanding of how speakers themselves understand variation. Agha (2008) has argued that moving towards an interpersonal perspective can help us observe how the social-indexical values of speech-forms are reevaluated through the reflexive activities of speakers (255).

The present paper explores metapragmatic comments about English in New York City by self-identified New Yorkers. It draws on sociolinguistic interview data from an ongoing corpus-building project (Tortora et al. in progress) as well as performance data from 15 YouTube videos and commentary posted by YouTube viewers about how New Yorkers sound. It examines which linguistic patterns are most commonly identified with local speech, and how individuals position their own practices in relationship to it (cf. Rhymes and Leone 2014). Additionally, the paper discerns how individuals imagine and construct local speech patterns through their metalinguistic and metapragmatic comments – those that reference how certain words are pronounced, what kinds of things New Yorkers say, and what kind of individuals speak in this way. Using quantitative and qualitative discourse analytic methods, these elements will be analyzed in tandem.

The analysis will show how the features and social identities associated with “talking like a New Yorker” are experienced and negotiated by individuals and how they come to be socially recognized as indexical of a certain set of speaker attributes (Agha 2005; cf. Bolander 2016). This kind of analysis can greatly complement and expand traditional variationist work by illustrating how people experience and make sense of linguistic variation (Johnstone 2016, Leone-Pizzighella and Rymes 2017; Rhymes 2014) and by providing additional insight into social dynamics that can lead to language change.

#YouAreWhatYouTweet: Identity & vowel devoicing in French-language tweets

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Phrase-final vowel devoicing (PFVD), e.g. *oui_hhh*, is a phenomenon in which utterance-final vowels lose voicing and produce intense fricative-like whistles (Fónagy, 1989). Previous work has determined its structural, prosodic, phonological and lexical preferences among French speakers (intonation phrase-final, statement-final, low tone, open syllable, high vowel, high frequency word) (Fagyal & Moisset, 1999; Smith, 2003; 2006), and revealed its variable perceptual value among L1 & L2 listeners (L1 marker of politeness or negative affect; L2 marker of politeness) (Author, 2016). PFVD is often anecdotally associated with females (Fagyal & Moisset, 1999; Smith, 2006), however, recent work has reported statistically similar rates of production across both genders (Author, 2014). The goal of this study is to examine the use of PFVD in microblogging messages on the social media site, Twitter, in order to compare the pragmatic values of the tweets it occurs in to the previously proposed perceptual values, all while observing the interaction of user gender, location in phrase and hostword lexical frequency on its realization.

A collection of French-language tweets was mined in R using *twitterR* (Gentry, 2015) for a period of 12 months. Tweets were sampled from within a 300-mile radius of 48.86° lat, 2.35° long, the GPS coordinates of Paris. A snowball sampling-style method was used to pull tweets containing lexical items ending in *-h*, *-sh*, *-ch*, and *-che*, four common written representations of the PFVD phenomenon, e.g. *oui* ‘yes’ → *ouih*, *ouish*, *ouich*, *ouiche*. Mining order began with the item *oui+endings* and proceeded until all words found with devoiced vowels during the mining process had been independently queried with each of the four endings, e.g. a search for *ouich* revealed tweets that contained *beaucouph*, *pourch*, and *mercish*, each of which was then searched with every ending. The items were then checked against a dictionary list of French words ending *-h*, *-sh*, *-ch* and *-che*, and established words were removed. The resulting corpus was a collection of 512 PFVD tokens sent by 324 tweeters. Tweets were coded for tweeter gender (male, female—determined by tweeter’s French adjectival agreement), location of PFVD in phrase (intonation phrase-final, non-intonation phrase-final—determined by syntactic units), pragmatic category of tweet (politeness/negative affect, other) and lexical frequency of hostword containing PFVD (continuous) (Wortschatz, 2017).

93% of words containing PFVD occurred in tweets expressing politeness or negative affect. Binary measures of pragmatic category were submitted to a factorial logistic regression with gender and location in phrase as independent variables: no main effects/interactions were found, suggesting similar recognition of the pragmatic categories across groups/positions. Continuous measures of lexical frequency were submitted to a factorial ANOVA with gender and location in phrase as independent variables. No main effects were found, however, a significant interaction emerged whereby females were more likely than males to apply PFVD to high frequency words in non-intonation phrase-final position ($p < 0.01$). This supports previous studies suggesting a gender difference in PFVD usage by demonstrating it to be positional rather than quantitative. It also suggests the lexicalization of PFVD in high frequency items (Smith, 2006). The present work has implications for language change because it illustrates a subtle broadening in the distribution of a sociophonetic variable, led by female users.

Examining the Relegation of Language Contact in Language Change: The “Naturalness” of Contact-Induced Variation in Catalanian Spanish

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Traditional frameworks of historical and comparative linguistics explored language change as unambiguously internally motivated, acknowledging the role of language contact only for those instances in which a structural account was unavailable (Bynon 1977; Lass 1997). Though recent frameworks emphasize the role of external alongside internal factors in language change (Hickey 2012; Labov 2001; Tagliamonte 2012, etc.), variationist sociolinguistics treatments of contact-induced change (Levey et al. 2013; Mougeon et al. 2005; Poplack & Levey 2010; Poplack et al. 2012) remain remarkably cautionary. Their proposals of criteria required to prove contact-induced change continue the tradition of questioning if not completely disavowing contact-induced change whenever an endogenous or “natural” account is available.

We argue against such approaches that invoke the effective weighing of endogenous vs. contact evidence to determine which provides the stronger or even sole account of change, and champion a framework (cf. Romaine 1995) that treats endogenous and contact motivations as equally probable of facilitating linguistic innovation. This case study of sociophonetic data concerns the voicing of intervocalic alveolar voiceless fricatives (e.g. *los años* [lo.sá.ɲos] > [lo.zá.ɲos] “the years”) in the Spanish of Catalan bilinguals in Catalonia, Spain, a well-attested feature deemed “natural” and “unremarkable” (Hualde & Prieto 2014) in monolingual Spanish.

Over 5,000 tokens of Spanish intervocalic /s/ were elicited from 48 Catalan-Spanish Barcelonan bilinguals (stratified by language dominance, age, and gender) and a control group of 6 monolingual Madrid speakers through sociolinguistic interviews and phrase-list readings. Moreover, 822 Catalan intervocalic fricatives were collected via a phrase-list reading from the bilinguals to permit cross-linguistic comparisons. Data were submitted to gradient acoustic analysis using Praat and subsequently modeled in R using mixed-effects linear regression in order to confirm sensitivity to the aforementioned social factors in addition to specific linguistic factors (word position, prosodic stress, language) and style, permitting an assessment of the interplay between structural and contact influences.

Main effects of age ($p=.0002$), gender ($p=.02$), language dominance ($p=.005$), and style ($p<.0001$) are consistent with a change in progress in apparent time favoring greater voicing led by Catalan-dominant young females in casual speech, with several speakers voicing as strongly in Spanish as in Catalan, a language with phonemic voiced /z/. Spanish voicing is constrained by stress (favoring voicing over unstressed sequences, $p<.0001$) for monolinguals and bilinguals alike, consistent with prior accounts of /s/-voicing as endogenous lenition in Spanish (Hualde & Prieto 2014; Schmidt & Willis 2012; Torreira & Ernestus 2012). A significant interaction between language dominance and word position ($\alpha=.0167$ for post-hoc comparisons) reveals that only Catalan-dominant bilinguals produce a near-categorical absence of voicing in word-initial contexts (e.g. *la sábana* “the sheet”), the site of phonemic voicing contrast in Catalan.

These findings are argued to evidence a confluence of internal and contact influences, which we deem sufficient to constitute full-fledged contact-induced change. We propose that the criteria for classifying contact-induced change need not presume endogenous and contact motivations to exist in a hierarchy with endogenous forces as an a priori default. By realigning the focus of contact-induced change with the reality of both endogeneity and contact as mechanisms underpinning innovation (Croft 2000), we suggest that language change in multilingual communities is equally as “natural” as that of monolingual communities.

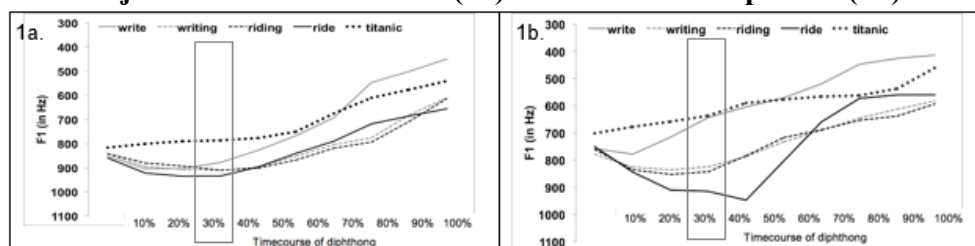
Individual Variation, Community Coherence: Patterned Variation in an Incipient /ay/-Raising Dialect

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While the origin of Canadian Raising—wherein /ay/ and /aw/ surface as [ʌy]/[ʌw] before voiceless consonants—is thought to be phonetic, it has been notoriously difficult to document an incipient, phonetic raising variety of English. In such a dialect, the diphthongs would be expected to raise only before segments that are voiceless on the surface. In most documented dialects, however, including American varieties in which only /ay/-raising occurs, a phonological pattern obtains: the diphthong raises before segments that are underlyingly voiceless, regardless of surface voicing, such that /ay/ raises to [ʌy] before both the surface-voiceless [t] in *write* and the surface-voiced t-flap in *writing*. Fruehwald (2016:404) contends that the period of purely phonetic conditioning for /ay/-raising is either too brief to be identified or nonexistent. Recent work that we have undertaken, though, has documented incipient phonetic raising in and around the area of Fort Wayne (FW) in northeastern Indiana. Our data come from 27 participants (16 female, 11 male; 19-78 yrs old) who hail from FW and were recorded producing a wordlist. Diphthongs in target stimuli were annotated in Praat (Boersma & Weenink 2016). Duration and time-normalized F1 measures were taken with FormantPro (Xu 2015). Strikingly, despite the expected inter-speaker variation, speakers fall into four broad patterns. These range from no raising at all to phonological raising, with two types of incipient, phonetic raising in between.

Six talkers have the phonological pattern of raising described for other varieties of English, wherein /ay/ raises before surface-voiceless sounds as in *write* and before underlyingly voiceless/surface-voiced sounds like the t-flap in *writing*. We call this **Pattern 3**. Nine talkers have **Pattern 2**, the previously elusive phonetic raising pattern: they produce a raised /ay/ before surface-voiceless triggers as in *write* and *titanic* but—crucially—not before t-flaps (i.e. *writing* is pronounced without raising). Eight talkers have **Pattern 1**, of key interest because—to our knowledge—it has never been documented before. In Pattern 1, ay-raising occurs only in diphthongs immediately before a primary stress, in words like *titánic* and *citátion*. Finally, four talkers have no raising (**Pattern 0**). Sample plots of time-normalized F1 trajectories from Pattern 1 and Pattern 2 talkers are in (1a) and (1b) respectively. We focus on the 30% mark in the vowel, firmly within the vocalic part of the diphthong but somewhat removed from co-articulatory effects. Following Labov *et al.* (2006) and Rankinen (2014), a difference of >60 Hz in mean F1 is considered a general diagnostic for raising. This paper thus documents for the first time the phonetic stages that can be the precursors to the phonological pattern of ay-raising. We suggest that other researchers have failed to document the phonetic stages because relevant words like *titánic* and *citátion* are rare or not elicited and because, as Fruehwald has conjectured, the period of purely phonetic conditioning for /ay/-raising is very brief.

(1) /ay/ formant trajectories for a Pattern 1 (1a) and a Pattern 2 speaker (1b).



VO vs. OV: What conditions word order variation in Media Lengua?

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Spoken in Highland Ecuador, Media Lengua is a mixed language, consisting of mainly Quichua morphosyntax but with over 90% of its lexical roots relexified from Spanish (Muysken 1981). While the two languages that created Media Lengua (Quichua, a head-final language with mainly OV constituent order, and Spanish, a head-initial language with mostly VO word order) have both been described as allowing word order variation (e.g. Cole 1982; Muntendam 2013), the extent of such variation in naturalistic Media Lengua speech or the conditioning of this variation have rarely been studied. This paper reports results from a corpus of naturalistic Media Lengua speech produced by 10 participants from two different communities in Northern Ecuador, one of which is generally regarded to have shifted more to Spanish while the second one is described as more Quichua conservative (Gómez Rendón 2008).

Approximately one-fourth (26%, 86/328) of all verb-object complexes in the corpus employ the more Spanish-like VO word order. This finding is in line with previous research on Media Lengua, which reports similar distributions (Gómez Rendón 2008; Muysken 1997). The present paper, however, further tests a set of hypotheses in order to assess the role of language contact and language-internal pragmatic considerations in word order variation. To evaluate language contact, tokens were coded for the presence vs. absence of Quichua accusative morphology and for the use of a relexified (Spanish) vs. unrelexified (Quichua) verb root. Pragmatic considerations are evaluated by weighing factors involving characteristics of the object—animacy and discourse repetition of the referent—and the verb, in particular, its lexical class.

In a logistic regression, both object animacy and discourse repetition of the object referent significantly increased the likelihood of VO structures. Both of these factors can be regarded as instantiations of topicality and have previously been argued to condition word order variation (Downing 1995; Givón 1983). Thus, the more topical/discourse-centered a referent, the more likely it is to occur post-verbally.

Though word order varied by individuals, it was not significantly different in the two communities, contrary to predictions targeting contact with Spanish. Surprisingly, Quichua accusative morphology nearly categorically marked all objects regardless of their position with respect to the verb and almost all verbs were relexified with Spanish lexical roots. This suggests that contact with Spanish may not be the primary reason for the inclusion of VO structures, as suggested in other work (e.g. Gómez Rendón 2008). Moreover, it was found that specific verbs tended to (dis)favor VO constructions regardless of the lexical class to which they belonged. This calls into question the suitability of semantic verb classes to study variations in linear order in Media Lengua. All in all, the results thus indicate that VO word order occurs similarly across participants' communities under specific discourse-functional conditions related to topicality, in line with cross-linguistic tendencies.

- (1) *camoti-ta* *pela-ju-n*
 sweet.potato-acc peel-prog-3rd
 ‘She is peeling the sweet potato.’

- (2) *aplasta-ju-n* *camoti-ta*
 squash-prog-3rd sweet.potato-acc
 ‘She is squashing the sweet potato.’

Habitual behaviour:

Teasing apart the variable

contexts of the English past habitual

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Despite robust variation, the past habitual, as in (1), has received only minor attention in the variationist literature. This may be due to the opaque nature of this variable, which raises distinct challenges. Each form is polysemous and habituality itself is not well defined. Comrie (1976)—the definitive work on aspect—provides a bipartite definition: a situation that occurs iteratively over an extended time (1a,b), or a situation that can be protracted over time (1c). Morphological ‘habituals’ can express one or both meanings, but the literature does not provide a unified semantic definition that could be operationalized for circumscribing an envelope of variation.

- (1) a. In the olden days, they *hewed* them.
 b. In the morning, the school *would* be cold.
 c. The old post office *used to* be practically where the present post office is.

The result is a diversity of approaches. McLarty et al. (2014) consider all variants together. Van Herk and Hazen (2011) set aside the highly frequent preterit forms. Tagliamonte & Lawrence (2000) take a variation-centered and structure-neutral approach, categorizing tokens according to which variants could be used: those that allow all three, only *used to* and the preterit, only *used to* and *would*, or the preterit only. Each study presents a different interpretation of variation—change in progress, regional variegation, stable variation. Without a replicable and reliable definition of the variation, these possibilities cannot be assessed.

We incorporate more recent semantic analyses (e.g., Binnick 2005) in an attempt to objectively define the multiple variable contexts and not rely on the pattern of variation or collapse across variable contexts. We argue that situation type (event vs. state) and predicate type within states (stage-level vs. individual-level) partition three distinct variable contexts: (iterative) events (1a), (iterative) stage-level states (1b) and (protracted) individual-level states (1c).

We base our argument on two corpora of Canadian English, enabling us to validate our model across datasets and apply a comparative lens. For each context, the preterit represents the majority form. However, other forms vary by context: events exhibit more dispersion than stage-level states (with *used to* and *would* competing more robustly with the preterit). For individual-level states, *used to* accounts for <10% and *would* is absent. Regional comparison suggests a possible difference, one favours *used to* and the other favours *would*. We interpret the overarching parallelism across datasets as support for our model, while suggesting that distributional differences in minority variants may signal regional demarcations.

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Categoricity and graduality: Progress in the analysis of /ʃ/ in Spanish

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Previous sociolinguistic research of /ʃ/ has focused the description of variable pronunciation of this segment in Panama (Cedergren 1973:66-79), Spain (Moya Corral & García Wiederman 1995) and Mexico (Serrano 2002:49-69) with a focus on the process of lenition as giving rise to more fricative-like productions. Cedergren reports that lenited variants are favored word-medially (e.g. *ancho*) and when preceded by a vowel (e.g. *mucho*). In terms of social factors, women, younger speakers, and middle class Panamanians speakers favored lenited variants, a pattern of change in progress. In Moya Corral and García Wiederman, men, younger speakers and working class Spaniards from Granada favored lenited variants. For Sonoran immigrants in Mexico City, Serrano found that factors such as preceding segment (after rhotics, e.g. *marcha*) and unstressed syllables favored lenition. Concerning social factors, women favored more fricative-like realizations in comparison to men, while men tended to produce lenited semi-occlusive variants. The present investigation contributes to further our knowledge on variation involving /ʃ/ by comparing an analysis of the dependent variable conceived as discrete categories (variants) versus an analysis based on a continuous dependent variable by performing acoustic measurements of duration adapted from Mitani et al (2006). While the common practice has been to analyze data impressionistically in apparent time, this investigation examines data acoustically and in real time.

Thirty-six speakers from the *Diachronic Study of the Speech of Caracas (Estudio diacrónico de Caracas)* were selected for the analysis. The speakers are evenly divided according to sex, socioeconomic level and age. The factors analyzed were: proceeding and following phonetic context, stress, frequency, priming sex, socioeconomic level, age and time period (1987 vs. 2004-2010). Statistical analysis of the data was performed by applying conditional tree, random forest and linear mixed-effects models, treating the dependent variable both as discrete and as continuous according to the duration measurements. These measurements were obtained by marking the onset and offset of frication borders visible by taking into account the U-shaped intensity curve in the spectrogram corresponding with a non-periodic section in the waveform.

In contrast to previous formulations in the literature, lenition does not provide the most descriptive account of the innovative variants of /ʃ/, as so-called lenited variants tend to be longer in duration than affricate productions. The average duration of /ʃ/ was 71.5 ms, with the central 50% of data clustering around 50-85 ms. The methodology used to define the dependent variable, based on acoustic measurements, contributes to the understanding that /ʃ/ has a continuum of variants. A linear regression of duration measurements in Rbrul (Johnson 2009) suggests that the longer, more fricative-like variants are produced most often among the youngest generation of this speech community. The implication of this finding is that traditional, sometimes arbitrarily-defined discrete categories do not always capture the nuances of socio-phonological variation. Conceptualization of the dependent variable as continuous reflects more accurately how we store variation cognitively and the effects of its use.

2SG Reference and (Relative) Gender in the Spanish of Salvadorans in Boston

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Speaker second-person singular (2SG) address form choice can be influenced by both static and transient social roles. It is governed by social structures (e.g. social class, age), power relationships between speakers (Brown & Gilman 1960), speaker attitudes, and negotiation of identity/relationships (Kashima & Kashima 1998; Mühlhäusler & Harré 1990). While Spanish is often characterized as having a traditional T-V system, Salvadoran speakers employ a tri-partite system, regularly using all three address forms. *Voseo* is used in the most familiar relationships, *ustedeo* in more formal/respectful contexts or to acknowledge low social position, and *tuteo* by speakers actively seeking upward social mobility (Kany 1945; Lipski 2000; Micheau 1991, *inter alia*). In addition, social factors (e.g. age, gender, level of education), impact 2SG choice (Quintanilla-Águilar 2009, Michnowicz & Place 2010). Conversely, U.S. Salvadoran speakers use *voseo* less than their in-country counterparts, in alignment with the *tuteante* Spanish-speaking majority, and because *tuteo* is often perceived as socially and economically advantageous (Hernández 2002, Sorenson 2010, Raymond 2012, Woods & Rivera-Mills 2012).

I analyze the 2SG choices of 10 Salvadorans living in the Greater Boston Area, with the aforementioned social constraints as independent variables. Participants were split evenly by gender and ranged in age from 19 to 55. Mixed effects logistic regression in R reveals that the sole significant factor in predicting 2SG choice is speaker gender. First, while *tuteo* forms were most frequent overall, male speakers chose *voseo* (20.5%) significantly more often than females (5%), independent of interlocutor. Second, when faced with the choice of *tuteo/voseo* versus *ustedeo*, the gender of the interlocutor relative to the speaker was a significant constraint. Specifically, in female-to-male exchanges, females show a statistically significant preference (95.7%) for *ustedeo*, compared to male-to-female exchanges (4.2%).

My findings have several implications. First, they support Salvadoran 2SG choice as tri-partite. Second, high rates of *tuteo* among this group constitute a divergence from trends observed in El Salvador (Michnowicz & Place 2010), but corroborate previous findings on U.S. Salvadoran 2SG use (Raymond 2012; Sorenson 2011; Woods & Rivera-Mills 2012). It also signals alignment with and accommodation towards proximal Spanish-speaking communities in Boston (cf. Giles 2008), and reaffirms the prestige associated with the *tuteo* variant. Third, while *voseo* is a standard form within El Salvador, in Spanish-speaking communities in the U.S. it is used by the minority. Therefore, lower rates of use by females in this study supports the claim that women tend towards more standard variants (Trudgill 1972). Finally, the striking disparity in 2SG choice according to speaker (relative) gender validates the claim that 2SG form choice is highly imbued with social meaning, and therefore constrained by both speaker and interlocutor. In sum, these findings reinforce the claim that the socio-pragmatic meaning of 2SG forms is constructed at the local level (cf. Raymond 2016), and justify investigation into the indexical significance that they embody in different communities.

Word Frequency in a Contact-Induced Change

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Exemplar Theory is typically held to predict that more frequently-used words will lead sound change in progress, as new exemplars of the frequent words rapidly replace old exemplars in the speaker's memory (e.g., Pierrehumbert 2002). However, empirical studies of sound change in progress have often failed to find such effects consistently (Dinkin 2008, Hay et al. 2015). Hay et al. argue that the direction of frequency effects depends on the mechanism of change.

Nycz (2013) does demonstrate a convincing lead for frequent words, finding that Canadians in New York City acquiring the *cot-caught* distinction do so to a greater extent in more frequent words. This is not a community sound change, but a dialect-contact-induced change in individual speakers adapting to the dialect of a new community. Since dialect contact involves a change in the phonetic distribution of exemplars a speaker hears, and the speaker adjusting their pronunciation to match, contact-induced change seems a likely venue to look for the predicted favoring effect of frequency in community-wide sound change as well.

Dodsworth & Benton (2017) argue that the abandonment of the Southern Vowel Shift (SVS) in Raleigh, N.C. is a contact-induced change, driven the migration of non-Southerners into Raleigh. Therefore we test the frequency hypothesis on the vowels of the Southern Shift in Raleigh; Exemplar Theory would purportedly predict that more frequent words lead the change in progress and thus show less Southern shifting.

We use vowel data drawn from force-aligned conversational interviews with 184 Raleigh natives. For each phoneme involved in the SVS (/i/, /ɪ/, /e/, /ɛ/, /æ/, /aɪ/) we ran a separate mixed-effects linear regression, with Z2-Z1 at nucleus as the dependent variable for the front vowels and Z2-Z1 at glide as the dependent variable for /aɪ/. Lexical frequency was measured both corpus-internally and with metrics derived from SUBTLEX (Brysbaert and New 2009).

For /ɪ/, /e/, /ɛ/, and /æ/, more frequently-used words are *more* likely to exhibit SVS pronunciation for speakers born after 1950; for older speakers, who pre-date the change away from SVS, there are no consistent frequency effects. This is contrary to the usual prediction of the exemplar literature, since we find frequent words trailing in a community-wide change; it also diverges from the prediction of Dinkin (2008) that frequent words will exhibit more centralized vowels, since the Southern Shift is not uniformly in the direction of centralization.

We propose an explanation of this unexpected result in terms of the social circumstances of the change. The SVS is stigmatized (Preston 2015), and its loss is therefore a change toward the standard. Infrequent words are more unfamiliar and therefore speakers are likely to attempt to produce them more carefully. However, language ideology biases the speaker towards identifying “careful” pronunciation with “standard” pronunciation, and therefore towards retreat from the stigmatized SVS in “carefully” articulated words. This model can also account for other results that have found frequent words favoring standard variants in variables such as (ing) (Forrest 2017) and TD-deletion (Bybee 2000).

Dominican Perceptions of /s/ in the Diaspora

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The present study analyses the perceptions of some variants of /s/ ([s̺] [s̟] [Ø]) and /θ/ in the speech of Dominicans who have immigrated to Madrid, Spain. In doing so, the goal of this study is to examine how migration, minority status, and dialect contact promote changes in perceptions of linguistic variables, and the social meanings attributed to them. A major difference in the varieties of Spanish as spoken in Santo Domingo and Madrid can be seen in the production and perception of the variable /s/. Arguably, the most salient phonological feature of Castilian Spanish is its unique employment of two phonological categories /s/ and /θ/ (*distinción*), where other varieties only have one category, /s/ (*seseo*). However, it also differs from most varieties of Spanish, including Dominican Spanish, in its apical realization of /s/ as [s̺] (Hualde, 2005). On the other hand, as one of the most radical /s/ reducing Spanish varieties (Alba, 2004), Dominican Spanish /s/ production provides a marked contrast to the non-/s/ reducing Madrid variety. At the perceptual level, these differences in /s/ production are accompanied by different indexical associations (Eckert, 2008) in the two varieties. As an example of this, for Dominicans, high frequencies of syllable final overt [s] production can be seen as “undominican” (Bullock, Toribio, & Amengual, 2014), or as a sign of male effeminacy (Zentella, 2003), whereas in Madrid both segmental reduction, and the lack of distinction between /s/ and /θ/ can be seen as “incorrect” speech (Yraola, 2014).

Perceptions of [s̺] [s̟] [Ø] and [θ] were analyzed using a matched-guise task (Lambert et al., 1960) that included both male and female guises for /s/ reduction, /θ/ use, and laminal vs apical articulation. The test items were created using the voices of 2 Dominicans (1 male and 1 female), who had lived in Madrid for more than five years and whose accents displayed features from both varieties. These items were mixed with filler items produced by speakers from Spain and the Dominican Republic, as well as from multiple American countries (Mexico, Colombia, Peru, U.S.A). Using a 5-point *Likert* scale, Dominican participants in Santo Domingo and Madrid, as well as Spanish participants from Madrid were then asked to rate the fillers as well as the test items for social factors including: nationality, race, education, sexuality, and socioeconomic status.

Results suggest that social factors such as socioeconomic status, education, and gender are determinant in linguistic perceptions both in diasporic and non-diasporic contexts. With regard to accent recognition, Dominicans in Santo Domingo label more items (test and filler) as Dominican than those in Madrid, and are less likely to label items as “Spaniard” when [θ] or [s̺] are not present. On the topic of race, both groups associate speakers they perceived as Spanish with the label “blanco”, while associating voices they had identified as Dominican to “indio” or “moreno”. However, this distinction becomes even stronger in the diaspora group, suggesting that migration is likely to promote changes in indexical fields or modify the strength of its social associations.

Social networks and intra-speaker variance for changes in progress

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Some models of language change highlight **high intra-speaker** variance at early stages of change (e.g., Ohala 1989, Trudgill 1998). The social patterning of linguistic changes also implies high intra-speaker variance during early stages, e.g., lower middle class speakers' high rates of innovative variants as well as style-driven variation (Labov 2001, Eckert 2011). However, Fruehwald (2017) finds surprisingly **consistent intra-speaker variance** across year of birth for sound changes in Philadelphia. This paper tests the hypothesis that intra-speaker variance is a function of *social network* in addition to age, given that social network affects linguistic exposure.

In the Southern U.S. city of Raleigh, the Southern Vowel Shift (SVS) has been reversing since migration from the North accelerated around 1960. In a 184-speaker sample from the conversational Raleigh corpus, all of the front vowels shift significantly away from their traditional Southern positions across apparent time. Yet the same vowels show **consistent or decreasing intra-speaker variance** across year of birth, even during the first decades of dialect contact. Social network studies show that embeddedness in a local community corresponds to maintenance of local linguistic variants (Milroy 1980). In Raleigh, embeddedness in a bipartite school attendance network predicts degree of retreat from the SVS (Dodsworth & Benton 2017). We now ask, first, whether network embeddedness predicts intra-speaker variance for the SVS variables. Second, because the retreat from the SVS is a contact-induced change, we ask whether network embeddedness also predicts intra-speaker variance for a non-contact change which is probably not unique to Raleigh: increasing affrication of word-initial /dr/ ('drive' sounds like 'jrive'), represented as variance in peak center of gravity (COG).

Speakers were divided into 3 generations according to Raleigh's migration and school history. Network embeddedness was calculated using the *cohesive blocking* algorithm (Moody & White 2003), a hierarchical clustering procedure. For the (contact-induced) vowel changes, linear regression models find that network interacts with social class in predicting intra-speaker variance. During the first generation of dialect contact (1950-1967), blue collar speakers with low embeddedness (who grew up in the community's affluent suburban periphery) show high F2 variance; these speakers were exposed to Northern vocalic variants growing up, but Southern variants are symbolic capital for them as working-class adults. Speakers with network positions closer to the community's urban core are less variable.

The non-contact variable, peak COG for /dr/, rises significantly during the first contact generation among males, and network embeddedness shows a marginally more positive effect for males than females. Intra-speaker variance in peak COG also rises during this generation, and it is significantly lower for males than females in the following generation. However, it is **never** affected by network embeddedness, and it only rises during the first contact generation.

The results for the contact-induced changes show that *only speakers with certain network positions are highly variable*, even though all speakers participate in change. However, the /dr/ results suggest (as in Fruehwald 2017) that non-contact changes progress with relatively uniform intra-speaker variance.

“I’m Catholic and she’s public”: Education and the Northern Cities Shift in St. Louis

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While level of education is known to influence patterns of variation, recent work has shown that the *type* of education matters as well. Labov et al. (2016) show that students attending elite schools in Philadelphia are more advanced in their shift from the complex short-a system to a nasal one than students in local parochial schools. This paper looks at a similar example in apparent time: St. Louisans who graduated from Catholic and public high schools between 1953 and 1970. I show that speakers in ‘Catholic’ and ‘Public’ peer groups differ in the degree of their adoption of Northern Cities Shift features.

The data are drawn from 11 sociolinguistic interviews with white women born between 1935 and 1952. The interviews are roughly balanced for both type of secondary education (6 ‘Catholic’, 5 ‘Public’) and level of education attained (7 college-educated, 4 not). Throughout the interviews, type of secondary education was found to be a highly salient identity marker for older St. Louisans: subjects recalled the divide between ‘Catholics’ and ‘Publics’ as often tense and important in determining their peer groups. Transcribed data were force-aligned using the FAVE program (Rosenfelder et al. 2014). F1/F2 were extracted at 10% intervals using a Praat script, and normalized to z-scores. I focus on the first three NCS stages: raised TRAP, fronted LOT, and lowered THOUGHT (Gordon 2001). Values reported are for 40% of the THOUGHT and LOT vowels, and 30% of the TRAP vowel. The TRAP tokens were coded for pre-nasal or other environment.

Linear mixed effects models tested for potential fixed effects of age, education type, and level of education attained, and random effects of speaker and lexical item on TRAP, THOUGHT, and LOT production. Interactions with environment were additionally considered for TRAP. There were no main effects for age and education level for any of the three vowels. There was a main effect of environment for F1 of TRAP, and type of education was significant for both F1 of TRAP and F1 of THOUGHT. Publics’ THOUGHT is lowered further than Catholics’ ($\beta=.209$, read: more NCS-like). Publics have a raised TRAP, but Catholics’ TRAP is raised further overall ($\beta=.436$). Interactions were found between environment and education level, as well as environment and education type, for TRAP. On the whole, pre-nasal tokens are raised more than other tokens ($\beta=.663$). However, Publics have a smaller difference between environments than Catholics ($\beta=-.174$, read: more NCS-like), while those without a college education have a greater difference than those with a college education ($\beta=.161$, read: less NCS-like).

NCS adoption appears to have been a change from above, as those with lower levels of education have more of a nasal short-a system. The results indicate that Publics have a more NCS-like vowel space overall than Catholics, suggesting that Publics led the change from above in their adoption of the NCS in St. Louis. One potential explanation for this effect is that the founding and early settlement of St. Louis by Catholics has encouraged Catholics’ ongoing maintenance of local features.

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Finding Variants in a Dynamic Feature Space: Classification as Validation

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This paper explores the problem of maintaining ground-truth validity for corpus-based studies of variation that rely on unelicited feature sets. As the number of known variations continues to increase, there has been a move toward using passively observed corpus data in order to increase both the number of samples available and the amount of data per sample. The use of such corpora, however, means that a large but unknown set of features is available for each sample. This creates the dual problems of (i) choosing which features to include in a study and (ii) extracting or annotating those features consistently in very large datasets. This paper uses Computational Construction Grammar (C2xG) to define a morphosyntactic feature space: a Construction Grammar is learned from a separate corpus and then used to annotate samples for corpus-based dialectometry. This approach solves the problems of choosing and annotating features but creates a new problem: noise.

In traditional approaches, ground-truth is maintained during the elicitation and annotation of features. During data analysis, the validity of each sample's representation can be assumed. In corpus-based studies, without elicited features, the validity of each representation must itself be verified. This is especially problematic for unsupervised approaches. These clustering methods are not able to quantify overall model error. This is a critical failure for corpus-based approaches because they are unable to quantify how well the unelicited feature set explains the data. Supervised approaches such as classifiers, on the other hand, can provide both (i) a representation of variations in the usage of particular features as well as (ii) the overall validity of the model in terms of its ability to make predictions about held-out data.

In this study, the ultimate source of ground-truth is the category of a sample (its region) and the validity of the model (a Linear Support Vector Machine) is its ability to predict the region membership of held-out data. Model stability is enforced using cross-validation so that model validity is not an artefact of a particular segmentation of the data. CxG is used to represent the morphosyntactic feature space, with each construction quantified by its frequency of usage in a given sample. This CxG is learned using a large web-crawled corpus. Regional varieties of English are taken from the International Corpus of English, with eight regions divided into samples of 2,000 words each. The model achieves an F1 of 0.938 (a metric similar to accuracy) for the task of predicting region membership of held-out samples. This shows that a dynamic morphosyntactic feature space can be used to model regional variation, with its representations validated by the model's accurate predictions. In practical terms, this approach to dialectometry replaces a fixed feature set with a fixed set of regional boundaries while maintaining measures of validity.

Directives and Gender in the Disney Princess Films: Progress?

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The study of the construction of gender in sociolinguistics relies increasingly on the idea of cultural discourses. Kiesling (2005) notes that cultural discourses are “reflected in, and created by... performances, and in widely shared cultural performances such as literature and film.” (2005: 696). However, although third wave sociolinguistic studies have turned their attention to the enacting of gender discourses in interpersonal contexts, there has been little study of language in the cultural artifacts which supposedly help create these gender ideologies. In addition, researchers in other areas such as media studies who have analyzed gender in these contexts have relied mainly on qualitative methods, which can be highly subjective if not deployed carefully. In some cases, the same film and even the same scene are used to draw entirely disparate conclusions. This research project seeks to address both of these concerns by applying quantitative methods of discourse analysis to the presentation of gender in the Disney Princess films. Studies in child development have shown that children use these films in playing with and constructing their gender identities (Baker-Sperry 2007, Coyne et al. 2016). We hope to shed some light on how these vastly popular films contribute to ideologies about gendered language use.

The focus of the analysis was directives, defined by Searle (1969) as a speech act in which a speaker attempts to get a recipient to carry out or to refrain from some action. Directives have been correlated with intersections of gender, power, and politeness in previous studies (e.g. Goodwin 1988; West 1990; Aronsson & Thorell 1999). We collected all instances of directives for characters in the Disney Princess films. We were particularly interested in mitigation and aggravation strategies which have proven to be correlated with gender in real-life speech communities (e.g. Holmes 2013). A regression analysis of the data from the films revealed that gender, urgency, and power dynamics all play a significant role in determining mitigation strategies as applied to directives. Within the model male characters mitigated significantly less than female ones ($p = 0.0248$). A complementary qualitative analysis additionally revealed that direct and aggravated displays of power by males tended to be ratified by unmarked compliance. The construction of femininity in the films, in contrast, involved a heavier reliance on mitigation when directives were issued. Even in positions of power, female characters mitigated more heavily unless they were villains, reinforcing the ideology that associates gender non-conformity with deviance and evil. As a counterpart, domestic situations uniquely qualified “good” women to enact authority through bald directives. Overall, then, the Disney Princess films do not show a great deal of “progress” in terms of challenging the traditional constraints of gender roles, at least with respect to the issuing of directives, though a few areas that seem more progressive will also be discussed. As a whole, these findings confirm previous observations about sex roles in children’s films and highlight the usefulness of linguistic methodology in analyzing media discourses.

The impact of diversity on language regard

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The study of language regard permits an analysis of the subconscious linguistic ideologies that influence an individual's construction of a linguistic self (and other). The analysis of such attitudes has taken many forms, but methods in perceptual dialectology (e.g., Preston 1989, Cramer and Montgomery 2016) have been developed to make the connection between perception and production more explicit. At its core, perceptual dialectology is about diversity – where non-linguists see it and what they think about it. Indeed, the draw-a-map task explicitly asks respondents to chart diversity. And while this might seem to constrain participants to only think in terms of geographic diversity, in practice, the diversity portrayed by respondents goes beyond the map, establishing the view non-linguists have about the diversity of language, ethnicity, and cultural identity.

This paper illustrates how perceptual dialectological methods of analysis can be particularly useful in examining situations of diversity. We showcase how these methods reveal similar perceptual tendencies in two different situations – Spanish-English language contact in Florida and the dialect contact situation in Kentucky. Each of these examples represents a robust scenario for the interplay of language production and the specific ideological constructs that surface in non-linguists' representations of their communities.

The data for this paper were collected within the scope of several different research projects. These projects used a multimodal approach to language regard in Florida and Kentucky, including draw-a-map tasks, language attitude surveys, and sociolinguistic interviews. In the Florida example, we see that respondents show a high awareness of dialectal features and different ways of speaking. Florida is perceived as a trichotomy with Spanish influence in the urban South and more rural, southern American associations in the North. Central Florida functions as a neutral buffer zone between these two poles, which is neither connected with any salient linguistic nor cultural attributes. In the Kentucky example, a tripartite division is also discovered. Urban areas like Louisville and Lexington exist as islands in the largely rural state, with the eastern portion of the state set apart as a separate mountain rural area. Louisville in particular exists in a border region between larger Southern and Midwestern cultural regions, and the results of the draw-a-map task suggest this diversity of experience impacts their understanding of the dialect landscape. Together, these results show that participants exhibit a stronger awareness of cultural and linguistic heterogeneity in settings of diversity as compared to monocultural contexts. Additionally, beliefs about languages are firmly connected to culture and serve as a valuable resource in (re)negotiations of identities.

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The persistence of dialectal differences in U.S. Spanish: /s/ weakening in Boston and NYC

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In the U.S., Spanish speakers are exposed to speakers of English as well as to other speakers of Spanish whose regional origins differ from their own. Though these two types of contact – *Spanish-English* and *intra-Hispanic* contact, respectively – are common to many communities, it is not clear that they uniformly promote linguistic change: While the use of Spanish in some U.S. communities displays patterns of structural convergence with English as well as the leveling of intra-Hispanic regional differences (Silva-Corvalán 1994, Parodi 2003, Otheguy and Zentella 2012), evidence of these trends is not universal (Flores-Ferrán 2004, Benevento and Dietrich 2015, Torres Cacoullos and Travis 2016). A further challenge is that within communities that do show signs of contact-induced change, it is difficult to determine whether change proceeds holistically or granularly. Some research suggests that convergence manifests broadly, such that numerous features display parallel shifts toward the grammatical norms of English (Erker and Otheguy 2016). Other research, such as the present study, challenges this view, suggesting that change unfolds (or doesn't) on a feature-by-feature basis.

This study examines syllable-final /s/ weakening in sociolinguistic interviews with sixty Spanish speakers. Twenty are residents of NYC and forty are residents of Boston. Previous research conducted in these cities has found that Spanish speakers with greater contact experience demonstrate more English-like use of a range of features. These include higher rates of subject pronoun use (Otheguy and Zentella 2012), less frequent use of subjunctive morphology (Bookhammer 2013), greater preference for S-V-O word order (Barrera-Tobón 2013), and a preference for centralized vowels in filled pauses (Erker and Bruso 2016). Coda /s/ similarly represents a site for potential convergence with English. A holistic view of contact-induced convergence would predict rates of /s/ weakening to decrease with contact experience, as English speakers do not routinely delete/weaken coda /s/.

The present analysis of 8,825 tokens of /s/ reveals no such trend. Nor is there evidence of dialectal leveling in the data. Significant regional differences in rates of /s/ weakening persist as contact experience increases. The presence and persistence of dialectal differences in /s/ among residents of communities known to otherwise demonstrate contact-induced change both highlights the need to investigate contact outcomes on a feature-by-feature basis and cautions against the assumption that language contact guarantees language change.

A Consideration of Multiple Time Points in a Longitudinal Study

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This project carves out a niche for itself among the growing number of studies on lifespan change (e.g., Shapp, LaFave, Singler 2014; Wagner 2008) by tracking a famous speaker's dialect across more than two time distinctions (see Harrington, Palethorpe, and Watson 2000 for another example). Analyzing multiple, widely-spaced time points across a speaker's life is crucial to capture the potential nuanced effects of occupational changes, social status up/downgrades, recent regional relocations, and other identity alterations on a speaker's language variety longitudinally.

The data come from YouTube recordings of four college commencement addresses given by Hillary Clinton in 1969, 1992, and 2017 at Wellesley College and in 2009 at Barnard College, spanning a total of 48 years. Each speech was given at a unique professional milestone: Wellesley graduate/Yale Law matriculant (1969); First Lady (1992); Secretary of State (2009); recently failed presidential candidate (2017). I focus on Clinton's realization of the Northern Cities Shift. The variables under consideration are F1 and F2 of BAT, BOUGHT, BET, BIT, BOT, and the F2 of BUT, totaling ~3000 tokens. Samples were transcribed in Praat (Boersma & Weenink 2014), formants were extracted by FAVE (Rosenfelder et. al 2014), and vowels were normalized (Lobanov) and scaled using NORM (Thomas & Kendall 2007).

A series of mixed-effects linear regression models for the F1 and F2 values of each vowel and post-hoc Bonferroni comparisons showed that Clinton's version of the NCS is most advanced in 1992 with a BAT that is significantly higher and fronter than that of all other samples; many BAT tokens featuring Northern "breaking"; and BUT and BOUGHT vowels that are backer than those of two other samples. Interestingly, BET is also fronter than that of all other samples, perhaps due to her relocation to Arkansas at the time, where she would have been exposed to the Southern Vowel Shift. Clinton's reputation as being a stolid and controlled politician seems to appropriately accompany her more "standard" and conservative dialect varieties in her later years and earlier years as an elite law student with future political aspirations. First Lady, traditionally a warm and welcoming "hostess of the White House" role, may have been benefited more from relatable regional features.

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A peripheral phenomenon? Variable use of left dislocation in northern colloquial German

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This research takes a quantitative and qualitative approach to describe variation in the use of left dislocation in colloquial varieties of German in historically Low German-speaking regions. Left dislocation is a syntactic phenomenon in which a constituent that could occur within the boundaries of a clause (as in 1a) instead directly precedes the clause and a coreferential, usually pronominal element appears within the clause (as in 1b):

- | | | |
|--------|-------------------------|-----------------------------------|
| (1) a. | [mein Hut] | hat drei Ecken |
| | [my hat] | has three corners |
| b. | [mein Hut] _i | der _i hat drei Ecken |
| | [my hat] _i | it _i has three corners |

Although such structures occur in many languages and are associated with particular discourse-pragmatic functions (e.g. Altmann 1981, Frey 2004), left dislocation in the form of resumptive demonstrative pronouns has been long recognized as a notable feature of the syntax of Low German varieties (e.g. Grimme 1922, Mahnke 1931). In one of the few studies to quantify left dislocation, Rohdenburg (2004) found that resumptive subject pronouns occurred in 31.1% of relevant Low German clauses, including in 20.6% of instances with a simple NP subject and 86.7% of the time following sentence-initial clauses. Thus, left dislocation appears to be nearly obligatory in “complex” environments in Low German and a viable structure even with “simple” constituents. Moreover, Evans (2017) found that over 40% of instances of left dislocation in Low German involve not nominal constituents, but rather adverbials, such as:

- | | | | |
|-----|--|--------------------|------------------------------|
| (2) | [im Jahre 1966] _i | da _i | stand hier schon eine Kirche |
| | [in the year 1966] _i | there _i | stood here already a church |
| (3) | und [wenn er wieder ging] _i | dann _i | gab er uns eine gute Lehre |
| | and [when he went again] _i | then _i | he gave us a good lesson |

The extent to which these syntactic patterns from Low German may have influenced or continue to influence northern German regiolects, however, has remained unexplored.

I draw on conversational and interview data from the German Research Foundation (DFG) project *Sprachvariation in Norddeutschland* (*Language Variation in Northern Germany*; SiN) to compare left dislocation in northern colloquial German across discourse environments and different speakers and speaker groups. The corpus includes recordings from 144 female consultants from 36 towns in northern Germany, including speakers with varying proficiency in Low German within each location. In addition to identifying trends in the types of dislocated constituents, preliminary analysis indicates higher rates of left dislocation in the colloquial varieties of speakers with greater knowledge of Low German and in regions in which Low German has been more widely maintained. Left dislocation therefore exists as a syntactic feature that shows variable grammaticality in contemporary German varieties spoken in northern Germany, and these results shed light on discussions of regiolect syntax (e.g. Langanke 2015) and the bilateral relationship between dialects and modern regiolects of German (e.g. Schmidt & Herrgen 2011). Furthermore, this work establishes a quantitative baseline to enable cross-linguistic comparisons on the frequency of left dislocation phenomena and contributes to our understanding of the syntax-pragmatics interface.

Incomplete neutralization in African American English: The role of vowel duration

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Consonant cluster reduction accounts for a long line of past inquiry into phonological processes involving African American English (AAE) final consonants. But variation of final consonant singletons in AAE also provides an important avenue for continued phonological research. Specifically, word-final /t, d/ in AAE can be realized as glottal stops, the result of which is coda neutralization. Word-final /t/ glottal stop replacement is common to many varieties of Mainstream American English (MAE) (Roberts 2006; Eddington & Taylor 2009), while glottal stop replacement of /d/ is mostly limited to AAE varieties, and often referred to as devoicing (Wolfram 1969; Farrington 2011). Coda neutralization processes are common across languages and word-final devoicing is one of the classic examples (Yu 2011). In most cases, though, the underlying voicing distinction is maintained in other ways (e.g., preceding vowel duration). Because the contrast is maintained, the result of this is partial, or incomplete, neutralization. While MAE final /t, d/ are not neutralized, work on vowel duration in MAE suggests that the effect of consonant voicing on vowel duration is partially phonologized (Solé 2007). Recent work by Holt et al. (2016) has shown that AAE speakers have more pronounced vowel duration differences between word-final /t/ and /d/ when compared to MAE speakers. This finding suggests that the voicing contrast is heightened through vowel duration in AAE. Holt et al. (2016) did not look at how this variation relates to different realizations of /t, d/, however, although such an increase in durational contrast may be expected to reflect a shift in cues as consonant identity becomes less clear through voicing alone. The current study presents a quantitative analysis of the relationship between vowel duration and final glottal stop replacement of /t, d/ to determine if the phonological contrast of consonant voicing is maintained through duration of the preceding vowel in neutralized contexts.

Data come from sociolinguistic interviews with African Americans from Memphis, TN (N=12), Durham, NC (N=12), and Washington, DC (N=12), three Southeastern cities with sizeable African American populations. Instrumentally guided coding is used for analyzing the realization of word-final /t, d/ (N=3638) and measurements of the preceding vowel duration were taken for each token. Non-neutralized contexts include full stops and glottal reinforced stops, while neutralized contexts include glottal stop replacement and consonant deletion. Across the three field sites, neutralized contexts account for 76% of the data, with glottal stop replacement being more frequent for /t/ than for /d/. A linear mixed effects regression was conducted on (log) vowel duration, with speaker and word as random effects. When controlling for inherent differences in vowel duration (e.g., vowel height, tenseness), results confirm that not only are vowels significantly longer before /d/ than /t/, but duration is longer in the case of glottal stop replacement for both /t/ and /d/ when compared to vowels in non-neutralized contexts. In sum, AAE exhibits coda stop neutralization through glottal stop replacement, the result of which is incomplete neutralization, as the consonant voicing contrast is maintained and heightened through the duration of the preceding vowel.

Gender Assignment to English Noun Insertions in New York Dominican Spanish

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The current study focuses on the assignment of grammatical gender to English noun insertions in Spanish discourse by speakers of New York Dominican Spanish (NYDS). Using Poplack, Pousada, and Sankoff's (1982) comparative study of New York Puerto Rican Spanish and Montreal French and other subsequent studies as models, we analyze the extent to which various linguistic factors condition gender assignment for NYDS speakers. All data come from sociolinguistic interviews conducted with bilingual Dominican-Americans and Dominican immigrants in New York. We focus on lone word insertions which have been explicitly assigned a grammatical gender, analyzing the effect of the following factors: 1) biological gender of the referent, 2) analogical gender, or the gender of the equivalent word in Spanish, and 3) phonological gender, or whether or not the ending of the word corresponds to an ending which is considered typically masculine or typically feminine in Spanish.

We find that in the cases in which the referent has a biological gender, the English insertion is assigned the corresponding gender categorically. Furthermore, our results show that analogical gender does play a statistically significant role, which aligns with the findings of some studies (Poplack et al. 1982, Smead 2000), but contradicts the findings of others (Otheguy & Lapidus 2001, Clegg & Waltermire 2009). We also find that phonological gender does not play a significant role in the gender assignment process, which contradicts the findings of most studies, with the exception of Otheguy & Lapidus' (2001) study which finds that -a is the only ending that appears to affect gender assignment.

Reviewing previous studies on gender assignment to English insertions in Spanish, we conclude that although it is possible that these discrepancies result in part from the establishment of different norms in different speech communities, a major source of these discrepancies appears to be a lack of consensus about how to define analogical gender and phonological gender. Moving forward, we propose that in further studies of gender assignment to English insertions, there should be a conscious effort to explicitly and consistently define concepts such as analogical gender and phonological gender and also to identify other potential factors which have sometimes been conflated with one of these two (eg. orthography) in order to better measure their individual effects.

Linguistic Distance and Mutual Intelligibility among South Ethiosemitic Languages

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Ethiosemitic languages are variants of the Semitic language family which are spoken in Ethiopia and in Eritrea. They are classified into North and South Ethiosemitic. The North branch consists of Ge'ez, Tigre and Tigrigna while the South Ethiosemitic includes Amharic, Argoba, Harari and several Gurage varieties. Many of the Ethiosemitic languages are closely related, and the speakers of one variety can sometimes communicate with the speakers of other varieties. The relative distance (Bender, 1966 & 1976; Bender and Cooper 1971; Fleming, 1968; Hudson, 2013) and mutual intelligibility (Gutt 1980; Ahland, 2003) among the languages previously received some attentions. Their typological features were also examined (*e.g.* Demeke, 2001; Hetzron, 1972, 1977; Laslau, 1969). However, previous studies have some short comings. First, not all languages were included the studies. Second, the classification proposals were not supported by sufficient data. Third, the classification attempts were hampered by a complex intermingling among the languages. Hence, the reported results are somehow inconsistent and often debatable.

The present study employed combinations of lexicostatistics, Levenshtien distance, intelligibility measures and geographical distance to determine the distance and mutual intelligibility among 13 South Ethiosemitic languages: Chaha, Geyto, Harari, Silt'e, Wolane, Mesmes, Soddo, Amharic, Argoba, Muher, Innor. Zay, and Mesqan. The study intended to (1) re-examine the previous classification of the languages (2) determine the relationship between geographical and linguistic distance, and (3) examine the relationship between language distance and the mutual intelligibility. Lexical and Levenshtien distances were computed based on 80 lists of vocabularies. The intelligibility scores were taken from Ahland, (2003) and Gutt (1980). The lexical distance was determined by computing the average of the percentage of non-cognate words in pairs of languages. The Levenshtein distance was determined by computing the cost-*insertion, substitution and deletion* required to transform a pronunciation of one word to another. GabMap was employed for computation of the distance, cluster analysis and multidimensional scaling. The geographical distance among the language areas was obtained from Google Earth.

The results show that the lexical and phonetic distances among the languages are almost consistent with the typological classifications proposed by Demeke (2001) and Hetzron (1972). However, Harari, Mesmes and Soddo have shown deviations from the previous classifications. This deviation is associated with the influence of adjacent Cushitic languages. Strong association was also found between language distance and geographical distance which implies a complex areal diffusion among the languages. There is also a significant relationship between lexical distance and mutual intelligibility, but no significant relationship is found between the phonetic distance and mutual intelligibility. This result implies a crucial role the meaning of words play in determining the mutual intelligibility among the South Ethiosemitic languages.

**“They just had such a sweet way of speaking”:
Affective stance, identity, and prosodic style in Kodiak Alutiiq**

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Recent research in sociocultural linguistics has increasingly focused on the interplay of style, stance, affect, and identity (Bucholtz 2009; Kiesling 2009; Zimman forthcoming), and on how this interplay manifests in speakers' use of phonetic and prosodic variables (Mendoza-Denton 2011; Starr 2015). Within this vein of research, indigenous languages remain understudied. Furthermore, those sociophonetic studies that do address indigenous languages tend to focus on segmental rather than suprasegmental variation (see, however, Sicoli 2010 and Blythe 2011 for exceptions).

This analysis investigates the prosodic stylization of constructed dialogue in Kodiak Alutiiq, an endangered Eskimo-Aleut language spoken on Kodiak Island. The data consist of 20 recordings drawn from fieldwork I conducted in Kodiak from 2014-2016, and 2 archival recordings collected in the 1990s and 2000s. Constructed dialogue provides a valuable window into the performance of affect and identity because the surrounding narratives provide insights into the identities and affective stances of the constructed speakers. These insights sometimes take the form of explicit comments, such as one Elder's titular remark on the speech style of the "old ladies" she used to know: "They just had such a sweet way of speaking."

Following Coupland's (1980) holistic understanding of style as being comprised of multiple variables, I analyze each speaker's average F0, F0 range, F0 standard deviation, voice quality, speech rate, and intonation contour across excerpts of constructed dialogue and non-constructed dialogue speech. Due to the low quality of some of the recordings, only the F0 measurements were extracted via scripts, while a team of trained interns coded voice quality, speech rate, and intonation contour auditorily. At first glance, the results of the prosodic analysis appear to show speakers conforming to macrosocial norms in their construction of the speakers they voice. For instance, speakers tended to raise their F0 more when voicing young female individuals than when voicing older males. However, adding affective stance into the picture complicates these generalizations. Speakers raised their F0 most when voicing uncertain stances such as anxiety and curiosity, and least when expressing dissenting or aggressive stances such as refusal and disdain. The construction of affective stances intersects with and influences the construction of identity so that an anxious adult male voice, for instance, was constructed with a greater increase in F0 than an authoritative adult female voice.

Examining the constructed dialogue in context yields informative identity categories that are inextricably intertwined with the types of affective stances they assume—authoritative priests, snotty teenagers, sweet old ladies, and other personae that recur throughout the narratives. Additionally, I find that the majority of these stance- and identity-based personae are characterized by a change in multiple prosodic features relative to the speaker's baseline. These results emphasize the importance of considering affective stance in conjunction with identity, and of examining the interactions of prosodic variables rather than considering them in isolation. Finally, they demonstrate the important role narrative has to play in language revitalization efforts, not only as a method for improving fluency, but as a conduit for the transmission of polyphony.

Ain't for *Didn't* in African American English: Change vs. Age Grading

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This paper evaluates whether the use of *ain't* in past-tense contexts (where it varies with *didn't*) in African American English [AAE] is best characterized as diachronic change by comparing rates of use of *ain't* in 4 environments over time: (1) past tense (*~didn't*), (2) present perfect (*~hasn't/haven't*), (3) present progressive/copula (*~isn't/aren't*), and (4) present tense preceding the verb *got* (*~don't*).

Use of *ain't* in contexts (2)-(4) dates to the 1700s (Jespersen 1940) in varieties of English. Use of *ain't* in the past tense is unique to AAE and may be a recent change (Howe 2005): Earlier varieties have low rates of *ain't* (~6%) compared to more recent, urban varieties (~32- 50%). However, speakers representing earlier varieties were often older, while more recent studies include data from adolescents, who use higher than average rates of *ain't* in this context (Labov et al. 1968, Ash & Myhill 1986). On one hand, other variables unique to AAE (habitual *be*, preterit *had*) underwent semantic change and increased in use during the twentieth century (Bailey & Maynor 1989, Cukor-Avila & Bailey 1995). On the other, use of some vernacular variants is known to peak during adolescence (Labov 1965, VanHofwegen & Wolfram 2010).

I examine data from 40 African American Philadelphians (born 1901 – 1969) from a corpus of casual speech collected in the early 1980s. Speaker rates of use of *ain't* were calculated in two environments: past tense (*~didn't*; 35 speakers) and “established” environments combined (*~haven't, hasn't, isn't, aren't*; 25 speakers). Rates of use of *ain't* in both contexts were then analyzed by speaker Year of Birth in a linear regression.

Speaker rates of use of *ain't* for *didn't* by Year of Birth increase significantly ($p = 00.1$) during the twentieth century, while rates of use of *ain't* in all other environments by Year of Birth show no significant change over time in any direction: Use of *ain't* as a general vernacular variant is not correlated with age.

Furthermore, comparing individual speakers' (N=23) rates of *ain't* in both environments shows that older speakers have a greater distinction between rates in the two environments than younger speakers. This result indicates that the *ain't~didn't* variable is treated differently by older speakers than younger (possibly due to grammatical reanalysis). Establishing a semantic difference between older and younger speakers' use of *ain't* in the past-tense context (a goal of current research) would indicate that past tense *ain't*, like other AAE variables, provides an example of change rather than age grading.

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Experimental evaluations of Chicano English *sh~ch* variation in *El Barrio*, Texas

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This presentation presents results from the latest, experimental phase of my study of *sh~ch* variation (e.g. “share” variably pronounced as *chare*, and “much” as *mush*) in the Chicano English of ‘*El Barrio*,’ Texas. In the community study phase, I conducted generalized mixed effect model analyses of more than 2100 tokens of (sh) and (ch), extracted from sociolinguistic interviews with 12 speakers, stratified by education, gender and age. Internal factors preceding environment and “tion” suffixes were significant for (sh), and preceding environment, word position, and lexical frequency for (ch). The social factors age, gender, and education were significant for (sh) and age and education for (ch). In the second phase of my study, I analyzed *sh~ch* variation in dozens of hours of speech from a leading Latina politician from ‘*El Barrio*,’ recorded in varying sociolinguistic contexts (differing in ethnicity of addressee, formality and tenor), and found that these significantly constrained the variation.

In the experimental phase, I prepared 8 test tokens digitally spliced using Praat to represent variation by **input variable** (sh) vs. (ch), **guise** (General American/GA vs. Chicano English/CE realization), and **word type** (lexical vs. function words). A recording of each token type was presented to groups of 20 “listeners” from El Barrio, with a total of 160 listeners (8 tokens x 20 listeners), who were asked to evaluate the “speaker” of each token on thirteen characteristics, e.g. how relaxed and sincere she sounds, her occupation and education, or her fluency in English or Spanish. Listeners were fairly equally split in terms of gender and age and the majority (106/160) reported speaking Spanish with family, friends and at work. These listener characteristics were included in the analyses.

Exploratory Factor Analysis grouped the thirteen speaker characteristics into four major Factors. Factor 1, “*Good People*” (a combination of five social characteristics: relaxed, sincere, trustworthy, familiar, and speaking well), yielded significant effects in the regression for *guise* ($p < .05$), *input variable* ($p = .001$), and *word type* ($p < .001$)—as well as a second order interaction between *input variable* and *word type* ($p < .001$). The perceived level of being ‘Good People’ is significantly greater for the CE guise than for the GA guise. Factor 2, “*Social Class*” (a combination of estimated occupation and level of education) showed a significant effect of *guise* ($p = .004$), with GA speaker tokens being associated with higher levels of social class, as expected. Factor 3, “*Native English/US Born*” (how likely it is that the speaker was born & raised in the US and is a Native English speaker) showed significant associations with *input variable* ($p < .05$) and *age of the participant* ($p < .000$). Factor 4, “*Spanish Fluency*” (a combination of understanding Spanish and speaking Spanish) showed significant associations only with *gender* ($p = .042$). In my presentation, I interpret these intriguing experimental results in more detail, and show how they richly complement and extend the variation analyses from the two other phases of my study. This study also demonstrates how experimental perception data can enrich production/use data of the kind more common in variationist analyses.

Language at Work: Workplace Conditioning of Language Variation in the South

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Research on style in sociolinguistics (Eckert 1989, 2000) emphasizes the importance of social institutions in the organization, modification, and reproduction of linguistic norms. Where schools play the primary role in organizing adolescent interactions, the workplace serves the same function for adults. From a sociological perspective, schools serve primarily as a way to accustom adolescents to the hierarchical structures of the workplace (Bowles and Gintis 1976; Lareau 2011), and workplaces offer the same opportunities for the formation of social and linguistic norms. Cultural norms evolve in individual workplaces (Roscigno and Wilson 2014; Swidler 1986), and these norms affect hiring practices (Rivera 2012) and the maintenance of social inequality at work (Ridgeway 1997). Linguists have examined the effect of the workplace on sociolinguistic variation mainly through analysis of speakers' style-shifting at work and between work and other contexts (Coupland 1980, Podesva 2007, 2011). While these studies show the importance of the workplace in conditioning stylistic variation, they do not address how the culture of a single firm comes to shape the practices of its workers. This paper evaluates the degree of stylistic convergence of multiple workers at a single firm, aiming to better understand how work, as both a social and sociolinguistic institution, shapes the production of linguistic variation.

The dataset for this analysis is drawn from self-recorded audio collected by workers at "Southern Tech", a locally-founded technology firm in the greater Raleigh, NC area. The speakers are members of a pilot sample of 6 speakers—4 men, 2 women, all white North Carolina natives—from a larger corpus of workers at the firm, and all work in professional occupations. Given the stigma associated with Southern-associated linguistic features (Fridland, Bartlett, and Kreuz 2005), we would expect workers to shift away from Southern norms while on the job. To gather data, each participant wore a recorder during their normal workday, resulting in a minimum of one hour of conversational data at work, as well as a minimum of one hour of conversational data from a casual setting, either with friends or family. Since all speakers are Southern natives, acoustic analyses were conducted on vowels implicated in the Southern Vowel Shift (SVS) and those with Southern associations, including /i/, /ɪ/, /e/, /ɛ/, /æ/, /aɪ/, and /ʌ/. A linear mixed-effects regression was run for each vowel, with each speaker treated individually.

Results show that 5 of the 6 speakers produce a more peripheral (less Southern) /i/ vowel at work, contrasting with the Southern-associated production of /i/, with no consistent changes for other vowels examined. This is evidence of a convergence on a linguistic norm for the workplace. In Raleigh, a Southern-shifted production of /i/ has associations with older, working-class identity, so these speakers' manipulations of the vowel suggest a distancing from the working-class norm. The reasons for this are illuminated by speakers' self-perception of their linguistic needs as professional workers, drawn from exit interviews. Speakers indicate that "sounding Southern" is fine for their jobs, due to working at a "Southern firm", but many of them make attempts to avoid "sounding unprofessional", suggesting a class-based element to their linguistic choices.

Production and perception of affricate /t/ and /d/ in Northeastern Brazil

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This paper analyzes production and perception on a recent change in progress in a Northeastern variety of Brazilian Portuguese: variation between stop and affricate realizations of /t/ and /d/ before [i]—as in [tia]~[tʃia] ‘aunt’, [dia]~[dʒia] ‘day’. The variable is a dialectal marker between Southern and Northeastern Brazil and, in Northeastern states, while Bahia is characterized by the affricate realization, Sergipe is characterized by the stop realization. However, recent studies have pointed to the emergence of the affricate variant in Sergipe, suggesting a change in progress, but these studies don’t inform the social forces driving this process nor how the innovative variant is evaluated by community.

In the production study, 50 tokens of /ti, di/ were extracted from each of 60 sociolinguistic interviews with undergraduate students from Sergipe, stratified by sex/gender and area of residence. Data were analyzed in a mixed effects model in R, including gender, preceding context, following context, and voicing as fixed effects, and word and speaker as random effects. Results show that the affricate realization (12%) is favored by female speakers (0.8775) from the urban area (2.1550), when the voiceless consonant /t/ (1.0431) is preceded by fricatives (0.7770), signaling the leadership of urban females in the implementation of a non-stigmatized variant.

The perception study, designed to observe the social meanings of the innovative variant in the community, consists of a subjective reaction test to 19 minimal pairs audio stimuli (e.g. [tia] ~ [tʃia]) extracted from the sociolinguistic interviews. The test was submitted to 30 undergraduate students stratified by sex/gender and area of residence. A factorial analysis reduced eight attitudinal factors (area of residence, State, beautiful, rhythm, speed, clearer, pleasant, solidarity) to two sets of traits: aesthetical and regional. These were analyzed separately for female and male judges and a Kappa test was applied to measure their rate of agreement.

Regarding aesthetical features, the affricate variant is considered “clearer”, “more pleasant”, and “more beautiful” than the alveolar stop for women ($p < 0.001$, Fisher), whereas there’s no significant difference for men. There’s minimal convergence between women and men judgements for “pleasant” ($\kappa=28.84$) and “beautiful” ($\kappa=14.5$), and weak convergence for “clear” ($\kappa=49.73$). As for regional features, the affricate variant is associated to the urban region by women (71.2%) and men (77.8%), with minimal convergence ($\kappa=30.42$). Women associate the affricate variant to “Bahia” (41.4%) and the alveolar stop to “Sergipe” (46%), but for men both variants are indistinctly associated to “Sergipe” (40.9%), with no convergence ($\kappa=11.38$).

The association between production and perception approaches in analyzing variable /t, d/ allows for a picture of the forces driving the change in the community, and reinforces the role of sex/gender in processes of language variation and change. The production study shows that women lead the process and the perception study shows that they attribute more positive values to the innovative variant and associate the conservative variant to Sergipe, while male judgments are largely indifferent.

Variation and clitic placement among Galician *neofalantes*

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New speakers (L2 learners of minority languages) are a rapidly growing topic in the field of language revitalization, particularly as concerns differences in their linguistic performance relative to native speakers (e.g. O’Rourke & Ramallo 2014; Costa 2015). Whereas the speech of native speakers is considered ‘authentic’ and ‘pure’, that of new speakers is seen as ‘artificial’ or ‘hybrid’ (O’Rourke & Ramallo 2011, O’Rourke & Pujolar 2015). This dichotomy has led to the stigmatization of new speakers and the varieties they speak.

This paper examines clitic placement among Galician *neofalantes*, a community of urban, middle class, L2 speakers of Galician in a bilingual region in Northwestern Spain. Galician has a complex system of pronominal clitics that can be either proclitic or enclitic depending on a range of grammatical factors (e.g. finiteness, sentence type, triggering particles). Among *neofalantes*, clitic placement is variable, sometimes following the rules of traditional Galician, and sometimes not. Non-traditional clitic placement has been criticized as one of the most salient “errors” in *neofalante* speech, both by speakers and by linguists (Dubert 2005; González González 2008). Due to language contact, the bilingual nature of the region and the genetic proximity of Galician and Spanish, most research has argued that non-traditional clitic use results from Spanish influence (e.g. Kabatek 1997; Dubert 2005). However, to date no empirical research has targeted *neofalante* clitic usage to test this assertion.

The current analysis is based on an accountable analysis of pronominal clitics (N = 3,736 tokens) in the vernacular of 15 *neofalante* participants. Results show that non-traditional clitic placement accounts for just under 19% of the data overall (n = 695). This indicates that the vast majority of tokens follow traditional Galician grammar and suggests that *neofalantes* are relatively good at mastering Galician clitic placement. However, variation is not evenly distributed. Proclitic placement follows traditional grammar at a rate that approaches categoricity (98.6%, N = 2,036). Most variation is concentrated in the enclitic category, where nearly 40% of tokens conflict with traditional grammar (39.2%, n = 666). Logistic regression suggests that variation is largely isolated to those contexts where Galician and Spanish grammar differs (e.g. finiteness (+/-), where finite verbs favour non-traditional placement), lending support to previous claims. However, social predictors are also relevant, with speakers who have Galician parents and who were born after the implementation of bilingual education favouring non-traditional placement as well. I interpret these results as the result of speakers’ desire to assert their Galician identity.

Why the long FACE? Ethnic stratification and language variation in a multi-ethnic secondary school

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There are various descriptions of ethnic varieties of British English (e.g. Kirkham 2012, Rampton 2006, Sebba 1993, Sharma 2011). However, in the UK, our understanding of ethnicity and its role in language variation and change is still rather limited. Recent work in London on Multicultural London English (MLE) found some evidence for ethnic stratification of linguistic variables; for example, “non-Anglo” boys were often more likely to use innovative features (Cheshire et al. 2011). Despite this, MLE is described as a multi-ethnolect emerging through indirect language contact and group second language acquisition of English among ethnically-diverse adolescent friendship groups. This is not dissimilar to other work on multiethnolects, which tends to foreground the effects of other social factors over ethnicity (e.g. Drummond 2016, Quist 2008). While the MLE projects provide much needed data on language change in London, the data has limited ethnographic information and so a nuanced discussion of ethnicity remains a challenge. The present study, therefore, uses qualitative and quantitative methods to examine a different multi-ethnic adolescent community to shed light on the dynamics of ethnicity in relation to linguistic variation and change in diverse contexts.

Data were gathered at Riverton, a multi-ethnic secondary school in Newham, an ethnically diverse borough of East London. I conducted a 12-month ethnography of a Year Ten (14-15 years old) cohort, collecting field notes, interviews, and group recordings with 27 students (19 girls, 8 boys). In its entirety, this project examines diphthongs FACE, PRICE, GOAT, and MOUTH, as well as TH- fronting and DH- stopping, and *was/were* levelling, showing varying levels of ethnic stratification. In particular, diphthong trajectories show ethnic stratification; White British girls exhibit more traditional diphthongs for FACE, whereas Black African and Bengali girls have shorter or even monophthongal realisations. Quantitative findings are supported by ethnographic observations, indicating that ethnic identity is highly important for many students. For example, Year Ten girls used self-ascribed peer group labels that were intentionally racialized: White Squad, Black Squad, and Asian Squad. Qualitative analysis of peer group norms and interactions further demonstrates the complexities of ethnicity at Riverton, as adolescents’ constructions of Whiteness, Blackness, and Asianness are inextricably linked to friendship networks, and notions of localness and Britishness.

The present study, then, has two key implications. Firstly, the results supplement research by Cheshire and colleagues, suggesting that ethnicity has the potential to impact language variation and change in multi-ethnic communities. Secondly, it provides important insights into social dynamics in multicultural contexts, particularly with regards to ethnicity. When discussing multicultural communities, ethnicity is often glossed over or disregarded altogether (Valluvan 2013). The results of this study suggest that not only are there notable linguistic consequences, but that these can provide important insights into social dynamics of ethnicity as it emerges in interaction.

‘A gente sempre faz’: Subject pronoun expression in Brazilian Portuguese

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Variable subject pronoun expression (SPE) is an archetypal syntactic variable, involving issues of syntax, discourse, function, lexical frequency, and cognition. Research on Spanish (e.g. Otheguy et al. 2007) reveals variation conditioned by such constraints, but all varieties studied are relatively conservative (from 19% overt SPs in Mexican Spanish to 41% in Dominican). This paper focuses on Brazilian Portuguese (BP), a language with much higher rates of overt pronouns that may be shifting towards non-null subject status. We ask if the constraints on SPE in BP are the same as those found for Spanish, given that SPE rates in European Portuguese are similar to Spanish, but as high as 80% in BP (Duarte 2003).

The present study examines SPE among eight speakers from the São Paulo SP2010 Corpus (Mendes 2013) and finds a mean SPE rate of 65%. A Goldvarb multivariate analysis indicates that BP shares some, but not all, of the constraints found for Spanish. Referent animacy is the strongest predictor: only 25% of inanimates have overt subjects. Referent continuity is next strongest: a switch in referent favors overt pronouns while referent continuity disfavors (factor weights: .66 vs. .38). Two cognitive factors--priming and lexical frequency--show contrasting results. As in Spanish, overt subjects in the speaker's preceding utterance favor SPE in our data, while preceding nulls favor nulls. Unlike Spanish, however, lexical frequency of the verb and the interaction between frequency and other constraints are not significant predictors.

These data only weakly support morphosyntactic functional predictions. Plural verbs have more distinctive person/number inflections than singulars, and lower SPE rates. But BP has drastically reduced verbal inflection, which confounds this finding and results in referent ambiguity: 2SG and 1PL subjects are mostly expressed with 3SG inflections (e.g., *A gente faz* replaces *Nós fazemos* ‘We do’). The contrast between tense/mood forms with less vs. more distinctive P/N inflection (e.g., imperfect vs. present and preterite) is not significant.

BP has clearly diverged from its European sources, and overt SPs are now the unmarked option. Qualitative change may already have occurred: variable SPE is governed primarily by pragmatic and processing constraints (referent continuity/disambiguation, priming), rather than by syntactic, morphological, or lexical factors. Inanimate referents still disfavor overt subjects, but overt subjects were almost impossible in this context before 1950 and their acceptability today is an innovation. Finally, if the reduction in distinctive P/N inflection favored increased SPE rates, it is no longer the ruling factor.

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Variation in filled pauses across speaking styles and boroughs within West Yorkshire: Implications for forensic speaker comparisons

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West Yorkshire is a county situated in Northern England and is comprised of five local councils (metropolitan boroughs): Bradford, Calderdale, Kirklees, Leeds, and Wakefield. In the current linguistic literature, West Yorkshire has received relatively little commentary, as it is often overshadowed by bigger, northern cities like Manchester and Newcastle-upon-Tyne. However, in forensic phonetics, literature on regional variation is often vital to forensic casework. Sociophonetic studies aid forensic phoneticians in making judgments regarding whether speaker characteristics are typical of a region or not. For both forensic and sociophonetic motivations, this paper begins to look at the variation present in West Yorkshire by analyzing variation in filled pauses across speaking styles in Bradford, Kirklees, and Wakefield from the West Yorkshire Regional English Database (WYRED; Gold et al., 2016).

In the forensic phonetics literature, hesitation markers have been identified as one of the most discriminant speaker parameters and have been shown to have greater discriminatory power than those of lexical vowels (Hughes et al., 2016). Furthermore, they are very frequent in spontaneous speech for most speakers, they are relatively easy to measure, and they are not thought to be consciously controlled. For these reasons, filled pauses have gathered an increased interest in the forensic phonetics community.

This paper analyses 57 speakers from WYRED. All speakers are male, aged between 18 and 30, have English as their first and only language, and were raised in an English-only speaking household. Speakers were recorded in four spontaneous speech tasks, where three of the four tasks are forensically-oriented. Each speaker was recorded for approximately one hour in total.

This study measures the vocalic portion of all “uh” /V/ and “um” /V+N/ productions in all 57 speakers across all four tasks. Filled pauses were manually segmented in Praat and F1, F2, and F3 midpoints were extracted from over 8,000 tokens. Results suggest that filled pauses may be influenced by speaking style. The relative number of filled pauses produced in Task 1 when speaking to a research assistant is larger than in Task 3, when participants were speaking with another participant from the same area. These results, in relation to speaking style, vary slightly from those previously reported in Schachter et al. (1991). The quality of the filled pauses appear to be relatively stable within tasks for speakers. However, some variation is present in F1 for filled pauses between boroughs.

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Class, gender and ethnicity in Sydney: Revisiting social conditioning in 1970s Australia

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In her foundational work on Australian English in Sydney, Barbara Horvath (Horvath 1985, 1991; Horvath & Sankoff 1987) compiled the *Sydney Social Dialect Survey* (SSDS) to investigate the role migrants play in language variation. Recorded from 1977-1980, this collection of 180 sociolinguistic interviews investigates variation across age, gender, ethnicity, and socioeconomic status. Variation among speakers was considered in relation to the Australian broadness continuum (Mitchell & Delbridge 1965), comprising Broad, General and Cultivated speech, with Broad speech characterised as less in keeping with the standard. Based on auditory analysis of five vowels (FLEECE, FACE, GOAT, PRICE and MOUTH), Horvath found that gender and SES conditioned variation among Anglo speakers, but that such social conditioning was absent among Italian and Greek teens (Horvath 1985: 81).

While Horvath's work is able to paint a broad picture of the social factors influencing variation in Sydney, it does not investigate the specific phonetic detail of individual vowels. Rather, variation is identified across a count of all vowel tokens identified as Broad, General or Cultivated. Recent studies have applied quantitative acoustic methods to explore phonetic variation in Australian English, with data largely taken from controlled environments (e.g., word lists), primarily focusing on variation across gender, with less attention paid to ethnicity and class (e.g. Harrington et al. 1997; Cox & Palethorpe 2011, 2012).

The current study investigates whether trends that Horvath identified hold when quantitative acoustic measures are applied to spontaneous speech data in the SSDS, and to probe further the social conditioning along gender, class and ethnic lines. We focus the analysis on a sub-corpus of the SSDS, which comprises 49 Anglo and Italian teenagers (aged 13-18), distributed evenly across gender (female, male) and SES (lower working, upper working, middle). Approximately 13,000 tokens of FLEECE, FACE, GOOSE, GOAT, MOUTH, and PRICE were subjected to acoustic analysis, and findings were corroborated with linear mixed-effects models fit to normalised F_1 and F_2 at the target nucleus for each vowel.

Analysis of the overall data reveals that gender is the strongest predictor of variation, and that SES and ethnicity do not significantly impact vowel realisations. Relative to males, females produce fronter realisations of FLEECE ($p < 0.01$) and FACE ($p < 0.01$), backer realisations of GOOSE ($p < 0.01$) and MOUTH ($p = 0.02$), higher realisations of GOAT ($p = 0.01$), and higher ($p < 0.01$) and fronter ($p = 0.05$) realisations of PRICE. However, further analysis reveals that this effect is largely attributable to middle class Anglo females—lower and upper working class females pattern more closely with males, and Italian females with Italian males. In exhibiting the least broad vowel realisations, middle class Anglo female teenagers thus stand apart from not only their male peers, but also their Italian and working class peers.

The large-scale acoustic analysis conducted here concords with Horvath's conclusions that principled social variation is evident in Anglos, but not in Italians. Our findings build on Horvath's work by identifying the specific behaviour within each vowel category and highlighting the role of middle class Anglo females as the drivers of this social patterning in 1970s Australia.

Two Sides of the Style Coin: Matching Morphosyntactic and Phonological Variation Across Topic in Middle-Class African American Speech

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Foundational sociolinguistic studies have explored many factors which give rise to stylistic variation. Though variation conditioned by what the speaker is talking about is implied in studies of variation across interactional contexts, in many studies, topic as its own factor is left unexplored. Using data from sociolinguistic interviews with 28 middle-class African American informants from the same neighborhood of a major U.S. city, this study combines an examination of morphosyntactic features of African American English implicated in quantitative studies of dialect density (Renn & Terry 2009, Van Hofwegen & Wolfram 2010) with that of a phonological feature, final consonant devoicing, which has been shown to be primarily conditioned by speaker-internal variation (Farrington 2011) and can be understood as a hypercorrection implicated in the performance of articulateness (Grieser 2015). Topic variation at both levels of structure pattern similarly, suggesting that both are implicated in stylistic performance associated with participation in the linguistic marketplace (Bourdieu 1991).

Features of African American English morphosyntax are compared in frequency per intonation unit across 8 topics in over 40 hours of interview data. The five most-used features in the data, (1) habitual *be*, (2) HAD + past tense, (3) Existential *it*, (4) zero copula, and (5) third-singular verb regularization, are compared across topics, with a chi-square test finding them significantly less present ($p < 0.05$) in the topics of “education” and “work.” At the same time, a phonological feature, final consonant devoicing (FCD), operationalized as voicing during the closure, is compared using the same 8 topics. A mixed-effects model in rBrul considers four linguistic factors—identity of the stop, morphological status of the word, and preceding and following phonological context of the stop—and three social factors: age, gender, and SES, in addition to topic. All linguistic factors are significant; and topic emerges as the only other significant factor ($p < 0.01$) in predicting FCD, with “work” and “education” predicting more FCD.

That marked morphosyntactic features associated with a ethnolinguistic variety reduce in topics associated with education and professionalization suggests that the participation in the linguistic marketplace is not merely limited to professional contexts, but also to the discussion of those contexts. FCD patterns alongside this stylistic performance, supporting other findings (Grieser 2015) that FCD is implicated in stylistic performance of correctness. These findings provide empirical evidence for the importance of the consideration of stylistic variation as bricolage, serving as further evidence that stylistic variation is best understood by exploring the constellation of features which are variably recruited in interaction.

Belgian Standard Dutch is (not) dead (yet): The omnipotence of zombie varieties

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Deumert (2010: 259) uses an elegant *zombie*-metaphor for standard varieties which are “essentially dead, but continue to structure our actions and experiences because we (...) treat them as if they were real”. This image fits few varieties as well as Belgian Standard Dutch (BSD), the norm for spoken Dutch which was forced onto the Flemish in a process of hyperstandardization (Van Hoof & Jaspers 2012). In spite of the comparative success of this standardization, BSD has never been a vital production reality. Yet, it continues to be ideologically powerful to the extent that it fuels controversy, and legitimizes the discrimination of Tussentaal, an increasingly vital colloquial variety (Grondelaers et al. 2016).

If anything, standard language dynamics in Flanders seem to indicate that language ideology and language production are *not* causally related, unless – as Kristiansen (2009) has demonstrated in Denmark – a “double standard scenario” is emerging, whereby overt discourses uphold the official norm, whereas covert progressive ideologies sustain the vitality of modern varieties which are publicly downgraded.

In an attempt to confirm this double standard-scenario in Flanders, we conducted two experiments. In a free response task, 202 participants returned the first three adjectives which came to mind in response to six labels for varieties of Belgian Dutch, including BSD and Tussentaal. Data were processed in two ways. A simple “sort and count” analysis revealed a higher proportion of negative evaluations for VRT-Dutch in the youngest generation. In a “big data” approach, we used distributional semantic analysis to cluster the 1000+ keywords into evaluative dimensions. While both analyses suggest ideological change, we cannot exclude that emerging anti-standard sentiments represent a growing weariness of the hysterical mediatisation of language issues in Flanders, rather than an indication of ideological change (see also Lybaert 2017).

In order to go *below* public conceptualizations, and get a grip on the ideological motor of Flemish standard language dynamics, we designed a speaker evaluation experiment with two priming conditions: critical Tussentaal-samples were preceded either by two clips of unaccented posh BSD, or by two clips of Tussentaal with stigmatized morpho-syntactic variants. Analysis of the ratings confirmed that Tussentaal clearly commands modern prestige evaluations (as evidenced on attributes such as *modern* and *hip*), but it is equally obvious that the conservative BSD-ideology is alive and kicking.

While our data, therefore, confirm the Kristiansen-scenario (“public support for the conservative ideology, private support for new hierarchisations”), Flanders appears to be an exception to the extent that there is no univocal public endorsement of the conservative ideology, and that the private support is not unconditional.

The social meaning of regional and ethnic accent strength in Netherlandic Standard Dutch

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Although the causal relation between language perception and production has often been questioned, there is evidence that the ubiquity of accent variation in Netherlandic Standard Dutch (NSD) is motored by, or at least correlated with, a positive evaluation of (some) regional accents. Grondelaers et al. (2010) and Grondelaers & Van Hout (2010) found that the undisputed standard flavour of NSD, the Randstad accent, was invariably evaluated as the most prestigious. Other regional accents, however, were not systematically rejected.

This paper reports two new speaker evaluation experiments which address important lacunas in our understanding of the perceptual and ideological correlates of standard language dynamics in The Netherlands.

Since accent broadness has been identified as a major evaluation determinant since Giles (1972), we manipulated this variable in a new design. In a preliminary task, untrained listeners evaluated read aloud sentences produced by male and female speakers of the high prestige Randstad accent and the low(er) prestige Limburg accent in terms of the strength of the speaker's accent. Speech clips were extracted from the *Sprekend Nederland*-corpus, a smartphone-elicited database of speech (Van Leeuwen et al. 2016). 16 clips produced by the male and female Randstad and Limburg speakers who were found to be the least and most accented in the previous experiment, were subsequently entered in a speaker evaluation experiment. Ratings correlated robustly into a *Superiority* (traditional prestige), a *Dynamism* (modern prestige), and an *Integrity* component, and on both Superiority and Dynamism, milder versions of especially the lower prestige Limburg accent were strongly upgraded.

In a second experiment, we investigated the social meaning and standard status of weak and strong *ethnic* accents, as produced by Moroccan-Dutch speakers. Although prior research has revealed that non-European L2-accented speech elicits negative attitudes (also in NSD, see Grondelaers et al. 2015), some Moroccan Dutchmen with a *weak* accent have risen to positions associated with traditional prestige. In a new experiment, participants rated the weakly and strongly-accented male speakers from the previous experiment, complemented with weakly and strongly-accented Moroccan-Dutch males. Crucially, weakly-accented Moroccan-Dutch speech was deemed much more superior than its strongly-accented counterpart (though not as superior as any indigenous speech), and Moroccan-flavoured speech was found to be the *most* dynamic of all.

The new data suggest that regional and ethnic accents in NSD are being mapped onto a *strength scale* which neutralizes prior absolute prestige differences, and resets the prestige and standardness of the accents in (more) quantitative terms.

Saks vs. Macys: (r-1) marches on in New York City department stores

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Labov's landmark study of the social stratification of /r/ in New York City department stores (1963) revealed an age distribution that suggested an ongoing 'change from above' in the City dialect towards increased use of consonantal /r/ in coda position (r-1). This observation has been the focus of several subsequent tests (Fowler 1986, Mather 2012), effectively providing real-time trend studies by replicating the original methodology. They have shown continuing progression in the direction Labov predicted. This is a unique case in variationist studies of change in progress; no other change has been so frequently sampled with controlled methodology across so long a time frame. The present study extends the duration of this series to 54 years. The original study investigated three department stores that were socially stratified by price level and target clientele: Saks, Macys and S. Klein. Klein, the low-end store, closed in 1976, but the other two still operate in their original locations in Manhattan and were investigated for the present study using Labov's original methodology.

160 speakers were observed in each store. The results show continued advance of (r-1) in real time (Fig. 1). The percentage of speakers using all (r-1) has increased by a factor of 2.8 in both stores since Labov's study, but the rate of change has accelerated considerably since Mather's 2009 data collection. Social stratification of the variable is still apparent: Saks, the high-end store, continues to show higher rates of (r-1) than Macys. In Labov's apparent time results, (r-1) use increased among younger speakers at Saks, but was higher among older speakers at Macys, suggesting that the change originated among higher status speakers, and spread to lower status speakers by diffusion in adult life. In the current study, this pattern has shifted. The age distribution at Saks is flattening out at a high level (speaker groups under age 50 all produce over 80% (r-1) tokens), while Macys now shows a conventional apparent time pattern, with (r-1) advancing among younger speakers. The linguistic conditioning on the process is moderating as the change approaches completion: Macys speakers showed moderate increases in (r-1) of about 7% between internal ('fourth') and final position ('floor'), and between non-emphatic and emphatic productions, but Saks employees are essentially uniform across all conditions.

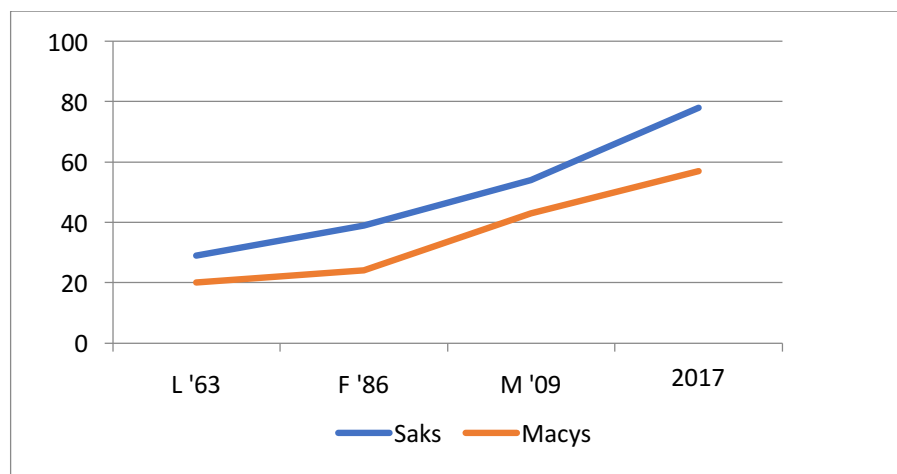


Figure 1. % all (r-1) in real time, in four studies, by date of data collection

Sociolinguistic Partnerships in the University: The Effects of Linguistic Materials in First Year Composition

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As sociolinguists, one of our main responsibilities is to educate our students (and our colleagues) about the reality of language variation and the negative impact of common misconceptions towards variation (Labov 1982, Wolfram 1993). One of the major avenues that we can accomplish this in the university is through the First Year Composition (FYC) program. In this paper we look at an example of the partnership of linguists with FYC faculty and examine the ways in which sociolinguistic knowledge can enrich first year writing students' experience in the classroom.

Through the use of an online Digital Badge system, all sections of the first and second semesters of FYC at a regional university are provided with direct instruction in linguistic diversity and style-shifting central to the rhetorical use of language. By calling attention to language attitudes and stereotypes as well as the context-specific nature of language use, these badges invite students and instructors alike to see language as a socially situated and materially bound literate activity. This approach, which resists a rule-driven or prescriptive stance, positions language as a generative system of possibilities. This promotes an academic culture that honors the diverse home languages students bring to the classroom (cf. NCTE 1974 "Students' Right to their Own Language") as it calls for students to build upon their existing linguistic repertoires as they develop the reading and writing strategies central to academic and public discourse.

The program has been running since 2014, and to date we have collected both qualitative and quantitative data from 4,589 students that have utilized these language awareness modules. Looking at data from a subset of students as well as data from interviews with instructors across two semesters, we investigate the ways that instructor attitudes about dialect appreciation and linguistic plurality (Reaser, Adger, Wolfram, & Christian 2017, Charity-Hudley & Mallinson 2011) are shown in student performance and response to questions about linguistic style and linguistic security in the writing classroom.

Data from the analysis indicate that students respond positively to the linguistic material in FYC and that they generally find it socially and academically affirming and helpful as they negotiate a new discourse community. Similarly, data from instructor surveys indicate that the ways in which the linguistic material is presented in class as well as a general knowledge about linguistic diversity and language variation are all significant. This work points to the importance for sociolinguists to utilize the opportunity presented by required FYC courses to first reach all students within the university with the message of valuing linguistic variation. Second, it reminds us of the need for linguists to engage in conversations with FYC faculty about the importance of valuing a variety of voices within the classroom as an important step in the acquisition of the Language of Wider Communication (Smitherman 1995, Cheshire 2005, Adger, Wolfram, & Christian 2007, Reaser & Adger 2008).

Media Effects on Explicit Language Attitudes

Hayley Heaton and Robin Queen
University of Michigan

Language attitudes are well documented within sociolinguistic research. Some sociolinguists have suggested that language attitudes are spread through media exposure (Kristiansen 2009, Kristiansen 2014, Sayers 2014) with the theory that using language variation in association with stereotypical, often negative, characteristics supports negative attitudes (Lippi-Green 2011). This claim, however, has not been empirically tested. This paper explores the assumption that representations of accented speakers on television affect explicit language attitudes towards an actual human being with those linguistic characteristics. Additionally, this research works towards building an interdisciplinary methodology to test media effects on language attitudes comparable to media effects research in other fields.

Specifically, this paper tests whether attitudes about the intelligence of speakers with an American Southern English (ASE) accent are affected by representations of ASE-accented characters on television using a combination of methods from sociolinguistics, psychology, and communications. The true purpose of the research was hidden from participants so as to not compromise the integrity of results. After completing an attitudes baseline measure, participants heard three adapted television clips recorded by community theater actors. Each clip had a more and a less intelligent character. One set of participants heard clips in which the more intelligent character had an ASE accent; the other heard the less intelligent character with an ASE accent. After the clips, participants were told the experiment was over and were debriefed by an ASE-accented research assistant (RA). They were then asked to complete an evaluation of the experiment. The evaluation included the actual measure of interest: a semantic differential evaluation of the ASE-accented RA.

Results indicate that overall attitudes did not significantly differ from baseline to evaluation, but do indicate demographic and cultivation effects. In particular, self-identified ethnicity and television preferences affected attitudes across conditions. Participants who self-identified as White changed significantly less than those who did not from baseline to evaluation for ratings of competence, cheerfulness, reliability, and trustworthiness, leaving smartness as the only non-significant trait. Those who identified favorite television shows with prominent Southern characters also showed less change in trustworthiness from baseline to evaluation and thus rated the Southern RA significantly less trustworthy than those without favorite television shows with Southern characters. This result is particularly interesting as the most frequently identified favorite television show featuring a Southern character was *House of Cards*, which features a manipulative Southern lead. In models including demographic factors, those who heard the more intelligent ASE-accented character trended towards greater change in ratings of competence and reliability from baseline to evaluation, resulting in higher ratings of the RA on these attributes. Thus, language attitudes may at least be primed by media; the interaction, however, is more complex than a simple cause-and-effect relationship and is affected by other factors such as self-identified demographics.

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The quotative system in Saipanese English: Contrasting profiles of *be like* and *zero*

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This paper examines the use of quotatives in the English spoken in Saipan. While multiple investigations of the quotative system in L1 varieties exist, studies on L2 varieties (for example Philippine or Singapore English (D’Arcy 2013)) using the ICE corpora are in their relative infancy. I investigate the diffusion of this globalized variable and how it is embedded in a multilingual, multicultural, and mobile community with a nativizing English variety.

Saipan is the largest of 14 islands in the Commonwealth of the Northern Mariana Islands, located in the Pacific Ocean. English became a community language in Saipan when the US began its administration post-WWII. The two indigenous communities, the Chamorros and Saipan Carolinians, each have their own language, yet mostly use English as a lingua franca. Consequently, Saipan is shifting from an English as an L2 to an English as an L1 community.

Variationist methods are used to compare the quotative system of Saipanese English with what we know about other L1 and L2 varieties. The data consist of a subset of a corpus collected in 2015: Out of 95 conducted sociolinguistic interviews with indigenous speakers, 32 speakers were analyzed in detail for this study. Results from a mixed-effects logistic regression model in *R* reveal constraints similar to those highlighted for other Englishes: E.g. Toronto English (Tagliamonte and D’Arcy, 2007), American English, English English and New Zealand English (Buchstaller and D’Arcy, 2009). The use of *be like* is favored with the historical present, thought, first grammatical person, and mimesis. This study, furthermore, focuses on the complex and under-researched social factors that influence quotative choice in L2 settings. From the Saipan data I investigated not only the well-known factors of speaker sex and age, but also the mobility histories, ethnic backgrounds and occupations of the speakers.

Results reveal that mobility is one of the key factors influencing the choice of a quotative: Half of all *be like* tokens were produced by speakers who had spent a considerable time, seven years and above, off-island (six out of the 32 speakers (19%) fall into this category). Furthermore, *be like* correlates with Chamorro ethnicity, students and white-collar workers. Interestingly, the *zero* quotative is the second most frequent variant in the Saipan data set. This variant is preferred in the speech of Carolinians and blue-collar workers. In addition, these two social factors also correlate with a lower mobility rate. This study, therefore, shows how the global innovative quotative variant *be like* is adopted into an emerging contact variety of English and how complex interactions of social factors shape the choice of the *be like* or *zero* quotative.

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Is that an interruption? Depends on who's listening

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As discourse analysts have known for decades, what counts as an interruption for some is a cooperative sign of engagement for others (e.g. Tannen 1983). However, quantitative and experimental approaches to turn-taking and overlapping speech rest on the assumption that all listeners generally agree on whether a moment of overlap sounds interruptive or cooperative, and attempt to map interruptiveness onto objective properties of speech alone (e.g. Kurtić et al. 2013; Chowdhury et al. 2015). The present study challenges this assumption, using social perception experiments to demonstrate that interruptiveness is a highly subjective phenomenon. This study advances our understanding of interruptions and turn-taking by investigating how listeners' own interactional styles influence whether they interpret overlapping speech as either interruptive or cooperative.

4,000 American English speakers were recruited through Amazon Mechanical Turk to listen to a single audio recording of two speakers interacting and then answer questions about the speakers, such as how engaged/friendly/dismissive/controlling each seemed, how likely it was that each speaker was trying to interrupt, and whether each speaker likely felt interrupted or listened to by their interlocutor. All stimuli consisted of five-line scripted dialogues between male-female pairs. Stimuli varied along several dimensions; this paper focuses on the presence, duration, and prosody of overlapping speech. Speakers performed overlapping turns in their typical conversational voice, in a louder "floor-grabbing" voice, and in a quieter, less intrusive voice.

Participants also answered questions about their personalities, interactional styles, and gender attitudes. This paper focuses on one measure of interactional style: evaluations of two friendly spontaneous conversations. After evaluating the target stimuli, participants listened to these two 25s recordings and indicated which they would be more comfortable participating in and which sounded most like their own conversations. One prototypically "high involvement" conversation (Tannen 1984) contained lots of cooperative overlap, fast speech rate, and no gaps between turns, while the prototypically "high considerateness" conversation contained no overlaps and long gaps between turns.

Linear regressions tested the effects of overlap duration, prosody, and interactional style on perceived interruptiveness. Overall, interruptiveness was significantly affected by overlap duration ($p < 0.0001$), prosody ($p < 0.0001$), and the interaction between duration and prosody ($p < 0.008$); longer overlaps and overlaps with "floor grabbing" prosody were perceived as more interruptive. However, these perceptions systematically varied depending on participants' interactional styles. Participants who preferred the "high involvement" conversation evaluated all overlaps as less interruptive ($p = 0.006$), and even evaluated speakers as more engaged when overlapping for a short duration ($p = 0.01$) or with "un-intrusive" prosody ($p = 0.007$), compared to equivalent dialogues with no overlap. Crucially, it is not that "high involvement" participants merely tolerated overlaps, but at times, they preferred it to no overlap.

Though it's often assumed that speakers aim for "no-gap-no-overlap" turn exchanges (Sacks et al. 1974), recent work challenges this, showing that overlaps of detectable length are actually more common than "no-gap-no-overlap" exchanges (Heldner 2011). The findings presented here suggest that speakers likely vary in their preferred turn-taking systems, and this study demonstrates the value of incorporating qualitative aspects of listener subjectivity into quantitative models of interaction.

**Tense/mood variation and epistemic commitment:
Form-function mapping in three Romance languages**

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Argentine Spanish, Brazilian Portuguese, and Italian all exhibit tense/mood variation in future-framed adverbial contexts that is not accounted for in most grammars (Real Academia Española 2010, Perini 2002, Proudfoot & Cardo 2005). In Argentine Spanish, the present indicative is variably used in place of the normative present subjunctive (1); in Brazilian Portuguese, either the present or future indicative may be used instead of the future subjunctive (2, 3); and in Italian the present indicative appears in lieu of the future indicative (4).

- (1) Cuando llego [PI] / llegue [PS] a casa, te llamo.
- (2) Quando chego [PI] / chegar [FS] em casa ligo pra você.
- (3) Quando chegarei [FI] / chegar [FS] em casa ligo pra você.
- (4) Quando torno [PI] / tornerò [FI] a casa, ti chiamerò.
‘When I get home, I’ll call you.’

I analyze data from Twitter combined with constructed examples, which were adapted from tweets and presented to native-speaker consultants of varying ages and genders to obtain acceptability judgments. Results show that similar pragmatic factors related to degree of epistemic commitment (cf. Boye 2012) govern this variation across the three languages, in spite of appreciable individual variation and different thresholds for acceptable use of the non-standard forms in each language. That is, in all three languages, non-normative indicative forms are most acceptable in cases that are, first and foremost, immediate and certain to occur, and secondarily, temporally specific. In other words, when the speaker holds a high level of epistemic commitment to the realization of the future action, non-normative tense/mood forms may be used. Similarly, future-framed habituals and stereotypical circumstances are additional cases where the non-normative variant occurs, further corroborating the central role of epistemic commitment in conditioning this variation. These findings call into question previous descriptions of tense/mood contrasts and show that the “doctrine of form-function symmetry” (cf. Poplack et al. 2013) for tense/mood alternation, so often proclaimed in grammatical descriptions of the three languages, is empirically indefensible.

Furthermore, my findings show that Spanish, Portuguese, and Italian encode epistemic information via similar grammatical means, even though the specific linguistic forms differ. This cross-linguistic evidence of the importance of pragmatic factors in tense/mood variation shows that, although these related languages vary in the degree to which speakers accept non-normative indicative forms in future-framed contexts, the underlying constraints guiding form-function mapping of tense/mood and epistemic commitment are the same, thus permitting one to begin to create a “variationist typology” (cf. Torres Cacoullos & Travis 2015) of such mapping.

How Black Does Obama Sound Now? Testing Listener Judgments of Intonation in Incrementally Manipulated Speech

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Suprasegmental features, especially intonation and voice quality may be of special interest to sociolinguists as well as the public, due to their high level of salience for listeners (Tarone 1973, Purnell et al. 1999, Baugh 2015, Thomas 2016, Holliday 2016). Acoustically, suprasegmental features encompass a number of acoustic parameters which can be challenging to isolate from one another, though artificially manipulated speech may prove useful for isolating these features.

This study builds on Alim and Smitherman (2011), as well as intonational methodologies, by testing listener judgments of manipulations of Obama's utterances in one interview. The utterances were declarative Intonational Phrases with H* and/or L+H* pitch accents (following updated ToBi conventions for MAE of Beckman et. al 2007). 93 American English listeners each heard 40 phrases, with 4 different step manipulations of each of 10 phrases (as well as 40 fillers, all in a randomized order). These were presented in an online-experiment via Qualtrics, and phrases were selected for length as well as high frequency vocabulary where possible. For example, one target phrase was "they rotate", originally uttered with one L+H* pitch accent and an L-L% boundary. This phrase was then manipulated in Praat to produce 3 more versions, each with a more extreme difference between F0 of the low and high targets than the previous one. Each manipulation decreased the low target by one semitone and increased the high target by one semitone, so that there were 3 steps between original and the most extreme. For each utterance, listeners responded to the question, "How Black does Obama Sound?", using a slider bar.

Following the experiment, a mixed-effects regression model was conducted for blackness ratings by assessing the interaction of Pitch Accent type, Manipulation Step, and Boundary tone, with Phrase nested within Pitch Accent. No main effect for Pitch Accent type was found, indicating that, overall, phrases with L+H* accents are not rated more or less black than those with only H* pitch accents ($p=.27$). However, the model revealed a significant interaction of Pitch Accent and Manipulation Step such that the more extreme L+H* phrases were rated as more black ($ps<.05$), though no effect was observed for the manipulation steps on the H*-containing phrases. Additionally, we observed a significant interaction of Pitch Accent and Boundary Tone, as L+H* phrases were also rated as more black when they concluded with an H-L% boundary tone ($p<.05$).

These results indicate that listeners are sensitive to stepwise manipulations of the F0 contour, and therefore provide a promising new direction for studies on listener judgments of ethnicity. For Obama's speech, a more extreme contrast between F0 min and F0 max in a given intonational phrase triggers a "more black" rating, though only for the L+H* pitch contour, which occurs more frequently in AAL (McLarty 2013, Thomas 2015, Holliday 2016). If it is the case that this intonational contour is reliably more likely to be rated as black with more extreme pitch differences, this is an exciting finding for scholars interested in perception, linguistic discrimination, and speech synthesis.

The jet set: Articulatory setting and the shifting vowel system of London English

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Previous research reports that the short vowels of Southern British (SBE) are participating in a “drag chain” (Wells 1982; Trudgill 2004), with both internal and external mechanisms implicated in its propagation (Tollfree 1999; Torgersen & Kerswill 2004; Torgersen et al. 2006). However, in a recent analysis we find evidence for extreme convergence, not shifting, particularly within the low-back vowel space. This may indicate that while earlier stages of the change are best characterised as a shift, this term does not describe subsequent developments. In this paper, we focus on how we may progress beyond a segmental based analysis in the investigation of systemic vocalic change.

Our data come from two British “engineered reality” television programmes: *Made in Chelsea* (MiC) and *The Only Way is Essex* (TOWIE). The shows present enactments of salient social class stereotypes – upper middle-class (UMC) Chelsea and working-class (WC) Essex. As such, we can use this data to assess the extent to which observed developments are community-specific in the region. Formant measurements were automatically extracted using the FAVE suite (Rosenfelder et al. 2011) with Lobanov normalisation. We took 4,650 stressed monophthongs across 30 speakers (balanced for speaker sex and programme) from high-definition videos of the first two seasons of each programme.

In our preliminary analysis, individual regressions of the relative position of the KIT, FOOT, DRESS and TRAP vowels (examining F1, F2 and the Euclidean Distance from FLEECE) indicate that there is a general pattern of convergence – or “in-crowding” – in the low back area of the vowel space. This change is most advanced among MiC speakers, with women in TOWIE beginning to participate in the change as well. Measurements of vowel space dispersion (e.g., Bradlow et al. 1996) confirm that changes in individual vowel position correspond to a decrease in the overall size of the low vowel space. In short, we find a system-wide change that lacks the regulation of a chain shift. This presents a methodological and a theoretical challenge: how can we quantitatively represent changes of this nature? And, how can we motivate the lack of functional differentiation between segments that such a change implies?

Recent work on sound change that reports on similar patterns has argued for the importance of articulatory setting as an explanatory mechanism (Pratt & D’Onofrio 2017; Sóskuthy et al. 2017). Based on this, we examine F3 of all vowels in the sample, as a measure of speakers’ lingual settings (Nolan 1983; Thomas 2011). Our results demonstrate that convergence in the vowel space correlates with the adoption of a “muffled” or “lax” voice setting (Honikman 1964; Laver 1980). Furthermore, we find that speakers in the sample strategically deploy this setting across different stylistic contexts, suggesting that they are drawing upon a salient enregistered persona in their enactment of particular styles (Agha 2008). The correlation between style and articulatory setting allows us to account for the system-wide vocalic convergence, and contributes to our understanding of the relationship between supralaryngeal setting and the propagation of sound change more generally.

Quantifying contact through regionality and education: Examples from variationist studies of Arabic dialects

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In recent studies of language variation and change in Arabic, contact has been proven to be a significant sociolinguistic factor. Such are the studies of the Jordanian dialect of Sult, the Palestinian dialect of Jaffa and the dialect of the Ghamdi dialect in Mecca, Saudi Arabia, which form the basis of this paper.

We use ‘contact’ as an umbrella term for a number of related phenomena, such as dialect contact and language contact, which can occur with or without mobility, often involving multiple opportunities for daily interactions with speakers of other varieties, including supralocal ones (see Milroy et al. 1994).

Studies and theoretical formulations of contact (e.g., Thomason & Kaufman 1988, Matras 2009) have dealt meticulously with qualitative aspects of this phenomenon. Few works, however, have dealt with contact quantitatively. Nagy’s (1996, 1997) work on contact between Faetar and standard Italian was one of the first attempts to incorporate—and challenge—the qualitative aspects of contact with an attempt to formally include them in a quantitative study of LVC.

The first known quantification of (dialect) contact was carried out by AlEssa in 2008 for the dialect of Jeddah, and this paper follows suit. In each of our three studies, some measure of contact has been considered, and found to be statistically significant. Eckert (2012) posits that there is a “relation between language use and the kinds of social moves that lead to the inscription of new categories and social meanings.” The more such new categories we have, the more challenging it is to quantify them for statistical modeling.

For the Mecca community, we devised a Regionality Index, based on migrant speakers’ self-identification as *Indigenes* or *Interlopers*, following Chambers’s (2000) formulation of regionality as a social factor. For Jaffa, a number of components in the sociolinguistic interviews were devoted to eliciting information that is indicative of levels of contact between the speakers’ L1—Arabic, and their L2—Hebrew. These were later converted into factor groups, which were considered individually. Among these factor groups, was that of Language of Education. This focus on *type* of education rather than mere *level* of education correlates with our evaluation of education as a *proxy variable*, which is manifest in the study of Sult. Similar to Prichard & Tamminga’s (2012) study of types of higher education institutions attended by Philadelphia speakers, we include Jordanian and Palestinian students who have a wide range of public, private and parochial schools they can attend, resulting in different levels of both dialect- and language contact.

In the Jordanian case, the linguistic variable studied is the historic voiceless interdental fricative (θ), which variably merges with its alveolar plosive counterpart /t/ as a result of contact with Amman speakers; in Palestine we look at the voiced pharyngeal fricative (ʕ), which is variably lenited or deleted in direct relation to contact with Hebrew; and in Mecca we examine the gradual monophthongization of the traditional ‘wide’ diphthongs (aw) and (ay) – [aʊ] and [aj] – to [ɔ:] and [ɛ:], with intermediate ‘narrow’ diphthongs [ɔu] and [ɛi].

Auxiliary reduction in the Spanish periphrastic past

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The correspondence between meaning and phonetic form has long been discussed in the literature on grammaticalization, which maintains that elements with more abstract (grammatical) meaning tend to be shorter and more reduced (Givón 1979, Bybee et al. 1994, Lehmann 1995). In their analysis of 'type' noun constructions in contemporary English, Dehé and Stathi (2016) observe that semantic change (and, in particular, desemanticization) and phonological reduction occur in tandem. Moreover, they demonstrate that "synchronically coexisting prosodic patterns correspond to different degrees of grammaticalization" (2016:911). Following Traugott (2002), the current study assumes a distinction between 'primary' and 'secondary' grammaticalization, the latter referring to changes that do not involve a shift in grammatical category but rather extension of semantic/pragmatic meaning. By analyzing patterns of phonetic reduction of a form undergoing secondary grammaticalization, in this case the perfectivization of the periphrastic past (or perfect) in Peninsular Spanish (see Schwenter & Torres Cacoullós 2008), I argue that increased reduction can indeed be linked to advanced stages of grammaticalization, in this case characterized by the use of the perfect in past narratives.

Various studies, such as Bybee (2002), have shown that the rate of deletion (or reduction/lenition) of intervocalic /d/ in Spanish is greater with participles than with other lexical, non-grammaticalized classes (see also Blas Arroyo 2006). The current analysis observes patterns of erosion and omission of auxiliaries in the Spanish periphrastic past (e.g., *he vuelto* and *han venido* in example 1) and demonstrates that sound change in morphosyntax is more gradient than observed by Bybee (2002, and others). The data come from a corpus of spoken Spanish consisting of sociolinguistic interviews with 25 speakers from Alcalá de Henares, Spain, a dialect in which the periphrastic past displays the *perfect* to *perfective* development characteristic of other Peninsular varieties. The tokens targeted for this study were extracted from the narrative portion of the interview in which speakers were asked to narrate the day's events, an excerpt of which is provided in example (1). The narrative use of the perfect is particularly innovative in that this usage is, for other varieties of Spanish, reserved for the simple past (Schwenter 1994). Cases of first person auxiliaries (*he*) were categorized (reduced vs. unreduced) using acoustic cues and compared to other first person forms in the corpus.

- (1) *Luego me (he) vuelto a la biblioteca y he estado estudiando también la lingüística. Y después me han venido unas compañeras y me han dicho de salir al colegio de Málaga. 'Later I returned to the library and was also studying linguistics. And afterwards some friends came and told me to leave Málaga College.'*

Of the 336 verb forms analyzed, the overall rate of auxiliary reduction was 55%, with a third of these cases being completely omitted. A logistic regression also revealed that the rate of reduction was significantly higher in narrative contexts than in the broader corpus, with other factors also showing significant conditioning, such as verb class and verb frequency. Although the results of the current study differ from those of Dehé and Stathi (2016) with respect to their findings on frequency effects, these data provide corroborating evidence for the observation that gradient phonetic reduction can be viewed as a reflex of different degrees of grammaticalization.

What it means when you say my name (right): Subjective evaluations of the linguistic reproduction of names

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What social meaning does it carry to accurately or inaccurately replicate the pronunciation of another's name? Previous research has shown that imitation or adoption of the linguistic features of another is mitigated by attitudes toward that individual or group (Eckert 2004; Babel 2010; Yu et al. 2013; Weatherholtz et al. 2014). Regarding loanwords, a speaker or community's use of unnativized (more source-like) variants has been both hypothesized and demonstrated to correlate with more positive attitudes toward the source language or associated group(s) (Weinreich 1968:27; Thomason 2001:73; Lev-Ari et al. 2014). We build on these observations by asking whether a speaker's accurate or inaccurate reproduction of another's name can be *perceived* by listeners as a reflection of that speaker's attitudes. This hypothesis is tested using a matched-guise paradigm (e.g., Lambert et al. 1960; Purnell et al. 1999; Yuasa 2010) to examine how the evaluations of a speaker are influenced by whether they accurately or inaccurately replicate the name of a newly introduced interlocutor.

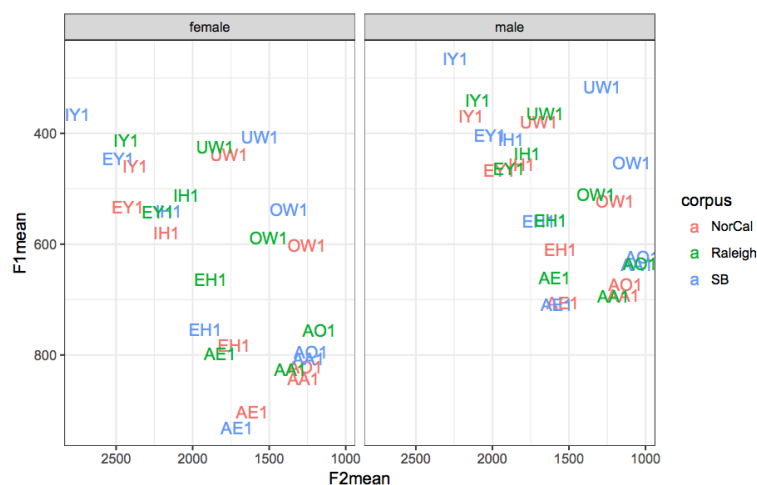
In an online experiment (N=134), participants heard three short dialogues set in different casual settings with everyday-like small talk and self-introductions. In each dialogue, two people meet: Speaker A, the NameHolder who introduces herself with her name; and Speaker B, the Repeater who reiterates the NameHolder's name in a subsequent line. After listening, participants rate Speaker B (the Repeater) along different social trait spectra. In the first two dialogues, the Repeater's pronunciation matches the NameHolder's, both of a standardly Anglo name variant ([nə'tæliə], cf. [nə'təlɪə]) and a less Anglo, more foreign-indexed variant ([ʌn'diə], cf. ['ændɪiə]). In the final, the Repeater's pronunciation does not match the NameHolder's ([isə'bɛlə] → [ɪzə'bɛlə]; [ɪzə'bɛlə] → [isə'bɛlə]). Results largely confirm the hypothesis set out to be tested. Accurate replication is judged as significantly more sociable, friendly, cooperative, and polite. Effects also extend to some factors less directly tied to interaction, with an accurate Repeater also judged as likely multilingual (but also in the inaccurate condition in the foreign variant direction: [ɪzə'bɛlə] → [isə'bɛlə]) and more likely politically liberal (mirroring previous findings by Hall-Lew et al. (2010) regarding loanword variation). However, other factors more inherently tied to the individual such as intelligence and attractiveness do not show significant effects.

These findings suggest that the social phenomenon of name exchanging can carry significant meaning. Just as it has been observed that a more negative attitude toward a person or group can lead to less imitation of their linguistic forms, less accurate reproduction of their linguistic forms (and, indeed, linguistic labels they use to represent themselves) can be perceived as unsociable, unkind, and uncooperative. This may therefore be seen as a platform for 'face-work' (Goffman 1955), with mispronouncing another's name as a potential face-threatening act or accurately pronouncing it as a face-maintaining device. And/or this could be seen as a platform for speech accommodation (Giles et al. 1991), indicating alignment with another via convergence or divergence. This is in line with previous work analyzing the mispronunciation of the names of Students of Color as a microaggression by 'othering' (Kohli and Solórzano 2012) and 'indexical bleaching' (Bucholtz 2016): two sides of the same coin.

The California Vowel Shift in Santa Barbara

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The Atlas of North American English (ANAE; Labov et al. 2006) recognizes three major dialect regions: the North, the South, and the West. Findings since the 1980s have shown that different areas within the West are linguistically divergent. Eckert (2004) describes the Northern California Vowel shift as follows: /ɪ/ fronting before nasals with backing and lowering elsewhere, /ɛ/ backing and lowering, /æ/ raising to /eɪ/ before nasals and backing and lowering elsewhere, /ʌ ʊ u o/ fronting, and a complete merger of /ɑ/ and /ɔ/. This study examines the vowel spaces of fifteen middle class, white, 20-30 year old speakers raised in Santa Barbara, California. This field site in the Central Coast was chosen in order to diversify the pool of data from California, as most research has been centered in Northern California (Preston, 1986; Hinton et al., 1987; Eckert, 2004, 2008; Hall-Lew 2009, 2011; D’Onofrio et al., 2016) or the Los Angeles area (Bucholtz et al., 2007; Aiello, 2010; Kennedy & Grama, 2012). The data is drawn from two reading passages, recorded in fall 2016: *The Boy Who Cried Wolf* (Deterding, 2006) and *Comma Gets A Cure* (McCullough et al., 2000). By completing an automated formant analysis using Praat scripting and statistical analysis in R, I address the following research questions: Is Southern California exhibiting the CVS the same way that Northern California speakers are? How do male and female realizations of the CVS differ? How do non-binary and non-conforming speakers compare to those with binary-gender identities? How do level and location of education affect the CVS? Using mixed-effects models, I found that Santa Barbara speakers are shifted very similarly to those from Northern California. Using mean F1 and F2 values from Aiello 2010, the only differences appear to be with the fronting of back vowels, as Santa Barbara males’ are much less fronted.



In the Santa Barbara corpus alone, women have a lower and more backed /ɛ/ realization than the other three genders. Furthermore, women who stayed in California for their college years are more likely to have a complete split between pre-nasal and non-pre-nasal /ae/ tokens. Men exhibited a more raised /ae/ before /k/, which indicates that they have not fully adopted the shift. There is no effect of gender on other phonemes, and no effect of a speaker’s level of education. I

conclude that these young, middle-class, white Santa Barbara natives are California Shifted. However, this shift may not be fully realized with male speakers. While there are significant differences based on binary gender, we cannot make the same claims for non-binary or non-conforming speakers, level of education, or location of higher education. Future work should include more sociological variables such as social network and occupation in order to fully examine the CVS among these speakers.

Pragmatic Effects on the Variable Use of 2PL Address Forms in Andalusian Spanish

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In Central and Western Andalusia, both pronominal and verbal variation are found in the use of plural address forms (Lara Bermejo 2015). The pronominal variation involves alternation between the 2PL pronouns *ustedes* and *vosotros* as subjects, e.g. *ustedes coméis* and *vosotros coméis* ('you [plural] eat'). The verbal variation involves the alternation between the 2PL and 3PL verb forms when *ustedes* is the subject pronoun, e.g. *ustedes coméis* and *ustedes comen* ('you [plural] eat'). Previous work addresses pragmatic differences between these variants only in terms of contextual (in)formality and (a)symmetric interpersonal relationships, arguing that there are no pragmatic differences between the variants (Alvar 1973; Lara Bermejo 2015; Narbona et al. 1998). Building upon prior research on pragmatic differences between singular address forms (Raymond 2016; Sinnott 2010), in the present study, I show that plural address form variation in Andalusian Spanish is likewise closely tied to pragmatic differences.

I collected a total of 7450 tokens from online fora, Twitter, and from the corpus *PRESEEA* Málaga. Data also come from an oral elicitation task and an online forced-choice survey with different types of contexts. Data were analyzed using multivariate logistic regression in R, conditional inference trees and random forests (Tagliamonte & Baayen 2012). Results indicate that pre-verbal as opposed to post-verbal placement leads to significantly more use of *ustedes* over *vosotros*. *Ustedes* is also more likely to occur in contexts where affection or anger is expressed toward the interlocutors, as shown by the contexts from the elicitation task and online survey, and a by the co-occurrence of *ustedes* with graphic features like emojis in the online sources. Furthermore, *ustedes* is more frequently produced by male speakers with lower education. Imperative mood, post-verbal placement, and no intervening material between subject and verb lead to more use of the 3PL verb form over the 2PL with *ustedes*. The 3PL is also more frequently produced by older male speakers, in rural areas, and in apologies.

This research reveals that use of the 3PL with *ustedes* is limited to formulaic expressions of the type *disculpen ustedes* ('pardon-2PL me'). It also reveals that *ustedes* plus the 2PL verb form follows the pattern of its predecessor *vuestras mercedes* ('your honors'), which also occurred in pre-verbal position more frequently and with second person agreement instead of third person agreement before it was fully stabilized in the system (Fernández Martín 2012). This pattern suggests a possible change in progress, supported by the association of *ustedes* plus the 2PL with male speakers overall, and the 3PL with specifically older male speakers. Furthermore, *ustedes* as opposed to *vosotros* conventionally implicates non-neutrality, where the specific attitude toward the interlocutors is context-dependent. This study therefore sheds new light on pronominal shifts in Spanish, which are typically assigned to static social categories (cf. Raymond 2016). It shows how address form switching is used by the same speaker in the same interaction to convey different pragmatic meanings. Finally, it contributes to the analysis of plural address forms more generally, which are highly understudied from a cross-linguistic perspective.

AAE Intensifier Dennamug: Syntactic Change in Apparent Time

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University of Pennsylvania

Dennamug [dɪnə'mʌ:] is an intensifier in some varieties of African American English, etymologically related to (a truncation of) the phrase “than a mother(fucker)” although, perhaps surprisingly, not transparently so to many speakers who use it. It has existed since at least the 1980s, but occurs at a very low frequency in speech. Here, we use a corpus of all 3,600+ tweets containing dennamug to examine its changing syntactic properties, arguing that massive social media corpora allow for investigation of attested but extremely low-frequency spoken phenomena (cf associative *nem* in Mufwene, 1998), and that such corpora yield valid results when compared against other corpora and speech (Doyle, 2014; Jones, 2015; Austen, 2016), and specifically with regards to spoken AAE (Eisenstein, 2013, 2015; Stewart, 2014; Blodgett et al., 2016; Jones, 2016).

We argue that dennamug is increasingly grammaticalized, primarily as an individual lexical item. Increasingly, it is a semantically non-decomposable predicative intensifier that follows the adjective phrase it modifies (cf. -ass constructions, Collins et al., 2008). The signs of its grammaticalization are its use with bare adjectives, obscuring its historical origins as a comparative phrase (ex. 1a.) and its use with absolute adjectives (which do not allow degree comparison or comparative constructions) (ex. 1b.).

(1) a. I'm hungry dennamug, b. This ... weather is bipolar dennamug (cf. ?? more bipolar than...)

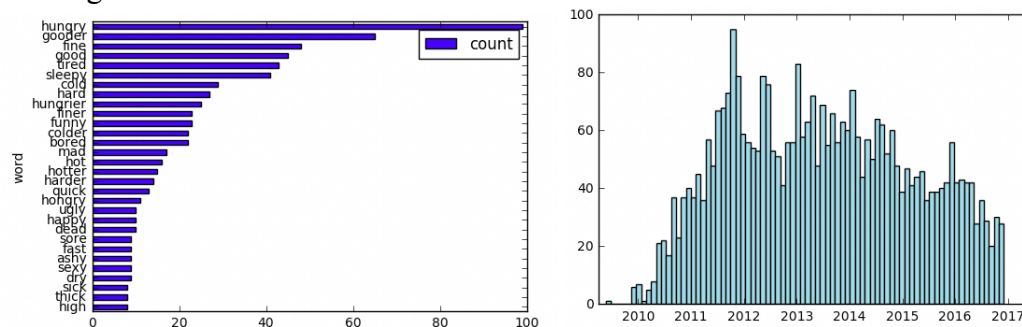
We note that only 20% of uses of dennamug make use of comparative morphology, and the vast majority of them are nonstandard comparatives (ex. 2a.) – a full 20% of which are the enregistered *gooder* (ex. 2b.). In fact, for all adjectives other than *gooder*, the bare form is nearly twice as common as the comparative.

(2) a. Tuna melts be deliciouser dennamug b. Dunkin donuts hash browns gooder dennamug

Moreover, for some speakers, dennamug is now available to modify other types of phrases, and even entire clauses (cf -ish constructions, Duncan, 2015).

(3) a. binary thinking dennamug (NP), b. voter regret dennamug (NP), c. false advertising dennamug (NP), d. tweet watching dennamug (VP), e. I'm laughing dennamug (VP), f. My accent gonna be outchea [= out here] dennamug because I'm going to be exhausted (PP), g. No weapon formed against me shall prosper. Dennamug. (CP)

We argue that dennamug is an example of grammaticalization “up the tree” following (Roberts and Roussou, 2003), fed by opaque surface phonology. We further argue that for similar low-frequency spoken phenomena, use of social media corpora may be a fruitful avenue of investigation.



(a) 30 Most common preceding words

(b) Use over time

Figure 1: Dennamug in Tweets

“In my mind I was like”: Speaker Strategies for Differentiating Thought and Speech in the Age of Quotative be like

Taylor Jones and Christopher Hall

University of Pennsylvania, CulturePoint LLC

(1) a. in my mind i was like who carries around that many cupcakes but then i was like you know what thats relatable

Starting with Butters (1980), there has been enormous interest in verbs of quotation among sociolinguists, primarily focused on the rise and spread of quotative be (all) like (Butters, 1982; Blyth et al., 1990; Buchstaller, 2001), including its use in African American English (Cukor-Avila, 2002), and outside of the United States (Tagliamonte and Hudson, 1999). One of the key features that differentiates quotative be like from other verbs of quotation is that it can be used to express both direct quotes and “unuttered thoughts” (Butters, 1982). However, such usage creates ambiguity: in the narrative being recounted, did the person in question utter, or merely think the reported utterance?

Here, we report that some speakers have developed a strategy to disambiguate, thought and speech using quotative be like: speakers mark thought with “in X’s mind” (where X is the thinker) before quotative be like. The construction can be used for all persons (ex. 1), can be used with ambiguous be like (ex. 1b), and is used to contrast inward (thought) expression from outwardly expressed sentiment (ex. 1c).

- b. Like in our minds we were like "be cool man!! DONT BE A JERK!"
- c. yeah, just how jerome put us together and you were like HIM, but in your mind you were like oooh yess
- d. some fans didn’t cheer but I’m sure in their mind they were like yes he hurt his ankle

We used Twitter to investigate the use of this construction in computer mediated communication in the last decade, gathering all tweets containing either the construction or quotative be like. We found that following a spike as Twitter adoption climbed, use of in X’s mind, X was like has remained steady, and is used at roughly the same rate compared to X was like as thought is compared to said (ie., roughly 1:1000)

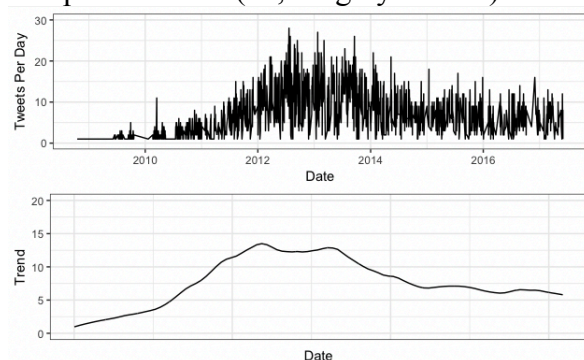


Figure 1: Tweets using “in my mind I was like” (top) and time series trend (bottom)

We argue that the above innovation is the result of structural pressure from the ambiguity inherent to quotative be like, and that the phenomenon has important implications for both future studies of verbs of quotation and for the study of language change more broadly, especially as concerns selection versus drift.

Dialect Contact and Linguistic Accommodation: Standard Seoul Korean Speakers in Gyeongsang Province

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This study examines standard Seoul Korean speakers' linguistic accommodation in the form of phonological and suprasegmental convergence or divergence in dialect contact. In particular, this study explores how 'gender', 'age', and 'length of residency in Gyeongsang province' can affect speakers' accommodation. The study also examines speakers' motivations for linguistic accommodation. Speaker's accommodative behavior can be explained by the "change-by-accommodation" model or by the "identity-projection" model (Auer & Hinskens, 2005). This study investigates which model is more useful to explain standard Seoul Korean speakers' accommodation. Also, this study examines correlations of participants' accommodative acts and their identity with Gyeongsang province.

A total of 38 speakers participated in this study, representing two genders, three age groups (20-34, 35-49, 50-60 years), and three length of residency in Gyeongsang province groups (under 10, 10-20, and over 20 years). All participants were born in Seoul and resided there for at least sixteen years before relocating to Gyeongsang province.

Participants performed an identity assessment questionnaire and two tests. TEST1 was designed for investigating phonological variation in six vowels and three consonants, including 48 target words and TEST2 was designed for exploring lexical pitch accents in the 60 target words. All of the target words in TEST1 and TEST2 are most likely to show stereotypical characteristics of the Gyeongsang dialect.

The results show that men emerge with higher index scores than women in their use of the Gyeongsang phonological features. Furthermore, the older the participants are, the more participants accommodated to the Gyeongsang phonological features. Also, the longer the participants have lived in Gyeongsang province, the more the participants converged with the Gyeongsang phonological features. The fact that length of residency in Gyeongsang influences a speaker's accommodation to the Gyeongsang phonological features can support the "change-by-accommodation" model, which relies on mechanistic frequency of exposure to new features and process of adaptations to a particular dialect.

However, both age and length of residency in Gyeongsang do not affect speakers' use of Gyeongsang accent as examined in TEST2. Trudgill (1986) suggests if features are too salient, they are not adopted by speakers. When participants were asked about the identification of features that were indexical of "Gyeongsangness", the most frequently mentioned variable was the lexical pitch accent in the Gyeongsang dialect. The data reveal that there is little accommodative behavior in speakers' use of Gyeongsang accent. However, the results show that there is a strong correlation of speakers' frequency of use of Gyeongsang accent and their identity with Gyeongsang province, which supports the "identity-projection" model. This study indicates that the "change-by-accommodation" model may affect speaker's accommodation to salient features, but the "identity-projection" model may affect speaker's accommodation to features that have extra strong markers of a dialect.

Variation in the use of *ça/c'* and *il(s)/elle(s)* in Parisian French

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Linguists have noted variation in the French pronominal system for third person referents, whereby the French pronoun *ça* ('this, that, it'), classified as a neuter demonstrative pronoun (Grevisse & Goose, 2008), is "frequently used as a personal pronoun and the range of *il(s)/elle(s)* ['he, it.SG(PL)/she, it.SG(PL)] has been restricted" (emphasis in the original; Ball, 2000, p. 70). This has been interpreted as a language change in progress, whereby *ça* is losing its demonstrative value and becoming grammaticalized as a neuter personal pronoun (Thibault 1983; see also Harris, 1977). Previous studies have investigated this phenomenon within a variationist framework for Quebec French (Thibault, 1983) and varieties of Louisiana French (Brown, 1988). This project advances our understanding of the variation in the pronominal system of French by reporting results of a preliminary study of the variation between *ça* and *il(s)/elle(s)* in a recent corpus of Parisian French.

This project uses variationist sociolinguistic methodology and focuses on contexts in which the pronouns have a nominal referent (whether generic or referential). Data were collected from a sample consisting of 105 minutes of interview data from the *Corpus de Français Parlé Parisien* (Branca-Rosoff et al., 2012). Examples of variation encountered in the corpus are given in the near minimal pair in (1)-(2). In (1), the nominal referent is *c'quartier axé sur le Temple* ('this neighborhood centered on the Temple') and the speaker uses the pronoun *il*. In (2), the referent is *votre quartier* ('your neighborhood') and the speaker uses *ça*.

- (1) comment vous l'appeliez alors c'quartier axé sur le Temple? *il* avait un nom?
'How do you call it then this neighborhood centered on the Temple? Did it have a name?'
(Sonia B.-R., CFPP 03-01, 1295.882)
- (2) c'est quoi alors votre quartier? [...] *ça* a un nom? on d- on dit "le centre ville"?
'So what is your neighborhood? Does it have a name? Do people say
"downtown"?
(Sonia B.-R., CFPP RO-01, 1661.342)

Data were coded for internal and external predictors and analyzed using Rbrul (Johnson, 2009), and two "novel" (Tagliamonte & Baayen, 2012, p. 136) statistical tests using R (R Core Team, 2015): Conditional inference trees and Random forest (using R's party package, Hothorn, Buehlmann, Dudoit, Molinaro, & Van Der Laan, 2006; Strobl, Boulesteix, Zeileis, & Hothorn, 2007; Strobl, Boulesteix, Kneib, Augustin, & Zeileis, 2008). All statistical tests were performed using the Language Variation Suite platform, Scrivner & Díaz-Campos, 2015).

Results focus on internal predictors, and suggest that *ça* is becoming the default pronoun for inanimate referents, with *il(s)/elle(s)* used for animate referents. Results of Conditional inference trees and Random Forest additionally suggest that after animacy, properties of the predicate are more important predictors than properties of the referent (e.g. gender, definiteness, number). The study also compares findings with the results for Quebec French (Thibault, 1983) and Louisiana French (Brown, 1988), and discusses the results in terms of the overall role of *ça* in the pronominal system of French.

Going back to the source: A diachronic analysis of the expression of necessity in Hexagonal and Quebec French

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French spoken in Quebec (QF) is largely considered to be vastly different from Hexagonal France (HF) but this assumption has not been tested empirically. Systematic and accountable analyses of morphosyntactic features in HF are generally absent from the current body of linguistic research on French, which precludes the possibility of reliable comparison. This represents the main motivation for this study: to conduct a comparative variationist analysis of morphosyntactic variation in both varieties.

The variable under analysis here is the expression of necessity. Variants, all expressing some form of ‘to be necessary’ include *falloir*, *devoir*, *être obligé*, *avoir besoin*, and *avoir à*, though only the first two (1-2) have been the focus of prior (usually theoretical) studies. (Examples are verbatim reproductions from one of the three HF corpora used in this study: *Corpus du Français Parlé Parisien des années 2000*-CFPP (Branca-Rosoff, Lefevre & Pires 2012), and *Enquête Sociolinguistique à Orléans*, ESLO1 and ESLO 2 (LLL-Orléans, 1968-2010).)

- (1) « J’ai perdu ma carte ‘vélib’ donc euh **faut qu’** j’m’en refasse. » (CFPP/OK/2325)
‘I lost my velib card so um I have to get another one.’
- (2) « On a une langue on **doit** conserver. » (ESLO1/UN412/630)
‘We have a language we have to preserve.’

Extensive quantitative analysis of variant use in large corpora of spontaneous HF across two time periods (a;b) was undertaken and subsequently compared with variant use in two QF corpora from roughly the same time periods (c;d). Results revealed many striking similarities between in the two varieties: both make use of all of the variants and generally share the same underlying grammar for each across time. However, one clear difference emerged from the analysis: while *falloir* dominates both systems, its form differs in the two varieties. The main variant in HF is *falloir* + infinitive while in QF, it is *falloir que*.

Further analysis revealed that this difference is due to the independent rise of *falloir que* to express necessity in QF, which has led to a reorganization of the necessity system. For example, QF speakers express the distinction between generic and non-generic necessity differently than HF speakers by using *falloir que* + *tu_{indef}* rather than *falloir* + infinitive.

As the first comparative variationist analysis of morphosyntactic variation in QF and HF, this study contributes to clarifying our understanding of the (dis)similarities between the two varieties, as well as transplanted varieties and their source variety more generally.

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Performing class, performing Pittsburghese: Falling question intonation in Pittsburghese videos

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Although variationist work has always valued the unreflective use of language, over the last few decades it has become clear that we can gain valuable knowledge about how the linguistic variables we study are deployed in their speech communities through speech that is performed, as shown by researchers such as Schilling-Estes (1998) and Coupland (2007). In this paper, I focus on such speech to tease out the social and interactional meanings attached to an intonation pattern that arises rarely, and only in multiparty conversation: the Pennsylvania Falling Question Intonation (FQI), more specifically L*+H L%.

Previous work on FQI (Fasold 1980) has shown that this intonation tends to be used for questions in which the questioner is likely to know the answer to the question. In support of this view, preliminary data in this corpus show that the majority of FQI questions in the videos are known, recoverable, or predictable by the questioner. The data also suggest, however, that there is a dual conversational function of mocking the addressee and furthering friendly conversation. In short, FQI is important for working-class 'banter' in Pittsburgh.

The web video series is *Greg and Donny*, presented on YouTube®. The series depicts conversations among the two eponymous characters and their friends in Johnstown, Pennsylvania, a small industrial city in the Pittsburgh dialect area. The intonation pattern of each question was coded in ToBI (Brugos, Shattuck-Hufnagel, and Veilleux 2017), with L*+H L% coded as the variant of interest (FQI).

Although these data are limited to some extent by the fact that they are written, rehearsed, and performed for a camera, this drawback is ameliorated by the fact that the data are gathered at all. This type of intonation would be challenging to discover in either a sociolinguistic interview or a recorded conversation among naive participants. Moreover, the reactions on the YouTube® site from viewers suggests that the use of language is not unnatural, providing more evidence that these routines are distillations of speech community norms for the language presented here.

The data to be presented therefore suggest that FQI is more than just a question variant in Western Pennsylvania, and also more than simply something used by Pittsburghers: FQI is an important interactional resource for solidary conversation among Pittsburghers, and is a valuable strategy for showing connection in a mock-confrontational style that fits into the working class speech community of 'Yinzers.'

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Can you roll your R's? Phonetic variation in Spanish rhotic productions by heritage speakers in Southern California

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The present study examines the phonetic variation of Spanish rhotics produced by heritage speakers of Spanish (HSSs) in Los Angeles area. Spanish rhotics are one of the most salient sound features that distinguishes Spanish from English. While English rhotics are produced as an alveolar/ postalveolar approximant [ɹ] without lingual constriction, Spanish rhotics are produced with either a single (tap /ɾ/) or multiple (trill /r/) apical occlusions depending on the phonological context (Hualde, 2005). For those who value Spanish as an important aspect of Latino identity, not able to produce Spanish rhotics with lingual constriction or “roll the R’s” is commonly associated with low Spanish proficiency and thus not being Latino enough (Fought, 2003; Masi de Casanova, 2007). Previous studies found that HSSs generally produced Spanish trills with a single apical occlusion, similar to taps, but they still maintained tap-trill contrasts using duration (Amengual, 2016; Henriksen, 2015). Regarding Spanish spoken in Los Angeles area, Parodi (2014) argued that both taps and trills are produced as one sound with two occlusions as an effect of Spanish-English bilingualism. The objective of this study is to empirically test whether rhotic neutralization occurs in the speech of HSSs residing in Los Angeles area and whether variation of HSSs’ rhotic production can be explained by Spanish proficiency and use.

A drawing dictation task was conducted, which was designed to elicit Spanish rhotics in various phonological contexts in semi-spontaneous pair interactions. The number of occlusions and duration were calculated for all instances of rhotics in the interactions of HSS-HSS dyads. Spanish proficiency was measured using a picture naming task and the amount of Spanish use was determined using a questionnaire based on Fishman’s (1966) domains of language choice. The effects of phonological context, proficiency, and use on the number of occlusions and duration will be statistically analyzed using linear mixed effects modeling.

According to preliminary results with four HSSs (2F, 2M), neutralization was not observed between Spanish taps and trills. That is, compared to taps, everyone produced trills longer (75.96 ms. vs. 23.62 ms.) ($t = 16.67$) and with more occlusions (1.68 vs. 0.76 times) ($t = 3.338$). However, a closer examination based on phonological context showed that the tap-trill contrast was less clear when trills were located word-initially. In general, trills in this position were shorter (67.69 ms.), compared to those in intervocalic position (79.57 ms.) and, regarding the number of occlusions, they were produced with fewer occlusions (1.07 times) than intervocalic trills (2.13 times). In fact, for three out of four speakers the number of occlusions of word-initial trills was similar to that of taps. Only one person (G2_F_1) produced both intervocalic ($t = 7.496$) and word-initial trills ($t = 3.542$) with significantly more occlusions than taps, although she followed the overall trend in that her word-initial trills were produced with fewer occlusions. The effects of proficiency and use will be analyzed in a larger dataset.

African American Identity and Vowel Systems in Rochester, New York

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Research on African Americans' (AA) vowel systems is limited, but studies have found that AAs participate in regional sound changes to varying degrees (Yaeger-Dror & Thomas 2010; Thomas 2007). In northeastern regions, the extent to which AAs draw on the Northern Cities Shift (NCS) or the supralocal African American Vowel Shift (AAVS) is unclear, given the overlapping predictions for BAT and BOT. The NCS predicts BAT raising and tensing, and BOT fronting, while the AAVS predicts BAT raising and BOT fronting (Thomas 2007; Kohn & Farrington 2013). This paper aims to investigate BAT, BOT, and BOUGHT patterns across a community of 24 AAs (12 women, 12 men) in Rochester, New York, an unexplored community in the AAE literature.

Sociolinguistic interviews were transcribed and forced-aligned using FAVE. Tokens were extracted from stressed positions and the measured midpoints were submitted for various analyses in mixed effects regressions.

The results suggest that the nasal pattern is replacing the general raising of BAT and as BAT retracts, BOT and BOUGHT do, as well. This is contrary to predictions made by the AAVS and NCS. Younger speakers are lowering ($p < 0.05$) and retracting ($p < 0.001$) BAT, with young women leading ($p < 0.001$). Younger speakers have also developed a BAT-BAN nasal split ($p < 0.001$), while women lead in the raising of BAN ($p < 0.01$). Furthermore, younger speakers are also retracting LOT ($p < 0.001$) and BOUGHT ($p < 0.05$) with young women leading the former ($p < 0.01$) and young men leading the latter to a marginally significant degree ($p = 0.075$). No main effects emerged with respect to the Euclidian Distances between BOT and BOUGHT ($p > 0.05$).

These results are consistent with findings where speakers appear to be leveling NCS patterns across the Northeast with respect to their development of the nasal pattern and the backing of BOT and BOUGHT. Among African Americans, the emerging nasal pattern has been observed in Detroit (Gordon 2000) and Philadelphia (Labov, Fisher, Gylfadottir, Sneller, forthcoming). In Syracuse, another upstate urban city, Driscoll and Lape (2015) claim that speakers are reversing patterns of the NCS (Driscoll & Lape 2016). Aside from the leveling, it is unclear which shift is being undone. Older speakers' plots seem to support the NCS reversal analysis as the height and frontness of BAT tokens are greater in comparison to BET, something not predicted by the AAVS.

These generational changes should be contextualized in Rochester's economic history. Once a booming industrial town, it is recovering from the collapse of major industries like Kodak, its largest employer in the post-World War II era. Seeking more economic mobility, younger speakers express a desire for more career opportunities, with five of the younger speakers already having relocated since the interview. This talk aims to discuss how these sociohistorical conditions contribute to the development of the observed linguistic patterns. Furthermore, it illustrates the complexity and heterogeneity within AA communities, prompting questions about how different, local articulations of racial identity shape in-group variation, and how we (and community members) determine who is an African American English speaker.

Modeling Population Structure and Language Change in the St. Louis Corridor

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The St. Louis Corridor, extending from St. Louis, MO through Springfield, IL toward Chicago is atypical within the Midlands for expressing some features associated with the NCS (Labov et al. 2005). Some of these features have both advanced and partial retreated of the NCS features over the course of the 20th Century (Friedman, 2014). Friedman's detailed population study of the Corridor suggests that the path of the NCS is due to population movements along Route 66 during and after the Great Depression. Census data shows that the Depression was the only period in the Corridor's history when net migration was out of Chicago and into the cities along Route 66. NCS features peak among speakers who grew up in the Route 66 cities at this time, but there is a second smaller peak of NCS features among speakers born less than a generation later farther from Route 66. It follows that the migration out of Chicago along Route 66 created a temporary situation where NCS features entered On-Route communities, then those features diffused farther Off-Route where they were then transmitted to the next generation. When net migration returned to normal and the Inland Northern influence diminished, the NCS began to retreat.

We investigate through simulation whether population movements in On-Route/Off-Route communities are sufficient to account for the NCS in the Corridor. This region has been the subject of agent-based simulation in the past (Stanford & Kenny, 2013). Their goal was to study the effect diffusion has on chain shifts, and while their communities are labeled Chicago and St. Louis, that model did not apply to the Corridor specifically. In contrast, our simulation studies the demographic and geographical facts of the Corridor rather than the mechanism behind chain shifts.

We set up a simulation that captures the geographical shape of the Corridor. Nodes representing speakers are placed into a graph where edges represent social ties. The graph is clustered into a series of On-Route and Off-Route communities, the Midlands, and Chicago. These are interconnected to simulate long distance movement along Route 66 and short distance movement to adjacent communities. Since the focus here is on the spread of variants rather than the phonetic qualities of the NCS, we treat the NCS as a single binary variable. Chicago begins at 100% NCS+ and all other communities begin at 100% NCS-. Only a single parameter, the rate of movement from Chicago to On-Route communities, is varied. At each iteration, new learners at each node internalize variants proportionally to their usage among nodes with which they interact.

Formally, the simulation is implemented through a new linear algebraic model based on (Niyogi & Berwick 1997) which directly calculates the statistically expected results from agent-based models (cf. Stanford & Kenny, 2013). Our simulation achieves an offset two-peak distribution across iterations by only varying net migration from Chicago to On-Route communities. This complements Friedman's descriptive studies and provides additional evidence that Route 66 drove change in the Corridor.

Is (T,D) deletion a single, unified process? New insights from Toronto English

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This study investigates the variable reduction process underlying (T,D) deletion, i.e. the deletion of coronal stops in word-final consonant clusters (1a–c), in Toronto English.

- (1) a. No, it wasn't *colØ*.
 b. Yeah, I think he *left*.
 c. The girls *loved* him.

Extensive research has shown that constraints on (T,D) deletion are generally uniform and stable across varieties (Guy & Boyd, 1990; Tagliamonte & Temple, 2005; *inter alia*). One of the most robust constraints is morphological category: monomorphemes (1a) have the highest rates of deletion, followed by semi-weak verbs (1b) and regular past tense forms (1c). The stability of the major constraints has led to an assumption that the reduction process is a single, unified one. Yet this has recently come into question. Using data from American English, Tamminga and Fruehwald (2013) find that semi-weak verbs exhibit higher rates of inter-speaker variation than monomorphemes and regular past tense verbs. They argue that this supports the idea that (T,D) deletion is actually the result of three separate processes: (1) phonological deletion in monomorphemes, (2) phonological deletion in past tense verbs, and (3) allomorphy in semi-weak verbs. They attribute the high rates of inter-speaker variation for semi-weak verbs to two variable processes – rules (2) and (3).

This paper replicates this analysis with Toronto English data. 6,253 word-final (T,D) tokens were extracted from the Toronto English Archive, a stratified community corpus of 2.3 million words collected between 2002 and 2011 (Tagliamonte, 2012). In accordance with the previous literature, tokens were coded for both social (age, sex, education) and linguistic factors (preceding and following phonological segment and morphological class). The data were subjected to mixed-effects models in R, with a random intercept for lexeme and a random slope for speaker by morphological class, to obtain speakers' deviation from the model average for each morphological class.

Results indicate that semi-weak verbs do not exhibit the highest rates of inter-speaker variation ($SD = 0.51$), instead patterning in between monomorphemes ($SD = 0.58$) and regular past tense verbs ($SD = 0.46$). If semi-weak verbs are subject to two variable processes, we would expect them to show the greatest inter-speaker variation. However, as this is not the case, we find no support of multi-level variable processes. Further analysis by age groups reveals that older speakers adhere most closely to the community norm, but both they and the younger speakers show high rates of inter-speaker variation. In contrast, the middle-aged speakers pattern closely together, suggesting that the *marché linguistique* (Sankoff & Laberge, 1978) may be the driving force behind the inter-speaker variability across categories.

This suggests that (T,D) deletion is a single, unified process, and provides an alternative explanation for differing rates of inter-speaker variation across morphological categories: speakers who are subject to more linguistic marketplace pressure than others may have “a greater stake” (Chambers 2009:190) in producing standard variants. It also highlights the importance of building a tradition of replication and comparison within variationist sociolinguistics, so that hypotheses can be tested, refined, and if indicated, abandoned.

Regional Differences in African American Vernacular English: The production of the /ay/ vowel in Northern and Southern regions of the United States

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This paper investigates regional differences in African American Vernacular English (AAVE), by means of looking at a prominent feature of AAVE, the monophthongization of the vowel /ay/. Little research has been carried out on the subject of regional variation in AAVE, as the focus (until recently) has been on describing the variety as a whole and pointing out its similarities across the United States (Thomas 2007, Rickford 1999). Some works have focused on regional particularities of AAVE speakers (Mallison and Wolfram 2002; Scanlon and Wassink 2010), but very few have investigated broader regional differences, comparing larger areas of the United States.

This paper addresses this topic by comparing the level of monophthongization of the /ay/ vowel of Northern and Southern AAVE speakers. The /ay/ vowel monophthongization is known to be a feature that indicates regional differences among European American speakers of the North and South (Labov et al. 2006). While Northern European American speakers are reported to diphthongize /ay/, Southern speakers produce a more monophthongal version. The absence of this regional difference in AAVE speakers would suggest a more uniform, supra-regional variety. For the purpose of this research, a set of recordings from the 1970s, collected by the Dictionary of American Regional English, was used and analyzed by measuring and comparing the delta of formant F1 and F2 values of 27 tokens at the onset and glide of the /ay/ vowel. The 27 analyzed speakers were all female African Americans, differing in age (16-88 years old), education (minimal to college degree) and regional demographics (rural and urban), reading the same passage of a short story.

The results indicate that there are in fact significant differences between Northern and Southern speakers, depending on the speakers' age ($F_{1, p} = 0.037$). Older African American speakers (born in the 1920s or earlier) from Northern regions diphthongize more than Southern speakers of the same age range. However, this tendency changes in younger speakers, born in the 1930s or later. Younger Northern African American speakers as a whole diphthongize the /ay/ vowel less than Southern speakers of the same age group. This may indicate that Northern speakers are moving away from a feature that is typical of European American English of that region and are more likely to use a feature commonly associated with AAVE speakers as well as Southern European Vernacular English speakers.

Diffusion and transmission in local and global linguistic change

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The study of changes in progress has focused on the incrementation of the new feature within the speech community but little is known about the mechanism of change across communities in global linguistic change. One of the most striking cases of such global change is the recent expansion of *be like* as a verb of quotation across the English-speaking world (Buchstaller 2014). The Philadelphia Neighborhood Corpus (PNC) provides a valuable site for the study of this mechanism, including yearly studies of neighborhoods from before the times of first reporting of *be like*: in the literature (1982), in the PNC (1979).

The transmission of change from below regularly shows a peak in late adolescence (Labov 2001, Tagliamonte and D'Arcy 2009). But in Philadelphia adolescents play no role at all in the use of *be like* until 1990, and adolescent dominance at the 90% level does not appear until 2000. In the two prior decades 1970-1990, the use of *be like* is confined to young adults 20-39 years old at 10-30%. In the following decades a number of speakers aged 40-59 show a moderate use of *be like* indicating that they acquired this use from young adults in the period of first contact.

While the process of transmission requires a study of local symbolic behavior among adolescents, global diffusion depends upon the communication patterns of young adults. The innovative users of young adults in Philadelphia include musicians with wide contacts outside of Philadelphia and a cosmetologist whose social networks extend broadly across the city. It must be noted that 5 of the 30 young adult innovators were African-Americans.

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Mandarin dialect contact and identity construction: The social motivation and meanings in the variation of Taiwan Mandarin (r) in an immigrant setting

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Due to intensive contact with local dialects, the de-retroflex feature has become a salient linguistic feature in the Mandarin spoken in Taiwan and differentiates it from standard Mandarin in Mainland China. Considering linguistic differences between Taiwan Mandarin (TM) and Putonghua (PTH), the current study investigates TM speakers' linguistic behaviors in contact with PTH speakers in an immigrant community in the US. It uses variationist analysis to uncover correlations between TM speakers' linguistic preference for retroflex fricative (r): standard variant retroflex fricative [ʒ] and non-standard lateral [l], and four social factors: social network strength, generation, gender, and length of stay in the US. The data include 28 individual interviews with TM speakers and a questionnaire, and 5 group interviews to investigate the distribution of the variants when TM speakers converse with PTH speakers.

The results of a binominal one-level test show that all four social factors have statistical significance for affecting TM speakers' preference for the retroflex fricative (r) variants. Particularly, gender displays the strongest magnitude of effect, i.e. is the strongest predictor of the standard variant [ʒ]. This finding reveals that TM speakers' preference for standard and nonstandard linguistic feature is still affected by gender ideology to meet Taiwanese cultural norms and societal expectation of how women and men use proper language to display their gender role. On the other hand, the strength of social network with PTH speakers displays the weakest magnitude of effect. This finding is unexpected because the framework of social network has been considered as a powerful factor to predict a positive correction between speakers' linguistic choice and their strength of network with their interlocutors. The above result suggests that other factors could outweigh speakers' strength of network in an immigrant community where the members are highly mobile and replaced by new members.

Comparative results from two types of interviews show that PTH speakers' presence is likely to play a large part in affecting TM speakers' preference for the variants. Both male and female TM speakers increase the frequency of the non-standard variant lateral [l] in comparison with the frequency in their individual interviews. This tendency may suggest that the social meanings and function role behind the variable (r) are activated and emerged in group interview. As a result, the variable (r) is surfaced as a marker of group identity. The above findings correspond to participants' metapragmatic discourse, which reveals their language attitudes toward their Mandarin and standard Mandarin. The social meanings behind the variable (r) reflect TM speakers' language attitude and their perceptions of the sociocultural contexts in their homeland. The role of the variable (r) in their daily use does not surface as a marker of group identity until they contact with PTH speakers in an immigrant setting. In contact process, they may not consciously aware of the link between the social meanings and the variants but may subconsciously employ it to construct in- and out- group speech to reinforce in-group bond, to connect their place of birth, and to project their local identity in a globalization context.

The relationship between iconicity as motor-sensory analogy and social meaning: Evidence from creaky voice

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Within sociolinguistics, *iconicity* is recognized as playing an important role in the indexical field (Eckert 2016), as elsewhere it is more commonly described as “perceptuomotor” analogy (Dingemanse et al 2015). Although work has been done on the frequency code and social categories (i.e. size and gender), less work has explored how perceptuomotor analogies map to social meanings. This paper explores these processes by examining creaky voice use in British English. I argue that creak as a motor-sensory analogy (low-frequency, “contained” emotion (Esposito 2016)) is deployed micro-contextually for passive stancetaking, and, due to this iconic analogy, indexically maps to broader social categories (e.g. gender and class).

My primary focus examines creak’s interaction with upper class male identities. Data come from sociolinguistic interviews recorded in London with three men. I contrast this with data from three young women of the same class background recorded at a group sociolinguistic interview. I conducted an auditory analysis to determine the voice quality of all participants’ vowels, computing the proportion of creak for each speaker. I then provide a qualitative analysis of when and why creak is used, and a quantitative analysis of the tentative relationship between creak, class and gender.

Results indicate that on a macro-level creak is associated with upper(middle) class identities, supporting Esling’s (1978) findings. This was particularly true amongst men - the participant identifying as most upper(middle) class used the most creak (32.5%) compared to the man who identified the least (0.68%). Furthermore, women had a higher overall mean creak rate (20.7%) than men (15.4%) ($p < .001$) similar to findings in American women (Yuasa 2010, Podesva 2011). Results of the qualitative analysis align with previous work (e.g. Levon 2016, Sicoli 2010), showing that creak is taken up by participants to mitigate emotionally or socially difficult moments in conversation. I argue that creak is used as passive power and connect this interpretation to motor-sensory cues cross-linguistically. I explore the idea that for women, creak mediates their societal double bind (Lakoff 1973) - allowing them to navigate linguistically between impossible social norms.

To say that creak is iconic of class or gender does therefore not capture the full picture. Instead, there is perhaps an iconic relationship between creak and passivity, stemming from strong (possibly cross-linguistic) motor-sensory analogies. Creak remains iconically passive, but can be mapped to social meanings at micro-contextual and macro-identity levels. This draws together iconicity in the sociolinguistic and cognitive science senses - everything is filtered through culture, but there is the potential that cross-linguistic motor-sensory analogies exist. How these cognitive processes interact with social meaning should be explored further.

Production Planning Effects in Sandhi: A corpus study using automated classification

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Lexical planning ease is increasingly used to explain variation in cross-word phenomena (the Production Planning Hypothesis, or PPH; Wagner 2012; Kilbourn-Ceron et al. 2016; MacKenzie 2016). For example, the /t/ in “but” can be pronounced [ɾ] before a vowel-initial word, but the rate at which this applies is sensitive to factors like lexical frequency because frequent words are retrieved more quickly, meaning there’s a higher chance that the speaker knows that a vowel follows the /t/ early enough to plan flapping the /t/ (Kilbourn-Ceron et al. 2016). The explanation seems plausible, but so far only cases where a process’s target precedes its trigger have been examined. This gap in existing research is crucial because the PPH makes the strong prediction that production planning effects should be stronger for right-to-left processes (like English flapping) than for left-to-right ones (ex. flapping word-initial stops after word-final vowels) because in the former case the trigger must be planned early enough to affect the target, whereas in the latter case the trigger came first and is therefore already planned when planning the target.

In this study, we test the predicted asymmetry by examining cross-word hiatus resolution in a Madrid Spanish corpus (redacted). In Spanish, either V1 or V2 in a /V1#V2/ sequence is often deleted or reduced, and /e/ deletes more often than /a/ (ex. Garrido 2013). For example, *la escuela* /la eskwela/ ‘the school’ is often pronounced [laskwela]. Based on the PPH, we expect that V1’s deletion will be more affected by the interaction between vowel identities and word 2’s predictability than V2’s deletion will be. Drawing from conversational Spanish data – rarely examined for this phenomenon –, vowel tokens were automatically coded as realized or deleted using rule-augmented forced alignment. We then extracted 5000 tokens of /a#e/ and /e#a/ sequences without intervening pauses and analyzed the deletion patterns using mixed-effects multinomial regression, testing the effects of lexical frequency and conditional probabilities (both associated with predictability and therefore lexical retrieval speeds, e.g. Kilbourn-Ceron et al. 2016).

We find that deletion is extremely common, occurring in 87% of tokens. As in previous research, /a/ is less likely to be deleted across the board (10% deletion). We crucially find significant interactions between predictability factors and vowel identity. These interactions suggest that the predictability factors modulate the vowel identity effects in /e#a/ more than those in /a#e/: if the vowel sequence is easier to plan, V1 in /e#a/ is more likely to delete, but V2 in /a#e/ isn’t as affected.

In summary, our results are consistent with the PPH prediction that production planning factors affect the realization of sandhi phenomena because they predict whether the speaker has planned the phonological context. We additionally find the directional asymmetry that’s crucial to the PPH: the right-to-left resolution patterns are more strongly affected by planning factors than the left-to-right resolution patterns are. This study finally highlights the usefulness of aligner-automated classification, a method relatively recent in the field (e.g. Milne 2014; Schuppler et al. 2014), for analysing variation.

Aesthetic judgments of self and other: Dialect attitudes in the Spanish of Argentina

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At the core of language attitudes is the aesthetic judgment of accent which may be directed to an anonymous speaker, an imagined dialect, or to one's own accent. This paper investigates aesthetic language judgments from these three perspectives, which, combined, provide a multi-faceted view of the underlying attitudes towards dialect groups. The data for this study were gathered from the responses of 63 speakers of Argentine Spanish. These participants made aesthetic judgments of anonymous speakers ($n=16$) from three major dialect zones in Argentina (based on the dialect zones from Vidal de Battini 1964) - Buenos Aires, Córdoba, and Tucumán, and in turn, participants evaluated their own regional variety for its perceived aesthetic value. Aesthetic judgments were based on brief recordings of naturalistic speech from the 16 different speakers and elicited with the prompt (in Spanish), "In your opinion, this person's accent is: (choose one) nice, fair, ugly". Another item on the attitudes test asked the participant to identify the dialect of the speaker, which was used for interpreting results by confirming the listener's belief of the speaker's actual origin (Preston 1999). Participants also completed a questionnaire collecting demographic, experiential, and further attitudinal language measures. The speakers from Buenos Aires received a more positive aesthetic opinion and at the same time were more accurately identified than speakers from Córdoba, and Tucumán (86.5% accuracy, 34.4% "nice" and only 1.9% "ugly" judgments). Tucumán speakers were viewed in a markedly more negative light, both by anonymous listeners from a variety of dialect zones, and when Tucumán speakers evaluated their own dialect. The Tucumán speakers were also the least accurately identified in this study (43.4% accuracy). However, the most negative aesthetic opinions were towards speakers *perceived* as being from Tucumán, many of which were misidentified. When grouping speakers by their *real* (and not perceived) origin, Tucumán speakers received the greatest proportion of "nice" judgments (40.2%). These attitude measures reveal a bias towards the dominant dialect of Argentina, which may be due in part to the greater proportion of listeners from the Buenos Aires dialect region participating in this study. These listeners may simply prefer their own dialect over those that are physically distant and/or symbolically different, like the folk perceptions of dialects that cross a regional (Preston 1999) or a national border (Martínez 2003). However, this does not explain the negative judgments Tucumán speakers make towards their own dialect. Perhaps seen as an expression of linguistic insecurity (Labov 1972), this may also reveal a failure for all speakers to recognize the validity of a dialect whose features are not as widely known as the characteristic features of Córdoba and Buenos Aires dialects (e.g. intonation, *sheísmo*), which allow speakers to be more readily identified, and thus, judged.

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The effect of lifetime exposure on perceptual adaptation to non-native speech

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Research shows accented speakers in North America face considerable discrimination (e.g. Lippi-Green 1997), despite only brief exposure being needed for listeners to overcome the initial processing cost of hearing an unfamiliar non-native accent (e.g. Clarke and Garrett 2004). Previous work on perceptual adaptation to accented speech consists of laboratory experiments where participants are generally excluded if they have experience with non-native speakers, as this allows researchers to isolate the effect of laboratory training. However, it does not permit the investigation of whether real-world exposure to foreign-accented speech similarly improves listeners' ability to understand previously unencountered accented talkers. This study compares populations that differ in their level of real-world exposure to non-native speakers and examines whether individuals used to hearing foreign-accented English are better at understanding accented speech compared to inexperienced listeners.

To investigate the effect of lifetime experience, 31 monolingual participants with substantial exposure to non-native speech were recruited in New York City. A second set of 31 students, inexperienced with foreign-accented speech, was recruited from a university in upstate New York. This location was chosen to mitigate the chance of participants having substantial daily exposure to non-native speech. The demographics of this college are reported as being 64% White and 1% foreign (NCES 2014). Additionally, all participants completed a social network questionnaire to ensure their reported personal contact with non-native speech was consistent with their categorization as high- or low-exposure.

The experiment consisted of 10 training blocks and two test blocks of sentences embedded in noise that participants orthographically transcribed. Training blocks presented five native American English-speaking male voices to give participants experience listening to speech in noise, which is a difficult task (e.g. Parikh and Loizou 2005). This was followed by test blocks consisting of previously unheard sentences read by a Mandarin-accented male and a Russian-accented male. Logistic mixed effects regression models reveal participants in the high-exposure group are significantly more accurate than those in the low-exposure group on test trials ($\beta=1.3$, $p<0.001$). Moreover, further models of differences in performance on test talkers show high-exposure participants outperform low-exposure participants on both Russian-accented trials ($\beta=1.19$, $p<0.001$) and Mandarin-accented trials ($\beta=1.44$, $p<0.001$). Within the high-exposure group, there are no significant differences between Russian versus Mandarin trials ($\beta=-0.61$, $p=0.392$), while the low-exposure group are less accurate on Russian trials ($\beta=-0.45$, $p=0.003$).

This work brings a new approach to experimental methodology by considering degree of prior exposure to accented speech, in this case English, rather than solely relying on training in the laboratory. The effects found in attunement studies, where training on multiple accents facilitates improved accuracy on untrained accents (e.g. Baese-Berk et al. 2013), are shown here to be mirrored in the wider population; listeners used to interacting with non-native speakers are more accurate when faced with a novel speaker of foreign-accented English. Finally, this work has implications for our understanding of accented-English, and challenges ideologies of language discrimination of its speakers.

“Les jons fon skil veulent”: Reflections of the French nasal vowel shift in variant orthography

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Recent studies have shown that documented sociophonetic variation in spoken English is reflected in non-standard spellings on Twitter (Eisenstein 2015, Tatman 2015). In addition to suggesting Twitter as a new source of data in sociophonetic inquiry, these findings provide evidence of speakers' awareness of their own phonetic variation. This study expands upon this work by investigating if non-standard spellings reflect sociophonetic variation in French as they do in English.

Hansen (2001) documented a counterclockwise chain shift currently underway within the French nasal vowel paradigm. The shift is most advanced among speakers with lower levels of education, and is also subject to phonological and lexical factors. The shift from [ã] towards [ɔ̃] is the most pronounced within the paradigm, and is conditioned by stress, labiality of the preceding segment, and grammatical category.

A list of 63 words containing the phoneme /ã/ was adapted from Hansen's data. Non-standard spelling variants of each word suggesting a shift towards [ɔ̃] (such as *jons* for *gens* 'people') were searched directly with Twitter's search function. Because of high volume, tweets containing standard spellings of the same words were extracted from Twitter's Streaming API using the interface provided by IFTTT.com, and the frequencies of standard and non-standard spellings were compared. Non-standard spellings were infrequent. The misspelling with the highest rate of occurrence was *jonre* or *geonre* (correct spelling: *genre* 'type, like') with 348 tokens in one year compared with 4,711 tokens of the standard spelling in one day. However, non-standard spellings reflecting a shift towards [ɔ̃] were found for all 63 words. In some cases the altered letter was capitalized, suggesting that users are deliberately stylizing this phonetic variation in their writing.

Although the [ã] > [ɔ̃] shift is seen in both speech and writing, its distribution throughout the lexicon is different in the two mediums. In a linear regression analysis, frequency ratios of standard and non-standard spellings did not show the same effects for stress, preceding context, and grammatical category found to condition [ã] > [ɔ̃] shifts in Hansen's spoken data. These factors conflicted with stronger factors unique to the written medium. Orthographic word length was negatively correlated with non-standard spelling, $r(64) = -.38$, $p < .05$, and Number was the grammatical category with the highest rates of non-standard spellings (unlike in Hansen's spoken data). Word frequency was also a significant factor, $r(64) = .29$, $p < .05$, though Hansen found no effect for frequency.

The high rate of non-standard spellings of numbers is likely due to the fact that numbers are typically represented with numerals in writing. The effect for frequency suggests that variation in the pronunciation of high-frequency words is more likely to be noticed by speakers, favoring transfer to writing. Against the trend, very orthographically short words display fewer non-standard spellings because a single changed letter can render the word uninterpretable. Analysis of orthographic variation in computer-mediated communication is a promising avenue for future sociophonetic research in other languages, but factors unique to the written medium must be given greater consideration.

Subject-Verb Agreement in Moncton, New Brunswick Acadian French

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Acadian French is spoken in Canada's Atlantic Provinces and in parts of eastern Quebec. The population of urban Moncton has had its population augmented in recent years by presence of francophones from northern New Brunswick, Quebec and elsewhere in *la francophonie*. This immigration is in part due to general employment opportunities and in part due to the fact that Moncton is home to the largest French-language university east of Quebec. The late 20th and early 21st centuries have thus seen increased exposure to supralocal varieties of French.

The present study concerns 3rd person plural subject verb agreement. The vernacular inflectional ending *-ont* (e.g. *ils parlont* 'they are speaking') was in wide usage in vernacular European French up until the 17th century when it was relegated to lower-class speech before largely disappearing from most European vernaculars by the 19th century (King, Martineau & Mougeon 2011). In Acadian French, the traditional variant varies with the phonetically-null *-ent* inflectional ending (e.g. *ils parlent* 'they are speaking') found in most other spoken French varieties, as well as in the standard language. Previous studies have shown variation in use of the traditional variant. Communities in Newfoundland, Nova Scotia, Prince Edward Island and southeast New Brunswick have found high rates of such use (e.g. Flikeid & Péronnet 1989; King Nadasdi & Butler 2004; King 2005; Comeau & King 2006). The variety with the lowest rate of use is that of northeast New Brunswick, where there has been longstanding close contact with Quebec (Beaulieu & Cichocki 2008). However, even here the traditional variant is linked to speakers with strong local network affiliations.

The usage of nineteen adult speakers of Acadian French born between 1964 and 1978 who were born and raised in Moncton and have two francophone parents from the southeast was analyzed. There is a near-equal numbers of males and females, with ten participants having at least some post-secondary education and nine participants with none. Quantitative analysis reveals that of the nineteen participants (with a total of 2153 tokens), six (four females and two males) were invariant in their use of the phonetically-null ending (N=751). The results for the remaining participants reveal that the traditional variant is used at an overall rate of 19% (N=1402). Multivariate analysis of data using Goldvarb X for participants exhibiting variable usage combined gender and education into a single factor group due to interactions between the two. The results show that educated males favour the phonetically-null ending (.60), while uneducated females are fairly neutral (.47), and uneducated males (.39) disfavor it (data for the one educated female with variable usage (97% *-ent*) were omitted from the multivariate analysis). As in prior studies (e.g. Beaulieu and Cichocki's 2008), the phonetically-null ending was favoured with lexical subjects (.61), as opposed to pronominal subjects. The rate of use of the traditional variant is lower than has been previously reported for this community by Flikeid & Péronnet, whose participants were all elderly speakers, suggestive of change in progress due to increased contact with supralocal varieties.

Frequency and Syntactic Variation: Evidence from Mandarin Chinese

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With the rise of exemplar theory (Bybee 2010, 2013), the role of frequency in language variation and change (LVC) has been the object of considerable study, particularly in phonology. Results, however, have been mixed, with some studies showing strong frequency effects (e.g. Bybee 2002; Jurafsky et al. 2001) and others showing no or only minimal effects (e.g. Walker 2012). Recently, Erker and Guy (2012) extended the analysis of frequency to syntactic variation and examined the role of frequency in variation between null and overt subject personal pronouns (SPPs) in New York City Spanish. Their results, which later studies have been unable to replicate (Bayley, Greer, & Holland 2013, in press; Martínez-Sanz & van Herk 2013), suggest that frequency either activates or amplifies the effects of other constraints, such as co-reference and person and number. This paper extends the study of frequency effects on LVC to Mandarin Chinese. Specifically, we examine the effect of frequency of the verb on speakers' choices between null and overt SPPs, e.g.

- (1) 我 喜欢 看 电视, 但是 Ø 不 经常 看。
 wǒ xǐhuān kàn diànshì, dànshì Ø bù jīngcháng kàn.
 I like watch TV, but Ø not often watch.
 I like watching TV, but I don't do it very often.

Because the way that frequency is measured may affect results, in this study we use two different measures: 1) corpus frequency, with frequent verbs defined as those representing one percent or more of the verbs in the corpus, and 2) rank in a frequency dictionary, or general frequency (Xiao, Rayson, & McEnery 2009). Results of multivariate analysis of approximately 6,900 tokens with Rbrul (Johnson 2009), collected from 20 native speakers of Mandarin in several different contexts in Harbin, China, show that lexical frequency, regardless of how it is measured, has only a small effect on speakers' choices between null and overt pronouns. In fact, the effect of frequency according to both measures is considerably less than the effect of other well-established linguistic constraints such as co-reference and person and number. Finally, a comparison of the results by frequency measure shows that both measures produced very similar results. The results presented in this study, as well as results presented for Southwest Spanish in Bayley et al. (2013, in press) and Dominican Spanish in Martínez-Sanz and van Herk (2013), suggest that the role of frequency, at least in this area of the grammar, has been considerably over-estimated and that well-established linguistic constraints provide a better explanation for SPP variation than lexical frequency.

Investigating English contact through Spanish subject expression in Georgia

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While subject pronoun expression (SPE) in U.S. Spanish has been extensively studied in the Southwest (e.g. Silva-Corvalán 1982, 1994; Torres Cacoullos & Travis 2010) and Northeast (e.g. Flores-Ferrán 2004, 2007; Shin & Otheguy 2009, 2013; Otheguy & Zentella 2012), the Southeastern region has received little attention (but see, e.g., Wilson 2014; Limerick 2017). Preliminary research in the Southeast (Georgia) has mainly argued against English contact effects, although bilingual simplification has been suggested due to a weakening of the switch reference constraint (Limerick 2017), which is consistent with simplification explanations for Spanish in L.A. and NYC (e.g. Silva-Corvalán 1994; Shin & Otheguy 2009). The current paper builds upon this research and aims to expand on studies of SPE by further investigating contact-induced change. Specifically, I examine SPE among the Latino community in Roswell, Georgia, an exurb of Atlanta, expanding on Limerick's (2017) preliminary work by more closely investigating possible English contact effects. Reflecting recent immigration to the Southeast in general, Roswell's Latino population grew from 10.6% in 2000 to 16.6% in 2010 (U.S. Bureau of the Census 2010), experiencing a 75% increase, making it an ideal test site for emerging bilingual speech communities in the Southeast.

The present study examines SPE among 17 Mexican immigrants using sociolinguistic interview data collected by the author. The speakers' average length of residency (LOR) in the U.S. is 12 years, and their average age of arrival (AOA) is 27. Tokens from the interviews (N = 4,000) were coded for linguistic variables previously shown to constrain SPE (e.g. person/number, switch reference, TMA, morphological ambiguity, polarity, specificity) as well as social variables (e.g. English proficiency, age, gender, LOR, AOA), and then analyzed using mixed-effects multivariate analysis in Rbrul (Johnson 2009). Results indicate an overall pronoun rate of 27%, which is notably higher than what has been reported for monolingual Mexican Spanish (e.g. 22% [Lastra & Martín Butragueño 2015], 16% [Michnowicz 2015]). Moreover, the multivariate analysis indicates that while many factors pattern similarly to these communities, there are differential effects for morphological ambiguity and TMA, which may suggest both simplification and complexification. Regarding social variables, none of them have a significant effect on subject expression. In sum, although divergences were found as evidenced by both an increased pronoun rate and a different variable grammar in Roswell Spanish as compared to monolingual Mexican Spanish, there were no correlations between social factors (e.g. English proficiency, LOR, AOA) and pronoun use, demonstrating little or no evidence of direct English contact effects. This finding is consistent with communities in California (Silva-Corvalán 1994) and New Mexico (Torres Cacoullos & Travis 2010) and corroborates preliminary findings in Georgia (Limerick 2017).

Variation in word-initial /r/ in a geographically isolated community: The case of Santa Teresa, Brazil

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This study investigates variation in word-initial /r/ in heritage speakers of Veneto in the rural community of Santa Teresa, in Southeast Brazil. The Veneto dialect came to be spoken in Santa Teresa due to 19th century migration from the Veneto region in northern Italy. Many studies describe and document the Veneto dialect in Italy and in Brazil, but this is the first to examine its phonology in a variationist framework.

The majority of variationist sociolinguistics studies have focused on English and on monolingual speech communities (cf. Stanford and Preston, 2009; Meyerhoff and Nagy, 2008); existing research in the field also leaves heritage languages under-represented. This is especially true in the case of isolated communities in remote areas as Santa Teresa. The town is located in the mountains of the state of Espírito Santo. This rural area is very remote and isolated, with no internet access and no 3G or 4G coverage.

In Portuguese spoken in Santa Teresa, word-initial /r/ is pronounced as [h] (glottal fricative). In Veneto spoken in Italy word-initial /r/ can be pronounced as [ɾ] (flap) or as [r] (trill). Considering the fact that Veneto and Portuguese co-existed in Santa Teresa for 143 years it could be hypothesized that the Portuguese [h] has been transferred into Veneto of bilingual speakers.

To investigate this hypothesis, 680 tokens of word-initial /r/ were extracted from a corpus of spontaneous speech of 20 residents of Santa Teresa speaking Veneto. The tokens were coded for sex and age group (25-59 and 60-84) of the speaker, as well as for syllable stress and word class. A multivariate analysis shows that, overall, speakers favour the use of Veneto /r/ over Portuguese-influenced [h]. Older speakers (60-84) favor the Veneto /r/ compared to younger speakers (.875 and .125 respectively). Significantly more males than females favoured the use of Veneto /r/, which supports the notion that men tend to use fewer innovative forms than women. These findings provide important documentation of the use of /r/ in a Veneto community and also contribute to the understanding of language variation and change across languages and cultures.

Sororithroat: The acoustic and ideological properties of an emerging voice quality

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In recent years, voice quality has become an area of increasing interest for sociolinguists (Mendoza-Denton 2011; Podesva 2007; Podesva and Callier 2015; Yuasa 2010). Linguists have shown its importance in many cases—from constructing a persona to indexing participant roles, race, affect, or gendered identities (Moisik 2012; Sicoli 2010; Starr 2015; Zimman 2015), as well as the many ideologies and folk-linguistic explanations that arise when voice quality becomes enregistered for a particular style. Scholars have investigated a variety of voice qualities in American English, but this paper examines a previously unanalyzed voice quality on the cusp of enregisterment, given the folk-linguistic label of “sorority voice”. This voice quality arises from the perception of certain young, feminine voices as “raspy”. The voice quality then, for certain styles, undergoes a process of iconization (Gal and Irvine 1995) or rhematization (Gal 2016), being read as iconic of the state of the young women’s vocal folds. This rhematization allows for the voice quality to be linked with ideological explanations for the iconic connection between voice quality and vocal chords—often the effect of the young women’s social and sexual practices—as seen in definitions from the website Urban Dictionary (a crowd-sourced dictionary in which users define words absent from traditional dictionaries).

This paper aims to describe both the acoustic and ideological properties of this emerging voice quality. We analyze three popular female actresses—Emma Stone, Scarlett Johansson, and Lindsay Lohan—often noted for their “raspy voices” (as determined by their recurring presence in internet collections of public figures with “raspy voices”). Publically-available interview data were obtained and screened for audio quality. Syllables perceived as “raspy” by both authors were analyzed using three measures—spectral tilt (the degree to which intensity drops off as frequency increases [Gordon and Ladefoged 2001]), jitter (variation in the duration of successive fundamental frequency cycles [Gordon and Ladefoged 2001]), and shimmer (cycle-to-cycle variation in waveform amplitude [Farrús et al. 2007]). Actresses’ use of “raspy” phonation was characterized by a negative values of H1-H2 relative to modal voice, and higher jitter and shimmer. Despite the tendency for emerging voice qualities to be pathologized, either through ideological explanations like alcohol consumption (“nearly constant drinking”), drug use (“smoking”) and sexual practices (“sucking dick” or “3rd-basing”), or through medical conditions like vocal nodules or vocal chord damage, this paper argues that the presence of intraspeaker variation in voice quality use makes pathological explanations unlikely to account for all cases. This paper also aims to analyze the semiotic processes highlighted by “sorority voice’s” emerging salience as an enregistered feature. An analysis of this developing category, for instance, highlights the perceived naturalization of voice quality and its relationship to physiological factors (Podesva and Callier 2015), foregrounds the role of embodiment (Bucholtz and Hall 2016) in some instances of rhematization (Gal 2016), and emphasizes the link between the rhematization of a linguistic feature and the existing ideological associations with social groups.

/h/ insertion in a Pacific English: The developing methods of understanding a non-standard feature in the Federated States of Micronesia

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This paper discusses the rarely reported phenomenon of /h/ insertion. This feature is a salient and robust characteristic of the variety of English emerging in Kosrae, Federated States of Micronesia. It takes the form of a non-standard epenthesis of [h] to provide a consonantal onset to vowel-initial syllables as seen in the example below.

Male, 31: *That guy is really **hold** now*

We know little about the linguistic and social constraints that govern this variable to date, with dialect descriptions usually restricted to merely listing its occurrence, most notably in the English of Newfoundland (Strowbridge, 2008; Clarke, 2010) and Francophone learners of English (John and Cardoso, 2009). Schreier (2017) conducted a smaller analysis measuring this occurrence in content versus function words finding significant favouring of content words in the English spoken in Tristan da Cunha. Jones (1989) has published most extensively on the process taking examples of the phenomena from current and past British varieties, namely Lazamon's Brut (Madden, 1847) and Hackney (Wells, 1982), whereby he observes motivations for insertion, which include syllabic periphery, and its acting as a vowel quality reduced onset to peaks of any palatality, labial or sonority specification. He notes that the [h] resembles a devocalised (vowel content reduced) vowel.

The data for this paper are yielded from a corpus of 90 Kosraean informal speakers recorded on the island in 2015. The corpus consists of approximately 45 minute-long semi-structured informal interviews. Speakers range in gender, age, education style and level, off-island time and experience, and language and social attitudes. Metalinguistic awareness is also attested by the younger participants regarding this phonological feature.

Using R Statistical Programme I analyse both intra- and extra-linguistic factors, which showed potential for variation constraint. It was important, given the lack of earlier studies, to first carefully define the outer envelope of variation. Sociolinguistic factors analysed include gender, age, and time off island. Intralinguistic consideration was given to following and previous environments regarding vowel or consonant production categories. Further coding categories included diphthongisation, word type and previous word type, word initial stress, emphaticalness, and syllable weight.

Statistical results show that if there is a preceding consonant, insertion can only occur if that consonant is /r/ or /l/. Tokens with other preceding consonants were therefore excluded from the analysis. /h/ insertion most frequently occurs in the onset of a stressed syllable and is favoured after a vowel. Insertion is most likely to arise intervocalically as suggested by Jones (1989), most commonly preceding back vowels, in particular the [ɔ], [oʊ] and [aɪ] phonological features. Males insert /h/ more than female speakers; however, age and time off island produce insignificant difference in output according to the statistical analysis. The statistical evidence shows that this complex and little researched feature is more linguistically embedded than socially constrained.

Troppppp loooongueuuuhhh: Orthographic lengthening across French dialects

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Introduction. Recent work has found that non-standard spelling is affected by phonological processes and their social salience in cases of respellings like "beah" for "beer" (e.g. Tatman 2015, 2016). People across dialects also lengthen words for emphasis, both in informal writing (repeating letters, ex. "way" > "wayyyy") and in speech. Are dialect differences in speech reflected in differences in orthographic lengthening patterns?

Previous work found that English lengthening generally targets word-final letters even if the letter is silent, but there's otherwise a preference to lengthen syllable nuclei (redacted). This study adds dialectal and cross-linguistic components, using French data from three regions: Midi (Southern France), Northern France and Quebec (Canada). In particular, we examine three cases: (a) final consonants, often silent; (b) final "e", which is sometimes silent and sometimes pronounced as schwa, at rates that vary by region (highest in Midi French, lowest in Quebec French; Milne 2014); and (c) digraphs representing monophthongs, to see whether dialect phoneme inventory differences affect how sequences are lengthened.

Methods. After collecting a corpus of over 50 million geotagged French tweets, we extracted 66 000 tokens of French words in which a letter was repeated at least three times. We performed mixed-effects logistic regression to predict whether letters were likely to be lengthened.

Results. Overall, we find a general preference to lengthen the final letter across all three varieties of French, like in English. This preference is still found when the last letter is a consonant that wouldn't be pronounced -- lengthening final silent letters is even preferred in longer words. Non-final lengthening also tends to target vowels, often in non-final syllables, unless multiple letters are being lengthened in a single word.

Final "e" is nearly categorically lengthened when present, and sometimes respelled as "euh" to emphasize that the schwa is pronounced. In Midi French, however, there's a greater probability of also lengthening the vowel of the previous syllable in polysyllabic words. Adjacent consonant clusters make "e" lengthening more likely, which parallels the effect consonant clusters have on schwa realisation rates in speech (Milne 2014).

Finally, for monophthongs' digraphs, the first letter is generally lengthened. We also find that digraphs don't lengthen equally often: "ou" is less likely to lengthen than "au" and "eu", consistent with lengthening tendencies in speech. Lengthening "ou" is especially unlikely in closed syllables in the Quebec data, which is probably because the dialect laxes the vowel in this context (Dumas 1987). We additionally find that a region's likelihood of merging /o/ and /ɔ/ (Gess et al. 2012) is associated with its likelihood of lengthening "au".

Discussion. Lengthening is similar in English and French in frequently targeting the final letter and showing letter-specific tendencies, but French more frequently lengthens non-final letters as well. We also find evidence that regional variation (e.g. dialect phoneme inventory and phonological patterns) inform variation in lengthening. We additionally observe vowel quality and syllable structure effects that seem to reflect variability in prosodic prominence (redacted), suggesting that writers use prosodic information when deciding which letters to lengthen.

Preliminary evidence of Spanish-Kaqchikel language contact in Guatemala: The case of Spanish voiceless stop aspiration in monolingual and bilingual speech

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Scholarly interest in language contact in the Spanish-speaking world has grown tremendously over the years (e.g., Klee & Lynch, 2009). Nevertheless, research has mostly focused on morphosyntax, although there has been recent growth in sociophonetic studies. However, one large Latin American language family, Mayan, has remained relatively unexplored, with the exception of Spanish in contact with K'ichee' (Baird, 2015, in press) and Yucatec Maya (e.g., Michnowicz, 2015; Michnowicz & Carpenter, 2013). This is surprising given the fact that Guatemala is home to 21 Mayan languages (Law, 2014) that are potentially in contact with Spanish.

As one step to fill this gap, the present study investigates the Spanish voiceless stops /p, t, k/ from a variationist sociolinguistic perspective (Poplack & Levey, 2010) with monolingual and bilingual Spanish-Kaqchikel speakers from the greater region of Antigua, Guatemala. It has been reported that Kaqchikel voiceless stops have a longer voice onset time (VOT) than Spanish (cf. Bennett, et al., in review; Williams, 1977), meaning that there is a conflict site between the two languages (Poplack & Meechan, 1998).

The data come from thirty-four sociolinguistic interviews (i.e., 24 bilingual and 10 monolingual speakers) collected in the summer of 2015. For the acoustic analysis, 10,135 tokens were segmented in Praat and measured for VOT. The tokens were coded for linguistic (phoneme, position in word, lexical stress, following vowel) and extralinguistic (biological sex, age, language background) factors. Separate multivariate analyses were run for each phoneme using R (R Core Team, 2017) and the statistical package Rbrul (Johnson, 2009). A mixed-effects model was chosen in order to take into consideration individual lexical item and speaker (as a random effects) and to use continuous variables (VOT and speakers' age).

Results show that all the linguistic factors affect the variation in VOT for all the voiceless stop phonemes; additionally, biological sex also affected VOT with men producing longer non-standard VOT values than women, a finding that parallels Yucatan Spanish (Michnowicz & Carpenter, 2013). Although there were observable differences between the VOT means of monolingual and bilingual speakers the differences were not statistically significant. Separate statistical analyses for each language background group (following Poplack & Levey, 2010) revealed similarities and differences between the constraints hierarchies. Therefore, this study proposes that the VOT values may be the result of language contact based on: 1) higher VOT values than non-contact varieties of Spanish; 2) the intermediate VOT mean values of bilingual speech when compared to monolingual speakers of Spanish and Kaqchikel speakers; 3) slight differences in the constraint hierarchies between monolingual and bilingual speakers; 4) the lack of age-grading effects that has been observed in Yucatan Spanish (Michnowicz & Carpenter, 2013), possibly due to high levels of bilingualism in the Kaqchikel community (Instituto de Estadística Nacional de Guatemala, 2014). Overall, this study calls attention to the opportunity for language contact scholars to examine possible effects of language interference through shift (Thomason & Kaufman, 1988) in Guatemala given that there is both a high degree of bilingualism and on-going language shift.

Acoustic correlates of perceived prosodic prominence in African American English and European American English

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Although much work has investigated various aspects of African American English (AAE), prosodic features of AAE are relatively underexamined (Tarone 1973; Rickford 1975; Wolfram and Thomas 2002; Green 2002; Cole, Thomas, Britt and Coggshall 2005; Thomas and Carter 2006; McLarty 2011; Thomas 2015). Using the ToBI paradigm (cf. Beckman et al. 2005), prosodic differences between AAE and European American English (EAE) varieties have been identified, with AAE speakers on average using more pitch accents per syllable, while also using L+H* pitch accents at higher rates than European Americans (McLarty 2011; Holliday 2016). However, such an approach relies on analyst-driven annotations whose relevance to naïve, everyday listeners is largely unknown.

Recent work by Cole and colleagues has devised a new methodology for the study of prosody, investigating how naïve listeners perceive prosodic prominence (cf. Cole, Mo and Hasegawa-Johnson 2010; Cole, Mahrt and Roy 2015). This approach asks large numbers of naïve listeners to label prosodic prominence in speech, yielding important new insights into the perception of prosody and prosodic variation. These perceived prominences can then be used to mine acoustic correlates of prominence in the speech signal. However, this bottom-up, naïve listener-driven approach to identifying acoustic correlates of prosodic prominence has not been applied to voices of different ethnicities, an area of crucial interest to sociophoneticians.

The current paper fills this important gap by using naïve listeners from different regions (from Oregon, N= ~120; from North Carolina, N= ~80) to identify prominences in the conversational speech of both African Americans and European Americans (from the American South). Results from a previous NWAV of only Oregonian naïve listeners found that prominence was perceived more frequently for African American voices than for European American voices in conversational speech. In the present paper, we examine the acoustic correlates of those perceived prominences, asking whether acoustic cues of prominence differ across ethnicities. Additionally, by using listeners from different regions, we ask whether greater familiarity with AAE and/or Southern speech affects the cues used for prominence perception.

Preliminary results from Oregonian listeners suggest that cues to prominence perception may differ across ethnolects, with duration and RMS intensity being important for both AAE and EAE voices, but that F0 movement may also be critical for AAE voices. Thus, this project affords a deeper understanding of how different ethnic varieties produce prosodic prominence, and the acoustic correlates that aid in prosodic prominence perception for everyday listeners.

Infinitive verbs, agreement and perceived competence

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Subject-verb agreement in infinitive verbs (FLEXinf) is a feature that sets Portuguese apart from the majority of Romance languages (Scida 2005). In Brazilian Portuguese (BP), Canever (2012) shows that FLEXinf occurs in written production, even in contexts that would prescriptively rule it out. In this paper, we discuss results of a perception study focusing on whether speakers are perceived more positively when in a FLEXinf-guise.

FLEXinf is optional in certain contexts, such as (i) *Eles usam a Internet para fazer(em) ligações* ‘They use the Internet to make calls’, where *(em)* optionally indicates, in the adverbial clause, that the subject of *fazer* ‘make’ is *eles* ‘they’. On the other hand, in modal constructions like (ii) *Crianças podem aprender(em) muito com a Internet* ‘Kids may learn a lot with the Internet’, *(em)* is negatively evaluated and considered a grammatical mistake. In 180 dissertations (2000-2011), FLEXinf is employed in 63% of 322 tokens like (i), and in 0.3 % of 353 contexts like (ii) (Canever 2012).

Does it then follow that FLEXinf currently indexes more positive social meanings? We designed a matched-guise experiment with stimuli like (i) and (ii), produced by two female and two male speakers, also varying according to the verb person (1st or 3rd), since this is a significant variable in production. The combination of these variables leads to 32 different stimuli, which were organized in 8 sets, so that each participant would listen to both structures, in the 1st and 3rd person plural, but only once to each speaker. Each set was listened to by 50+ participants, for a total of 414. Listeners rated the stimuli on a variety of scales, including perceived level of education, intelligence, and formality. A Principal Components Analysis of the responses indicates that these three scales function as one underlying component, here identified as “competence”. Multiple regression models (with participant as a random effect) were built to test if this component is influenced by the above variables. Results show that the voices are perceived as more educated-, intelligent- and formal-sounding without FLEXinf. Listener’s sex, age and level of education are not significant predictors. While these results were expected for modals (ii), in which FLEXinf is considered a grammatical mistake, they contradict the hypothesis for adverbials (i), in which FLEXinf is optional and could be leading to the perception of speakers as more “competent”. However, when the responses are analyzed in subsets that separates modals from adverbials, listener’s age becomes a significant predictor in both: younger listeners tend to perceive the voices as more competent-sounding in their FLEXinf-guises.

These findings are important in discussing the relationship between change in perception and production. In addition, we further demonstrate that listeners are attuned to the perceptual meaning of grammatical variables, which have generally received less attention than phonetic ones (Levon and Buchstaller 2015).

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Language Attitudes toward African American English in California Public Schools

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Phonological characteristics of a voice act as a cue to a talker's social background (Hill, 2012). For example, the pronunciation of *my* as [ma] and wider pitch variation (Rickford & Rickford, 2000) are characteristic of African American English (AAE). At an unconscious level, attitudes towards social groups are tied to ideologies about linguistic variation (Preston, 2013). For stigmatized language varieties, such as AAE, negative sentiment can be the cause of wrongful discrimination (Baugh, 2003). This study focuses on how attitudes toward AAE influence teachers' assessment of student characteristics and abilities at three northern California public schools.

Traditionally, many educators assume that language proficiency is marked by mastery of 'standard English'. As a result, African American children may be treated differently than white children when tested for language proficiency. African American students often are classified as either Fluent English Proficient (a classification used for English language learners) or Speech Impaired (Hill, 2012). Education policies, such as Common Core standards and legislation prohibiting use of tax dollars for standard instruction for AAE speakers (Vaughn-Cooke, 2007) also exemplify negative language attitudes toward AAE in education and policy. This is one cause of the education-achievement gap for African American children (Rickford & Rickford, 2007). However, we have yet to fully understand the interaction between language attitudes and the achievement gap. This study examines how teachers assess AAE on educational and socioeconomic measures, relative to mainstream American English (MAE).

A male native AAE speaker read a weather report in both an AAE guise and a MAE guise. In the AAE guise, the speaker produced phonological patterns consistent with AAE, such as high-low intonation, high rates of [-m], and monophthongal pronunciations; in the MAE guise, he did not. Thirty-two teachers from three San Francisco Bay Area schools participated in a matched guise test: one suburban high school, one urban high school, and one city college. First, participants heard one of the weather recordings (17 heard AAE, 15 heard MAE). Then, two types of data were collected from each participant: teachers completed a Likert-scale language attitudes survey about the speaker; spoken or written responses were collected from each teacher, as well, about why they rated the speaker as such.

Teachers who heard the MAE guise rated the speaker as more educated and more likely to attend college compared to teachers who heard the AAE guise in the language attitudes survey. Topic modeling of the qualitative responses showed that reading was the most salient topic mentioned for both guises. In AAE, reading co-occurred with negative descriptions, ranging from slow to calling the speaker unintelligent. One teacher falsely recalled hearing slang, while another wrongfully classified the speaker with a speech disorder. Meanwhile, for the MAE guise reading was perceived as sounding pleasant. There is some effect for school site; teachers from the urban schools showed more favor for AAE.

The results of this study suggest that teachers' subconscious assessments of students' reading comprehension are influenced when they identify speakers as African American or white. The paper concludes with a discussion of the implications of the results for teacher education and educational practice

The Formative Years: Vowel Change in a Longitudinal Study of LDS Talks

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Previous research has established that many phonetic properties, including vowel formants, change systematically throughout adulthood (e.g., Harrington et al., 2000; Reubold et al., 2010; Gahl et al., 2014). In this study, we contribute a new dataset to the study of intra-individual phonetic change and relate the observed formant shifts to previous findings on vocal aging and measures of vowel clarity/intelligibility (e.g., Ferguson & Kewley-Port, 2002; McCloy et al., 2012; Ferguson & Quené, 2014; among many others).

Data. The LDS Church makes publicly available the recordings and transcripts of talks given by high-ranking priesthood members (www.lds.org/general-conference). We analyzed the speech of the current church president, Thomas S. Monson (b. 1927), over a period of 45 years (ages 44-89). Our data set includes all talks given by Monson at general conferences held in April and October during the years 1971 to 2016, with 3-6 talks available per year. (Analysis of a parallel data set from another prominent church member, Boyd K. Packer, is currently ongoing; see also Stanley & Renwick, 2016.)

Recordings and transcripts were aligned with the Penn Forced Aligner (Yuan & Liberman, 2008) and midpoint formants for all vowel tokens were measured with FAVE-extract (Rosenfelder et al., 2014). An ellipse was fit to the $F1 \times F2$ tokens for each vowel category separately, collapsing across all recordings, and outliers were identified by a liberal criterion. Approximately 341,000 vowel tokens remained for analysis (/i/-39,778; /ɪ/-36,175; /eɪ/-18832; /ɛ/-29,676; /æ/-25,822; /u/-14,057; /ʊ/-2,696; /oʊ/-12,464; /ɔ/-14,426; /a/-18,688; and central vowels and three diphthongs).

Analysis. We partitioned the data into 5-year time bins and calculated the $F1 \times F2$ mean for each of the fifteen labeled vowel categories within each bin. The resulting vowel plot reveals characteristic and relatively static features of the talker's Utah dialect — such as fronted /u/ and /ʊ/ across all time bins — as well as change over time on the F1 dimension. The most striking change is a gradual lowering of the F1 means of /æ/ and /a/ (i.e., movement of the low vowels to higher positions in the vowel space), an age-related shift that has been observed for other talkers (e.g., Reubold et al., 2010). This shift is also found for the falling diphthongs /aɪ/ and /aʊ/, presumably affecting their first component, and to some extent for the central vowel /ʌ/.

A talker could compensate for low-vowel raising by (i) applying parallel shifts to neighboring vowels or (ii) reducing the variability within each low vowel category: either type of compensation could preserve vowel dispersion. However, we found that (i) the non-central mid vowels (and high vowels) had relatively stable F1 means and (ii) the variability within /a/ generally *increased* over time while that for /æ/ remained essentially constant. Moreover, we found that several previously-identified measures of dispersion and intelligibility (e.g., convex hull area) display negative trends across time in Monson's speech. Under the assumption that there is an age-invariant pressure for dispersion/intelligibility, especially in formal talks, this indicates diminishing articulatory control during these 'formative' years.

“¿Estoy cerca tuyo!”: A Variationist Look at the Expression of Locatives in Spanish

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The expression of adverbial locatives in Spanish has been prescriptively conceived with the following structure: locative adverb plus a prepositional phrase headed by *de* and followed by a personal pronoun (e.g. Alarcos 1994; Morales & Vega 2011; RAE 2009; Seco 1988). Around the second half of the 20th century, according to Marttinen Larsson (2015), the Spanish language experimented certain progress formulating the locative expressions, finding two linguistic forms in variation (i.e. locative adverb + prepositional phrase or locative adverb + possessive pronoun). For instance, *estoy cerca de ti* vs. *estoy cerca tuyo*, both meaning ‘I am near you’. Former studies that have evaluated this instance of variation have been merely descriptive, despite using empirical data (e.g. Marttinen Larson 2015; Polakoff Olivera 2011; Santana Marrero 2014). Thus, and while this phenomenon has remained unexplored in the field of Hispanic Sociolinguistics until now, the present investigation sought to shed light on this topic by analyzing data from different corpora with a variationist point of view. In order to attest the potential progress of the expression of locatives, it was imperative to examine how this phenomenon works and varies not only diatopically (i.e. regional variation) and diachronically (i.e. historical progress) but also diafasically (i.e. stylistic variation). This paper aimed to obtain the (extra) linguistic factors that favored the use of the non-canonical form (i.e. adverb + possessive). Moreover, it was also relevant to verify whether the different adverbs could play a role on the speakers’ preference for either one structure or the other. With the purpose of addressing these questions, two elements centered the data collection: a corpus composed of written and oral texts as well as a list of locative adverbs (Santana Marrero 2014). Many variables, both linguistic and social, were chosen, but the most remarkable one was the point of reference since this factor regarded the preposition as a dyadic entity (Ojea Lopez 1994). The statistical analysis with Rbrul (Johnson 2015) determined that the use of the non-canonical form was conditioned by dialect, followed by grammatical person, adverb, and referent type. This analysis also yielded an important finding whereby the gender and number associated with point of reference B were also some of the factors that favored the use of the structure adverb + possessive. This fact is one of the major contributions of this paper and leads to conclude that the agreement with the gender in the possessive pronoun is determined by the gender associated with point of reference

Shifts toward the supra-regional in the Northern Cities region: Evidence from Jewish women in Metro Detroit

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Recent studies of the Northern Cities Shift (NCS) suggest that changes to the vowel system are underway. Driscoll & Lape (2014) find that five of the six NCS vowels are reversing in apparent time in Syracuse. Wagner et al. (2016) uncover a mixed pattern in Lansing, with LOT and pre-oral TRAP reversing, but DRESS advancing. They offer three potential reasons for the lack of uniform reversal: (i) only pre-oral TRAP-raising/fronting and LOT-fronting have been reported as stigmatized; (ii) the NCS was never uniformly realized in Lansing, unlike in urban centers like Detroit; (iii) younger speakers may be orienting to supra-regional norms.

In this study, part of a larger study of Jewish English in Southeast Michigan, we present preliminary findings on the state of the NCS in Metro Detroit. Our findings generally coincide with the findings in Lansing, thus favoring factors (i) and (iii) over (ii) above. We further find that younger women not only have lower and backer pre-oral TRAP, but are also moving to a monophthongal variant.

Our sample consists of ten Jewish women from Metro Detroit divided into two age groups of equal size—ages 62-74 (mean:70) and 22-48 (mean:35). All speakers were born and raised in Detroit or in the northwestern suburbs. All tokens came from the word-list portion of sociolinguistic interviews. Formant values were measured in Praat at 33% duration from onset per Thomas 2011. Our analysis focuses on the TRAP, LOT, DRESS, KIT, and GOOSE vowels, with 2-6 tokens per vowel per speaker.

As in the Lansing study, we find considerable backing and lowering of DRESS and pre-oral TRAP, with mean differences (m.d.) in F1 and m.d. in F2 across age groups of at least 144Hz in every case. Younger speakers' LOT vowels are also backer, but the F2 m.d. (35Hz) isn't as great as in Lansing (50-100Hz). These findings suggest that the absence of full reversal of the NCS there may not be due to socio-historical differences from Detroit but rather mechanisms affecting both populations, such as stigmatization of NCS TRAP and orientation to supra-regional norms.

Concerning supra-regional norms, as in Lansing, we find considerable fronting of GOOSE—391Hz m.d. in F2 across age groups—consistent with the 'third dialect' (Clark et al. 1995). Also consistent with supra-regional varieties, but counter to findings in Lansing and Syracuse, we find KIT lowering among younger speakers (100Hz m.d. in F1). This change could also be construed as NCS advancement. We look to disambiguate these two possibilities and interrogate what role—if any—speakers' 'Jewishness' plays in these patterns in future research.

Finally, our analysis indicates that younger women not only have lower, backer pre-oral TRAP nuclei, but are moving away from the diphthongal variant of older speakers to a monophthong. The mean change in F1 from 25% to 75% duration from onset for older speakers was 2.69 times that of younger speakers, and 4.37 times for F2. Thus, we observe apparent-time variation not only in the nucleus of pre-oral TRAP but also in its articulatory trajectory.

In town or around the bay? Deontic Modality and Stative Possession in Newfoundland

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Local discourse in the Canadian province of Newfoundland and Labrador distinguishes between two highly stratified social groups, (“baymen” and “townies”).

Previous research has shown strong differences in usage (Childs et al. 2010), claimed usage (Van Herk et al. 2014) and attitudes (Clarke 1982) between these two groups. This urban/rural distinction has been shown to drive social behaviour and affiliation, both in language and elsewhere (Ito 1999, Thomas 1997). In the case of Newfoundland, however, it is unclear what constitutes urban.

This paper analyzes two linguistic variables and contrasts the linguistic system of two urbanizing communities from Newfoundland.

Multivariate analysis of 24 speakers from each community reveals differences between the communities. Stative possession, a feature currently undergoing a highly urban-oriented change in Canada (Tagliamonte et al. 2010), reveals that Corner Brook (N=1560) lags behind Petty Harbour (N=1977). Corner Brook men’s choice of *got* appears to be stable while Petty Harbour is increasingly choosing *have*. Corner Brook women are changing to *have*, but they are doing so about a generation and a half behind Petty Harbour. It can be argued that Corner Brook men are revitalizing local or working class identity features as having a white collar job or an university education in the dataset appears to favour *have*.

Deontic modality (N=890) also appears to be changing slower in Corner Brook than in Petty Harbour. Jankowski (2004) and Tagliamonte & Smith (2006) all document the decline of deontic modality *must* in British and American dialects. *Must* is used more commonly in Corner Brook (26%) than in Petty Harbour (15%). The data also reveals a preference for the periphrastic construction *got to* for deontic modality among Corner Brook men. However, all Petty Harbour speakers favour the periphrastic construction *have to* for deontic modality, a choice possibly explained by the increased urban favouring of *have* constructions over *got*.

Urbanicity appears to be determined by the distance to the capital, and the social networks which the capital city provides. This fits well with the dialect diffusion models (Chambers & Trudgill 1980). Corner Brook, despite being the largest community, is more rural.

English Variation in the Dutch Caribbean: Evidence of Dutch Substrate in Saban English?

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Saba was settled by the Dutch in the 1640s, followed soon thereafter by the English, Irish, and Scots. By 1665, English-speakers were a majority on the island, and by 1816, historical documents suggest that Saba was entirely English-speaking (Hartog 1988). Currently, Saba is a special municipality of the Netherlands, and Dutch has been used in specific domains like government and education throughout the past century. Despite Saba's past and present Dutch affiliation, there has been no investigation of Dutch substrate in Saban English. Aceto (2015) and Williams and Myrick (2015) observe that the Dutch islands of St. Eustatius, St. Maarten, and Saba all developed local Englishes despite Dutch settlement and governance. This phenomenon is said to be a result of the Netherlands' *laissez-faire* approach to foreign rule (Crane 1971; Hartog 1988) or openness to other languages for commerce (Aceto 2015). Nonetheless, Dutch has been central to the formation of other Caribbean varieties like Berbice Dutch Creole, Negerhollands, Sranan, as well as Papiamentu and Saramaccan. Was Dutch a critical component of Saba's developing dialect? We know that Dutch influenced the Saba lexicon as evidenced by numerous calques and Anglicized loanwords in Saban English (Johnson 2016). Is there any evidence of Dutch substrate in Saban English phonology or grammar? If so, how is this substrate realized? Does it play any social or ethnic role in the composition of Saban English?

To answer these questions, we examine word-final obstruent devoicing for evidence of Dutch influence (Warner et al. 2004), as well as consonant cluster reduction, which has been used to gauge contact with West African languages in Caribbean creoles (Holm 1988). Next, we examine locative prepositional usage due to the incongruence of Dutch cognates for English prepositions 'by,' 'at,' 'to,' 'on,' and 'in'. Data for our study come from multiple sources spanning over four decades, including transcribed life stories (N=22), tape-recorded oral histories (N=6), and digitally recorded sociolinguistic interviews (N=32). Results highlight Dutch substrate as well as contact between Anglophone varieties and Caribbean creoles. For instance, word-final /d/ and /z/ devoicing patterns suggest Dutch influence similar to the devoicing patterns seen in Wisconsin and Pennsylvania due to German substrate (Purnell et al. 2005; Anderson 2011). High rates of consonant cluster reduction (higher for Saban speakers of African ancestry), however, suggest contact with Caribbean creoles (Holm 1988). Saban English usage of 'by' for *at* and 'to' for *in/at* mirror Dutch usage of 'bij' and 'te'; these findings suggest transfer from Dutch, similar to the prepositional patterning seen in Jewish English as a result of Yiddish substrate (Benor 2015), as well as White South African English (Bowerman 2008). We conclude that, despite the non-development of a local Dutch variety on Saba (Williams and Myrick 2015; Aceto 2015), Dutch was preserved in specific aspects of Saban English phonology and grammatical structures in addition to its lexicon. This preliminary study sheds light on the complex role of substrate, transfer, and contact in the English-speaking Dutch Caribbean.

Mapping variation in the English-speaking Caribbean: Moving toward a more complete understanding of Caribbean English

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The most effective sociolinguistic maps both document and explain language variation (Livengood, 2013). Mapping language variation in the Caribbean, however, remains a persistent challenge due to intertwined histories that span natural geographic barriers, intra-island variation, and the fact that social categories vary from place to place. As such, the same linguistic variants may be imbued with differing sociolinguistic significance on different islands. In a step toward a more complete explanation variation in Caribbean English, we have analyzed linguistic data for 35 Caribbean islands, drawing from more than 45 sources for more than a dozen morphosyntactic and phonological features. For this paper, we map and report on three representative features: copula absence, second-person plural pronouns, and post-vocalic r-lessness. These features were selected for what they reveal about their social, regional, and historical distributions in the Caribbean. Additionally, to illustrate how individualized island histories have created such distinctive linguistic patterning, we examine closely three islands that span the Eastern and Western Caribbean: Barbados, Saba, and Jamaica.

Results of mapping copula patterning support Sharma and Rickford's (2009) hierarchy for copula absence favorability: noun phrase < locative < adjective. However, they also complicate Winford's (1992) claim of inflected be usage as indicative of decreolization; our maps show wide usage of copula absence, even in varieties such as Bahamian English and Saban English, neither of which underwent creolization (Reaser, 2010; Williams and Myrick, 2015). Mapping of second-person plural pronoun patterning offers nuance to the traditional diagnostic of *unu* forms as the Western Caribbean variant and *all-you* forms as the Eastern variant (Aceto 2008). We find intra-regional variation with this pronoun, as well as variable usage within single islands. Finally, our mapping of post-vocalic (r) documents two fully rhotic varieties – Bajan, which has been described as being potentially “more rhotic than North American [Standard] English” (Van Herk, 2003: 206), and Jamaican English – while also revealing subtle variation among non-rhotic and semi-rhotic varieties. At the same time, we conclude that without consistent methodologies and analyses, broad claims about the nature of post-vocalic (r) variation in the English-speaking Caribbean is difficult, if not impossible.

Our paper shows how progress toward holistic mapping of English variation in the Caribbean can reveal insights into language history, contact, and creolization. At the same time, it underscores challenges related to data comparability and inter- and intra-island variation. This result of both successes and challenges recalls Mufwene's (2001) ecology-based theory of language evolution: it appears that there exist today dozens of co-existing linguistic systems. Because of this, even islands with parallel and overlapping settlement histories still exhibit extensive linguistic differences. All language varieties, even those with similar pasts existing in relative proximity to each other, have unique histories. While cartographic methods have not yet progressed for maps that document and explain these histories in the Caribbean as a whole, carefully constructed maps of individual islands and regions can start to both document and explain the rich linguistic variation within Caribbean English.

Formal acceptability experiments as a novel measure of variation in flexible constituent order

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Languages and language varieties differ as to how flexible the order of their major constituents (SUBJECT, OBJECT, & VERB), though this dimension of variation has been underexplored for a variety of reasons. Most immediately, there is a methodological barrier, as any study would require a way to operationalize degree of flexibility in a quantitative manner. Here, I advocate for using formal acceptability experiments to establish an operational definition of flexibility: measuring the extent to which speakers prefer the canonical (discourse-neutral) order and disprefer non-canonical orders in discourse-neutral contexts. I present a series of experiments demonstrating that this methodology is valid and can capture subtle yet meaningful differences in flexibility, both within and across languages.

The first set of experiments compares English, a rigid SVO language, Malayalam (Dravidian), and Korean, both described as flexible languages, in which all orders are grammatical but SOV is canonical. Non-canonical orders are associated with particular intonational contours and discourse contexts in Korean and Malayalam (Ahn 1988, Namboodiripad 2017); native speakers recorded stimuli using the intonation appropriate for each order according to their intuitions. Participants rated the six logical variants of transitive sentences, with animate subjects and inanimate objects, on a 7-point scale, along with a variety of fillers which differed structurally and in degree of acceptability. The results show that English speakers find canonical SVO order to be highly acceptable relative to the other orders, while Malayalam and Korean speakers show much smaller differences in the relative acceptability of canonical and non-canonical orders. This indicates that relative acceptability aligns with intuitions about differences in degree of flexibility across these languages.

Moving to variation in flexibility within languages, I present two follow-up experiments from Korean and Malayalam which show within-language differences in flexibility based on language experience. Relative acceptability of canonical SOV order is significantly higher for English-dominant Korean-speakers as compared to Korean-dominant speakers, indicating reduced flexibility. In Malayalam, younger and older speakers living in the same region show differences in relative acceptability of canonical SOV order, with younger speakers having higher relative acceptability for SOV than older speakers. Age corresponds with language contact in this population, suggesting that language contact corresponds with decreased flexibility in constituent order (cf. Heine 2008).

Acceptability judgment experiments are portable, can be used with audio stimuli (important when written stimuli are impractical or not applicable, as in these Korean and Malayalam populations), and can capture the fine-grained distinctions between sentence types. In addition, the data presented here is evidence for reduced flexibility corresponding to language contact, and it demonstrates that the flexible-rigid pattern cannot be described by wholesale borrowing of the surface word order of the contact language. Speakers who are English-proficient are not just translating English sentences into Korean and Malayalam, rather, contact with English is affecting the degree to which speakers prefer the canonical order in the flexible language. In addition to the methodological contributions of this work, these findings open the door to further explorations of how and why constituent order can change due to language contact.

A Rust Belt Feature? Economic change and the decline of raised TRAP in Lansing, MI

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Recent reports of the Elsewhere Shift in the Inland North (Wagner et al. 2016; Driscoll and Lape 2015) and beyond (e.g. Columbus, Durian 2012; Kansas City, Strelluf 2014) suggest a decline in dialect diversity in North America whereby local vowel systems are being replaced with a supra-regional one. This paper explores the relationship between changes in local economy and local dialect use in Lansing, MI. Lansing is a *Rust Belt* city (McClelland 2013), a once thriving (auto) manufacturing community that witnessed significant economic and population increases after World War II, but whose economy has suffered since major plant closures in the 1990s. Subsequently, Lansing's unemployment rate has increased by 8% and the population has decreased by 15% since 2000 (U.S. Census 2010).

The present study provides quantitative and qualitative analysis of interviews with 21 auto workers and managers (born 1907 – 1971) who were born and/or raised in Lansing. Particular attention is paid to those born between the end of WWII and 1961 (n=16), as it is in this baby boomer generation that the shift to a nasal system in the urban center is located. Within this generation, maintenance of the local raised system is not characteristic only of workers, this is also true of managers who associated with the factory workers, e.g. served on unions and fought for worker rights. Other managers, and workers living in rural communities, have lower and more retracted TRAP realizations. We find that raised TRAP is an “urban/worker” characteristic in Lansing that is directly tied to the baby boomer generation who experienced great prosperity during the height of the auto industry and who were negatively affected by the collapse of this industry in the 1990s. Perhaps shifting away from this local system is a linguistic means by which younger generations distance themselves from the shadow of the Rust Belt era.

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Almost everyone in New York is raising PRICES (but no longer backing PRIZES)

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PRICE-PRIZE Canadian raising (PPCR) is explored as a recent or in-progress phonological split in various northern US locations (e.g., Vance 1987, Fruehwald 2007). PPCR appears unreported for New York City English (NYCE), although Kaye (2012) describes an analogous long-established split with PRIZE backing replacing PRICE raising as distinguishing phonetic trait:

	PRICE	PRIZE
Traditional Canadian Raising	[AI]	[aɪ]
NYCE Canadian Raising (Kaye)	[aɪ]	[ɑɪ]

Kaye connects this split systemically with the NYCE LOT-PALM distinction arguing that not only do the phonetic outcomes of PRIZE and PALM lengthening and backing match but so do the conditioning environments. Kaye's unified analysis suggests that both contrasts should co-occur. So, as LOT/PALM undergo merger among younger White NYCE speakers (Newman 2016), PRIZE-backing should also be lost. Similarly, those many non-Whites that preserve a LOT/PALM contrast (Newman 2014) should back PRIZE. We address these questions with data from read-alouds containing 37 potential tokens each of PRICE/PRIZE and of 40 of LOT/PALM from 35 diverse participants in the Corpus of New York City English (CoNYCE). Vowels were measured at 35% of duration using DARLA vowel extraction and plotted with NORM.

- All participants except 2 (of 6) East Asians and 3 (of 4) South Asians show a PRICE-PRIZE distinction.
- PRICES were always RAISED in split cases.
- 3—all older Whites with distinct PALM—also showed PRIZE backing.

Consequently, NYCE can be added to the northern US varieties with PPCR, and PPCR joins the increasingly nasal short-A and simplifying low back system (see e.g., Newman 2014) as specific local features losing ground to larger regional patterns. More specific findings include:

1. Although PRIZE backing coincides with PALM retention among Whites, PALM was retained by most African Americans or Latinos leaving any systemic connection unclear.
2. Although many Asians, particularly East Asians split PRICE from PRIZE, fewer do than other racialized groups. South Asians are least likely to raise PRICE.

In conclusion, PPCR contributes to a number of trends found for NYCE such as the emergence of cross-ethnolinguistic commonalities co-existing with inter-ethnic distinctions and the evolution from strong local dialectal distinctiveness to joining wider regional patterns.

Social Predictors of Case Syncretism in New York Hasidic Yiddish

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This is a pilot study investigating synchronic variation in New York Hasidic Yiddish (HY) object pronouns. HY is a variety that has been transmitted directly by immigrants from Eastern Europe following the second world war, and is presently the everyday language of thousands of Hasidic Jews in New York and other communities around the world. In Yiddish, pronominal forms in the dative case, *mir* (1SG) *dir* (2SG), have historically been used in four types of syntactic constructions: 1) when the pronoun referent is the recipient of an action in a double object construction; 2) with a transitive verb that inherently selects for an object in the dative form; 3) with a dative experiencer; and 4) as the object of a preposition. Anecdotal observations suggest an innovative leveled paradigm with accusative forms *mikh* (1SG) and *dikh* (2SG) in all four historically dative positions. Moreover, while other Yiddish dialects have dative case marking on determiners and adjectives, HY has lost these, and *mir* and *dir* are the sole remaining dative forms in this dialect. Thus, learners of HY, unlike learners of other Yiddish dialects have less evidence for positing dative case. The data for this study come from an online controlled judgement experiment with 147 native HY speakers from New York. Regression analysis reveals an age effect, with younger speakers tending toward innovative dative forms, and an interaction between age and gender, with younger females innovating more extensively than males. However, sex is confounded with language dominance in this community, largely because of an educational model that supports HY-English bilingualism among girls, but gives primacy to HY in the education of boys. The results of this study suggest an emergent reduction in the HY case system where, for many young speakers, the distinction between the accusative and dative case forms has been lost. HY offers linguists a unique opportunity to observe the development of a post-coterritorial Yiddish dialect in a new language contact environment. This investigation into HY in its unique sociocultural context contributes to Yiddish linguistics by highlighting changes that have occurred since its arrival to the U.S.; and to general theories of language change by examining whether and to what extent these developments are driven by external forces, including its contact with a genetically related majority language.

Variable Direct Objects in Brazilian Portuguese

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We investigate linguistic and social constraints on variable direct object (DO) forms in Brazilian Portuguese (BP), as well as social perceptions of their use. Example (1) illustrates the possible variation between null (1a), tonic (etymologically subject pronouns; 1b), and clitic DO pronouns in BP (1c).

- (1) (a) Eu conheço a Joana, e o Marcos conhece \emptyset também.
 (b) Eu conheço a Joana, e o Marcos conhece **ela** também.
 (c) Eu conheço a Joana, e o Marcos **a** conhece também.
 ‘I know Joana, and Marcos knows her too.’

Previous research has shown that this alternation is constrained by both semantic and pragmatic features of the referent, as well as social characteristics of the speaker. With respect to third person, it has been shown that the animacy, specificity, and semantic gender of the referent of the DO constrain its expression (Creus & Menuzzi 2004; Schwenter & Silva 2003). Additionally, we find commentary on social stigma attached to the use of tonic DO pronouns for all three persons, with first and second more stigmatized than third (Tesch et al 2014; Perini 2002).

We explore the effect of semantic, pragmatic, and social factors on the acceptability of sentences with clitic, tonic, and null DO pronouns. Over 100 Brazilian online survey respondents saw one variant in each of 20 items, which they rated on a sliding acceptability scale. The referents of the DOs in these sentences possessed different combinations of animacy, specificity, and semantic gender, to test the impact of these factors on respondent judgments. Furthermore, we tested the acceptability of all three grammatical persons, to discern different levels of stigmatization. To this end, respondents classified the imaginary speaker of each utterance according to perceived social class, age, education, intelligence, and other personal characteristics (cf. Campbell-Kibler 2009). We also considered the personal characteristics of the survey respondents (level of education, socioeconomic status, age, gender).

Mixed-effects linear regression shows that the socioeconomic status of the participant was a significant predictor of acceptability. Participants of higher socioeconomic status disfavored the tonic pronouns, and rated first and second person significantly worse than third. They also characterized the imaginary speaker using these forms negatively (e.g. as inarticulate). Furthermore, we found that respondents were more likely to accept overt pronouns when the referent is specific, animate, and has identifiable semantic gender.

Our results corroborate and expand on previous work (Menuzzi & Creus 2004; Schwenter & Silva 2003; Tesch 2014), which had only considered subsets of the constraints that included here. Our findings for linguistic constraints suggest that BP speakers employ overt pronouns to signal the markedness of the object (Schwenter 2006, 2014). That is, they encode prototypical objects (inanimate, non-specific, no identifiable semantic gender) as null, and utilize overtness to mark divergence from prototypicality. Second, our social findings highlight the previously unexplored effect of socioeconomic status on DO pronoun choice and perception. Overall, our findings show that DO expression in Brazilian Portuguese is constrained by a complex combination of semantic, pragmatic, and social factors.

Variable vowel convergence in a cooperative task

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Phonetic convergence between interlocutors is to some extent automatic, yet mediated by linguistic and social-attitudinal factors (Giles et al. 1991, Namy et al. 2002, Pardo 2006, Babel 2010, Kim et al. 2011); the salience of social identity can suppress convergence and even lead to divergence in the production of identity-linked vowel sounds (Babel 2010). We present a novel task for assessing convergence in a cooperative setting, designed to minimize the salience of identity and better reveal effects of linguistic factors such as word class. Results based on the word list portion of the task indicate significant differences across vowels in degree of "convergability", as well as an effect of initial dialect distance.

Eleven pairs of participants (22 total, 14 women/8 men) completed hour-long experimental sessions in a sound-attenuated booth. Each pair consisted of same-gender 18-22 year-olds with different regional backgrounds currently attending college in Washington, D.C. Without their partner present, each participant read aloud a 45-item word list representing 13 word classes in American English, once at the beginning of the session and again at its conclusion. In between, the pair played a version of the game Taboo. In this game, one player takes a card with a keyword printed at the top followed by "taboo" phrases (e.g. keyword "Baseball", phrases "sport," "game," "pastime," "hitter," "pitcher"), and must elicit the keyword from their partner without using any taboo phrases or the keyword itself. Each participant was given their own card deck, balanced for representation of the vowels appearing in the word lists. Participants switched roles every few minutes, aiming to earn a set number of points for correct guesses. Each participant wore an Audio-Technica lavalier microphone transmitting to its own channel on a Zoom H4n recorder.

Lobanov-normalized F1 and F2 values were extracted from the word list readings using FAVE (Rosenfelder et al 2011). A convergence measure was calculated for each word for each speaker pair, by subtracting the Euclidean distance (ED) between the speakers' realizations of that word in the end-of-session wordlists from the ED between their realizations in the beginning-of-session wordlist; a positive value indicates convergence over the course of the session, and a negative value divergence. Mixed-effects models of the convergence measure were fit and compared using likelihood ratio tests, with random effects for word and pair and fixed effects for vowel and beginning-of-session ED. Greater initial ED was associated with greater convergence ($\chi^2(1)=181.981$, $p<0.001$), pace Kim et al. (2011). Vowel identity was also significant ($\chi^2(12)=22.209$, $p=0.035$). The most consistent convergence across pairs occurred with point vowels IY and AA, followed by monophthongs IH, EH, and AH; consistent divergence occurred in EY, AE, and the backgliding diphthongs UW, AW, OW. These results suggest that listeners focus on IY and AA while modelling their interlocutor's vowel space, facilitating convergence in these vowels, and that even in contexts where identity is not particularly salient, divergence -- particularly in diphthongs that mark relevant regional differences -- may still occur.

Linking acoustic correlates of rhoticity to perception: How the past informs the present

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As sociolinguistic methods progress towards large-scale automatic phonetic analysis, it is crucial to continue to explore the relationship between acoustic measures and perception. Post-vocalic /ɪ/-realization is a widely investigated sociolinguistic marker known to vary along social lines (Labov 2006; Schönweitz 2001). Proposed acoustic correlates of rhoticity include lowered F3 (Ladefoged 2003; Mielke 2013), also measured as F3 – F2 (Nagy 2008). We measure F3 in acoustic data from 48 Southern U.S. speakers (23F; $\mu=57.9$ years; $N=53,109$ tokens), and compare these results to impressionistic transcriptions of speech from the same informants ($N=1559$), as recorded by highly trained phonetic scribes (Pederson 1981), although perceptual classification is known to be inconsistent for /ɪ/ (Heselwood, Plug & Tickle 2008; Yaeger-Dror et al. 2008). We hypothesize that low F3 will correlate with impressionistic transcription of /ɪ/.

The data come from the Digital Archive of Southern Speech (DASS), a sociolinguistic audio corpus collected 1968–1983 (Kretzschmar Jr. et al. 2013), and a subset of the Linguistic Atlas of the Gulf States (LAGS) (Pederson et al. 1986). Southern speech is historically non-rhotic, but it became more rhotic over the course of 1900s in most regions (Thomas 2005). As our speakers range in birthyear (1886–1965), we expect a range of rhotic realizations. For each interview, highly-trained LAGS scribes in the 1970s–80s transcribed target words in LAGS *Protocols* (Pederson 1981), and then further summarized each informant's speech in one-page *Idiolect Synopses* (Bassett, McDaniel & Pederson 1986) featuring representative vowel productions in various environments. These impressionistic phonetic transcriptions comprise what is essentially a record of perception.

In the current study, transcriptions of 24 words containing the prescriptive /ɪ/-colored vowel /ə/ (e.g. *church*, *lawyer*) from the *Idiolect Synopses/Protocols* were labeled rhotic or non-rhotic (transcribed [ə]=non-rhotic). Acoustic data were extracted from each speaker's interview (minimally 1 hour): orthographic transcriptions were force-aligned using DARLA (Reddy & Stanford 2015), and F3 values automatically extracted for all instances of /ə/ and the comparable non-rhotic mid-vowel /ʌ/. F3 values were normalized using Nearey2 methods (Nearey 1978). If perceptual rhoticity and acoustic rhoticity correspond via F3, we expect speakers who are perceptually more rhotic, measured here by percentage of transcribed rhotics in the *Protocols* (%rhotic), to have lower average F3 in prescriptively /ə/ words, and to show a greater difference between F3 of /ə/ and /ʌ/ (/ə/ F3 - /ʌ/ F3; more negative=more rhotic).

As expected, there was a moderate negative correlation between %rhotic and F3 in /ə/, $r(46) = -0.31$, $p < 0.05$, and a slightly stronger negative correlation between %rhotic and F3 /ə/ - F3 /ʌ/, $r(46) = -0.42$, $p < 0.01$. Thus, existing DASS transcriptions utilized in conjunction with acoustic data suggest that F3 is indeed a reliable metric of perceived rhoticity. The impressionistic and acoustic data also tell similar stories regarding larger dialectal patterns. Both the percentage of transcribed rhotic tokens and the acoustic difference in /ə ʌ/ F3 indicate that in line with previous work (Schönweitz 2001), females are more rhotic than males, younger speakers are more rhotic than older speakers, European Americans are more rhotic than African Americans, and middle/upper class speakers are more rhotic than lower class speakers.

Lexical frequency effects on the Southern Shift in the Digital Archive of Southern Speech

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With the development of sociolinguistic theory and methodology, questions have been raised regarding the role of lexical frequency in sound changes in progress. Labov (2004; 2010) has argued that regular changes are not affected by frequency of word usage, while Bybee (2000; 2002) and Pierrehumbert (2001) have found evidence that words of greater frequency lead sound change. This usage-based framework suggests that, with the accumulation of more exemplars of frequent words, a perceptual bias allows for these words to undergo change more rapidly (Pierrehumbert 2001). Utilizing a larger and longer-spanning corpus than previously available, Hay et al. (2015) found that lower frequency words were actually more advanced in the New Zealand Vowel Shift. These results have shown the necessity for continued research on frequency effects in regular sound changes and illustrated the benefits of using large speech corpora.

The present paper investigates frequency effects in the Southern Vowel Shift (SVS) of American English, a well-studied regular change triggered by /ai/ monophthongization (Labov et al. 2006; Thomas 2001). We utilize the Digital Archive of Southern Speech (DASS) (Kretzschmar Jr. et al. 2013), a historical audio corpus of sociolinguistic interviews with 64 speakers across the American southeast recorded between 1968–1983, and a subset of the Linguistic Atlas of the Gulf States (Pederson et al. 1986). DASS is in the process of being fully orthographically transcribed for the first time. So far, at least 1hr/speaker from 48 speakers (23F; $\mu=57.9$ years; $\mu=7608.5$ vowel tokens/speaker) has been transcribed. The current corpus contains 365,209 tokens of 14,640 words; when fully transcribed, we expect the corpus to feature 1.5 million tokens. Unique words were counted within the corpus, and frequency was calculated per million words. As the DASS corpus is largely conversational, we take within-corpus word frequency to be representative of our speakers' natural speech (in line with the methods employed by Hay et al. (2015)).

The SVS predicts that /ai/ weakens and causes the tense vowels /i, eɪ/ to lower and back, and lax vowels /ɪ, ɛ, æ/ to raise and front (Labov et al. 2006). Here we examine vowel quality for the aforementioned front vowels by utilizing the metric Lobanov-normalized F2 minus Lobanov-normalized F1 (ZDiff) in order to capture both front-to-back and high-to-low movement (Dodsworth 2013). ZDiff is plotted against word frequency to determine if word frequency affects SVS realization. If no effect of frequency is apparent, each vowel's respective trajectory should remain flat; however, this is not the case. For the high front vowels /i, ɪ/, signs of the SVS in which /i/ is lowered and backed and /ɪ/ is raised and fronted are seen more in low frequency words, as in Hay et al. (2015). For the remaining front vowels /eɪ, ɛ, æ/, where /eɪ/ lowers and backs, and /ɛ, æ/ raise and front, evidence of the SVS is more prominent in high frequency words as in Bybee (2000; 2002) and Pierrehumbert (2001). These mixed results justify further exploration of frequency effects in DASS.

Progress in Subject Pronoun Expression Research: The Effects of the Verb Revisited

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This paper sheds light on the effects of the verb on Spanish subject pronoun expression (SPE). We explore seven predictors (gender, age, subject continuity, TMA, verb class, lexical frequency, and grammatical person/number of the subject) using 3,657 tokens from a corpus built on conversations with thirty socially stratified residents of Xalapa, Mexico. The overall pronominal rate (25%) constitutes the highest such rate found in Mexican Spanish, so far, and one of the highest in a mainland speech community (cf. Carvalho, Orozco, & Shin 2015; Lastra & Martín Butragueño 2015; Otheguy & Zentella 2012, among others). A multivariate analysis reveals a complex model with linguistic and social predictors intersecting. The internal conditioning—congruent with what occurs across the board—reveals person/number of the subject as the strongest predictor. The findings for verb class uncover that copulative, perception, and motion verbs, respectively, promote overt pronominal subjects. Although the favorable effects of both copulative and perception verbs are consonant with previous findings (Enríquez 1984:240; Orozco 2015:24; Otheguy & Zentella 2012:164; Shin 2015; Silva-Corvalán 1994:162; Torres Cacoullos & Travis 2011: 250; Travis 2007:115; among others), the effects of motion, speech, and cognition verbs, respectively, do not seem to be entirely consistent with what occurs in other speech communities. The apparent inconsistencies in the effects of most verb classes (motion, other, cognition, speech) compared across speech communities suggest that the effects of the verb on SPE may exceptionally lack the overarching uniformity evidenced by other internal predictors (cf. Carvalho, Orozco, & Shin 2015 and references therein; Lastra & Martín Butragueño 2015:53). A lexical frequency analysis exploring the effects of the fifteen most frequently occurring verbs in the sample as random effects factors provides more definite answers regarding how verbs condition SPE than the syntactically and semantically-guided approaches that have been used for four decades (cf. Bentivoglio 1980; Enríquez 1984). For instance, within copulative verbs *ser* ‘be’ favors overt subjects but *estar* ‘be’ favors null subjects. These findings along with those of Erker & Guy 2012; Orozco 2015; Orozco Méndez Vallejo & Vidal Covas 2014; Posio 2011, 2015; Travis 2005b, 2007; among others, imply that verb class, or for that matter classifications based on syntactic or semantic criteria, do not constitute the most accurate way to explore the effects of the verb on SPE. Moreover, the unusually robust effect of age sets Xalapa apart from most other monolingual Hispanic speech communities, as the effects of social factors do not consistently constitute strong SPE predictors (Carvalho et al. 2015:xv). When age does condition SPE, its effect is not as strong as that found here. Concurrently, the pronominal rate found among teenagers (10%) is below the lowest overall pronominal rate in the Hispanic World. Interestingly, the lower pronominal rate among younger speakers is consistent with findings in other monolingual Spanish varieties such as Peninsular (de Prada Perez 2015), Mexico City (Lastra & Martín Butragueño 2015), Colombian (Orozco 2015), and Dominican Spanish (Alfaraz 2015). In sum, this study contributes to advance our collective knowledge of SPE.

Salience and covariation in second dialect acquisition: Northeastern migrants in São Paulo

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Many works on *covariation* (Guy 2013, Tagliamonte & Waters 2011, Guy & Hinskens 2016), seeking to determine whether multiple variables in a speech community cohere in forming sociolects, have so far focused on the speech of native speakers. The concept, however, is especially fruitful when analyzing (im)migrants' speech, to determine the extent to which they have acquired host community's variants and whether these are acquired simultaneously or independently. Previous works (e.g. Erker 2016) have proposed that salience plays an important role in covariation, in that less salient forms covary more frequently and more strongly with other forms. This paper thus analyzes co-variation among six variables in the speech of 32 Northeastern (NE) migrants living in the Southeastern city of São Paulo (SP) in Brazil, focusing on the role of salience in second dialect acquisition.

All six variables define dialectal and regional boundaries in Brazilian Portuguese: (i) pretonic /e/ (e.g. *relógio* 'watch') and (ii) pretonic /o/ (e.g. *romã* 'pomegranate'), which tend to be lower [ɛ, ɔ] in the NE (Pereira 2010); (iii) coda /r/ (e.g. *porta* 'door'), pronounced as velar/glottal fricatives in the NE and as taps/retroflexes in SP (Callou *et al* 1996); (iv) /t, d/ before [i] (e.g. *tia* 'aunt'), pronounced as stops in the NE and affricates [tʃ, dʒ] in SP; (v) sentential negation (*não vou* vs. *não vou não* 'I won't go')—the latter more frequent in the NE (Schwenter 2016); and (vi) NP agreement (standard *as casa-s* vs. non-standard *as casa-Ø* 'the houses')—the former favored in urban areas (Scherre 2008). When asked by which features they are recognized as migrants in SP, Northeasterners normally mention coda /r/ and /t, d/ before [i], which point to their social salience in relation to other variables.

In a total of more than 30,000 tokens, each speaker's usage rates of SP's prototypical variants were calculated for each variable. Given non-normality of distributions (determined by Shapiro tests), Spearman's rank correlation coefficients were computed for all pairings (e.g. pretonic /e/ and /t, d/) using R. Results show that all phonological variables significantly correlate to one another, with rho between .36 and .70, indicating that speakers who have acquired one SP phonological feature have also acquired the others. On the other hand, coda /r/ doesn't correlate with NP Agreement ($\rho=.13, p>0.05$) nor sentential negation ($\rho=-.08, p>0.05$), and /t, d/ before [i] correlates only weakly with coda /r/ ($\rho=.36, p=0.04$) and doesn't correlate with sentential negation ($\rho=.21, p>0.05$). The latter, in fact, correlates only with the other morphosyntactic variable NP Agreement ($\rho=.53, p<0.01$), which in turn correlates with all variables except coda /r/. Thus, the prediction that more salient variables (coda /r/ and /t, d/) won't take part in as many correlation patterns holds for the phonological variables, but doesn't account for lack of correlations with sentential negation. While these results reinforce the evidence that salience plays an important role in covariation, they also signal one of its possible limits.

Transmission of Variation Between Homeland and Heritage Faetar

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Previous variationist research on Heritage languages in Toronto has shown that features do not undergo significant changes as they are transmitted from Homeland to Heritage speakers (Kang & Nagy, 2016; Nagy, 2014; Nagy, Iannozzi, & Heap, forthcoming). This raises the question of whether this general stability in transfer applies across different language features or whether it is specific to the particular features already investigated, with other unexplored features less resilient in the face of transfer. An ideal testing ground to address this issue is to consider a variable closely related to one previously examined. In light of existing research documenting the state of pro-drop in Faetar (Iannozzi, 2015; Nagy, Iannozzi, & Heap, forthcoming), we investigate differences in the rates and constraints of the yet-unstudied variable of subject doubling, compared between Heritage and Homeland Faetar speakers.

The data for this project are taken from two corpora of spontaneous speech: one consisting of sociolinguistic interviews with 21 Homeland speakers, and the other consisting of sociolinguistic interviews with 14 Heritage speakers. In total, 1,875 subject tokens were extracted and analyzed according to comparative variationist methods (Poplack & Tagliamonte, 2001). Following previous research on subject doubling in other Romance languages, the data were coded for social (*age, sex, and Homeland or Heritage community membership*) and linguistic factors (*information status, grammatical person, negation, tense, and intervening material*) and analyzed using multivariate logistic regression in Rbrul (Johnson, 2009) in order to determine the contributions of the factors to the realization of subject doubling.

Results of the multivariate analysis show that subject doubling is only grammatically constrained in the source variety: Homeland speakers favor doubling in new information contexts, similar to speakers of European French (Barnes, 1985). Age is also significant for the Homeland speakers, and the direction of effect indicates that as age increases, the likelihood of subject doubling decreases; this is suggestive of a change in progress in the Homeland, with younger speakers leading a change towards more doubled subjects. No factors – social or linguistic – emerge as significant for the Heritage speakers, indicating that while they have acquired the surface structure of the variation, they have not acquired its grammatical constraints. However, the lowered rate of doubling in the Heritage variety raises the possibility that the application value is simply too low to ascertain its grammatical conditioning. Still, the lack of significance for age in the Heritage variety indicates that the change towards increased use of double subjects is not mirrored by the speakers here in Toronto. We propose that this is because the Heritage speakers left the homeland either before or around the time that the youngest Homeland speakers were born, resulting in them having missed out entirely on this change.

Though previous studies of Faetar have documented the substantial variability in pronoun realization, this is the first study to consider subject doubling across communities and showcases one of many possible ways that speakers' departure from the Homeland can lead to differences in the Heritage variety.

The Changing Sounds of Exceptionally Aspirated Stops in Diné bizaad (Navajo)

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Many studies have examined linguistic and social factors that influence VOT (Flege 1991; Yao 2007; Nagy & Kochetov 2013) including research on VOT as a locus of contact-induced phonetic transfer in multilingual communities (Fowler et al. 2008; Michnowicz & Carpenter 2013). Diné bizaad, a Southern Athabaskan language spoken in the American Southwest, plays an important role in typological discussions of VOT due to the exceptionally long values reported for its voiceless aspirated stops. However, these measurements were recorded 25 years ago, and an increase in English usage among the Diné community has since ensued.

Additionally, before widespread bilingualism, scholars noted variation in the supralaryngeal constriction of /t/ and /k/: ‘consonants are aspirated, by some speakers very weakly, by others so strongly as to form consonant clusters- tx, kx’ (Reichard 1951:19). Stronger aspiration has also been qualitatively associated with Western speakers, raising the potential of VOT as a meaningful variable independent of English contact (Saville-Troike & McCreedy 1980).

The Diné phoneme inventory includes labial, alveolar, and velar stops with a three-way laryngeal distinction (McDonough 2003), though questions remain about the phonemic status of <t> and <k> as aspirated stops or affricates /tx kx/ (McDonough & Wood 2008). Table (1) shows a comparison of mean VOT (ms) values for the relevant English (Lisker & Abramson 1964:394) and Diné (Cho & Ladefoged 1999:219) stops.

Table 1. Comparative VOT

	Voiced	Voiceless unaspirated	Voiceless aspirated	Voiceless aspirated ejective
Diné		/t/	/t ^h /	/t ^h /
		6	130	108
		/k/	/k ^h /	/k ^h /
		45	154	94
English	/d/	-	/t/	-
	5, -102		70	
	/g/	-	/k/	-
	21, -88		80	

This study measures VOT in elicited tokens containing /t/ and /k/ in recorded data from speakers of different ages, genders, regions, and linguistic backgrounds. Recorded tokens are manually segmented for VOT, then measurements analyzed with mixed-effects logistic regression. Initial results show that VOT is shorter than earlier reported values with the shortest VOT found in words from participants younger than 50. These measurements indicate that the exceptionally aspirated Diné stops are shortening, likely due to an increase in English bilingualism and language shift. Further, results indicate a longer VOT for /t/ than /k/, the opposite of typological predictions, but explainable by a highly velarized /tx/ (Young & Morgan 1987). These data expand our understanding of language contact and change and follow the work of Stanford and Preston (2009) in expanding the body of variationist studies conducted in indigenous communities.

Statistical tracking and generalization: Dual strategies in bidialectal acquisition

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Previous research is divided over how children ages 4 and under respond to patterned sociolinguistic variation in their input. A majority of studies show that children track and reproduce the frequencies seen in their input (Smith, Durham, & Fortune, 2007; Maneva & Genesee, 2002; Quay, 2008). However, there are also studies that demonstrate that children target the form that they hear most frequently and generalize this to all of their productions (Roberts, 1997; Foulkes, Docherty, & Watt, 1999).

This paper analyzes a case of bidialectal acquisition through the productions of a 4;4 child whose parents speak different dialects of English. The father commands a North-Central American English dialect, while the mother has a mix of Appalachian English and South African English. Crucially, the two parents differ in their production of mid-high vowels, with the North-Central dialect characterized by monophthongs [e] and [o] (Allen, 1973), while both Appalachian English and South African English have diphthongs [eɪ] and [oʊ] (Labov et al., 2006; Bekker, 2009). It was hypothesized that the child would track the variants and reproduce the monophthongs with his father and the diphthongs with his mother. This prediction was not entirely born out, as the child generalizes by producing the diphthong [eɪ], but tracks statistical frequencies by producing both [o] and [oʊ].

The child was recorded while interacting separately with both parents. He was given an elicitation task via 14 pictures with single-word captions and asked to name the object in each picture. Each word contained a different target vowel of English. The task was repeated three times, with the word list randomized each time, to elicit three tokens of each vowel. After the child produced each target word, the parents repeated their child to record the same tokens.

The first and second formants from the tokens were measured at four different points: 30 milliseconds from the beginning of the vowel, 30 milliseconds from the end of the vowel, and the highest point of each formant. These points were selected to determine whether the formants remained relatively steady across the vowel, indicating a monophthongal production, or if they changed, indicating a diphthongal production. An [eɪ] diphthong would display a lowering in F1 and raise in F2, while an [oʊ] diphthong would show a lowering in both F1 and F2. The formant measurements were Lobanov-normalized using NORM (Thomas & Kendall, 2007).

Results show that productions are split by vowel. Regarding the front vowel, the child consistently produces [eɪ] regardless of his interactional partner, as his F1 drops and his F2 raises considerably across the vowel. This suggests that he is generalizing over the variation in his input. However, the same pattern does not hold when considering his back vowels. Here, he appears to accommodate to his interactional partner, producing either [o] or [oʊ].

The results of this study suggest that children may not immediately develop a uniform way of encoding patterned variation in their vocalic input. Both generalization and statistical tracking may be used as strategies to deal with interspeaker variation.

Phonological environment conditions social perception of sibilants

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University of Chicago

A growing body of work in sociolinguistic research has examined the indexical role of sibilant variation. This indexical relationship has been found for geographic location, urban/rural alignment, and gender and sexuality, with a fronted /s/ typically perceived as more urban, feminine and gay (Stuart-Smith 2007; Campbell-Kibler 2011; Zimman 2013; Levon 2014; Podseva & Van Hofwegen 2014). Importantly, however, these studies of sibilant perception and production are largely agnostic to any role that the phonological environment may play in determining the socio-indexical meaning of /s/. However, sound changes taking place in many varieties of English demonstrate a need for further investigation into the socio-indexical nature of sibilant variation.

It has been robustly demonstrated for many varieties of English that /s/ is approaching /S/ in /str/ clusters (Shapiro 1995), while recent research by the author has demonstrated less categorical but equally observable retraction in /spr/ and /skr/ clusters. A retracted /s/ in /str/ clusters has been generally found to be associated with more eastern, younger and urban populations (Shapiro 1995; Durian 2007), while studies differ to whether there is a gender effect or not (Gylfadottir 2015; Wilbanks 2017). No work to our knowledge has examined the social correlates or indicators of retraction in /spr/ or /skr/ clusters.

The current study seeks to examine the perception of sibilants in /s{p t k}r/ clusters. Specifically, it seeks to determine if a retracted /s/ in these positions contributes different socio-indexical meaning. Eight (4 male) speakers of American English (4 California, 4 Illinois) were recruited to read a series of words starting with sibilants and plosives in carrier phrases and isolation. Participants were instructed to speak naturally and casually. Two individuals consistently produced /s/ as /S/ in /str/ and two produced an intermediate value between /s/ and /S/. Only one of the retractors also consistently retracted in /skr/ and no individuals exhibited retraction in /spr/.

Target sentences were extracted and placed in a social perception task, in which native speakers of American English (n=17) listened to each clip and were asked to supply any information about the speaker's identity, characteristics or traits in an open-ended question. Listeners heard all 8 speakers produce /s/ in 7 different environments {s, sp(r), st(r), sk(r)} and /S/. For the male retractor, listeners were split in describing his /str/ tokens as more masculine, athletic and straight than his other /s/ tokens or whether those same tokens were more gay, intellectual, and pretentious. The female retractor did not elicit strong changes in listeners' responses in her /str/ clusters, which were typically described as younger.

The results of this experiment, though limited by the nature of the task, suggest a role of phonological position in assigning social meaning: a retracted /s/ preceding a consonant cluster does not carry the same associations as a retracted /s/ elsewhere. A follow-up study is underway using scaled responses to the attributes identified in the open-ended questions with cross-spliced tokens in order to manipulate degree of retraction while holding the other acoustic and social factors constant.

LOT-raising and toughness in a California high school

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Stanford University

Sociolinguists have long explored the indexical potential of vocalic changes in progress, showing how variants of a shifting vowel can index local manifestations of class, gender, and more recently, the instantiations of macro-social categories in personae (Labov 1972a, Eckert 1989, Podesva 2011, D’Onofrio 2015). In this study I examine one component of the California Vowel Shift (CVS)—raised LOT—and show that its use indexes a salient local category within an adolescent community of practice.

This paper draws on a year-long ethnography at a public arts high school in the San Francisco Bay Area, where students split their time between academic classes and one of twelve arts disciplines (e.g. dance, theatre, orchestra). One of these disciplines, technical theater (or “tech”), is distinct in a few key ways: students engage in manual labor, using professional-grade tools to construct sets for school productions and events; and many students join the stagehands’ union immediately upon graduation. Though the more conventionally highbrow disciplines garner more cultural capital, technical theater students are unique in that their training brings the promise of economic viability in their hometown, an increasingly elusive status in the Bay Area. Further, the tech stereotype is locally enregistered: tech students self-describe and are described by peers as “rowdy” “assholes” who wear black clothes and work boots, carry knives, and are “handy” by virtue of “always building stuff,” producing a cumulative image of tech students as “badass” and “tough.”

Ethnographic interviews with 24 speakers (12 young men, 12 young women) were transcribed and force-aligned, and F1 midpoint measurements of the LOT and TRAP vowel classes were taken across each interview (n tokens = 5,280). Two regressions were fit with tech/non-tech and binary gender as predictors of Lobanov-normalized F1 values: one testing F1 height of LOT, and another testing F1 distance from each LOT token to the speaker’s mean TRAP measurement. Results indicate that tech speakers produce significantly higher LOT tokens than their non-tech peers ($p < 0.05$), and further, that tech speakers are more likely to produce a LOT token higher than their TRAP token ($p < 0.01$). This suggests that the lowermost boundary of the vowel space—shifting from LOT to TRAP for California speakers—can be socially conditioned by local categories. Notably, gender is not a significant predictor in either model ($p = 0.85$, $p = 0.80$); tech girls are as likely to raise LOT as tech boys.

I argue that raised LOT indexes an interconnected interpretation of tech students’ material prospects as well as their social, sartorial, and linguistic practices: their skill at manual labor, their work boots and knives, along with their use of raised LOT. By virtue of its use by tech students, this CVS feature can thus index salient tech characteristics, namely a self-reliant, embodied toughness. Further, though hegemonic masculinity is often ideologically linked to toughness, even in sociolinguistics (Trudgill 1972, cf. Mendoza-Denton 2011), this trend transcends gender categories, indicating that gender alone cannot predict the use of an advanced variant.

Who Belongs to the Mainstream Speech Community? A report from Vancouver BC

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In most sociolinguistic studies, the examination of the “mainstream speech community” in multilingual cities focuses on the speech of the “founder population,” which in North America has typically comprised speakers of English (Labov 2001). In contrast, ethnolects are studied as varieties that exhibit non-mainstream patterns due to imperfect acquisition of the standard with L1 transfer. The limited scope of such an approach has been critiqued because it only gives a partial picture of the dynamics of the entire speech community (Kerswill 1994). In a study of the speech of second-generation immigrants (Chinese and Italian) in Toronto, and its comparison to that of Anglo speakers, Hoffman and Walker (2010) conclude that the pattern of variation that they observe is mostly the result of the construction of ethnic identity, and not of imperfect learning of the standard.

In order to add to this body of work, we explore the question of how much the speech pattern of second-generation immigrants differs from that of the founding population in a super-multilingual area of Canada. We present the results of a comparative variationist analysis into the Canadian Raising and Shifting patterns of four different ethnic groups living in the metropolitan area of Vancouver BC.

The dataset is constructed on the basis of recorded sociolinguistic interviews with 52 participants (female and male) who self-identified as Anglo-Canadians, Chinese-Canadians, Filipino-Canadians, or South-Asian Canadians. In order to also gain insights into the emic perspective on ethnicity, participants were asked questions concerning their ethnic orientation during the interview (Hoffman and Walker 2010). At the end of the interview, each participant read a word list (based on Boberg 2008) designed to elicit the production of the 32 vowels of the Canadian English system.

For the resulting 7540 tokens from the word list, F1 and F2 were measured using the one-point method described in the ANAE (Labov et al 2006), and normalized in NORM (Thomas and Kendall 2007) using the TELSUR-G method. An analysis based on linear mixed effects regression models reveals that ethnicity is not a factor in terms of speakers’ participation in these features of Canadian English. All groups fit the definitional criteria for Canadian Shift (cf. Boberg 2010): they all have mean F2 values for /o/ that are below the threshold of 1275Hz; F2 values for /æ/ that are below 1825 Hz, and F1 values for /e/ that are above 650 Hz. For Canadian Raising, we find that most Anglo speakers participate in the raising of both /ay/ and /aw/, with differences between the raised and unraised nuclei of these diphthongs that exceed 60 Hz. The same is true for South-Asian, and Filipino speakers. Chinese speakers, however, do not participate in raising.

We also discuss the results of the qualitative analysis of the ethnic orientation portion of the interviews, and the implications of our findings in terms of sampling the speech community of super-multilingual urban centers.

The soft underbelly of sociolinguistics – NOT!

Dennis Preston

Oklahoma State University and Michigan State University (emeritus)

This paper reviews the essential role subjective (folk) knowledge plays in sociolinguistics as characterized by leading figures in the field, and outlines the main scholarly approaches to such knowledge — folk linguistics, language ideology, and language attitudes. These are described on four levels: the traditional main research objectives; the major research methodologies; the assumed levels of awareness of respondents (explicit vs. implicit), and the underlying storage and processing mechanisms.

Although tasks and interviews seem most associated with folk linguistics, observation and interaction with language ideology, and experimental work with language attitudes, recent studies reveal all four levels outlined above seem hopelessly entangled in each research tradition.

Perhaps one should say hopefully, for if research traditions were not combined, important insights might be overlooked. In the work on variation and change in Danish dialects, for example, Kristiansen's work at the LANCHART Centre in Copenhagen (e.g., 2009) has shown that responses to an overt folk linguistic task (which regional variety do you like best?) always result in a preference for the home area; responses to an implicit matched guise experiment, however, reveal a preference for Modern Copenhagen speech, which just happens to be the variety influencing usage in all of Denmark. Similarly, work in southeastern Michigan shows that local respondents prefer their own variety for both status and solidarity in an overt folk linguistic task (and show prejudices against Southern and New York City speech), but when a silent guise is presented, Southern speech is preferred over local speech for solidarity dimensions (e.g., friendliness). In even further contrast, when an "Index of Linguistic Insecurity" (Labov 1966) was developed for these same southeastern Michigan respondents, it was found that, although their regional security is very strong, their individual linguistic security is weak, even weaker than Labov's famously insecure New Yorkers.

These and other research results point to the importance of using a variety of methods in seeking the subjective correlates of language variation and change. We know that it is important because we have been told so:

The theory of language change must establish empirically the subjective correlates of the several layers and variables in a heterogeneous structure. Such subjective correlates of evaluations cannot be deduced from the place of the variables within linguistic structure. Furthermore, the level of social awareness is a major property of linguistic change which must be determined directly. (Weinreich et al. 1968:186).

But we should be aware that the search for those correlates is in itself a multifaceted adventure, one that will not reveal what we seek if a single research model is used.

Challenges of analysing linguistic variation in a growing metropolis: A trend study of auxiliary alternation in Montréal French (1971-2016)

Béatrice Rea
University of Oxford

My paper investigates the auxiliary alternation in spoken Montréal French between *avoir* “have” and *être* “be” with the twenty or so verbs prescriptively requiring the latter, as in (1):

(1) *J’ai tombé* (AVOIR) vs *Je suis tombé* (ÊTRE) : “I fell/have fallen”, literally “I **have** fallen” vs “I **am** fallen”

This levelling phenomenon has been documented in virtually all the French-speaking communities of North America and in some varieties of popular European French in Lorraine, Picardy, Gascony, and Wallonia (Ledgeway 2012).

After analysing the Sankoff-Cedergren Montréal Corpus (1971), Ledgeway (in press) observed that argument structure had little to do with the variation, and Sankoff & Thibault (1977: 107) concluded that greater exposure to the standard would slow down *avoir*-extension. Given the great socio-demographic changes that have taken place in Montréal in the last 45 years, I attempt to determine with a pilot study (2013) and a trend study (2016) whether there has been a change in the social and linguistic distribution of the variable, and if so, what form it has taken. I will also explore such variation within pronominal constructions because they have not been studied by Sankoff and Thibault, as in (2):

(2) *Je m’ai fait mal* (AVOIR) vs *Je me suis fait mal* (ÊTRE): “I (have) hurt myself”, literally “I **have** done harm to myself” vs “I **am** done harm to myself”

In 2013, I recorded 12 native speakers of Montréal French (and an additional 48 in spring/summer 2016) and transcribed the compound tense tokens of the verbs that had shown alternation in Sankoff & Thibault (1977, 1980), as well as those of the pronominal verbs that arbitrarily surfaced during the sociolinguistic interviews. The variable context was circumscribed like in Sankoff & Thibault (1977, 1980). The speakers have subsequently been grouped according to gender, age, socioeconomic class, and linguistic market index. While “native speakers of Montréal French” might have been a fairly straightforward label in 1971, demographic changes have made it quite challenging to find ‘old stock’ Montrealers. Labov *et al.* (2005: 27) encountered the same problem when creating their Atlas of North American English, especially when trying to find native speakers from Atlanta (Georgia), Dallas (Texas), and New York City. This is why I include speakers from all over the *Grand Montréal*/Greater Montréal area and native Québécois French speakers who might not have been born and raised in Montréal, but come from neighbouring regions, have lived in Montréal for most of their economic life and are now established in the *Grand Montréal*.

A comparison of my preliminary results (2014) with those of Sankoff & Thibault (1977, 1980) reveals that the auxiliary alternation observed in intransitive verbs has overall significantly decreased in Montréal French. *Avoir*-extension so far correlates with the past infinitive and with male gender, older age, lower socioeconomic classes, and minor insertion in the linguistic market. My data also show that auxiliary alternation in the compound tenses of pronominal verbs is highly socially marked. The decline of *avoir*-extension in Montréal French, a realignment with Standard French, appears to evolve in the opposite direction of a trend displayed by many Romance varieties to use a single auxiliary, namely “have”, in the compound tenses of active verbs (Loporcaro 2016).

Rootedness and the spectral dynamics of /aɪ/ monophthongization

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University of Alabama

It is widely known that monophthongization of the diphthong /aɪ/ is a prominent feature of Southern U.S. English (e.g. Labov, Ash, and Boberg 2006). Some scholars have noted that monophthongization is ‘the most notable unchanging feature of Southern speech’ (Feagin, 2000:342). Research into this feature has shown that it is both regionally marked and socially meaningful (e.g., Anderson, 2002; Bernstein, 2006; Fridland, 2003; Greene, 2010, Pederson et al. 1986-93; Reed 2014, 2016; Wolfram and Christian, 1976, among many others). Monophthongization of /aɪ/, particularly in pre-voiceless contexts, is associated with rurality and older speakers and is inversely associated with education and social status. However, both Greene (2010) and Reed (2014, 2016) found that more monophthongal productions can be a signal of local identity and belonging.

Many of the investigations into /aɪ/ monophthongization used binary auditory classification (monophthong/diphthong) or only used two measurement points, one from the onset and one from the glide, typically around 20-25% and 75-80% of the token’s duration. While informative about whether or not a particular vocoid is monophthongal, these methodologies do not permit distinguishing among differing types of monophthongal realizations. More phonetically-oriented research (cf. Fox and Jacewicz, 2009; Thomas, 2000) has found that the formant trajectory of the vocoid can differentiate social groups. In this paper, I demonstrate that spectral dynamics can identify differences within monophthongal communities. In particular, how a speaker orients toward the local area impacts the degree of monophthongization of the diphthong /aɪ/.

In this investigation, I analyze the monophthongal realizations from 24 speakers (12 men, 12 women) from a small rural town in northeast Tennessee, balanced for age and education. The data were collected through sociolinguistic interviews, followed by completion of a Rootedness Metric, a psychometric survey designed to quantify the degree of orientation to place for each participant. I extracted all possible tokens of /aɪ/ from the interview, reading passage, and word list data. I then computed two measures, Euclidean distance (EuD) and trajectory length (TL). EuD uses two measurement points of F1/F2 (20% and 80%), and TL is a composite measure, where EuD measures from 10ms intervals are summed. This more closely captures the degree of overall formant movement. Plotting these measures allows for visualization and comparison of the entire trajectory of the articulation. Linear mixed effects models were built to examine the variation in both EuD and TL. Results indicate that rootedness, gender, task, duration and following voicing (as main effects and in interactions) contribute to more monophthongal productions (a smaller EuD and TL). However, EuD underestimated the amount of spectral movement for some speakers, where TL was able to capture the full degree of spectral dynamism. Thus, the relative influence on monophthongization by the social factors (rootedness, age, gender and task) and the linguistic factors (duration and following voicing) were better represented by TL. More finely nuanced measures using spectral dynamics can capture language variation that may be lost when only comparing a few measurement points.

A diachronic BNC - construction of balanced sociolinguistic sub-corpora & case study

Susan Reichelt
Lancaster University

This paper details the efforts of constructing two comparable corpora of the spoken parts of the old BNC (1994) and the new BNC2014. Both subsets are equally distributed across age groups, gender, region, and social class and amount to approximately 500 speakers.

The talk will highlight some considerations that need to be made with reference to data collection, both for the old and the new BNC set. In particular, the regional distribution across the UK as well as social class membership that was assigned to the speakers will be put into the context of sociolinguistic corpus prerequisites (cf. Tagliamonte 2014).

Despite shortcomings, the datasets present a unique opportunity for large scale diachronic variation analyses. With the time-span covering two decades, the corpora offer extensive speaker data that enable new research with a focus on language change, both in terms of generational change and age grading.

Taking intensifiers as an example, the paper presents apparent and real time study results that add to the existing literature on the feature (see for instance Ito and Tagliamonte 2003; Macaulay 2006; Tagliamonte 2008). Intensifiers are items that precede other parts of speech, modifying the semantic entity of the respective part of speech up or downwards on a scale.

Amplifiers, as in examples a – c below are the focus in this case study.

- a. They're *very* nice.
- b. She's *so* thoughtless!
- c. That's *really* cheap.

Following Barnfield and Buchstaller (2010), all variants were coded on a functional basis, meaning that all items that amplified a following adjective were included. The results presented here describe the changing variant preferences across social factor groups, as well as grammatical factors correlating with variation through multivariate analysis.

Main attention will be paid to results that cater to our knowledge of language change and that provide insights into how degree adverbs are used by speakers of different ages across time. One particular degree adverb, *so*, was found to be incoming and gaining popularity with the younger speakers in the old BNC, as well as other studies in the early 2000 (Stenström 1999; Ito and Tagliamonte 2003). This talk illustrates how this trend has progressed.

The case study illustrates the use of corpora that were not originally constructed to answer sociolinguistic questions. The results aim to show that repurposing existing data sets can serve as additional evidence as well as provide new insights into diachronic research enquiries.

A man needs a female like a fish needs a lobotomy:
How adjectival nominalization leads to innovative reference

Melissa Robinson, Alexis Palmer and Patricia Cukor-Avila
University of North Texas

This presentation documents the grammatical processes and semantic impact of innovative ways to reference individuals through adjectival nominalization. Research on nominalized adjectives (Wierzbicka, 1986) suggests that when meanings shift from having one property (1) to becoming a kind with associated properties (2), the noun form often encodes stereotypical attributes:

1. “Her hair is *blonde*.” (hair color)
2. “He married *a blonde*.” (female, sexy, dumb)

Likewise, the linguistic phenomenon of genericity refers to classes or kinds (Carlson & Pelletier, 1995) and different grammatical structures reflect properties in different ways (Lawler, 1973). In 1 and 2 above, the shift from adjectival *blonde* to indefinite NP *a blonde* moves the focus from the definitional characteristic to the prototypical. Similarly, adjectival *gay* (3) is definitional, but the marked, nominal form (4) adds socially-based conceptions of the “average” *gay*.

3. *jesus christ i make a joke and now im a gay man?* (sexuality) [constructed]
4. *jesus christ i make a joke and now im a gay? ...* (flamboyant, abnormal) [Twitter, 2016]

The definite plural (5) was recently brought to public attention by Donald Trump.

5. *Ask the gays what they think and what they do, in, not only Saudi Arabia, but many of these countries, ...* [Donald Trump, 2016]

Acton (2014) argues that this construction signals distance and non-membership.

To investigate innovative reference via nominalization, we compiled a corpus of 3,782 nominal and adjectival instances of *female*, *illegal*, *poor*, and *gay* from Twitter, Reddit, news interviews and commentary, and written and video blogs. Each instance was first annotated for pejorative or non-pejorative meaning. We also coded the corpus for linguistic form – indefinite singular, definite singular, bare plural, and definite plural – to analyze whether variation in form has a semantic impact. When we compare part-of-speech to annotations of pejorative meaning, we find that 66.8% of nominal instances are labeled pejorative and 13.0% sarcastic. Nearly all of the adjectival instances, 99.0%, are labeled non-pejorative. A subset of the corpus (N=121) was annotated for pejoration by three additional linguists following the same guidelines as the original annotator. Agreement across the four annotators is substantial, with a kappa value of 0.662 (Fleiss’s kappa). In a second corpus extracted from Twitter, 800 instances were annotated using crowd-sourcing, and again we find a correspondence between nominal status and pejorative meaning as annotated by non-linguists (Palmer et al., 2017). Our corpus studies provide strong empirical support for the hypothesis that certain adjectives take on pejorative meaning when nominalized and used in marked constructions, which can then reference individuals or groups in a derogatory way.

Where does the social meet the linguistic?

Mary Robinson and Laurel MacKenzie
New York University

It is abundantly clear that language users imbue certain linguistic elements with social meaning. A long tradition of sociolinguistic work has explored various facets of this phenomenon, including the social attributes that linguistic elements can index (Eckert 2008), the development of social evaluation as a language change progresses (Labov 2001), and the possible independence of the variants of a variable where social meaning is concerned (Campbell-Kibler 2011). However, despite decades of work on this topic, one question has not yet been satisfactorily answered: Are there **linguistic** constraints on the elements that social meaning is attached to? In other words, are all elements of language fair game for social evaluation? And if not — if some elements are less likely to bear social evaluation than others — then why?

We address this question by connecting two strands of research, each of which received considerable attention decades ago but has since largely faded from discussion. We give each an updated treatment, making connections to recent advances in our knowledge of how language is represented in the mind. We also suggest ways forward for additional research connecting sociolinguistic findings to formal theories of grammatical architecture.

The first strand concerns syntactic variation. We review literature which observes that syntactic variables are less likely to bear social evaluation than variables at other levels of language (Cheshire 1987, a.o.). We then consider syntactic variation from the perspective of modern generative syntactic theory. We observe that what sociolinguists have traditionally called “syntactic variables” are best subdivided into three distinct types, based on where in the grammatical derivation the variation occurs: (1) variation in lexical choice, (2) variation in word order, and (3) variation in the phonological form given to functional morphemes. Based on a survey of the literature, we demonstrate that it is type (2) variables that are least likely to be socially eval/uated. We suggest that this may be because the locus of variation is too abstract for language users to attach social meaning to, and because variability in word order is more likely to lead to unintelligibility than variability elsewhere in language.

We also consider the observation that internal and external constraints on variation do not interact (Sankoff & Labov 1979, a.o.). This implies that a variant will bear the same social evaluation in all linguistic environments in which it occurs. We survey literature that bears on this observation and suggest that it provides evidence for a separation of grammar (the derivation of linguistic elements) from language use (the deployment of variants for social purposes) (Embick 2008, Tamminga et al. 2016, a.o.).

For both strands of research, more case studies are needed. To that end, we conclude by describing our ongoing meta-study of social evaluation in language, with the goal of compiling a database of sociolinguistic variables.

Does language contact lead to simplification or complexification? Evidence from Basque-Spanish contact

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The debate as to whether contact leads to language simplification or complexification (Dahl, 2004; Miestamo et al., 2008; McWhorter, 2011), has often been linked to the type of contact involved. Some studies report that simplification is more likely to occur in adult L2-learning situations (Kusters, 2003; Bentz & Winter, 2013; Sorace, 2011) whereas cases of complexification are prone in long-term intensive contact settings (Nichols, 1992; Aikhenvald, 2002) or in child-bilingualism (Trudgill, 2011). Studies wherein both populations co-exist, however, remain unexplored. Therefore, the main goal of the present study is to examine the processes of two contact-induced phenomena within the Basque Autonomous Community in Spain, where Basque has been in long-standing contact with Spanish and where a large Basque-L2 community has emerged as a result of recent revitalization efforts (1960-80s).

The two contact-phenomena of interest are *Basque DOM* (in which certain direct objects are encoded with dative in the NP and the auxiliary verb) and *ergative case-marking* (encoded in transitive and unergative subjects). Following a variationist approach, a total of 84 Basque-Spanish bilinguals were stratified in 4 groups (native Basque-Spanish, early sequential bilinguals (ESB), L2-advanced and L2-intermediate Basque learners) whose data was gathered by means of sociolinguistic interviews (Labov, 2001). The variable use of the two phenomena were coded for a number of linguistic factors established in the literature and submitted to a hierarchy constraint analysis, followed by mixed-effects models, in *R* (Bates et al., 2015).

Results show that Basque DOM is used significantly more among native bilinguals and also constrained by a larger number of linguistic factors (ANIMACY_PERSON_NUMBER, VERB_SEMANTICS and BORROWED VERBS in interaction with NULL OBJECTS), which is explained through a process of *replica grammaticalization* (Heine & Kuteva, 2005) from Spanish *leísmo*. The L2-intermediate group also shows high rates of Basque DOM, but linguistic factors affecting its use are limited to ANIMACY_PERSON_NUMBER and VERB_SEMANTICS) showing a pattern of polysemy-copying. Following the relative approach to complexification, I argue that Basque DOM arose to lessen the processing cost among bilinguals (Kusters, 2003; Hawkins, 2004). However, following an absolute approach to complexification (Dahl, 2004), I argue that Basque DOM leads to linguistic *complexification* of the use of the dative case marker, not as an additive form as commonly assumed, but as an *additive use pattern* in an already existing form. Results for ergative case-marking show ample variation in its lack of use depending on the type of speaker: native-bilinguals show a phonological effect, whereas L2 speakers present a ‘problem’ in unergative verbs. I argue that the underuse of ergative is the result of a *simplification* process in paradigmatic redundancy (i.e. case), constituting an “L2-difficult” feature (Dahl, 2004: 294), in which learners need to figure out the ‘large’ number of linguistic factors that constraints its use.

In conclusion, the present study contributes to the wealth of research on language contact by showing that although simpler processing costs may apply to bilinguals, they are not only abounded to simplifying their linguistic outcomes.

A quantitative look at *ir* + GERUND in Ecuadorian Andean Spanish

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Ir + GERUND is a periphrastic construction in Spanish that derives from grammaticalization of *ir*, Spanish ‘to go’ and translates loosely to the English progressive construction ‘**to go x-ing**’ (e.g. Carlos **goes** talk-**ing**). Once the most common periphrastic construction for expressing general imperfectivity in Spanish, it has long since been superseded by *estar* + GERUND, ‘**to be x-ing**’ (e.g. Carlos **is** talk-**ing**) (Keniston 1936). *Ir* + GERUND is now reserved for more specialized meanings within what Torres Cacoullos 2000 refers to as the “imperfective aspectual territory.” However, the literature on precisely which kinds of imperfective aspectual meanings the construction can encode for is unclear. This is because many different meanings have been attributed to it over the years by scholars and speakers alike. As a result, it can be difficult to figure out which meanings still hold for present-day Spanish and which are outdated semantic descriptions on a list of diachronic changes. This paper addresses that issue by examining how the *ir* + GERUND construction operates in my corpus of 59 Ecuadorian Andean Spanish (EAS) speakers, collected 2016-17.

The decision to examine EAS was motivated by the observation that contact with Quichua has affected change in the usage frequencies and semantic parameters by which periphrastic expressions are used in Andean Spanish. The two periphrastic constructions to have received the most attention to date are *estar* + GERUND (Escobar 2009; Schumaker 1995; Muysken 1984) and *dar*, Sp. ‘to give,’ + GERUND (Haboud 1998; Olbertz 2008; Niño Murcia 1988). However, no quantitative analysis has tested whether contact with Quichua is likely to have played a role in shaping how *ir* + GERUND is used in EAS today. And there is good reason to believe that Quichua did play a role. Quichua has a closely corresponding construction that, like *ir* + GERUND, encodes imperfective aspect and derives from its ‘to go’ verb. Toscano Mateus 1953 was the first to propose the idea that *ir* + GERUND might be more common in South American Spanish than it is in peninsular Spanish because of structural reinforcement from Quichua’s corresponding construction. This paper pursues that hypothesis with a quantitative corpus analysis.

Future expression in varieties in contact: the Spanish and the Catalan of Catalonia

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Whereas Spanish utilizes three ways to express futurity: morphological future (MF), periphrastic future (PF), and present indicative (PI) (Orozco, 2005; Sedano, 1994), Catalan only allows MF (1a) as the prescriptive form, and PI (1b) in situations where the context ensures the realization of the events described (Gramàtica de la llengua catalana, 2002).

- (1a) El concert començarà ara mateix.
“The concert will start right now”.
(1b) El concert comença de seguida.
“The concert starts momentarily”.

Grammars on correct usage of Catalan do not allow “*anar a + infinitive*” (*El concert va a començar*, “The concert is going to start”) which is equivalent to the Spanish PF *ir a + infinitive* (*El concierto va a comenzar*) in order to express futurity in Catalan (Gavarró & Laca, 2002). This restriction is due to its similarity to the canonical preterit form which uses *anar* and an infinitive (*El concert va començar*, “The concert started”). However, recent descriptivist accounts provide evidence that show that *anar a + infinitive* has “spread into contemporary Catalan due to the influence of Castilian” (Blas Arroyo, 2008, p.115) as shown in (1c).

- (1c) Ara *anem a veure* el segon acte.
“Now we are going to/will see the second act”.

Overall, previous research has shown a generalized preference for PF over MF in Latin America (Orozco, 2007). However, some researchers have provided evidence for the vitality of MF in some regions in Spain, especially in the Valencian Community (Blas Arroyo, 2008; Kanwit & Solon, 2013). Both studies explained MF’s vitality due to the contact situation of Spanish with Catalan in these communities.

The present study aims to expand the research on future expression in the Spanish and Catalan of Catalonia given the lack of empirical data from this region. An additional objective is to fill the gaps in the investigation of the effects of language contact on the vitality of the MF, and explore the acceptability of PI in both Spanish and Catalan of this community, and of the PF in Catalan, a non-Catalan structure borrowed from Spanish.

The study included 60 university students from Tarragona, Catalonia. All participants completed a contextualized preference task adapted from Kanwit & Solon (2013). 30 participants completed the task in Catalan, and the other 30 in Spanish. Participants were asked to select their preferred future form (MF, PF, or PI) for 22 contexts. The task manipulated the factors shown to affect future selection: clause type, temporal distance, and presence/absence of a temporal adverbial (Blas Arroyo, 2008; Gudmestad & Geeslin, 2011).

Results revealed a preference for MF in the Catalan task and retention of MF in the Spanish task, in line with previous research (Blas Arroyo, 2008; Kanwit & Solon, 2013). PI was favored in immediate contexts when a temporal adverb was present in both languages. In line with the results reported in Blas Arroyo (2008), participants who reported being dominant in Catalan favored MF over PF overall in the two tasks, and for the Catalan task, only Spanish-dominant participants favored the PF over the MF.

The short-*a* split among young speakers in the Long Island suburbs of NYC

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In American English the most common pattern for the pronunciation of /æ/ is the “nasal” split, where the vowel is tense (raised and fronted) when followed by a nasal consonant and lax (lower and backer) otherwise. In contrast, historically New York City English (NYCE) has had a “complex short-*a* split.” Here the basis for the split, while primarily the following environment, is not nasal vs. oral but is instead front nasals, voiced stops, voiceless fricatives (tense) vs. velar nasals, voiceless stops, and voiced fricatives (lax). When the vowel is word-initial, in an open syllable, or in most function words, it is realized as lax regardless of what consonant follows. A third short-*a* system in American English is the continuous system (Becker 2010), in which front nasals are highest, what would be oral lax consonants in the complex system are lowest, and what would be oral tense consonants as well as velar nasals are intermediate.

The complex short-*a* split has been described thoroughly in Manhattan (Labov 1966, Labov et al 1972, Labov et al 2006, Becker and Wong 2010, Becker 2010) and recently has been examined in Brooklyn and Queens (Newman 2011, 2014). This paper reports on data from a previously unexamined geographic population within the NYC dialect region, the suburbs in Nassau County, Long Island. While historical sociolinguistic and dialectological studies of NYCE place Nassau County at the eastern edge of the dialect region (Kurath 1949, Labov, Ash, and Boberg 2006), there has been virtually no study of the distribution of NYC features there (but see Olivo 2013).

The speakers for this study are members of a robotics club in a high school in Nassau County. The 1243 tokens of the /æ/-vowel in the present study come from the word list portion of sociolinguistic interviews with 24 participants aged 14-18. The vowels were extracted and measured using the Penn Forced Aligner and Vowel Extractor (Rosenfelder et al. 2011).

Becker (2010) and Becker and Wong (2009) present evidence which suggests that NYCE short-*a* is losing its complex conditioning over time among young white speakers. Their demonstrated leveling suggests a change in progress and raises questions as to the successful transmission of complex short-*a* to younger generations of white New Yorkers. However, in Newman’s reports from the outer boroughs, none of his young white participants have a nasal system. In my sample of young speakers on Long Island, two-thirds of the participants have a system best described as a nasal-split, yet there are still vestiges of the NYCE complex-split in many of them (for example the “word initial constraint” mentioned above.) The other one-third of participants have continuous systems (or systems very close to NYCE complex split), but also include the innovation of velar nasals patterning with front nasals.

In conclusion, the present data suggests that Long Island is moving towards a nasal system, but maintains constraints of the complex-split system. There is evidence of language change towards the national standard, however it manifests with a mixing of constraints from the old and new systems and is not complete, as intermediate (continuous) systems are also present. Manhattan is the social, economic, and arguably linguistic center of the NYC dialect region. Becker found that the short-*a* system is simplifying and may be becoming less common among white New Yorkers in Manhattan. Questions remain as to what demographic and social factors might lead to this progression being more advanced on Long Island than in Newman’s population of the outer boroughs of NYC.

Attentional Load and Style Control

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The study of style-shifting has increasingly focused on identity construction, with audience and speaker design models now seen by many as having ‘very largely supplanted the attention to speech explanation’ (Coupland 2007:54). However, Labov’s (1972) attention-to-speech model included a cognitive dimension too, namely that a first-learned or more used vernacular may have cognitive primacy (see also Kendall 2009). If some individuals are dominant in one style, as with language dominance in bilinguals, this may compromise their ability to control their styles, with some shifts related more to cognitive load than identity. Conventional methods have not been ideally suited to studying this phenomenon. Labov’s (1972) classic methodology uses speech modes (casual, formal, prose, wordlist) that differ in attentional focus but also in social association. It is therefore difficult to know whether observed shifting is due to social sensitivity to prestige, defaulting to a cognitively ‘easier’ style, or both.

In this study, we test the pure effect of attention on style control: Does an increase in attentional load cause individuals to struggle to maintain a later-learned style? Attention is a limited capacity resource (Kahneman 1973) and divided attention is well-known to disrupt monolingual and bilingual speech production at all levels (e.g. Jou & Harris 1992). We should anticipate such effects in monolingual style variation too. This cross-modal experiment tests participants’ ability to maintain a formal style—acquired later than their vernacular and used less—under different degrees of attentional or cognitive load. All participants grew up in East London and have local vernacular features in their conversational speech. Participants were asked to read three comparable BBC science reports aloud, as they might in a formal presentation. The texts were edited to incorporate 4-8 tokens each of 6 variables (PRICE vowel, GOAT vowel, t-glottaling, l-vocalisation, th-fronting, *-in/-ing*), controlling for phonetic context, clausal context, and lexical frequency. Informal conversation was also recorded as a baseline. This was followed by two experimental conditions: Condition A (low attentional load) required participants to read aloud with no audio. Condition B (high attentional load) required participants to read aloud while attending to an audio stream of numbers uttered by a synthesized voice in order to add them up and report the sum total. Order of texts was counter-balanced across subject blocks. The same conditions were also tested with a free recall, rather than reading, task.

The analysis compares participants’ casual speech (baseline levels of vernacular and standard forms) to their production of formal variants under low and high attentional load. Not all variables show equivalent patterns of shifting, but preliminary results indicate that speakers are less able to maintain their formal style (perhaps any later-learned style) under high attentional load or divided attention. The results support an element of cognitive primacy in some style repertoires, and suggest that, as in bilingualism research, sociolinguists should consider style dominance and attention alongside social motivations for style-shifting.

How to be linguistically “*glocal*” in Singapore: The range of a linguistic repertoire

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This study investigates the range of speakers’ linguistic repertoires, used to create shifting local, global, or “glocal” meanings. Singapore has long been a site for studies on codeswitching and linguistic fluidity due to its rich sociolinguistic landscape. There is extensive documentation on the various kinds of recognizable features that characterize Singapore’s local English, also known as Singlish (e.g., Deterding 2007, Lim 2007, Wee 2008). Singlish linguistically contrasts Standard Singapore English (SSE), a variety heavily influenced by British English. However, despite the saliency of Singlish features, Singaporeans’ day-to-day language indicates that Singlish and SSE are not wholly discrete language varieties and the data presented here suggest a more fluid and dynamic utilization of both. This study approaches Singlish and SSE not as distinct entities, but as indexes (Eckert 2008, Leimgruber 2012) that carry the potential to create global or local meanings, allowing for more nuanced examinations of speakers’ real life variation. It examines the range of a Singaporean’s linguistic repertoire to show how identity is constructed through multiple linguistic resources, paying particular attention to the density and co-occurrence of such resources.

Three kinds of data were drawn from a series of interviews conducted in 2015 that capture Singaporeans in different conversational settings, ranging from 1-on-1 interviews with the researcher, peer group interviews, to self-recordings with family and friends. Both university (N=6) and polytechnic (N=6) students were recorded, two groups representing educational and peer group differences relevant to being “glocal.” The data addresses 1) the *diversity* of discourse particles that have been documented as characterizing Singlish, 2) the frequency of code-switching – either SSE-Singlish or SSE/Singlish-other language (such as Mandarin, Malay, or Tamil), and 3) the occurrence of Singlish syntactic constructions. For example, the discourse particle *lah* in isolation indexes Singlish but occurring with *meh*, *lor*, and *wat* together, as a cluster, indexes greater degrees of localness. Thus, examining the *density* and bundling of variables across conversational contexts and participant groups reveals how shifting “glocal” meanings are created in everyday interactions.

The data show that speakers use a variety of linguistic resources to position themselves locally or globally and also utilize bundled resources to index more complex meanings of “glocality.” Furthermore, polytechnic students demonstrate a narrower range of repertoire compared to university students. The varying degrees to which Singaporeans oscillate between Singlish and SSE is a linguistic navigation of being both local and global at the same time (Alsagoff 2010), informed by a post-colonial articulation of national identity. This tension, played out in strategic linguistic balancing acts highlighting speakers’ flexibility in moving amidst “glocality,” is influenced by the social contexts and participants of any given interaction. In analyzing linguistic repertoires and the range of shifting bundles of linguistic resources, we see how speakers position themselves in relation to multiple, fluid, and nuanced meanings: indexing the local, the global, or both simultaneously, mediated by situational contexts. The results of this study contribute to our understanding of linguistic repertoires, the analysis of co-occurring variables, and how multiple and various meanings emerge from context.

Hot and heavy: The phonetic performance of fatness and *fujoshi* in 'Kiss Him, Not Me'

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Japanese anime has been a rich source of mediatized data for sociophonetic studies (Podesva & Callier 2015), particularly in terms of gender performance and Japanese femininities (Starr & Greene 2006, Starr 2015, Redmond 2016). One recent anime, 'Kiss Him, Not Me', provides a unique opportunity to examine a related sociophonetic phenomenon: when a bundle of phonetic features is used to create equivalence between a physical characteristic and a sociocultural category.

'Kiss Him, Not Me' stars high-schooler Serinuma Kae, a self-professed *fujoshi* ('rotten girl') who is obsessed with Boys' Love – a stigmatized media genre depicting homoerotic male relationships for female audiences – and frequently fantasizes about pairing up attractive male classmates. Serinuma is initially depicted as fat, but soon undergoes rapid weight loss from trauma caused by the on-screen death of her favourite anime character. When she returns to school significantly skinnier, she is instantly viewed as sexually desirable by her classmates.

Importantly, Serinuma's physical transformation is accompanied by a linguistic one. Her original voice is characterized by both a saliently low average pitch, wide pitch range, lowered larynx phonation (Esling 1999), and centralized vowels – all features at odds with traditional depictions of Japanese femininity in anime (Miller 2004, Starr 2015, Redmond 2016). After losing weight, her voice takes on the qualities of a typical *shōjo* ('young girls') anime heroine: high average pitch, a tighter pitch range, breathy phonation, and a wider vowel space. Even after her physical transformation, however, when she speaks about her 'rotten' Boys' Love-related desires, Serinuma's voice quality changes considerably, reverting back to the phonetic features of her original 'fat' speech.

This paper uses comparative acoustic analysis and mixed-effects logistic regression modeling to examine Serinuma's speech in each of three modes ('pre-transformation', 'post-transformation', and 'post-transformation-*fujoshi*') throughout the first 20-minute episode. Initial results show that Serinuma's voice actress uses a specific bundle of phonetic features – including low relative median F0, relatively large F0 range, lowered larynx phonation (measured via the difference between F1 and F2 relative to modal phonation), and centralized vowels – when speaking in 'pre-transformation' and 'post-transformation-*fujoshi*' contexts to indexically equate Serinuma's 'rotteness' with her former fatness. This variation creates a clear dichotomy between Serinuma's skinny, traditionally feminine form on the one hand and her original fatness and continued lasciviousness on the other, as well as an equivalence between her 'rotten' sexual desires and her original fatness.

These results add to our understanding of physicality in embodied sociophonetics (cf. Bucholtz & Hall 2016) by showing how physical features – like fatness – can be socially mapped onto phonetic variables which, when used together in new contexts, draw indexical associations between a sociocultural category – like being *fujoshi* – and the original physical trait. Further, this example shows that even in media aimed at non-conformist subcultures like 'Kiss Him, Not Me' – written by a Boys' Love artist and featuring in-jokes for *fujoshi* – variation in phonetic performance can serve to subtly reinforce traditional gender norms, in this case through shared phonetic bundles which contrast both *fujoshi* desires and fatness against traditional performances of femininity.

How abstract is your variable? Allophonic systems as an intraspeaker variable

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In this paper, I provide evidence of phonological rule competition (à la Kroch 1989) in the speech of individual speakers who acquired language during an allophonic change in the speech community. Recent work (Labov et al., 2016; Sneller, 2017) in Philadelphia has found an allophonic restructuring in process, where the traditional Philadelphia /æ/ allophonic split (PHL) is rapidly being replaced by the nasal /æ/ allophonic split (NAS). Both allophonic splits result in a tense allophone and a lax allophone; the distinction is in the abstract rules governing the split. Labov et al. (2016) argue that the NAS allophonic system is in competition with PHL on the level of the community. The current paper expands on the work of Labov et al. (2016), finding evidence of competition between PHL and NAS within individual speakers as well. Data come from extended 11 dyad interviews conducted with white Philadelphians born after 1985, the demographic in which Labov et al. (2016) found a shift from PHL to NAS on the community level. Interviews were force-aligned and vowel measurements obtained using the FAVE program. Individual work tokens were classified as tense or lax using a binomial regression classifier, which has been found to be more accurate than auditory coding (author citation). The classification of a token as tense or lax was then used to classify those tokens as either consistent with PHL or consistent with NAS.

While these results show several speakers adhering primarily to either PHL or NAS, I also find evidence that some speakers exhibit tokens produced by PHL as well as tokens produced by NAS. We show that this is not the result of lexical diffusion, but rather is a robust variation within all conditioning factors of PHL and NAS as well as within word lemmas, indicating variation between subphonological systems. This is demonstrated in the production of Orange Juice (Figure 1), who produces both tense and lax tokens within individual lemmas such as *fantastic* and *planet*, as well as tense and lax tokens preceding velar nasals in *bank* and *slang*. We argue that this data supports an extension of the competing grammars of Kroch (1989) to the allophonic domain, and furthermore provides evidence that abstract allophonic systems may be a competing variable for individual speakers.

These findings have implications for the future study of language change, suggesting that both phonological change and syntactic change advance in the same way through the speech community. Finding robust intraspeaker variation in an abstract set of rules like an allophonic split also has implications for the study of language variation, suggesting that abstract rules themselves may act as a linguistic variable.

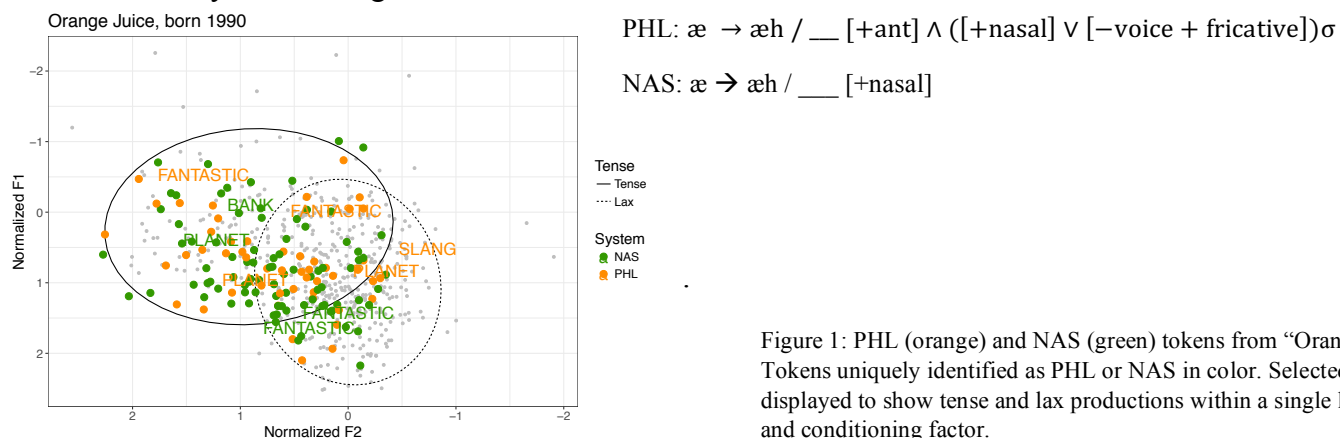


Figure 1: PHL (orange) and NAS (green) tokens from “Orange Juice” Tokens uniquely identified as PHL or NAS in color. Selected tokens displayed to show tense and lax productions within a single lemma and conditioning factor.

The Effect of Gender on variable Loanword Adaptation of Northern Kyungsang Korean

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Northern Kyungsang Korean (NKK) is a Korean dialect known to maintain traces of the Middle Korean tone system from the 10-16th centuries (Cha, 1999). In NKK, the location of the accent is unpredictable. Interestingly, however, when the dialect adapts foreign words, the pitch accent is assigned according to its own rules based on syllable weight, regardless of donor languages' accents, showing predictable pitch accents. That is, NKK loanwords show one of three accents: double, final, and penultimate depending on syllable weight along the following continuum V: > VCson > VCobstr > V > Vepen (Kenstowicz & Sohn, 2001). In this way, while research on pitch accent in loanword adaptation of NKK has been well-developed, most research has concentrated on establishing a phonologically formulaic pattern based on impressionistic analysis. Thus, this research is designed to examine the variations in the production of pitch accents with clear phonetic evidence. For this, two types of data are compared: data with clear hierarchy and data with somewhat unclear hierarchy in terms of syllable weight.

Six native NKK speakers and two native standard Korean (SK) speakers balanced for gender completed a production task in which they read 1,136 loanword nouns in a wordlist, ranging from two to six syllables, in two conditions: isolated words and embedded in a sentence. The visible pitch contours and fundamental frequencies (F0) of each loanword were analyzed in Praat. F0 was taken from the center of the steady-state region in a vowel with no pitch-accent in a syllable. When there are explicit rising or falling pitch contours, the highest and lowest pitch points are measured for F0.

The results show that "closed syllables are heavy but can contextually be light" (Rosenthal & Van Der Hulst, 1999), resulting in two acceptable variations in a single word, and that females tend to show style shifting more than males through their variable realization of pitch accent in loanwords, suggesting females' hypercorrection likely for standard variants as a prestige variant (Chambers, 1995; Trudgill, 1974).

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Is that a gun? Race, dialect and violence stereotypes

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Stereotypes that link race with violence influence our responses to everyday objects. Priming experiments using the Weapons Identification Task (WIT) have shown that people associate violent objects with Black faces: viewing Black male faces speeds people's responses to weapons and slows responses to tools, compared to viewing White male faces (Payne 2001). Where do these stereotypical associations come from?

American ideologies about people with Black bodies come primarily from our ideas about African American culture. Violence is linked with African American culture through the media (both news and entertainment), leading many Americans to believe that members of this culture are more likely than their White counterparts to have and use weapons (Dixon & Linz, 2000). Yet, physical appearance is not necessarily a good indicator of someone's membership in a cultural group. Many people with stereotypically Black features do not strongly identify with African American culture (for example, Black immigrants from other countries who are not descendants of enslaved Americans). There is a better indicator of African American cultural identity that simply being Black: speaking African American Vernacular English (AAVE). Speaking AAVE is a way of actively identifying with African American culture.

Here we sought to determine whether hearing AAVE elicits violence-related stereotypes, as viewing Black faces does, using a new adaptation of the WIT. In Study 1, we replicated previous face-weapon priming effects using a national online sample. In Studies 2a and 2b we established a paradigm by which to examine the effects of dialect on the implicit activation of crime stereotypes. Participants heard 24 racially ambiguous names (e.g. Brandon Wilson, Gregory Johnson), 12 spoken by 12 Black confederates speaking AAVE and 12 names spoken by 12 White confederates speaking Standard American English (SAE). Then they saw a picture of either a tool or a weapon and were told to press one of two buttons (with the key-object type mapping counterbalanced across participants) to indicate whether the picture was a tool or a weapon. Names (counterbalanced across dialect conditions) were used as the dialect samples because they allow for phonological and phonetic variation without introducing different content between the two dialect conditions (AAVE and SAE).

Reaction time results indicated that, like seeing Black faces, hearing AAVE led to faster categorization of weapons and slower categorization of tools than hearing SAE (dialect condition \times object type interaction: $\chi^2(1) = 6.79, p = .0092, \phi = 0.08$). This in-principle demonstration that dialect activates implicit violence stereotypes could have real-world consequences. US police officers are routinely trained to suppress implicit stereotypes activated by visual cues to race (Correll et al. 2007); they may be unaware that auditory cues to race can have similar effects. When AAVE speakers perform their native dialect, they may be at greater risk for becoming victims of violence themselves. Effects of dialect may be especially notable in visually impoverished environments, where many "shoot / don't shoot" decisions are made, and where auditory cues may be the strongest indicator of race.

Changes in the Timber Industry as a Catalyst for Linguistic Change

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Researchers have noticed the linguistic consequences of major social events in a community. Events that cause dramatic changes in demographics or sudden exposure to a new varieties such as World War II (Bailey et al. 1996), the rapid increase of island tourism (Wolfram, Hazen & Schilling-Estes 1999), or the start of daily trips to the mainland (Schilling 2017) often lead to the rapid spread of innovative linguistic variables and the recession of traditional features (cf. Herold 1990; Johnson 2010). The effects of these “catastrophic events” are typical of external factors in language change (Labov 2001). In this paper, I show that a catastrophic event in Longview, Washington led to sudden linguistic changes.

The timber industry was booming in mid 20th century Longview, Washington and provided employment for a significant portion of the local population. But starting in the mid 1970s, many of these jobs were contracted out and the mills began to be more automated, leading to closures and lay-offs. As people were forced to find employment elsewhere, the relatively autonomous community became more integrated with the surrounding region, exposing Cowlitz County residents to new linguistic variants.

For this paper, two variables are selected for study. The first, BAG-raising, is the conditioned raising of TRAP before voiced velars, which is characteristic of many Washingtonians (Wassink et al. 2009; Riebold 2012; Freeman 2014; Wassink 2014; 2015; 2016). The second, is diphthongization of GOAT, which has received less attention in research on the Pacific Northwest. Tokens of both of these variables are taken from sociolinguistic interviews with 54 residents of the Longview area. Linear mixed-effects models were fit to formant measurements of BAG and GOAT tokens with generation as the predictor variable. In both cases, the best generational split was found to be around 1970. More specifically, the older group raises BAG and has a more monophthongal GOAT vowel, while the younger group raises BAG to a lesser degree and has a significantly more diphthongal GOAT vowel.

The timing of these abrupt generational changes corresponds to the changes in the timber industry and the following shift in the area’s insularity. As the younger generation was exposed to more linguistic variants, they adopted features characteristic of the Pacific coast and abandoned their parents’ more traditional forms. I argue that the older residents of the area see Longview more as a quintessential mill town and express this view with their choice of linguistic variants, while the younger generation does not see Longview in this way and adopts new forms to express this view.

This study supports the view that “such catastrophic changes are more common than previously believed” (Labov 1994:24) and that researchers must look to local events for insight into language change. Indeed, while change in time is ubiquitous in sociolinguistic research, it is important to uncover not just when the change occurred but also possible explanations for the underlying causes.

Same name, same thing? Speakers see distinctions that linguists' labels paper over

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In a series of articles, Nancy Dorian (1973, 1977) reported very specific changes-in-progress that she observed in terminal East Sutherland varieties of Scottish Gaelic. The **initial consonant mutations** that are characteristic of the Celtic languages are associated with a number of (morpho-)syntactic contexts in Scottish Gaelic, and Dorian's informants showed an age-graded and contact-induced pattern of change vis-à-vis the traditional distribution of said mutations. Of particular note was the fact that the mutation pattern known as **Lenition** was not shifting along a uniform trajectory across the distinct environments that required it: in addition to the effects of increasing familiarity with English among the younger Gaelic speakers, Dorian introduced structural, semantic, and frequency-related factors as jointly producing a "hierarchy of morphophonemic decay" (1977).

Although the number and variety of factors that Dorian adduced in making sense of the "breakdown" of the system clearly remain relevant, the present paper suggests that the influence of phonologically-focused treatments of Celtic mutations on Dorian's analysis, namely viewing initial mutations as monolithic functions from root-initials to mutated alternants (e.g., Rogers 1972, Hannahs 2013; cf. Green 2007), inadvertently renders the systemic changes in question harder to explain.

Contrary to this assumed uniformity, Stewart (2013) demonstrated that a hierarchical collection of five (5) similar-but-not-collapsible mutation sub-patterns have become conflated under the label "Lenition" in traditional descriptions of Scottish Gaelic in particular. Formally, the simplest sub-pattern involves only one alternation, matching an initial /f/ in the root with the absence of a consonant in the corresponding position in the mutated form (e.g., *fraoch* /frøx/ ~ *fhraoch* /røx/ 'heather', *fichead* /fiçat/ ~ *fhichead* /içat/ 'twenty'); all other initial segments are unaltered. The most elaborated sub-pattern, by contrast, has a specific, distinct alternant for nearly every root-initial segment. The remaining three sub-patterns lie between these two extremes with regard to the range of initial segments included.

The present sub-pattern-based reassessment of Dorian's documented changes in the distribution of mutations in Scottish Gaelic provides insight into morphological constraints that can guide variation and change, with implications for cases of attrition, as Dorian discussed. While Gaelic speakers do not seem to treat mutations uniformly across all environments, a previously unseen coherence emerges when viewed at this finer-grained level.

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Social and Distributional Predictors of the Success of Lexical Innovations in Online Writing

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Lexical innovations such as the intensifier *af* (e.g., “that’s cool af”) emerge constantly in online communities (Grieve, Nini & Guo 2016). The success of an innovation often relies on the diversity of social and linguistic situations in which it is used (Metcalf 2004). The diversity of lexical context, or “context dissemination,” remains understudied yet could be important in explaining how linguistically useful an innovation will be: if the intensifier *af* remains bound to a few contexts, it may be abandoned in favor of a more useful intensifier.

We study lexical innovations that emerged on the online community Reddit from June 2013 to June 2016, focusing on two questions related to the influence of contextual factors:

- RQ1. Do innovations with higher context dissemination succeed more often and survive longer?
- RQ2. When controlling for context dissemination, do words with higher social dissemination succeed more often and survive longer?

We identify as successful innovations a set of 1,467 nonstandard words whose frequency grew consistently from June 2013 to June 2016, which include respellings, compounds and acronyms. Context dissemination (D^C) is defined as the count of unique trigram contexts in which a word appears, minus the expected trigram count, as computed by a linear regression on log-frequency. For RQ2, social dissemination is defined as the dissemination across users, subreddits, and discussion threads (Altmann, Pierrehumbert & Motter 2011). We match the successful innovations with a set of 601 slang words that grew and later declined over the same time period, but which had similar frequency during the pre-decline phase. We use logistic regression to compare the relative importance of context and social dissemination when controlling for initial frequency.

Addressing RQ1, higher trigram context dissemination indicates a higher probability of success ($\beta=3.824$, $p<0.01$). Among frequency-matched pairs, context dissemination alone distinguishes successful from failed innovations with 61.7% accuracy. For RQ2, higher subreddit dissemination ($\beta=1.94$, $p<0.01$) and a higher user dissemination ($\beta=3.287$, $p<0.01$) indicate a higher probability of innovation success. The fact that thread dissemination does not contribute to word success contrasts with prior findings (Altmann, Pierrehumbert, and Motter 2011) and suggests that adoption across users and subreddits is more important than adoption across threads. Lastly, we find that a predictive model incorporating both context and social dissemination outperforms context-only and social-only models (69.4% vs. 61.7% and 62.8%), showing that the linguistic and social contribute differently to word success.

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Dialect Identification Across a Nation-State Border: Perception of Dialectal Variants in Seattle, WA and Vancouver, BC

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Dialect identification studies of US regional dialects abound, yet few studies have explicitly compared listener perception of US and Canadian dialects. A notable exception is Niedzielski (1999), which reveals the effect of social information about a talker's nationality on perception of the /aʊT/ variable by Detroit listeners. Listeners did not perceive a Detroit talker as producing a non-standard raised /aʊT/, but did perceive this non-standard variant, attributed to a nationally demarcated out-group, when told the talker was Canadian. Documenting production Labov et al. 2006 note the difficulty of motivating the isogloss between “the West” and “Canada,” as the regions participate in similar sound changes. Subsequent research has pinpointed dialect features and sound changes in progress throughout the West and Western Canada (Fridland et al. 2016, Walker 2015, Boberg 2010). Swan (2016) provides an analysis of five diagnostic variables for Seattle and Vancouver, showing that Seattle and Vancouver share features of /æɡ/ raising and /æ/ retraction, but are differentiated by stronger /aʊT/ & /aɪT/ raising in Vancouver and stronger /æɪn/ raising in Seattle. Swan also reports an asymmetrical language ideology: Vancouver talkers report rarely being able to identify Seattle talkers based on speech alone, while Seattle talkers report confidently their ability to identify Vancouver talkers. The current project extends this research to the perceptual realm. Are Seattle and Vancouver listeners equally able to identify a talker as being from their own city or the other city? Does ability to discern a talker's nationality depend on the dialectal variable in the word?

Stimuli for this task were constructed from single-word utterances spoken in a word-list reading context by 19 speakers of Vancouver English and 20 speakers of Seattle English. The same four lexical items containing diagnostic variables were extracted for all talkers: *devout*, *tag*, *fan*, and *path*. Thirty native Vancouver and 22 native Seattle listeners heard 156 randomly presented words and were asked to judge whether the talker came from Seattle or Vancouver. As an initial analysis, listener accuracy was analyzed separately for each city using a binomial logistic regression in R.

Seattle and Vancouver listeners show important similarities and differences in their performance. For Vancouver listeners, Word, City and Age showed significant interacting effects; for Seattle listeners, Word, City, Age, and Gender interacted. Across all four variables, Seattle listeners identified a Vancouver talker at chance levels (50%). Vancouver listeners identified Vancouver talkers correctly at near-chance levels (54%) and Seattle talkers slightly less than half of the time (46%). These results dispel the self-reported abilities Seattle talkers expressed at identifying Vancouverites based on accent in Swan (2016), showing that despite an ideological asymmetry, they do not substantially outperform Vancouver listeners at identifying a resident of the opposite city based on speech. For listeners in both cities, Vancouver talkers were more often accurately identified in the /aʊT/ condition than Seattle talkers (67% for Seattle listeners), indicating that stereotypical Canadian Raising remains an important dialectal diagnostic perceived by both Canadian and American listeners. Seattle talkers were more often accurately identified in the /æɪn/ condition than Vancouver talkers, suggesting that pre-nasal raising is an important cue in differentiating American accents. Accuracy for the /æɡ/ and /æ/ conditions was lower, and may have been the result of response bias for the home city. The bias will be further analyzed using a signal detection theory framework, but may also be due to the fact that the two cities pattern similarly in production on the features. Overall, the findings isolate the perceptual phonetic cues related to national identity in two trans-border cities that have been described as having identical phonological systems and highlight that language ideologies are not always an accurate predictor of listener performance on perceptual tasks.

Individuals, communities and the sociolinguistic canon

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A foundational objective of variationist sociolinguistics is to describe the regular patterns of the speech community. Underlying this is the assumption that individuals reflect the community with respect to the grammar constraining variation. This is the premise of structured heterogeneity, which pulled the idiolect out of isolation and integrated it with the broader community (Weinreich et al., 1968). As the field has developed, the lens has shifted from large-scale macro-sociolinguistic analyses to small-scale micro-analyses that target communities of practice and individual agency. Paralleling this evolution from survey-based to locally-situated studies has been the development of new statistical tools (Johnson, 2009; Tagliamonte & Baayen, 2012) that create the possibility for elucidating the community-individual interface.

This paper has three goals: to revisit the relationship between the individual and the community; to use new statistical tools to assess the contribution of individuals in aggregated data; and to synthesize across the results to re-evaluate assumptions about individuals, idiolects and the speech community. We focus on a single community and six well-studied sociolinguistic variables: *-t/d* deletion, variable (ing), quotative *be like*, deontic *have*, subject relative *who*, and complementizer *that*. Our approach is unique for its comparative component and for the parallel composition of the datasets, with the same individuals represented across variables (N=145). Do individuals reflect community patterns across these variables, which vary across linguistic type, synchronic status, and, where relevant, stage of change? Further, are reported statistically significant patterns intact when individuals are included in the model? Do the models converge? Six large data structures analysed in earlier published work using Goldvarb are systematically reanalysed (total N=21,048) via mixed effects models in R (lme4 package).

The results enable us to problematize and theorize about the effect of individuals and offer insights into their role in sociolinguistic variation. We corroborate Paolillo's (2013:97) result that data are not the primary determinants of statistical analysis. Methodological decisions, sample design and especially sample size are more important to the outcome. Our results also confirm Guy's (1980) seminal observation that although individuals vary by frequency, the underlying constraints on variation remain consistent with the community norm. Thus, given judicious pre-statistical foundations (sample design, Ns per speaker, representativeness of the community, etc.) inclusion of a random effect for speaker does not affect evidence for the variable grammar.

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Escaping the TRAP: Losing the Northern Cities Shift in Real Time

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The *Atlas of North American English* (Labov et al. 2006) found that dialect diversity in North America was increasing, via the continuing advancement of regional sound changes such as the Northern Cities Shift (NCS). In the decade since the *Atlas*'s publication, however, indications have emerged that that conclusion was premature, with multiple studies finding retreat from the NCS in communities where it was expected to be stable or advancing (e.g., Wagner et al. 2016, Driscoll & Lape 2015). This paper reports a real-time study demonstrating that the loss of NCS can be rapid indeed.

Ogdensburg is a small city in rural northern New York, on the Canadian border. On the basis of nine speakers interviewed there in 2008, Dinkin (2013) described Ogdensburg as the northeasternmost limit of the NCS, with some evidence that the NCS was advancing in apparent time. In this paper, we compare those nine speakers interviewed in 2008 with a new sample of 39 speakers from the same city, interviewed in 2016.

In the eight years between 2008 and 2016, the NCS apparently disappeared from Ogdensburg. The change is visible in nearly all phonemes of the NCS, but most evident in the TRAP vowel, the raising of which is the most distinctive NCS feature. All but one of the 2008 speakers have (normalized) TRAP higher than all but one of the 2016 speakers. Four of the nine 2008 speakers (all born in the 1980s) have mean TRAP raised higher than DRESS; but none of the 2016 speakers do (not even those born in the 1980s). It seems that the NCS is being lost in Ogdensburg not via generational change, but via what Labov (1994) called communal change: rather than each younger cohort having less NCS than their predecessors, in 2016 Ogdensburg there is no apparent difference between age groups in NCS incidence in spontaneous speech. Thus it appears that the entire speech community dropped the NCS nearly simultaneously.

In F1 of TRAP, we observe a complex set of interactions between year of interview, year of birth, and speech style. Most tellingly, in both 2008 and 2016, style-shifting reverses direction between older and younger speakers: younger speakers shift away from NCS in more careful speech, while older speakers typically shift toward it. This allows us to reconstruct the following history for the NCS in Ogdensburg: While NCS advanced via generational change, it was also developing negative social evaluation. In 2008, young speakers' spontaneous speech reflected their participation in the ongoing change toward NCS, but in careful style they rejected it. By 2016, however, its nonstandardness had advanced to the point that the community abandoned NCS in casual speech as well. Thus the gradual generational change in the NCS's social evaluation seems to have foreshadowed an eventual communal change away from the NCS, once its negative evaluation was sufficiently strong. This study therefore sheds light on the rapidity with which "change from above" can reverse a regional dialect feature once it becomes stigmatized.

Explaining cross-generational differences in subject placement and overt pronoun rates in New York City Spanish using mixed-effect models

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This paper reports on a variationist sociolinguistic analysis of the relationship between subject placement and overt pronoun rates in the Spanish of first- and second-generation Spanish-English bilinguals in New York City. The data used for the study come from a spoken corpus of Spanish in New York based on 140 sociolinguistic interviews. In our previous bivariate and multivariate analyses we observed that second-generation speakers exhibit a more rigid word order compared to their newly arrived first-generation peers, more often preferring subjects in the preverbal position, and we explain that this increase in word order rigidity among our second-generation can be attributed, in large part, to their increased use of and contact with English. The present analysis, however, takes our research a step forward by examining the data using a multi-level analysis of variance of subject pronoun expression and placement. Using the statistical program R, we examine both token-level and participant-level variables and their effects on subject pronoun expression and placement. We also use decision trees to examine Raña Risso's (2013) Threshold Hypothesis, which proposes that once a threshold is crossed for the pronoun rate, significant changes in the preverbal rate begin using. Following this argument, the data can be explained in terms of the differential input for acquisition of Spanish received by the first and the second generations since the Spanish that the second generation is exposed to contains both a higher rate of overt pronouns and a higher rate of preverbal subjects. We propose that second-generation bilinguals do not have an *incomplete* grammar of Spanish but rather a *different* grammar than their first generation counterparts. The generational differences in nominal and pronominal subject placement found in our data are not evidence of incomplete acquisition of Spanish, but rather evidence of contact-induced diachronic change.

Progressive outliers in listener perception of sound change

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Vocalic outlier tokens are crucial indicators of the direction of an ongoing sound change. Speech community members who are exposed to these progressive outliers will accordingly shift their abstract representation of the vowel's distribution, setting the stage for further generational advancement (Labov 2001). Labov et al. (2010) hypothesized that for this to work, individuals must (1) integrate progressive outliers into their calculation of the mean position of the vowel in two-dimensional space, rather than rejecting them as noise and (2) weight progressive outliers more heavily than other integrated outliers in such calculations. They confirmed both hypotheses in an experiment with Mid-Atlantic participants, wherein a progressive, lax outlier realization of bad (traditionally tense: Labov, Rosenfelder & Fruehwald 2013) had an especially strong influence on listeners' representation of /æ/.

Because tense /æ/ is a stigmatized stereotype, it is hard to determine whether the lax outlier's strong effect was due to its progressiveness, its social preferability, or both. To reduce this confound, we examine /ɛ/, which is lowering in the Inland North without attracting overt attention (Driscoll & Lape 2014). 34 native English-speaking students from Lower Michigan listened to the word *bed* in five carrier sentences (e.g. *He makes the bed*). These were presented in four conditions: "Low Symmetrical (LS)," "Low Outlier (LO)," "High Symmetrical (HS)," and "High Outlier (HO)." The 'Outlier' conditions contained one token of *bed* with a high (low F1) or low (high F1) vocalic outlier, whereas the "Symmetrical" conditions did not contain outliers. For each condition, listeners selected from seven tokens of *bed* the one that they felt best represented the condition. The seven choices varied in F1 steps of 80Hz, from 580Hz to 1060Hz. Participants also recorded a word list and a short passage.

In three conditions (LS, HS and HO), perceptual /ɛ/ means were higher than the actual realizations, perhaps because of social correction toward an older norm (Niedzielski 1999). Given this apparent preference for a high /ɛ/, listeners would be expected to discard the Low Outlier token from their mean calculation, but they did not, in line with Labov et al.'s hypothesis (1). The focus on a single lexical item might have led participants to be unusually ecumenical. But notably, they gave the low outlier token of *bed* greater weight in their mean calculation than the high outlier, in line with hypothesis (2).

However, the strong effect of Low Outlier /ɛ/ is clearly not driven by overt social preference, as it was for lax /æ/. Our study therefore provides stronger evidence for the special perceptual salience of diachronically progressive outliers, independent of the social salience of the change they represent. Finally, participants' mean position of /ɛ/ in the production tasks was itself low. It is therefore reasonable that they toggled between a socially conservative and a socially progressive /ɛ/ representation in the experiment. A more robust test of the specialness of progressive outliers in future work will need to include older, more conservative members of the speech community, as well as other sound changes.

Social capital far from the capital: Verbal –s in Corner Brook, Newfoundland

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Situations of rapid social and linguistic change allow us to nuance our understanding of sociolinguistic processes like urbanization (Ito 1999, Thomas 1997), social capital (Bourdieu 1986), and identity performance (Butler 1990). Even core principles like the constant rate effect (Kroch 1989) may not hold if change is rapid and salient enough, as evidenced by work in Newfoundland (Wagner & Van Herk 2011, Childs & Van Herk 2014). There, younger speakers have reversed the aspectual constraints on a declining but highly salient identity marker, non-standard verbal s-marking (1), apparently in order to foreground speaker agency while simultaneously performing a “new Newfoundland” identity (2).

- (1) Traditional use with active verb: We **goes** to the cottage on weekends.
- (2) Innovative use with stative verb: I **loves** it!

Those papers, however, studied speakers in Petty Harbour and Pouch Cove, rapidly urbanizing fishing villages near St. John’s, the provincial capital. Anecdotal evidence and rural studies (e.g., Thorburn 2014) suggest that s-marking remains robust away from the capital, potentially without any changes to the traditional linguistic constraints. And language use surveys (Van Herk et al. 2014) suggest that the form is undergoing a revival, in awareness if not in overall rates of use.

To determine the extent of change, and to disentangle the effects of urbanization and regional identity, we investigate s-marking in Corner Brook, a mid-sized city (pop. 27,202) in western Newfoundland. Corner Brook is a regional economic and political centre, but is far from the direct influence of St. John’s, a 689-km drive away.

Multivariate analysis of present temporal reference tokens (N=1850) in 24 sociolinguistic interviews reveals patterns that draw from both traditional and innovative systems. Corner Brook retains some older constraints (subject type), and is neutral with respect to stativity (similar to the behaviour of older speakers in Petty Harbour). However, patterns in rates of use differ by gender. Younger women rarely use s-marking at all (2.4%). Younger men have reversed a decline found in earlier generations, and actually use more s-marking (37.7%) than the grandparent generation. This is likely due to the greater social and economic capital available to rural-identifying men in situations of cultural renaissance (Dubois & Horvath 1999).

In effect, younger Corner Brook speakers have adopted the *sociolinguistic* meaning of –s marking from the capital region (and/or from province-wide discourses of identity), without adopting the newer *linguistic* constraints on the form. Young speakers index a new Newfoundland identity through their use of –s, but replicate the linguistic constraints of the past. These findings suggest that while speakers may be aware of the sociolinguistic significance of a reclaimed traditional linguistic variable, the diffusion of linguistic constraints for the variable does not necessarily occur simultaneously.

Would You Like Fry With That? Exploring Perceptual Variation of Vocal Fry

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Although there has been significant research on the prevalence of vocal fry in young American English speakers, existing research on the pragmatic meaning of this feature and how it is perceived by listeners is widely divergent. Cameron (1994) argues that sociolinguistic variables employed by younger speakers and social minorities like women are more likely to be scrutinized, and some perceptual studies have shown that vocal fry exhibits this pattern (Anderson, 2014; Goodine, 2014). However, Yuasa (2010) reports favourable perceptions from younger listeners. Given these differences, this paper seeks to explore social meanings of vocal fry as it is perceived by listeners, and its relationship with pragmatic meanings as spoken by its users. Another goal is to contribute to the expanding and mapping of the indexical field (Eckert, 2008) for this feature and address methodological considerations.

The current study draws data from a perceptual survey where respondents were asked to rate their impressions of voices with and without fry. Prevalence of vocal fry in syllable nuclei was coded impressionistically and Praat was consulted for verification. The stimuli in the perceptual study was from eight participants aged 18-26: four men and four women, two of each using a significant amount of fry and two using mostly modal voice. Survey respondents rated impressions of the voices on five-point scales for attributes of authority, intimacy, seduction, persuasion, boredom, and emotional disengagement. These attributes were chosen for their frequency in literature as proposed pragmatic meanings of fry (Mendoza-Denton, 2011; Podesva, 2011; Shaw & Crocker, 2015; Yuasa, 2010; Zimman, 2012). The survey also elicited additional comments from respondents.

Results from 40 respondents suggest that vocal fry has several potential meanings for listeners. Respondents revealed a range of interpretations of vocal fry, including those reported in the literature such as young, female, urban, authoritative, and seductive. Perceptions varied by gender of speaker—ratings of women's voices varied more than men's and elicited more negative comments. Correlation analyses of ratings showed significant relationships for some features (e.g. seductive was correlated with intimate).

Evidence from this study strengthens the argument that young women's voices are subject to disproportionate scrutiny and contributes to previous findings that meanings are highly dependent on listener's perceptions of the speaker (Campbell-Kibler, 2009). Results challenge previous research suggesting that fry has one fixed meaning such as authority, and rather proposes an indexical field of potential meanings (Eckert, 2008). Further, correlation analyses can help map the indexical field, identifying which meanings cluster together and which ones are more independent. By exploring the relationship between function and perception, this paper strengthens our understanding of how meanings of linguistic variables are shaped and how they work interactionally to create a range of meanings.

Contact-induced majority language change: Quechua influence on the semantics of comitative coordination in Peruvian Spanish

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Interpretations of comitative coordination are known to vary cross-linguistically. Russian, for example, requires overt plural pronouns that can be interpreted as singular with comitative conjuncts (Vassilieva and Larson 2001), whereas Spanish favors null pronouns, and overt plurals are never singular (Camacho 1996). However, less studied is how the meaning of comitative coordination varies cross-dialectally, within the same language.

This paper finds different semantic interpretations of 1st-person comitative coordination between two Spanish varieties—Madrid vs. Lima (coastal Peruvian). Opposite of variation in other aspects of the grammar—two ways of saying the same thing—semantic variation is one way of saying two things. While both varieties favor a null pronoun with a post-verbal PP conjunct, the subject in this construction can ultimately have two meanings:

- (1) *vamos a-ir a-la-casa con Pedro*
pro going.1PL to-go home with Peter
 a. ‘Pedro and I will go home’
 b. ‘Pedro, you, and I will go home’

The subject can include only the speaker and the explicit referent *Pedro*, or also non-explicit participants. Crucially, variation occurs regarding whether a 2nd-person listener is understood to be included by default. Speakers from Lima unanimously preferred default interpretations like 1a, excluding 2nd-person, and Madrid speakers preferred inclusive ones like 1b. At the same time, with an overt pronoun, all speakers allowed only inclusive interpretations:

- (2) *nosotros vamos a-ir a-la-casa con Pedro*
1PL going.1PL to-go home with Peter
 ‘Pedro, you, and I (possibly others) will go home’

In summary, Lima speakers distinguish inclusivity of the subject using an overt pronoun, whereas Madrid interpretations are always inclusive.

I argue that this distinction in default interpretations reflects the varieties’ different contact situations: Peruvian Spanish exhibits significant influence from Quechua languages following over 500 years of contact (Escobar 1978)—including in the semantics of comitative coordination. While Spanish has a 1st-person-plural category that is ambiguous about including interlocutors (2nd-person), Quechua disambiguates exclusive-inclusive 1st-plural categories (Parker 1969; Cerrón-Palomino 1987). Quechua speakers must specify whether 2nd-person is excluded or included. Essentially, the default Peruvian interpretation of (1) with the null pronoun matches the exclusive Quechua, and the inclusive meaning emerges in Spanish with the overt 1st-plural pronoun (2).

Based on the data, default interpretations of null and overt 1st-plural pronouns with comitative conjuncts in Peruvian Spanish could be evidence of contact-related language change. In such a scenario, the more specific semantic properties of Quechua 1st-plural categories would have been mapped onto previously ambiguous, underspecified Spanish categories: null means exclusive; overt is inclusive. Such a refinement of semantic values is in fact typical of language contact situations, and grammaticalization of this process in Peruvian Spanish is clear in comitative coordination. This paper offers a unique example of potential influence from a minority into majority language, and insight into semantic variation.

Local meanings for supra-local change: A perception study of TRAP backing in Kansas

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Features of the California Vowel Shift (CVS; Eckert 2008) are found throughout the American West (Fridland et al. 2016). One CVS feature, TRAP backing, is associated with California and supposed Californian values in the popular media (Pratt and D’Onofrio 2014). It remains to be seen what regional identities or values TRAP backing indexes in communities undergoing the CVS outside of California. This study investigates the local construction of meaning for a supra-local sound change by examining how college students in Kansas, a region undergoing front lax vowel retraction, perceive TRAP backing.

Fifty-one listeners participated in a perceptual task involving stimuli read by young Kansan speakers; this task combined properties of dialect recognition tasks (Williams et al. 1999) and matched-guise tasks (Campbell-Kibler 2007). In each trial, listeners identified speakers’ regional origin and rated speakers on 14 affective Likert scales. Four critical stimuli belonged to one of two matched guises, which were acoustically manipulated such that only TRAP F2 differed between matched guises (Villarreal 2016). Conservative guises contained fronted (higher F2) TRAP and shifted guises contained backed (lower F2) TRAP.

A Bayesian analysis of regional identification found that listeners identified the shifted guise as significantly more likely to be from California than the conservative guise, indicating some association between TRAP backing and California among listeners in Kansas; guise did not affect other regional identification categories, however. A principal components analysis revealed three principal components that together accounted for 61% of the variance in ratings. PC1, measuring “general prestige,” combined seven scales, including *likeable*, *polite*, and *educated*; PC2, measuring “Kansan-ness,” combined two scales: *Kansan* and *small town*; and PC3, measuring “innovativeness,” combined three scales: *young*, *feminine*, and *fast*.

PC1 and PC3 significantly correlated with guise, with shifted guises rated higher on “general prestige” and “innovativeness” than their conservative counterparts. Conversely, PC2 significantly correlated with listeners’ regional identifications, as stimuli rated high for “Kansan-ness” were most likely to be identified as being from Kansas and least likely to be identified as being from New York or California. These results suggest that in Kansas, TRAP backing is associated with California despite local participation in the sound shift. Instead of associating TRAP backing with local identity, as Californians do, this sound change appears to index both prestige and youth in Kansas, perhaps motivating the spread of this sound change in the region. These results highlight the local construction of meaning for a sound change, while also providing some clues to the rapid supra-local spread of the CVS.

Do speakers converge toward variants they haven't heard?

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Language users imitate acoustic characteristics of speech to which they are exposed (Babel 2012, Goldinger 1998, Pardo 2006). Such imitation has been shown to generalize across lexical items (Pardo, 2009) and even phonemes (Nielsen, 2011). For example, speakers produce /k/ with lengthened VOT after hearing lengthened VOT for /p/ (Nielsen, 2011). Identity Projection Models of convergence (Auer et al. 1998) suggest that speakers may generalize even further, converging toward what they believe an interlocutor should sound like, rather than toward their observable linguistic behavior; this has yet to be observed in a controlled, laboratory study.

This study explores whether convergence extends across co-occurring dialect features. We investigate whether speakers produce more monophthongal /aɪ/, a salient feature of southern U.S. English, after listening to a southern-shifted talker who never produces /aɪ/ during the experiment.

A Word Guessing task was used to elicit target words from participants, who were all University of Pennsylvania students from various regions outside of the U.S. south. Participants (N=33) were given sentence-length clues and asked to guess aloud the word described. Clue presentation differed across 3 phases:

Phase 1 (Baseline): Clues presented in written format on the screen, providing baseline productions before exposure to speech stimuli.

Phase 2 (Exposure): Clues presented in audio format. Participants assigned to one of two conditions: *Southern*: Clues read by a Southern-sounding male talker from North Carolina (Participants = 24) *Midland (control)*: Clues read by a Midland-sounding male talker from Ohio (Participants = 9).

Phase 3 (Post-Exposure): Clues presented in written format in order to examine any delayed convergence effects and tease apart exposure effects and fatigue effects.

During each phase, a set of 52 words was elicited from each participant, 20 of which contained /aɪ/. No word was repeated within or across phases. Each of the three sets of words was balanced for frequency and phonological environment. The experimental phase in which each set of words was elicited was counterbalanced across participants, and trial order was randomized within each phase. Crucially, participants never heard the /aɪ/ vowel from either talker, as no clues contained any instances of /aɪ/. All clues contained at least one stressed instance each of /u, o, e, i, ε, ɪ/, providing strong evidence about the talker's dialect.

Initial results show that participants produce significantly more monophthongal /aɪ/, measured as the normalized Euclidean distance between the nucleus and glide, after exposure to the Southern voice compared to the Midland voice; this is confirmed with mixed effects modeling ($p < .05$). This effect also carries over into the Post-Exposure phase. Speakers do, in fact, converge toward variants they associate with—but haven't heard from—the model talker. Speakers in the Midland condition, in contrast, produce more diphthongal /aɪ/ during exposure ($p < .05$), before returning to their baseline Post-Exposure. We speculate that this surprising result stems from either convergence toward (real or perceived) hyperarticulation of the Midland talker or the slower-paced design of the Exposure Phase. Findings provide evidence for theories that take the target of convergence to be broader and more complex than a single linguistic unit.

Where Sociolinguistics and Speech Science Meet: The physiological and acoustic consequences of underbite in a multi-lectal speaker of African-American English

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This talk takes up Rickford and King's (2016) call to pursue "Justice for Jeantels." Miami-born Rachel Jeantel served as key witness for the prosecution in the 2013 trial of George Zimmerman. Although she was not on trial, media coverage was highly critical of Jeantel's testimony, and of the intelligibility of her speech. In her testimony, Jeantel self-identified as having an "underbite." While this presentation does not address the intelligibility of her speech, it does seek to clarify factors that shape it. I ask: What are the acoustic correlates of Type III malocclusion (underbite)? Can a sociolinguistically-informed investigation (of the variable linguistic context for deletion of /s/) clarify how her physiological condition interacts with linguistic features? /s/ was selected for analysis because it is well-known to be affected by Type III malocclusion (Wakumoto et al. 1996). However, the Speech and Hearing literature does not discuss the possibility that deletion is favored in certain morphological and phonetic environments under the influence of linguistic factors.

829 tokens of /s/ were collected from Jeantel's testimony in the Zimmerman Trial and a subsequent CNN interview. Two gender- and ethnicity-matched Floridians provided comparison data (token count n=1878). Tokens of /s/ from the three speakers were coded for (1) word position (*initial, medial, final*), (2) morphological environment (*verbal -s, possessive -s, and plural NP*), and analyzed using current best-practices in experimental phonetics. The first four spectral moments were analyzed, including *center of gravity* (Gordon et al. 2002). *Center of gravity* is a measure of the average frequency of the entire spectrum of a fricative, indicating the spectral location of the highest concentration of energy. /s/ in underbite patients typically displays a diffuse pattern of energy, audibly more consistent with [θ] than [s]. While Jeantel deletes in all three morphological environments, the other two Floridians differ: one deletes mainly in possessive constructions (e.g., *This girlø pain*), the other in the *verbal -s* pattern (*He loveø it*). A linear mixed effects model for CENTER OF GRAVITY (with fixed effects for CLINICAL GROUP and MORPHOLOGICAL ENVIRONMENT) reveals that a statistical model including the two fixed effects far outperforms one that does not.

Jeantel's linguistic inputs are varied: she is the child of speakers of Haitian Creole and Dominican Spanish. This linguistic repertoire is common in Miami. While progress has been made in understanding AAE phonology in both Sociolinguistics and Speech and Hearing, both fields have a long way to go before understanding the repertoires of bi- or tri-dialectal African-Americans. It is hoped that this research represents forward progress in bringing justice to speakers like Jeantel.

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A perceptual dialect map of Indiana

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This paper presents the findings of a study of people's perceptions of dialectal variation in Indiana. Understanding how people in a particular region divide the linguistic geography of that region is important for studying factors that are likely to influence linguistic change. Recent work in perceptual dialectology has shifted focus from entire nations to individual states such as Ohio, California, Texas, and Washington (Benson, 2003; Bucholtz, Bermudez, Fung, Edwards, & Vargas, 2007; Cukor-Avila, Jeon, Rector, Tiwari, & Shelton, 2012; Evans, 2011, respectively). These studies have revealed that not only are people sensitive to dialectal variation within relatively narrow geographic regions, but that people in these states evaluate different types of social information and linguistic detail. As a result each state has its own set of details that are "available" for residents to comment on (Preston, 1996).

Indiana is a state with a surprising amount of dialect diversity for the United States. The four major dialect regions in the state (Labov, Ash, & Boberg, 2005) have varying degrees of salience among natives of Indiana (Hoosiers), from readily noticed to moderately recognized as different. These dialects are also associated with a range of attitudes, from negative to neutral/positive. In this study respondents from Indiana ($n = 68$) were given a map of the state and asked to draw lines around regions of the state where they believe people speak English differently. They were also asked to provide labels for how they would describe the speech in those regions. These perceived dialect regions generally align well with traditional dialect maps of Indiana. The results indicate that the area around Chicago and southern Indiana are the most salient regions, with some suggestion of a distinct northeastern region and a further sub-division of the southern region based on degree of participation in Southern dialect features. In general, the middle region of the state is labeled as sounding "normal" or "standard". Unlike other studies in perceptual dialectology, there was not a strong urban/rural distinction (cf. Washington, Evans, 2011), rather respondents focused on regional lexical and phonological variation, such as "y'all" in the south or "pop not soda" in the north. It is suggested that Hoosiers are sensitive to established dialect boundaries, and that work on the acoustic and attitudinal correlates of these regions warrant further study.

Putting the /t/ in politics: Omarosa and hyperarticulated /t/

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Scholars have argued that released or hyperarticulated /t/ indexes intelligence, is used in more professional contexts, and indexes emphasis and strength in discourse (Bucholtz 1995, Podesva 2006, Eckert 2008b). Podesva et al's (2015) study on released /t/ demonstrates that even in a subject pool balanced for gender, race, regional accent, and political affiliation, women politicians use final and medial released /t/ more than their male counterparts.

This study looks at the speech of conservative American politician Omarosa Manigault and her use of hyperarticulated final /t/. Variable proportions in how final /t/ is articulated function as an index, allowing speakers significant performative flexibility. American politician Condoleezza "Condi" Rice's use of hyperarticulated /t/ has also been studied (Podesva et al 2012). Though Condi and Omarosa are both black female conservatives, they are quite different, Condi having worked in politics her entire career, while Omarosa has no formal training in politics. While Condi's speech reflects "neutrality and standard language" (Podesva et al 2012), Omarosa's speech indexes a different kind of conservative performance, one rooted in a more populist framework.

The data consist of word-final /t/ realizations within a 15-minute interview of Omarosa on *The View*. Realizations of the variable were auditorily coded, with a total of 41 realizations of hyperarticulated /t/ relative to 40 /t/ unreleased realizations. Overall, Omarosa hyperarticulated 50.6% of the time in this interview.

I show that Omarosa's use of both hyperarticulated /t/ and unreleased /t/ can be linked to specific factors such as particular socio-lexical items (buzzwords from the Trump administration), target audience (the Black community versus America at large), and spontaneous speech versus more prepared remarks. This variation endorses the conclusion that realizations of a feature can vary based on speaker's opinions about the topics being discussed (Schilling-Estes 2004). Through the calibrated use of these variants of /t/, Omarosa indexes intelligence and professionalism, as has been found in previous research. However, her use of unreleased /t/ while discussing certain topics such as her upbringing in the projects or her fiancé, allows her to index a more populist stance, thereby constructing an identity designed to resonate with multiple audiences.

Nós and a gente ‘we’ in Brazilian Portuguese: Effect of age in urban and rural areas of Espírito Santo

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In Brazilian Portuguese there are three common ways to express first person plural: (1) Traditional standard: *nós*-with-concord (*nós falamos* ‘we speak’); (2) Nonstandard: *nós*-without-concord (*nós falaØ* ‘we speak’); (3) Emerging standard: *a-gente*-with-concord (*a gente falaØ* ‘we speak’).

Variation involving these forms is here analyzed as two binary variables, concord with *nós* and alternation between *nós* and *a gente*. This variation is vigorous and ongoing (Scherre, & Naro, 2014; Zilles, 2005). In terms of Labov (1994:78) concord is a *stereotype*; alternation is a *marker*.

We analyze 1517 tokens from 40 speakers in Vitória, the capital (Vit-urb), and 1757 tokens from 32 speakers in the rural area of Santa Leopoldina (SL-rur), a small town. In terms over overall ternary distribution, the samples differ in only 4.6 percentage points with respect to *nós*-with-concord (Vit-urb: 26.6%; SL-rur: 22.0%); 20.4 percentage points with respect to *nós*-without-concord (Vit-urb: 3.8%; SL-rur: 24.2%); and 15.7 percentage points with respect to *a-gente*-with-concord (Vit-urb: 69.5%; SL-rur: 53.8%). The relative weights of age group (Sankoff, Tagliamonte, & Smith, 2005) in separate binary analyses show different directions in the cases of *nós*-with-concord vs. *nós*-without-concord, and *a-gente*-with-concord vs. *nós* with or without concord in the two communities.

In Vit-urb, the youngest age group favors *nós*-with-concord (0.814) and *a-gente*-with-concord (0.775) suggesting change in the urban community toward increased frequency of concord in line with other urban centers in Brazil.

In SL-rur, we find decreasing use of *nós*-with-concord in three age groups (0.675; 0.506; 0.315, respectively) with an uptick in concord by the 7-14 year group (0.489). Furthermore, in SL-rur, the intermediate group of 26-49 favors of *a-gente*-with-concord (0.745), suggesting age grading. This use is more frequently by speakers who have greater contact with Vitória, such as in agricultural trade. It is reinforced by the effect of the interviewer in SL-rur: *a-gente*-with-concord is favored if the interviewer is an outsider (0.700).

Thus, rural and urban communities are on the same plane as far as overall distribution of *nós*-with-concord is concerned, but exhibit different trajectories of ongoing progress, with distinct reflexes in the community: urban progress is community-wide change, while rural progress is change undergone by speakers in the middle-age subgroup of the community. In both cases, direction is toward the dominant urban norm of agreeing forms in the country as a whole. Nonetheless, even though *a-gente*-with-concord, an urban feature preferred in cities, penetrates the rural community, speakers still exhibit more *nós*-without-concord, a local loyalty feature (Milroy, 1989:168).

Boy vi alltid hundra (Boy we keep it 100) – Comparing ‘MAT and PAT’ replications in Danish and Swedish multiethnolects

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In the contact scenarios of today's multiethnic Europe, complex social factors interact with the ‘feature pool’ (Mufwene, 2001), rendering unique adoption-rejection patterns in each community (Cheshire, Kerswill, Fox & Torgersen, 2011). The interaction of substrate inputs, host language, social conditions, and diachrony challenges anyone who asks why certain features spread while others do not.

Nonetheless, a comparative study of Nordic multiethnolects might offer a unique opportunity to control for a number of these factors. Sweden and Denmark have (relatively) mutually-intelligible languages, similar socio-political structures, urban segregation, wealth gaps, literacy metrics, fluencies in English, and similar mean wages and employment rates for their working classes. Moreso, many of their migrants hail from the same countries.

Where Sweden and Denmark do differ is in their rates of migration – Sweden higher, Denmark lower – and their national cultural histories.

This presentation compares ‘matter and pattern’ replication (Matras & Sakel, 2007) in a corpus of Swedish and Danish hip hop. Hip hop is the broadest media platform for urban multiethnolect in Scandinavia today. The genre disseminates and embeds local contact-induced innovations into the wider nation state and is often itself a source of innovations (Brunstad, Røyneland & Opsahl, 2010). The ‘matter’ replications come mainly from heritage languages in the community, such as Arabic, Serbo-Croatian, Somali, Spanish, Turkish, and Wolof. The ‘pattern’ replications are entirely English calques, primarily from Black English Vernacular.

The corpus is growing, but preliminary results show that Swedish hip hop has nearly twice the number of unique ‘matter’ replications (370 tokens, occurring 775 times, out of 9207 words) than Danish (199, 461, 9742). But what is more interesting – given their equal access to English – is that the Swedish inventory of English calques is 33% higher (40 tokens, occurring 64 times, within 9207 words) as the Danish (29, 60, 9742). Furthermore, the replications are more evenly distributed in Swedish, while a sole emerging rapper (*J-Mix*, 2016) skews the Danish data.

To control for cultural legitimacy and representativity, I examined works from 2012-2017 that had videos with over 100,000 views per year on YouTube. Loanwords and calques were coded for manually. 40 songs were randomly selected in total: 23 Swedish, 17 Danish.

Because Danish and Swedish are morphosyntactically and lexically very similar, and because Denmark and Sweden share similar socioeconomic and political ecologies, I look primarily to migration numbers and to sociocultural traits to explain the results. Sweden has had higher and earlier rates of migration, which might explain its larger inventory of loanwords. The difference in calquing, however, is puzzling. One explanation is that the larger inflow of ‘matter’ in Sweden has created a more tolerant climate for ‘pattern’. Another explanation is that Sweden's historical diaspora in the United States has made it more tolerant to anglicized replication, and that its multiethnolect-speaking communities have taken in this same tolerance. Although Danish may have sanctioned replication more strongly in the past, the linguistic innovations from aforementioned rapper *J-Mix* (2016) indicate that this may be changing. In my search for explanations, I also hope to show that the variationist paradigm can be expanded from linguistic variables to also empirically examining macrosocial variables.

Introducing *NordFA*: Forced Alignment of Nordic Languages

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The study of sound change in the English-speaking world has benefited tremendously from automatic phonetic segmentation, permitting large quantitative studies to be conducted by small teams or even solo researchers. In contrast, we have seen little variationist research coming out of the Nordic nations, with one exception being LANCHART in Denmark (Pharao, Maegaard, Møller & Kristiansen, 2014). This is unfortunate when one reflects on Scandinavia's unique contact ecology, particularly Sweden, home to Europe's first multiethnolect (*Rinkeby Swedish*; Kotsinas, 1988).

In hopes of assisting and motivating variationism's progress in Scandinavia, we introduce the alpha version of *Forced Alignment for Nordic Languages*, aka *NordFA*.

NordFA is built on the original architecture of *Forced Alignment and Vowel Extraction* (*FAVE*; Rosenfelder, Fruehwald, Evanini, & Yuan, 2011), which incorporated the Hidden Markov Model Toolkit (*HTK*; Young, Woodland & Byrne, 1993).

The enhancements presented in this study exist for both Swedish (*SweFA*) and Danish (*DanFA*); Norwegian is not part of this release but is planned for the future.

SweFA is the most developed of the two and currently exists for the Central Swedish variety. Its pronunciation dictionary contains more than 2,000,000 entries, including inflected forms and most-common compound words (eg., *trevlig*, *trevliga*; *otrevlig*, *skitotrevlig*). Moreso, it has multiethnolectal entries: both established (eg., *aina*, *guzz*) and incipient (eg., *benim*, *jetski*). *SweFA* identifies external-sandhi retroflex coalescence (eg., *för sig* >> *fö shig*) and has a trial rhotics-coder that distinguishes between apicals and approximants similar to Bailey (2016). It also codes for lexical pitch accent 1 and 2, external-sandhi accent 2 in compound words, and “weak-suffix anacrusis” (Riad, 2015).

We tested it on a casual speech recording of young men from a multiethnic suburb in Stockholm, and the pronunciation dictionary covered 97.6% of all words (n=3966). We then compared it with manual alignment for 1123 monophones. Mean boundary displacements at onsets was 0.0205 seconds and 0.0199 seconds at offsets. Root mean square deviation was 0.144 and 0.141 for onsets and offsets, respectively.

DanFA's pronunciation dictionary contains over 200,000 entries of standard words but does not include new slang yet. Nor does it include schwa-assimilation or multiethnolect pronunciation. That said, our prototype for 160 Copenhagen monophones (casual speech) is promising in comparison to manual alignment. Those metrics, however, are not yet comparable to *SweFA*'s; and unlike *SweFA*, extensive speech has not yet been tested.

Like the original *FAVE*, *NordFA* can segment large files that are manually transcribed in *ELAN* (Wittenburg, Brugman, Russel, Klassmann & Sloetjes, 2006) and outputs the alignments in Praat (Boersma & Weenink, 2017).

SweFA and *DanFA*'s lexicons come from three sources: (1) data seized from the insolvent *Nordic Language Technology Holdings Inc.* (via the National Library of Norway), (2) the online Swedish slang dictionary *slangopedia.se*, (3) and manual entries from the first author's research corpus, which contains 115 hours of Stockholm Swedish. The test results indicate that *NordFA* stands to help Nordic sociolinguistics progress toward more large-scale, “big data” analyses.

Social Meaning, Style, and Language Variation in Beijing

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The study of speech styles has always been a key topic in sociolinguistics and relevant research have been conducted in many languages and communities. Under the traditional Labovian paradigm (Labov, 1972), style is mainly investigated through style-shifting across different contexts; however, recent studies of style have increasingly explored individuals' stylisation (Rampton, 2013) and how social meaning is constructed and manifested through speakers' styles (Eckert, 2016; Podesva, 2007). Nonetheless, to date, there is a lack of relevant studies in this area regarding language variation and the construction of style in Mandarin Chinese (cf. Zhang, 2005, 2008). In this paper, I present speech data collected from a group of native Beijing Mandarin speakers and demonstrate how they use the same set of four different vernacular Beijing Mandarin features to construct different styles suitable for their identities.

The study is part of a bigger project investigating the use of Beijing Mandarin among 21 Beijing-born university students in Beijing. Data from both sociolinguistic interviews (~33 hours) conducted with all 21 participants who have different class backgrounds, career plans, and future aspiration, and self-recordings from a subset of ten participants (~6 hours) were analysed. I examine the variation in four thus far unexamined/under-studied linguistic variables in Beijing Mandarin: neutral tone, classifier omission, intensifier *te*, and *erhua*. Three main social factors – gender, career choice, and future aspiration – are included in the analysis.

I first present the key results from the quantitative analyses, conducted using mixed-effect logistic regressions: although the four linguistic features are all considered vernacular, they do not share the same degree of vernacularity nor the same social meanings such as masculinity, non-standardness, and localness. For instance, established and stereotypical vernacular forms such as neutral tone show a sharper gender stratification with men preferring the vernacular variants while less-recognised features (i.e. classifier omission and intensifier *te*) lack significant gender differences.

Building on these results, I then offer a more detailed qualitative analysis on three different individuals and showcase the diversity in styles found in the corpus. The three styles included here are: the 'authentic Beijinger', the 'upwardly-mobile', and the 'non-local Beijinger' where speakers show different patterns in style-shifting across contexts (careful, casual, and self-recording) and individual features. I offer an overview of each speaker's use of all four linguistic features and how different their styles are from each other. This integrated analysis further demonstrates how different social meanings arise from the construction of styles for individuals who have different gender identities, aspiration levels and/or designated future careers.

This study contributes to the understanding of language variation in general by investigating variation observed in an under-described variety, Beijing Mandarin, from a variationist perspective. More importantly, I offer evidence showing that speakers utilise a wide range of linguistic features in the construction of styles, and social meanings are conveyed in this process. Focusing on the same variety Zhang (2005) has studied, the results provide an update of the social meaning of vernacular Beijing Mandarin features, confirming Beijing Mandarin's vernacular status while further developing our understanding of some of the other social meanings Beijing Mandarin has.

Ethnic Identity Construction: The Interlocutor Effect on the TOOTH Vowel in Chinese American English

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Previous studies on the English of Chinese American (CA) mostly approach the topic by comparing their speech to that of European Americans (EA) of the same dialect region (e.g. Hall-Lew 2009). The current research focuses on how CAs construct and express their ethnic identity through their linguistic responses to different interlocutors (e.g. Rickford & McNair-Knox 1994). Realization of the TOOTH vowel (post-coronal tokens of the high back vowel class as in GOOSE) was observed to vary not only with attention paid to speech, but with interviewers of different ethnicities.

The fronting of TOOTH is a widespread change in North America, but has not traditionally been observed in Lower Michigan (Labov, Ash & Boberg 2006), where it now appears to be a change in progress (Nesbitt & Mason 2016).

The data come from 14 college-age 2nd-generation CAs from Troy, Michigan. Data collection with this same group of participants were conducted in two separate times with an interval of about a week: the first time by an interviewer of male L2 English speaker of Chinese ethnicity, the second time by a female native speaker of English of European American descent, who grew up within 20 miles of Troy. 15 EAs from Troy were recruited as a reference group. A total of 670 primary stressed TOOTH tokens with normalized F2 measurements were extracted from recordings of a wordlist, a reading passage and an interview using the FAVE suite (Rosenfelder et al. 2011). Tokens followed by /l/ were excluded.

Overall, the present study finds that both EAs and CAs participate in fronting of the high back vowel, with EAs lead the change.

Results of interlocutor effect: CAs showed greater fronting of TOOTH with the EA interviewer than with the Chinese interviewer. A MANOVA showed a statistically significant difference: Tokens with the EA interviewer were significantly fronter ($p < .01$) than those with the Chinese. However, CAs' mean TOOTH did not approach that of the EA interviewer.

Results of style-shifting: Besides consistently producing fronter TOOTH with the EA interviewer, style-shifting of TOOTH was found in the data collected by the Chinese interviewer: The most fronted TOOTH was exhibited in the casual speech; in the careful speech, it was quite back. The same direction of style-shifting was also found among Troy EAs. These results reveal a conservative evaluation of TOOTH fronting by speakers from southeast Michigan.

This TOOTH vowel stylistic variation between interlocutors and among speech styles in Troy Chinese Americans provides some evidence for ethnic minority group's participation in a supra-regional sound change in the Inland North. Furthermore, this study explores and underscores the importance of taking the social characteristics of interviewers into consideration in the identification of linguistic features associated with ethnic and identity.

Gender normativity and attention to speech: The non-uniformity of gendered phonetic variation among transgender speakers

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Examining intra-speaker variation across various genres of speech has been a mainstay of variationist sociolinguistic analysis from its earliest days and was instrumental in producing some of the field's first frameworks, such as Labov's (1972) theorization of attention to speech. Although theories of style have developed over the intervening decades, sociolinguists remain carefully attuned to research participants' awareness of their own speech. Discussions of this phenomenon, however, tend to be framed through reference to linguistic forms that can be placed somewhere on a continuum of prestige ranging from standard to stigmatized. The well-established overall trend is for speakers to use more standardized variants when paying more attention to their speech. However, it has long been recognized that people may select non-standard forms because of the "covert prestige" they offer (Trudgill 1972) along with opportunities for certain kinds of identity work (Schilling 1998).

This paper presents a different take on intra-speaker variation by considering how the gendered characteristics of the voice differ across read and spontaneous speech using data from a two year ethnographic project on the changing voices of 10 female-to-male transgender individuals in the early stages of masculinizing hormone therapy. While Zimman (2017) examines the phonetic properties of these individuals' read speech, this analysis compares the same data to interviews with a focus on fundamental frequency and the spectral qualities of /s/.

If the attention to speech model of stylistic variation holds for gender, we might expect people to take on more normatively gendered voices during careful speech. This may be particularly true for transgender speakers, who are generally assumed to desire voices that are indistinguishable from their cisgender counterparts. However, the findings presented here build on Zimman's observations that trans speakers express a wide array of gender presentations, ranging from highly normative to profoundly subversive. This is reflected lack of any single pattern distinguishing these speakers' read and spontaneous speech. While some individuals showed significantly lower F0 and/or a lower frequency /s/ in read speech, others followed the opposite pattern with *less* normatively masculine speech in the more self-conscious context. Others still showed no significant differences. I present several possible explanations for these inconsistent findings informed by the ethnographic contexts in which speakers live and the other ways they negotiate their highly contested gender identities. I argue that concepts like overt and covert prestige fail to capture the workings of gender and that *normativity* provides a more useful framework for understanding individuals' agency to push back against assigned social roles.

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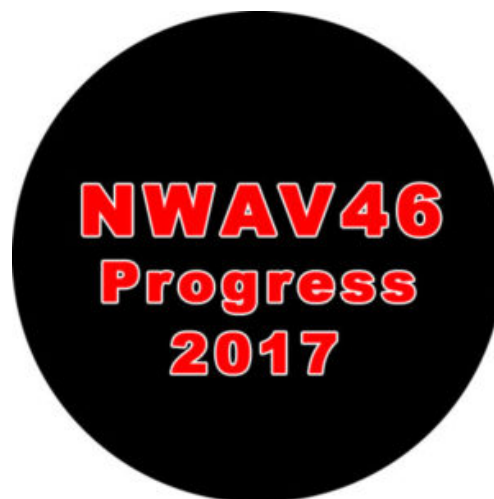
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- o Originality of research question(s) and interpretation,
- o Organization and argumentation. Was it clear? Accessible? Well-structured?
- o Effectiveness of technical presentation, e.g. visual aids/graphics, examples, timing
- o Communication skills, demeanour, volume and pace of delivery, fielding questions

Full abstracts: https://english.wisc.edu/nwav46/?page_id=57

Online ballot: https://uwmadison.co1.qualtrics.com/jfe/form/SV_8Bb9Ix9uViC36df



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