Sociolinguistic cues and nationality: A Comparison of /æ/ among Vancouver, B.C. and Seattle speakers

Cascadia Workshop on Sociolinguistics
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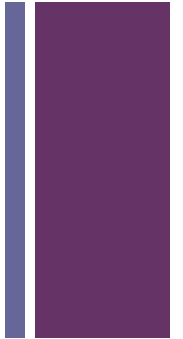3.2.2014

Roadmap

Introduction: Cascadia

Vowel Changes in U.S. and Canadian Pacific Northwest Dialects

Pilot Research Study and Results

Future Research: Cultural Identity Survey, Production and Perception Studies

General Discussion

Ideologies, Identities, and Attitudes

Background: Social Setting

Cascadia, the Pacific Northwest Tree Octopus and the Sasquatch Militia...

The sovereign nation of Cascadia already exists in sprit...

"The Republic of Cascadia is not yet officially recognized by Canada, the United States of America, or the United Nations. Not that it is any of their business." Lyle Zapato

Cascadia Independence Movement: a bioregion with unique flora, fauna and topography; a cultural and social movement:

"It [Cascadia] is used to define a unique regional character found within the Pacific Northwest, and extends to a wide range of beers (Cascadia Dark Ale), sports (the Cascadia Cup) and music (Cascadian Black Metal) just to name a few. The idea has since been adopted by a wide range of researchers who highlight the growing importance of regional growth management, environmental planning, economic cooperation, as well as disaster preparedness." Cascadia Now!

Cascadia Center: Issues and research around transportation from Oregon to British Columbia. Including integrated management and funding, surface and marine transportation, technology and energy use.

"Linguistic Characteristics" cited: "beginning with the Salish Chinook Jargon trade language, to our own unique patterns of speech today."

Background: Social Setting

The notion of Cascadia: More than just microbreweries?

Simon Fraser's 2004 Colloquium: Convergence vs. divergence (Froschauer, Fabbi and Pell 2006)

Ethnolinguistic vitality: "Linguistically, we have questioned whether- and feared that- American English would inundate all aspects of our variety of the English language and that most forms and patterns which are characteristic of Canadian English would be replaced by Americanisms." (Woods 1993)

(Chambers and Hardwick 1986, Clarke 1993 (incl. Chambers 1993, Woods 1993, Zeller 1993): Concern that American norms and features are overtaking Canadian English.

Sadlier-Brown 2012, Pappas and Jeffrey 2013):More recent, Vancouver-specific evidence that, with respect to /aw/ raising, Vancouverites are maintaining their Canadian flavor.

Background: Sociolinguistic Framework

- Speakers use linguistic variables meanings with locally-defined, fluid and constellational social meanings (Eckert 2008 and 2000, Podesva 2007, Silverstein 2003, Ochs 1992 etc.)

- Variation between speakers and listeners in usage and judgments (Campbell-Kibler 2005, Babel 2007, etc.)

- Nested identities and contextual saliency of ethnolinguistic identities (Fishman 1999).

- Speakers (and, aggregately, speech communities) may use linguistic variants to distinguish themselves and create a persona.

- Perceived nationality does have an impact on perception. (Niedzielski 1999, Hay et al. 2006)

Differentiating Canadian and U.S. Dialects in the Northwest

- ANAE suggests that "Canada" is very similar to the "Midlands" and "the West." But… the "West" is geographically huge! (Labov, Ash, and Boberg 2006)

- Canada is differentiated by Canadian Shift (downward, backward movement of /i, e, æ/) & Raising of /aw/ and, questionably, /ay/.

- Evidence from Boberg (2008) that Vancouver and Toronto may participate in similar changes, including /æ/, providing evidence for a more urban dialect of Canadian English.

- Boberg (2008) also describes /æ/ as one of the most regionally-differentiating diagnostics in North America.

Review of the Changes: Vancouver English
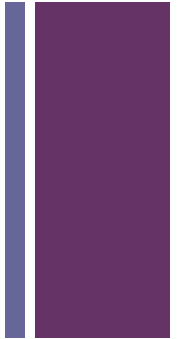
Prior observations of /æ/ retraction in Vancouver suggest:

It is a change in progress being led by middle-class women, but advancing among men and women.

Retracted /æ/ is a below-consciousness variable, not stigmatized or subject to stylistic variation; possibly an indicator of West Coast Canadian English.

Retracted /æ/ may be characterized by a normalized F2 less than 1825Hz in a single point analysis.

Retraction of /æ/ may be observed by relative Mean Cartesian Distance of /æ/ to /uw/ in which /æ/ has a lower F2 (Boberg notes large sd. devs!).

Retraction occurs before anterior nasals {n, m} and nasal obstruent clusters, voiceless fricatives, and occasionally before laterals. (Hall 2000)

(Esling and Warkentyne 1993, Hall 2000, Labov et al. 2006, Sadlier-Brown and Tamminga 2008, Boberg 2008, Pappas and Jeffrey 2013)

Vancouver Vowels: Sadlier-Brown and Tamminga 2008
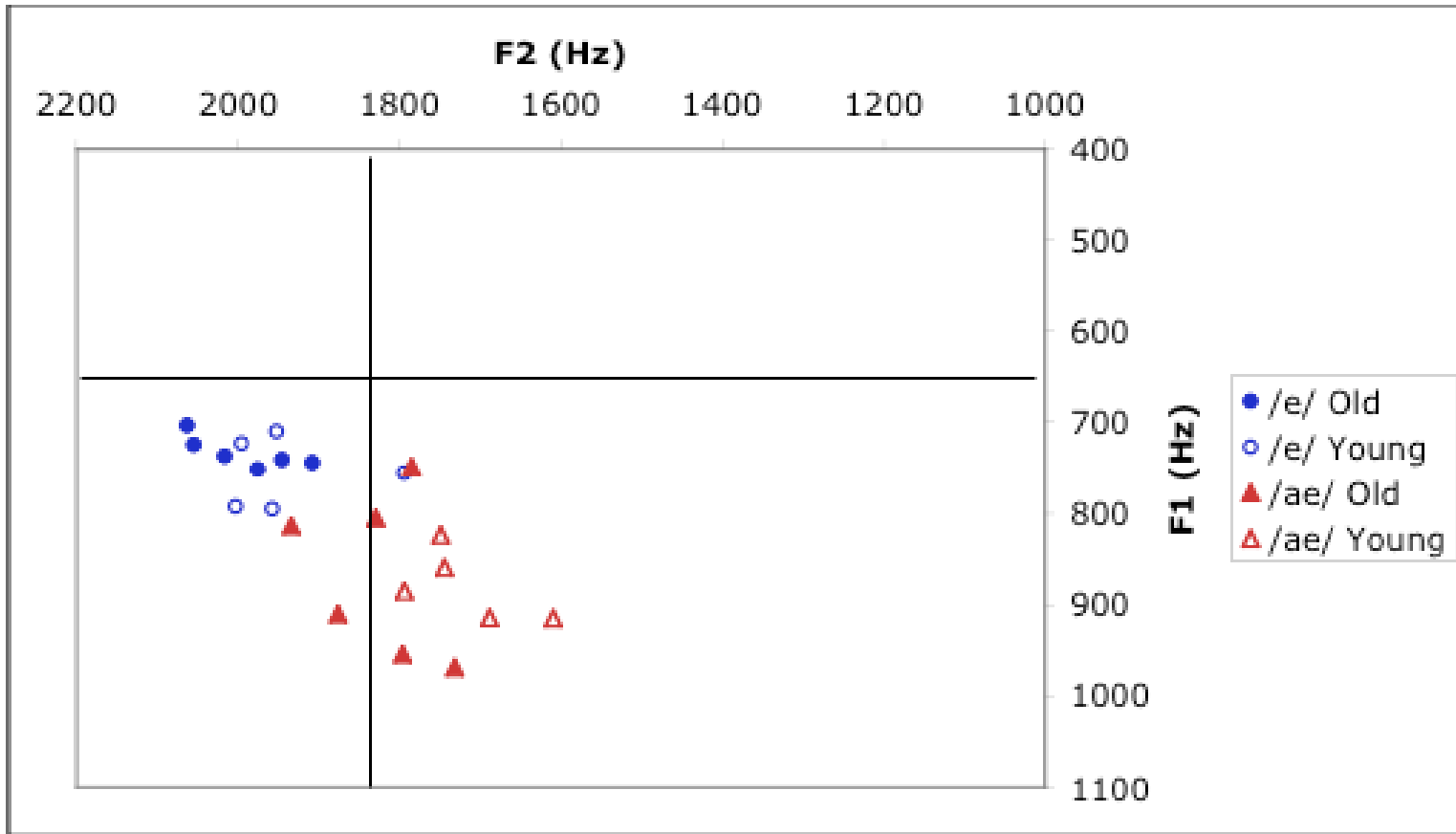
Review of the Changes: Seattle English

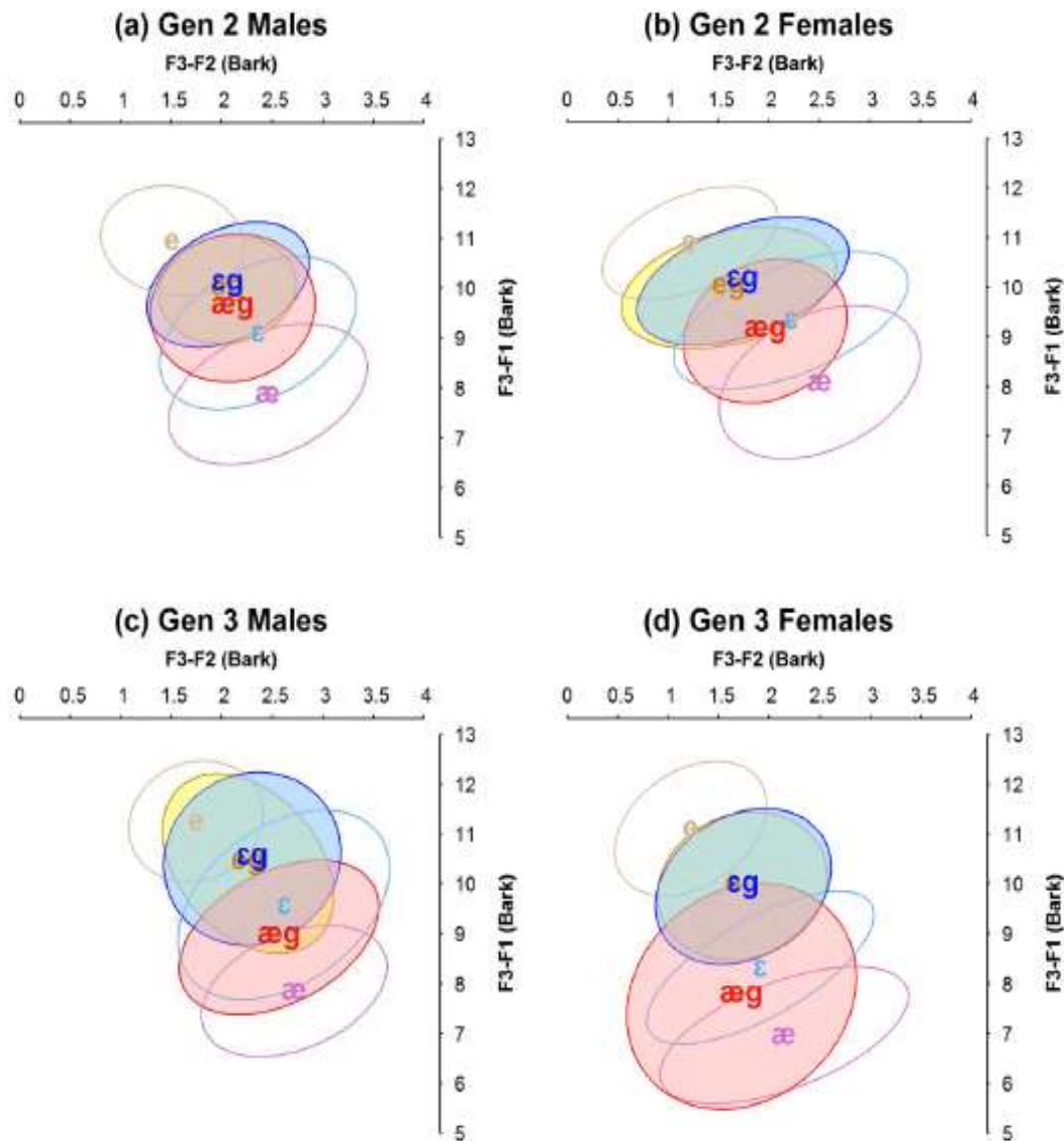Pre-velar tensing and raising of /æ/ is common among Washington speakers. (Boberg 2008, Wassink et al. 2009)

Men may merge *bag* and *beg*; woman may merge *bagel* and *beg.*

This feature may be stigmatized and does show sensitivity to stylistic variation.

Lack of pre-nasal raising of /æ/ may distinguish Washington speakers from Northern Cities and Canadian speakers.* (Boberg 2008 and Riebold 2012 vs. Wassink et al. 2009)

Freeman 2013 raises questions about completion of the change.

No accounts have documented /æ/ retraction among Washington or Seattle speakers.
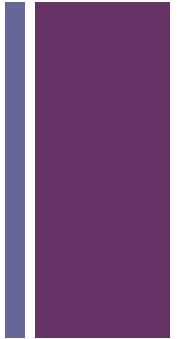
(a) Gen 2 Males
F3-F2 (Bark)

(b) Gen 2 Females
F3-F2 (Bark)

(c) Gen 3 Males
F3-F2 (Bark)

(d) Gen 3 Females
F3-F2 (Bark)

Figure 2. F1xF2 midpoint plots for each age/gender group. Older speakers (Gen 2) are on the top panels (a-b), younger (Gen 3) on the bottom (c-d); males on the left, females are on the right. Ellipses show two standard deviations around the mean of each vowel. The prevelar ellipses are shaded (/æg/ pink, /ɛg/ blue, /eg/ yellow), the plain vowels outlined (/æ/ violet, /ɛ/ light blue, /e/ tan). Note that with nearly identical means, the label for /eg/ is often obscured by that of /ɛg/.

From Freeman 2013,

Bag, beg, and bagel: prevelar raising and merger in Pacific Northwest English

Research Questions

- Confirm attested vowel changes in progress using consistent methodology:

- Is prevelar /æ / raising in Seattle? Pre-nasal? Other contexts?

- Is prevelar /æ/ raising in Vancouver? Pre-nasal? Retracting elsewhere?

- Confirm that (height of) /aw/ raising continues to differentiate Seattle and Vancouver English.

- Better understand the cultural perceptions and stereotypes speakers have about each other.

- Goal: expand into larger production study to inform perceptual study.

Small-Scale Pilot

- Small speaker base, n=4 (2 Vancouver; 2 Seattle)

- All female, working/middle class speakers in their mid-20s.

- All college-educated or currently enrolled in courses.

- Born and raised in Greater Vancouver and Greater Seattle.

- Same occupation: Marketing and Community Relations Team Leaders at Whole Foods Market, a natural grocery store.

- Job functions include media outreach (social and other), writing website copy, public relations, and acting as a company representative to other Team Members and community members.

- Weekly/regular communication with professional contacts in the other city; personal contacts remain largely within city of origin.

Methods

Sound file recordings of individual speakers were imported into PRAAT.

Due to the small number of tokens, vowel nuclei were hand-coded using a word/vowel tier in PRAAT.

Vowel formant data was automatically at time proportional intervals (20%, 50%, 80%) extracted using PRAAT Vowel Analyzer script (Riebold 2013).

Data normalized using vowel-intrinsic Bark Difference Metric in NORM (Thomas and Kendall 2007).
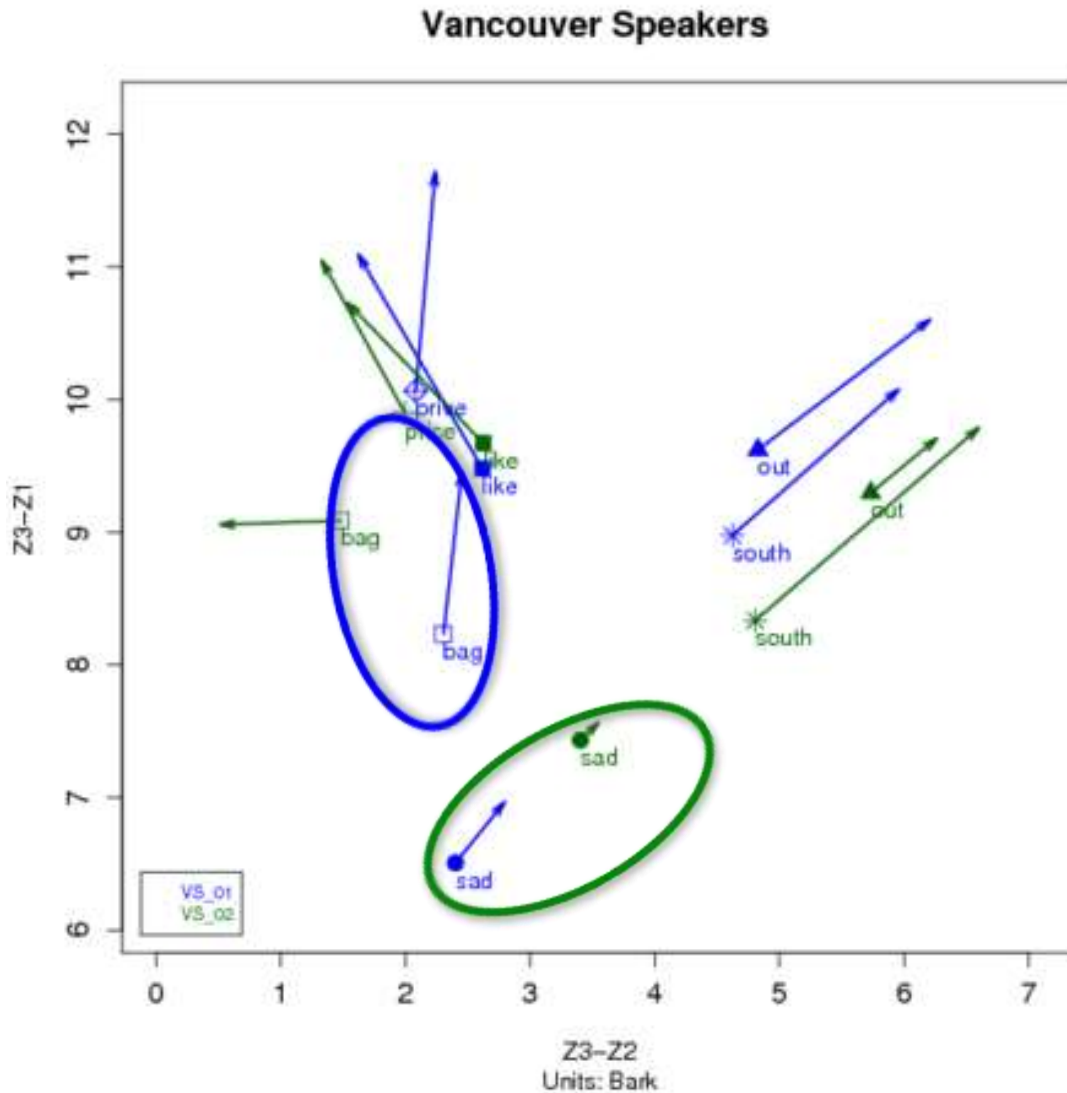
Bark-converted F_3 - F_2 is used to plot the normalized front-back dimension

Bark-converted F_3 - F_1 is used to plot the normalized height dimension.

Data from 50% and 80% time points plotted.
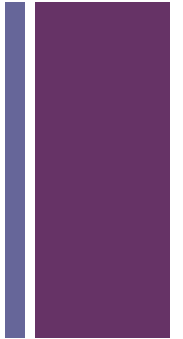
Results: Vancouver Speakers

Vancouver Speakers

Pre-velar fronting vs. pre-velar raising of /æ/; variation between speakers?
VS 01 *bag*
VS 02 *bag*

Retraction with raising in other contexts?

Consistent raising of /aw/ nuclei. For one speaker (blue), little difference between *South* and *out*.

VS 01 *out* and *South*

Results: Seattle Speakers

Seattle Speakers
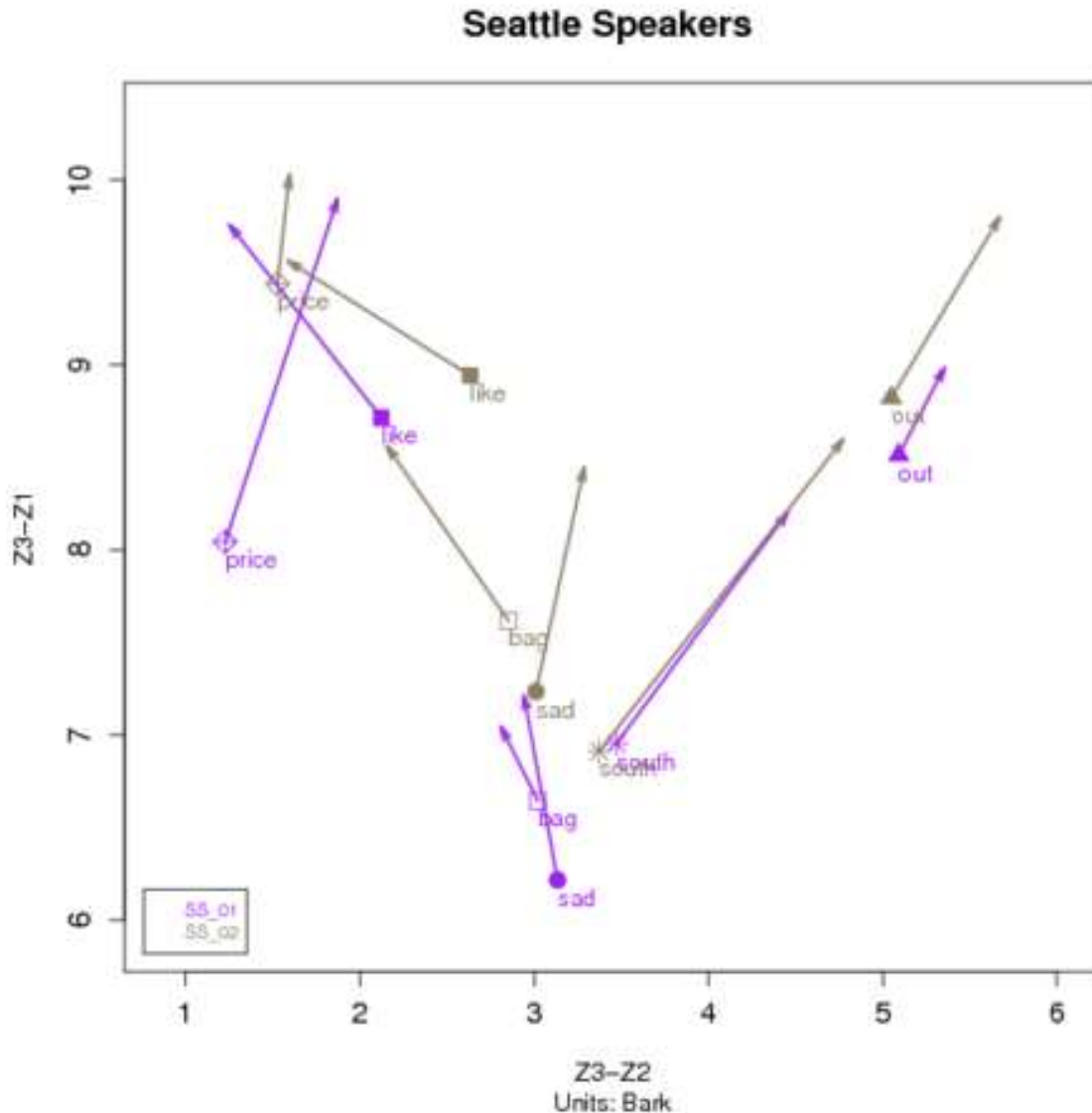
Mild pre-velar fronting and raising for one…
SS_01 *bag*
SS_02 *bag*

Raising in other contexts?

Raising for *out*, lower nuclei for *South*; lexical effect?

Variation with respect to /ay/ trends. Raising for some speakers?

+ Results:

Seattle and Vancouver Speakers

Vancouver speakers have higher nuclei for pre-velar /æ/ and showing more raising/fronting than Seattle speakers.

Vancouver speakers have higher nuclei for raised /aw/ and raise higher than Seattle speakers, more pronounced for some lexical items than others.

/ay/ nuclei are also higher for Vancouver speakers.

Discussion

- Preliminary findings may reveal differences for Seattle and Vancouver speakers that are anticipated based on prior research.

- These include, in particular, different trajectories for the front vowel /æ/ by which Vancouver speakers may show pre-velar raising or fronting and retraction in other contexts.

- Has /æ/ raising become stigmatized among Seattle speakers?

- More data is needed!

- More speakers, more phonetic environments, more information about social factors in the equation, more differentiation by task type.
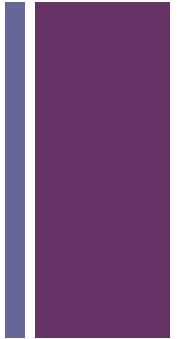
Future Production Study

Word list task: 220 tokens X 3 =660 total per speaker; 26,400 total
Cultural Identity Survey conducted as Sociolinguistic Interview

	/aj/ -vce	/aj/ +vce	/aw/ -vce	/aw/ +vce	/æ/ -vce	/æ/ +vce	/ɛ/ -vce	/ɛ/ +vce	/e/ -vce	/e/ +vce
_[lab]	5	5	n/a	n/a	5	5	5	5	5	5
_[cor]	5	5	5	5	5	5	5	5	5	5
_[vel]	5	n/a	n/a	n/a	5	5	5	5	5	5
_[+cont]	5	5	5	5	5	5	5	5	5	5
_[nasal]	n/a	5	n/a	5	n/a	5	n/a	5	n/a	5
_[l]	n/a	5	n/a	5	n/a	5	n/a	5	n/a	5
TOTAL	20	25	10	20	20	30	20	30	20	30

Production Study: Analysis

Cultural Identity Survey as Sociolinguistic Interview:

Understand whether attitudes towards the neighboring city or sense of municipal connectedness may relate to patterns of usage.

Do changes show distinct levels of meta-linguistic awareness for the two populations?

Same methods as pilot, only using Forced Alignment to extract tokens and providing statistical analysis.

Vowel formant trajectories plotted using cubic or quadric polynomial function (Wassink and Koops 2013).

Smoothing Spline ANOVA to describe vowel trajectory, not just mid-point data (Wassink and Koops 2013).

Conclusion: Sorry, Mr. Zapato

Linguistically-uniform Cascadia? Not any time soon!

Reason to believe that different patterns of usage around stereotypical variants such as /aw/ persist with stability between Vancouver and Seattle speakers.

/ay/ raising may also continue for Vancouver talkers.

Furthermore, below-consciousness changes or distinct usage patterns involving the front vowel system, (in particular, the low front /æ/) may be creating additional indicators between Vancouver and Seattle speakers.

More research is needed to detail these precise differences and assess the extent to which listeners rely on these cues as indicators, markers, or stereotypes of municipal or national origin in perception.

+ Conclusion
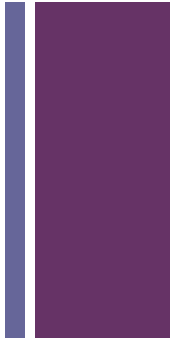
+ Appreciations:

Alan Yu, Victor Friedman, Alicia Beckford Wassink, John Riebold, Valerie Freeman, and UW Socio Brown Bag, Emily Sadlier-Brown, Panos Pappas

and

CWSL Conference Organizers!!

References

Anisfeld, Elizabeth and Wallace E. Labmbert. 1964. Evaluational reactions of bilingual and monolingual children to spoken language. Journal of Abnormal and Social Psychology, 69, 89-97.

Babel, Molly. 2007. Social judgments and their acoustic cues in read speech. UC Berkeley Phonology Lab Annual Report, pp. 226-264.

Bender, Emily M. 2001. Syntactic Variation and Linguistic Competence: The Case of AAVE Copula Absence. Ph.D. thesis, Stanford University.

Boberg, Charles. 2010. The English Language in Canada: Status, History and Comparative Analysis. New York: Cambridge University Press.

_____. 2008. Regional Phonetic Differentiation in Standard Canadian English. Journal of English Linguistics, 36.2: 129-154.

Boersma, Paul and Weenink, David. 2014. Praat: doing phonetics by computer [Computer program]. Version 5.3.62, retrieved 2 January 2014 from http://www.praat.org/

Bucholtz, Mary, A.C. Liang and Laurel Sutton. 1999. *Reinventing identities: the gendered self in discourse*. Oxford University Press.

Campbell-Kibler, Kathryn. 2007. Accent, (ING) and the social logic of listener perceptions. American speech, 82.32-64.

_____. 2005. Listener perceptions of sociolinguistic variables: The case of (ING). PhD Thesis, Stanford University.

Carnegie Mellon Online Pronouncing Dictionary of English (v0.7a). Available online at http://svn.code.sf.net/p/cmusphinx/code/trunk/cmudict.

Chambers, J. K. (1973) Canadian Raising. Canadian Journal of Linguistics 18, 113–35.

_____ and Hardwick, Margaret (1986) Comparative sociolinguistics of a sound change in Canadian English. English World-Wide 7, 21–46.

References

Clarke, Sandra (ed.) 1993. Focus on Canada. In Varieties of English Around the World. Amsterdam: J. Benjamins.

Clopper, Cynthia G., Janet B. Pierrehumbert, Terrin N. Tamati. 2010. Lexical neighborhoods and phonological confusability in cross-dialect word recognition in noise. Laboratory Phonology 1, 65-92.

_____ and Ann R. Bradlow. 2008. Perception of dialect variation in noise: Intelligibility and classification. Language and Speech, 51, 175-198

_____ and David B. Pisoni. 2004. Some acoustic cues for the perceptual categorization of American English regional dialects. Journal of Phonetics 32: 111-40.

D'Arcy, Alexandra. 2005. The development of linguistic constraints: Phonological innovations in St. John's English. Language Variation and Change, 17.3: 327-355.

De Decker, P. & Jennifer Nycz. 2006. A New Way of Analyzing Vowels: Comparing Formant Contours Using Smoothing Spline ANOVA. NWAV 35, Columbus, Ohio.

Drager, Katie, Rachel Schutz, Ivan Chik, Kate Hardeman and Victor Jih. 2012. When hearing is believing: Perceptions of speaker style, gender, ethnicity, and pitch. Paper presented at the LSA Annual Meeting. Portland, January 2012.

_____. 2011. Speaker age and vowel perception. *Language and Speech* 54(1): 99-121.

_____. 2010. Sociophonetic Variation in Speech Perception, Language and Linguistics Compass 4/7 (2010): 473–480.

_____. 2005. From bad to bed: the relationship between perceived age and vowel perception in New Zealand English. *Te Reo* 48:55-68.

Eagleton, Terry. 1991. Ideology: An introduction. New York: Verso.

Eckert, Penelope. 2000. *Linguistic Variation as Social Practice*. Oxford: Blackwell.

_____. 2008. Variation and the indexical field. Journal of Sociolinguistics 12/4, 2008: 453:476.
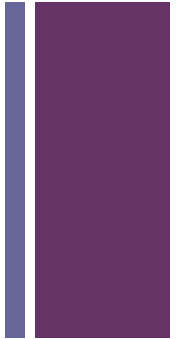
+ References

Esling, John E. and Henry J. Warkentyne. 1993. Retracting of /æ/ in Vancouver English. In S. Clarke (ed.), *Focus on Canada.* Amsterdam: John Benjamins, 229-246.

Evans, Betsy. 2010. Seattle to Spokane: mapping English in WA state. NWAV 39, San Antonio, TX.

Fishman, Joshua, ed. 1999. Handbook of Language and Ethnic Identity. New York: Oxford University Press.

Foulkes, Paul, Gerard J. Docherty, Ghada Khattab, and Malcah Yaeger-Dror. 2010. Sound judgments: perception of indexical features in children's speech. A Reader in Sociophonetics, ed. by Dennis Presont, Nancy Niedzielski. Berlin: Mouton de Gruyter.

Freeman, Valerie. 2013. Bag, beg, bagel: Pre-velar raising & merger in Pacific Northwest English. Generalist Paper Defense, University of Washington, December 13th, 2013.

Froschauer, Karl, Nadine Fabbi, and Susan Pell. 2006. Convergence and Divergence in North America: Canada and the United States. Centre for Canadian Studies, Simon Fraser University.

Gumperz, John and Dell Hymes (1972). *Directions in sociolinguistics: The ethnography of communication*. New York: Holt, Rinehart and Winston.

Hall, Erin. 2000. Regional variation in Canadian English vowel backing. Toronto Working Papers in Linguistics, 18.

Hay, Jennifer and Katie Drager. 2010. Stuffed toys and speech perception. Linguistics 48(4):865-892.

_____, Aaron Nolan and Katie Drager. 2006a. From Fush to Feesh: Exemplar Priming in Speech Perception. *The Linguistic Review*, 23 (3): 351-379.

_____, Paul Warren, and Katie Drager. 2006b. Factors influencing speech perception in the context of a merger-in-progress. Journal of Phonetics 34: 458-84.

References

Heller, Monica, with Mark Campbell, Phyllis Dalley and Donna Patrick. 1999. Linguistic Minorities and Modernity: A Sociolinguistic Ethnography. Longman: London and New York.

Hutchinson, John and Anthony D. Smith (eds.) 1996. Ethnicity. New York: Oxford.

Joseph, John Earl. 2004. Langauge and Identity: National, Ethnic, Religious. New York: Palgrave Macmillan.

Johnson, Keith, Elizabeth A. Strand, and Mariapaola D'Imperio. 1999. Auditory-visual integration in vowel perception. Journal of Phonetics 27: 359-84.

Koops, Christian, Elizabeth Gentry, and Andrew Pantos. 2008. The effect of perceived speaker age on the perception of PIN and PEN vowels in Houston, Texas. University of Pennsylvania Working Papers in Linguistics: Selected papers from NWAV. 36 (14). 91–101.

Labov, William, Sharon Ash and Charles Boberg. 2006. *The Atlas of North American English: phonetics, phonology, and sound change: a multimedia reference tool.* Berlin: Mouton de Gruyter.

_____. 2001. The anatomy of style-shifting. In Eckert, P. and Rickford, J.R., eds, *Style and sociolinguistic variation,* pages 85-108. Cambridge University Press, Cambridge.

_____. 1973-77. Q-GEN-II: Sociolinguistic Interview Modules.

Lambert, Wallace E. 1967. A social psychology of bilingualism. Journal of Social Issues 23: 91-109.

_____, Hannah Frankel and G.R. Tucker. 1966. Judging personality through speech: A French-Canadian example. The Journal of Communication, 1966, 16: 305-321.

_____, R.C. Hodgson, R.C. Gardner, and S. Fillenbaum. 1960. Evaluative reactions to spoken language. Journal of Abnormal and Social Psychology, 1960, 60, 44-51.

Leibkind, Karmela. 1999. Social Psychology. In Joshua Fishman (ed.) 1999, Handbook of Language and Ethnicity, New York: Oxford.

References

Levon, Erez. 2007. Sexuality in context: variation and the sociolinguistic perception of identity. Language in Society 36. 533–54.

Munson, Benjamin. 2010. Levels of phonological abstraction and knowledge of socially motivated speech-sound variation: A review, a proposal, and a commentary on the papers by Clopper, Pierrehumbert, and Tamati; Drager; Foulkes; Mack; and Smith, Hall, and Munson. To appear in Laboratory Phonology 1.

Niedzielski, Nancy. 1999. The effect of social information on the perception of sociolinguistic variables. Journal of Language and Social Psychology 18. 62–85.

Pappas, Panayiotis A. and Michelle Jeffrey. In Press. "Raising and Shifting in B.C." Methods in Dialectology 14, University of Western Ontario, August 2011.

Ochs, Elinor. 1992. Indexing gender. In *Rethinking context: Language as an interactive phenomenon*, ed. by Alessandro Duranti and Charles Goodwin, 335–

358. Cambridge: Cambridge University Press.

Pappas, Panayiotis A. and Michelle Jeffrey. In Press. Raising and Shifting in B.C. Methods in Dialectology 14, University of Western Ontario, August 2011.

Plichta, Bartek, and Dennis R. Preston. 2005. The /ay/s have it: The perception of /ay/ as a North-South stereotype in US english. *Acta Linguistica Hafniensia* 243–285. Theme Issue on "Subjective Processes in Language Variation and Change", Edited by Tore Kristiansen, Nikolas Coupland and PeterGarrett.

Podesva, Robert J. 2007. Phonation type as a stylistic variable: The use of falsetto in constructing a persona. Journal of Sociolinguistics 11.4: 478-504.

Preston, Dennis R. 1993. Two Heartland Perceptions of Language Variety. In *Heartland English: Variation and Transition in the American Midwest,* ed. Timothy C. Frazer 23-47. Tuscaloosa: University of Alabama Press.

—— and Daniel Long. 1999. Handbook of Perceptual Dialectology, vol. 1. Amsterdam: Philadelphia: J. Benjamins.

References

—— and Gregory C. Robinson. 2005. Dialect perception and attitudes to variation. In *Clinical Sociolinguistics*, ed. by Martin J. Bell. Oxford: Blackwell.

Preston, Malcolm S. 1963. Evaluative reactions to English, Canadian French and European French voices. Unpublished M.A. thesis, McGill University, Redpath Library 1963.

Purnell, Thomas, William Idsardi, and John Baugh. 1999. Perceptual and phonetic experiments of American English dialect identification. Journal of Language and Social Psychology 18:10–30.

Rickford, John R. 1985. Standard and non-standard language attitudes in a creole continuum. In *Language of Inequality*, ed. by Nessa Wolfson and Joan Maines. New York: Mouton De Gruyter.

Riebold, John M. 2012. Please Merge Ahead: The Vowel Space of Pacific Northwest English. Northwest Linguistics Conference 28, Seattle, WA, April 7th, 2012.

Sadlier-Brown, Emily. 2012. Homogeneity and autonomy of Canadian Raising. World Englishes, 31, 4: 534-548.

_____ and Merideth Tamminga. 2008. "The Canadian Shift: Coast to Coast." CLA Annual Conference, May 31st- June 2nd, 2008.

Silverstein, Michael. 2003. Indexical order and the dialectics of sociolinguistic life. Language & Communication 23: 193-229.

_____. 1976. Shifters, linguistic categories, and cultural description. In *Meaning in anthropology*, ed. by Keith Basso and Henry Selby. Albuquerque, New Mexico: University of New Mexico Press.

Staum Casasanto, Laura. 2008. Experimental Investigations of Sociolinguistic Knowledge. Ph.D. Dissertation. Palo Alto: Stanford University.

Strand, Elizabeth. 1999. Uncovering the role of gender stereotypes in speech perception. Journal of Language and Social Psychology 18. 86–99.

References

Sumner, Meghan, and Arthur G. Samuel. 2009. The effect of experience on the perception and representation of dialect variants. Journal of Memory and Language 60. 487–501.

Thomas, Erik R. and Tyler Kendall. 2007. NORM: The vowel normalization and plotting suite. [Online Resource: http://ncslaap.lib.ncsu.edu/tools/norm/]

Wassink, Alicia Beckford et. al. 2009. The effects of style and gender on fronting and raising of /ae/, /e:/ and /E/ before /g/ in Seattle English. NWAV 38, October 2009

_____, and Chris Koops. 2013. Quantifying and Interpreting Vowel Formant Trajectory Information. NWAV 42, October 17, 2013, Pittsburgh, PA.

_____ and Jeffrey Conn. 2007-2009. Conversational topic guide tool, "Dialect evolution and ongoing variable linguist input: English in the Pacific Northwest 200 years after Lewis and Clark." Available online at:http://depts.washington.edu/sociolab/Documents/elicitation/ABW/ABW-11-09.pdf.

Woods, Howard B. 1993. A synchronic study of English spoken In Ottawa: Is Canadian English becoming more American? In Sandra Clarke (ed.), Focus on Canada. In Varieties of English Around the World. Amsterdam: J. Benjamins.

Zeller, Christine. 1993. Linguistic symmetries, asymmetries, and border effects within a Canadian/US sample. In Sandra Clarke (ed.) 1993. Focus on Canada. In Varieties of English Around the World. Amsterdam: J. Benjamins.
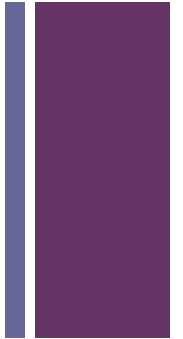
+ Introduction

Bi-directional relationship between phonetic variation and social meaning:

Social Meaning

Phonetic Variation
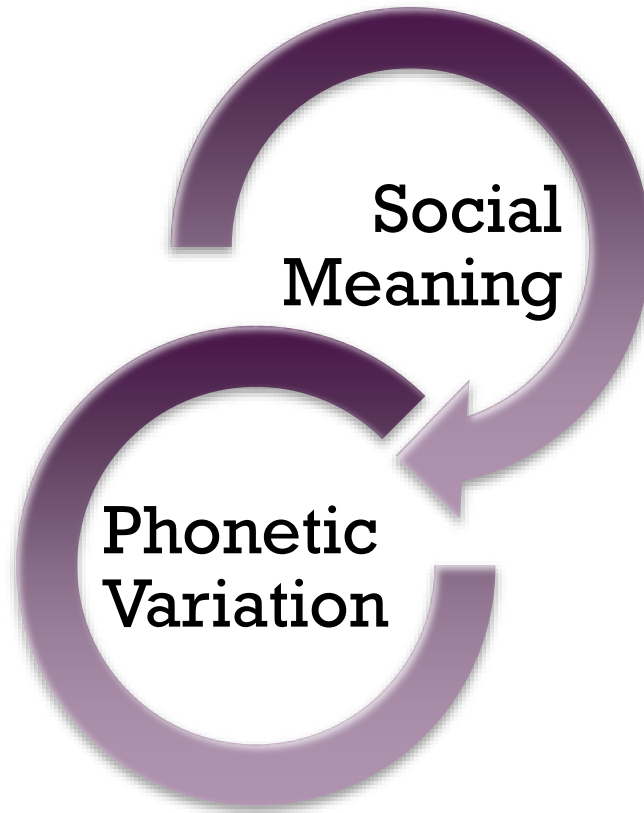
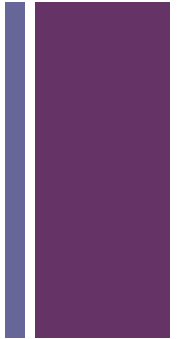Social judgments are affected by phonetic variation.

AND

Listener perception of phonetic variables is highly sensitive to social information.
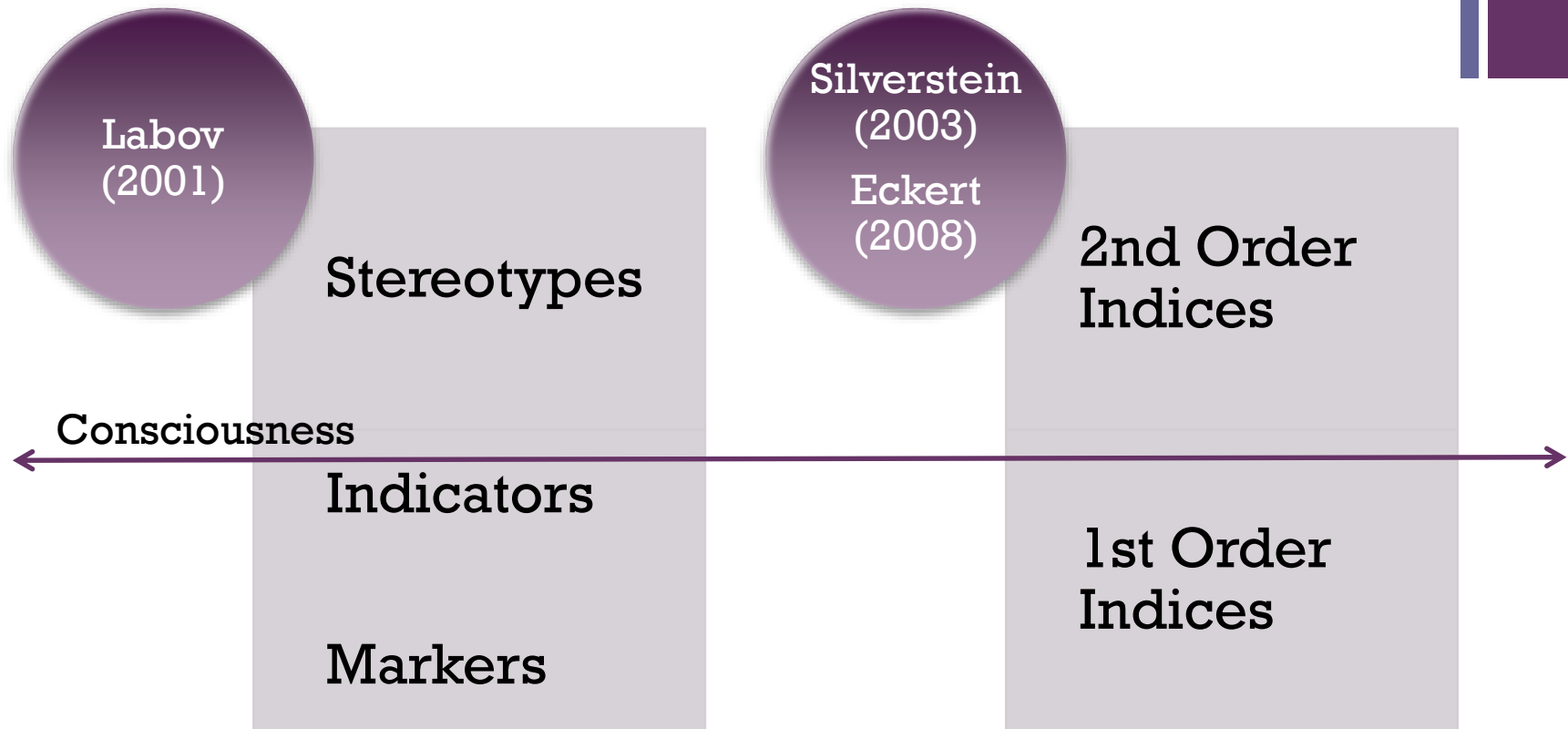
+ Introduction

- Phonetic variation activates listeners' stereotypes about speakers' race, region of origin, level of education, and even physical size and attractiveness. (Purnell, Idsardi & Baugh 1999, Campbell-Kibler 2007, Drager et al. 2012, Babel 2007)

- Listeners make different judgments about acoustic realities of speech depending on the social knowledge (the perceived gender, sexual orientation, social class or nationality) they have about the talker (Strand 1999; Johnson, Strand, and D'Imperio 1999; Hay et al. 2006b and Drager 2005; Hay et al. 2006a and Niedzielski 1999)

Social Meaning of Phonetic Variables

Labov (2001)

Silverstein (2003)

Eckert (2008)

Stereotypes

2nd Order Indices

Consciousness

Indicators

1st Order Indices

Markers

Listeners use multiple cues (not just stereotypes) to judge speakers' identities, regions of origin, etc. (Clopper and PisoniXXXXXXXXX, Levon 2006)

Defining retracted /æ / as below-consciousness and /aw/ raising as above…

Introduction

Listeners are active co-creators of social meaning!

Production Studies > Perception Studies

How do listeners differ in their reactions based on personal experiences and beliefs?

How do different types of sociolinguistic variables affect perception and listener judgments?

Advancing theories of social meaning and perception: We cannot hope to "decipher" social meaning by examining speaker behavior alone!

(Thomas 2002, Campbell-Kibler 2005, Drager 2010, Munson 2010)
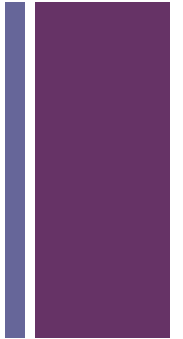
+ Perceptual Studies

The current study is investigating differential vowel trends within two communities.

Potentially variable predictors of social judgments:

1a) Type of information available: linguistic, social or both;
1b) Popular awareness of sociolinguistic variables in question (stereotype or not);
3) Variation between speech communities with respect to judgments;
4) Cultural identities and attitudes of the listeners.

Seattle and Vancouver speakers
Retracted /æ/ (below-consciousness variable)
Raised /aw/ as an (above consciousness variable)

Perceptual Studies

Prediction 1: Below-consciousness linguistic variables carry social information and can affect perception of social identity.

Prediction 2: Below-consciousness variables become more impactful primers for social judgments when they co-occur with a cue indexing the same social information.

Prediction 3: Listeners are more apt to rely on supplemental social information in addition to a below-consciousness variable when they are considering a variant that does not occur in their native dialect.

Prediction 4: When presented with variants not native to their dialect, listeners will be more responsive to stereotypical sociolinguistic cues than below-consciousness ones.

Perceptual Studies

- 2 experiments, between-subjects design

- 120 subjects in Seattle, 120 subjects in Vancouver

- 18-35 years

- Sample balanced for age and gender

- 12 conditions (6 per experiment), all subjects exposed to all conditions

- 12 native talkers to record stimuli, randomized pairing of talker voice to condition

- Stimuli identical in all other respects (no content difference to bias social judgments)

Perceptual Study: Experiment 1

- Effects of below-consciousness linguistic variable with and without above-consciousness variable on social judgments and perceived municipal origin

+/æ/ retraction +	+/æ/ retraction +	+/æ/ retraction +
no /aw/	unraised /aw/	raised /aw/
- /æ/ retraction +	- /æ/ retraction +	- /æ/ retraction +
no /aw/	unraised /aw/	raised /aw/

- Hear retracted variant in isolation and neutral variant in isolation

- Hear with raised /aw/ and with unraised /aw/

Perceptual Study: Experiment 1

Q: Are below-consciousness variables impactful in priming listener judgments of national identity?

Q: Does the presence of a stereotypical sociolinguistic variant coupled with social information affect judgments of the below-consciousness variable /æ/?

Q: Is the priming effect the same for native speakers of the dialect as well as for speakers of another dialect?

Prediction 1: Below-consciousness linguistic variables carry social information and can affect perception of national identity or dialectal region of origin.

Prediction 2: Raised /aw/ in conjunction with /æ/ -> greater likelihood of being from Vancouver.

Prediction 3: Speaker's make more inferences from a below-consciousness variable when considering their native dialect than when considering a dialect they do not speak or have less exposure to.

Perceptual Study: Experiment 2

Experiment 2: Effects of below-consciousness linguistic cue with social information on perceived nationality

+/æ/ retraction	+ /æ/ retraction	+ /æ/ retraction
+ No Social	-Canucks	+ Canucks
- /æ/ retraction	- /æ/ retraction	- /æ/ retraction
– No Social	-Canucks	+ Canucks

Speakers hear retracted variant in isolation; neutral variant in isolation

Speakers hear both variants paired with additional social information…
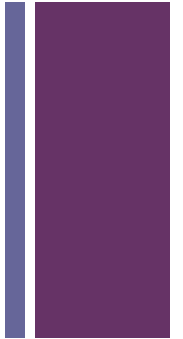
A man wearing a Canucks jersey in one condition and a Seahawks (-Canucks jersey) in the other.

Cues indirectly indexical of municipal or national identity.

Perceptual Study: Experiment 2

Q: Does adding social information strengthen or change the affect of /æ/ retraction on listeners' probability ratings of the talker's national identity?

Q: Does the inclusion of social information affect both Seattle and Vancouver subjects similarly?

Q: In the case of conflicting or mismatched cues about national identity of the speaker, does social information trump sociolinguistic information carried by a below-consciousness variable? In other words, are listeners more likely to assume Vancouver identity based on Canucks jersey without retraction or based on /æ/ retraction accompanying a Seahawks jersey?

Prediction 4: Below-consciousness variables become more impactful primers when they co-occur with a cue indexing the same social information.

Prediction 5: Listeners are expected to rely more on the visually-presented social information they receive as opposed to the potentially mismatched below-consciousness sociolinguistic cue they receive when making judgments of the talker's nationality.

Prediction 6: Listeners are more apt to rely on purely social information rather than a below-consciousness variable (i.e. rely on this variable as an indicator) when they are considering a feature that is not from their native dialect.

Perceptual Experiments: Analysis
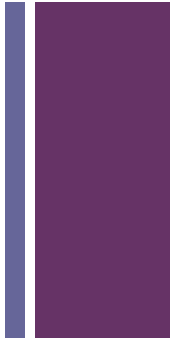
Visually present raw percentages of subjects' ratings

Mixed-effects linear regression to include:

- Listener nationality, age, and gender

- Conditional social information (sports jersey)

- Sociolinguistic cue (below-consciousness or above)

- Measure of dialectal exposure (derived from responses on the Cultural Identity survey)

- Talker gender

- Random effects for talker/listener.

Incorporate other methods as needed guided by Campbell-Kibler 2005, Hay and Drager 2006, Rickford 1985.