

The Third Vowel Shift in Kansas: A supra-regional shift with regional variation

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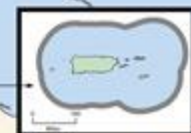
Kansas State University

NWAV 44

Toronto

Oct. 25th

Cooperative Ecosystem Studies Units

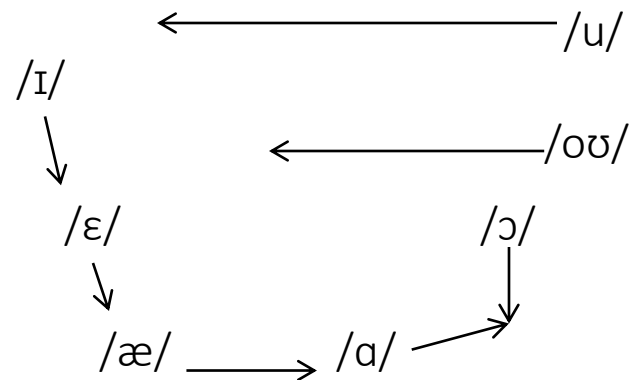


Labov, Ash, and Boberg 2006



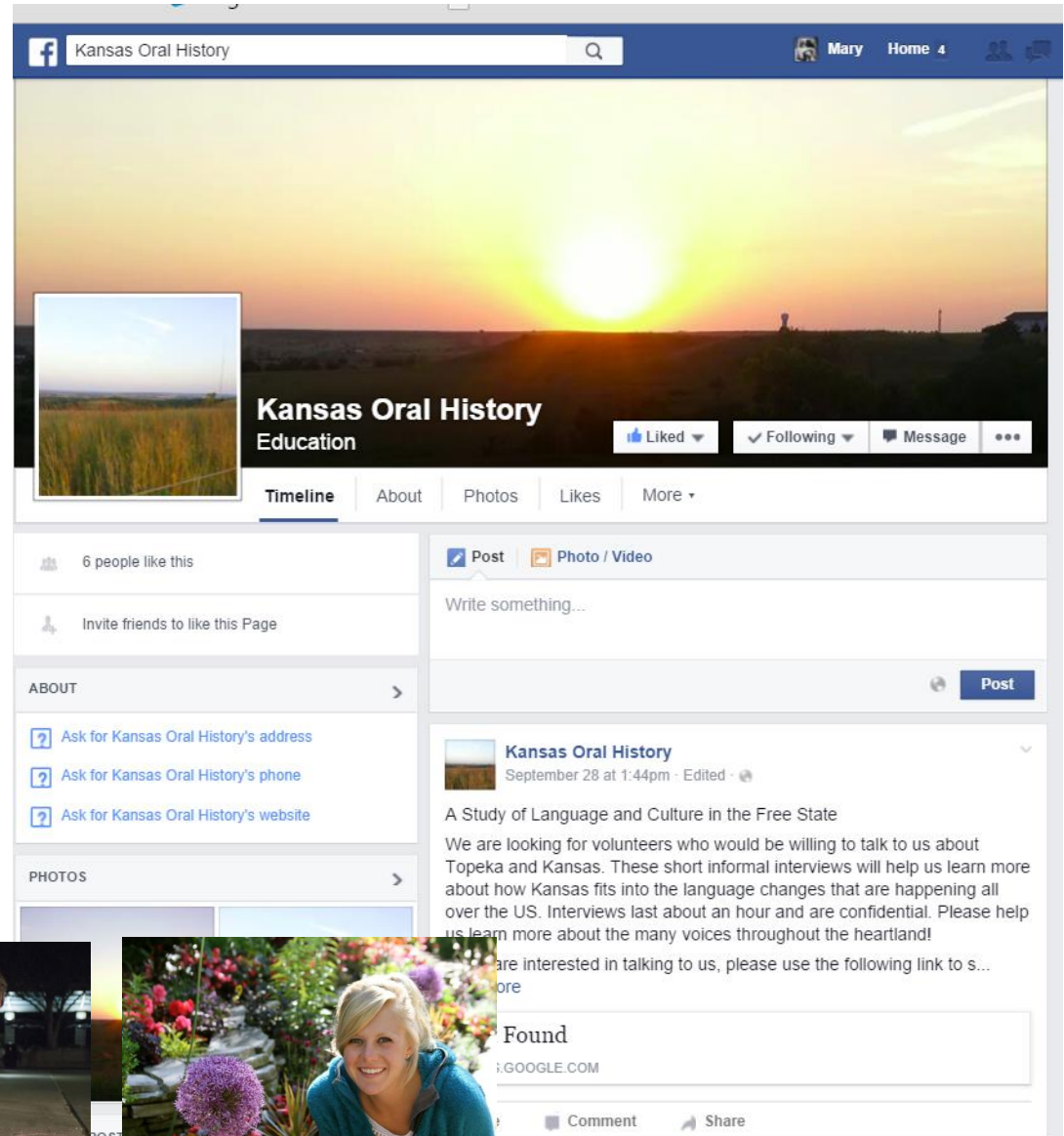
- Previous dialectology-style research in Wichita (Wyatt 1976) and Kansas (Hook 1990, Murray 1990, Von Schneidemessen 1990) shows a confluence of influences as well as few marked regional items
- Kansas City shows evidence of Third Dialect Shift (Strelluff 2014, Lusk 1974)
- Oklahoma shows some participation in the Southern Shift (Bakos 2013, Preston Today)

Third Dialect Shift



Kansas Speaks

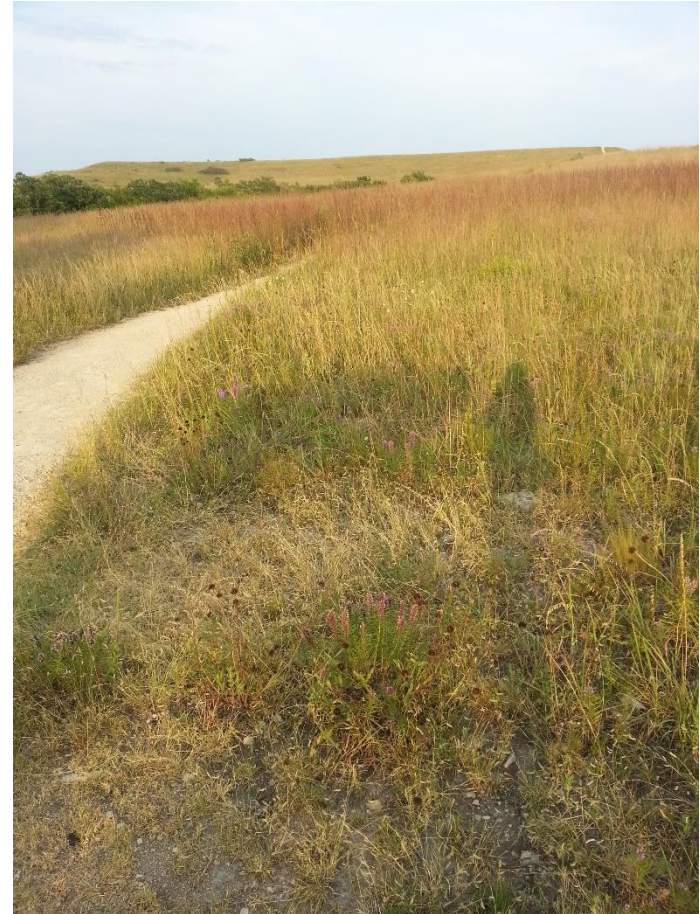
- 5 field sites
- 6 members
- 65 interviews
- 37 transcribed
- ~ 15 hours
- 26 aligned and extracted



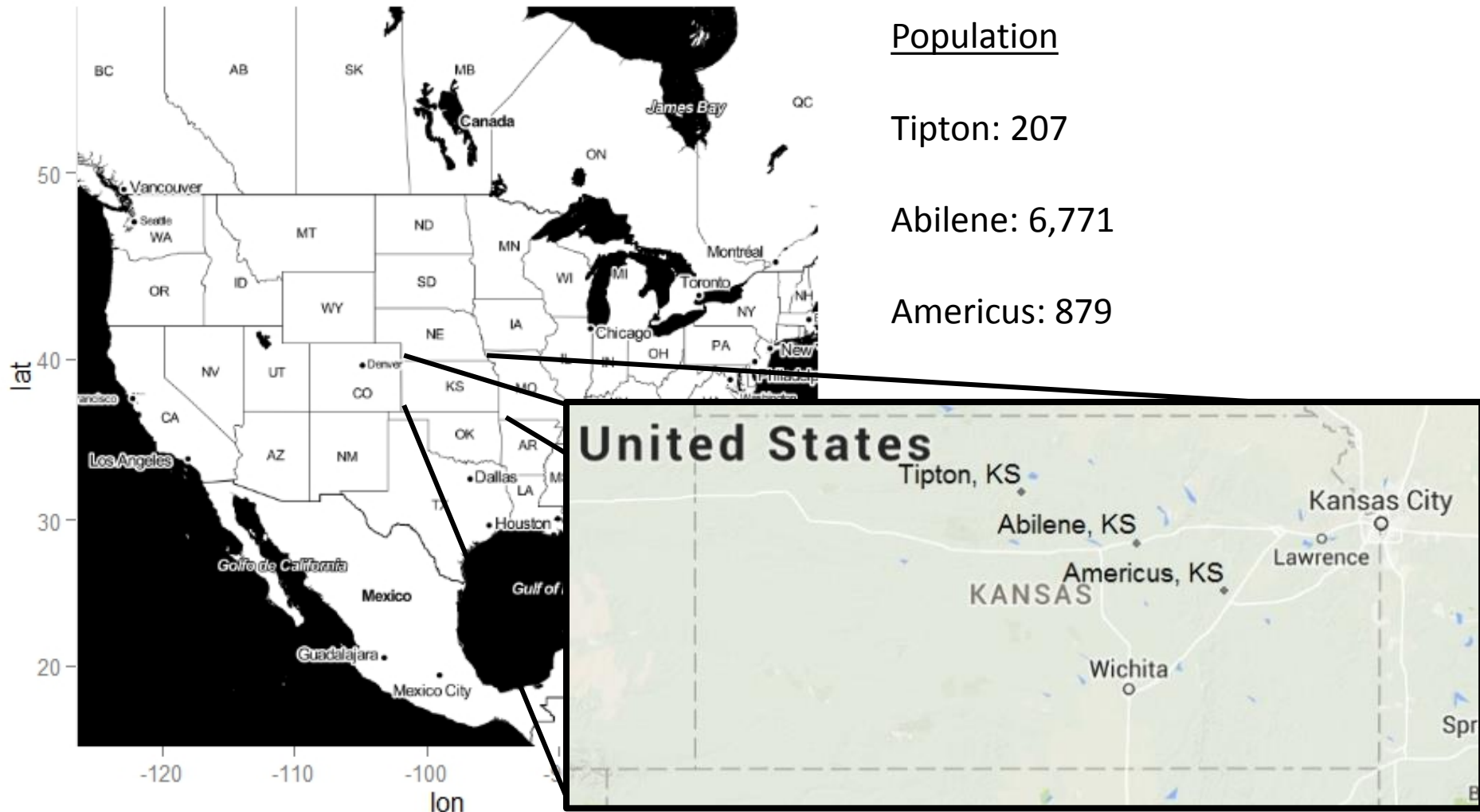
Goal 1: Document sound change in the central Great Plains region

Goal 2: Situate sound changes in reference to other regional sound changes in the US

Goal 3: Identify whether sound change patterns are distinct across rural, suburban, and urban communities, or whether patterns appear more uniform in this region



Communities



Speakers

	Tipton		Abilene		Americus		
Age Group	Female	Male	Female	Male	Female	Male	<i>Totals</i>
>35	2	1	3	1	5		12
<35	5	1	2	1	1	1	11
<i>Totals</i>	9		7		7		23

*Our two youngest speakers were removed from the 25 person analysis due to alignment issues

Tipton

- Self-sufficient community
 - Nearest city is 30 miles away
- School is independent from the public school system
 - Owned and operated by town members
- There has been only one church in town, the Catholic Church, for nearly 50 years
- Average commute in Mitchell county in 2013 was 10 min., up from 9 min in 1990
- Compare to national average 22.4 min in 1990, 25.8 min in 2013 (US Census American Community Survey)



Americus

- 10 miles from Emporia
- Traditionally a farming community, it has been transitioning to a commuter town
- While Americus has a high school, several of our participants attended schools in Emporia for better course selection and after school programs
- Lyon county commutes were 15 min. in 1990, 17 min in 2013



Abilene

- Established as part of a major cattle trail
- 25 miles to Junction City
- Manufacturing jobs (farming equipment, Russel Stover) employ the majority of people outside of education, healthcare, and service
- Commute time in Dickinson in 1990 was 17 min, up to 22 min in 2013



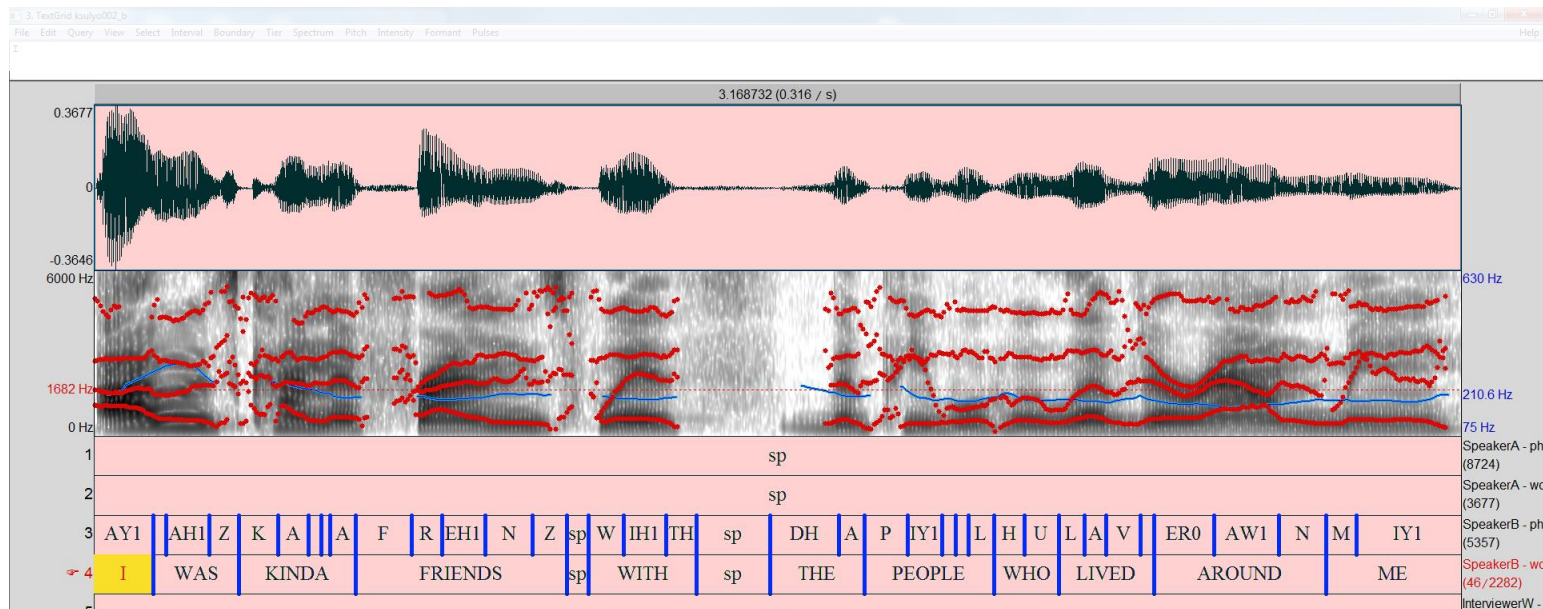
Network structure as a predictor of change?

- Tipton: Insularity may lead to preservation of older forms
- Americus: Changes in insularity may lead to a more innovative youth population compared to elderly generations
- Abilene: With a sustained identity as a cross-roads, and now a commuter town, this field site may lead innovation



Methods

- Interviews conducted by fieldworkers with close community ties
- Transcribed in Praat, double checked prior to and after alignment
- Unstressed tokens, tokens surrounded by liquids, frequent function words excluded from analysis
- Normalized using Lobanov (1971)



Analysis: 24,592

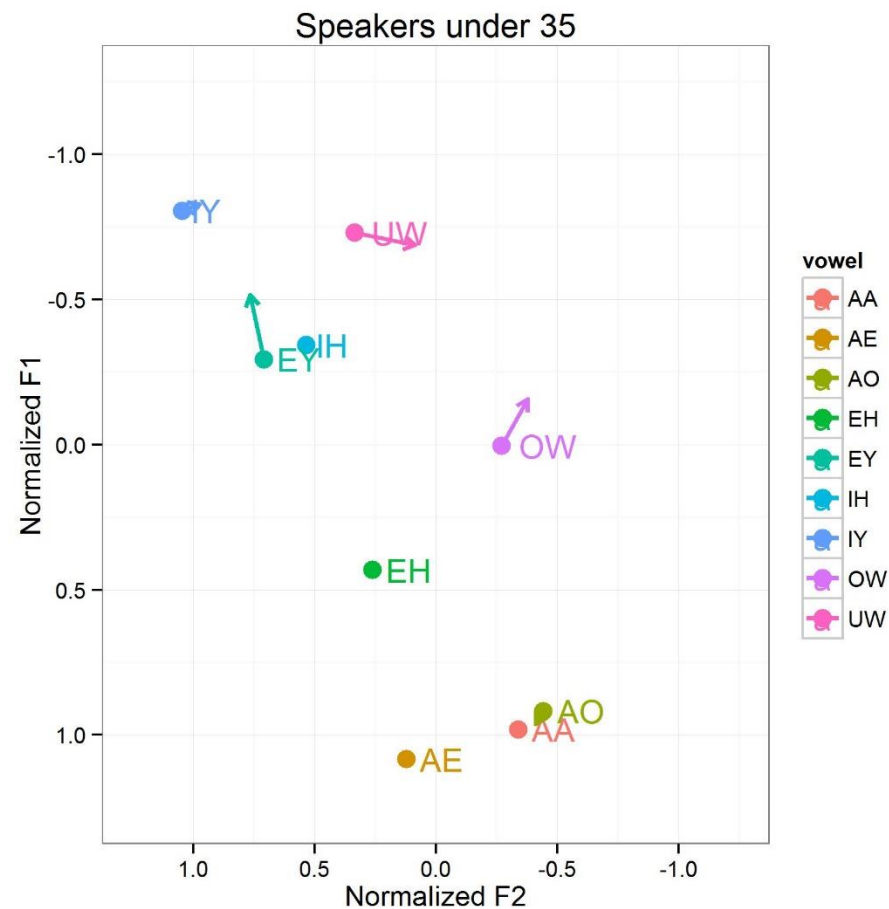
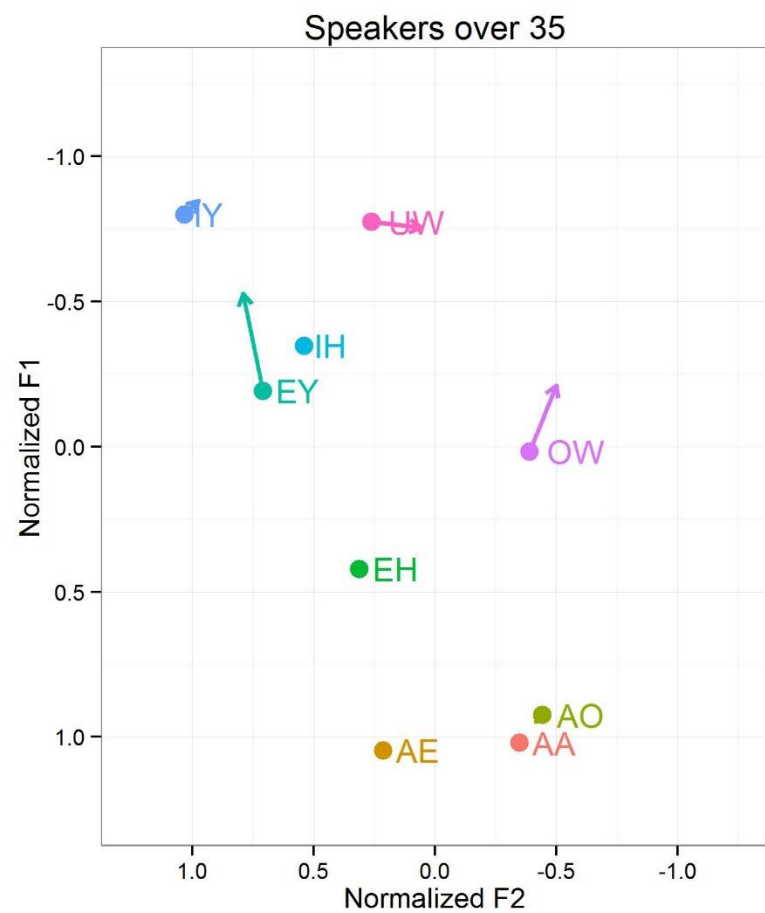
/iy/	/ɪ/	/ey/	/ɛ/	/æ/	/a/	other
1679	2202	2606	1935	3449	1638	11,083

Mixed effects models with preceding segment, following place, following manner, following voicing, following duration as fixed effects and speaker and word as random effects were run independently on normalized F1 and F2 values for each vowel class of interest

Goals 1 and 2

Document sound change in the central Great Plains region and situate the system within other regions of the US

3rd Vowel Shift in Progress



Lowering and backing

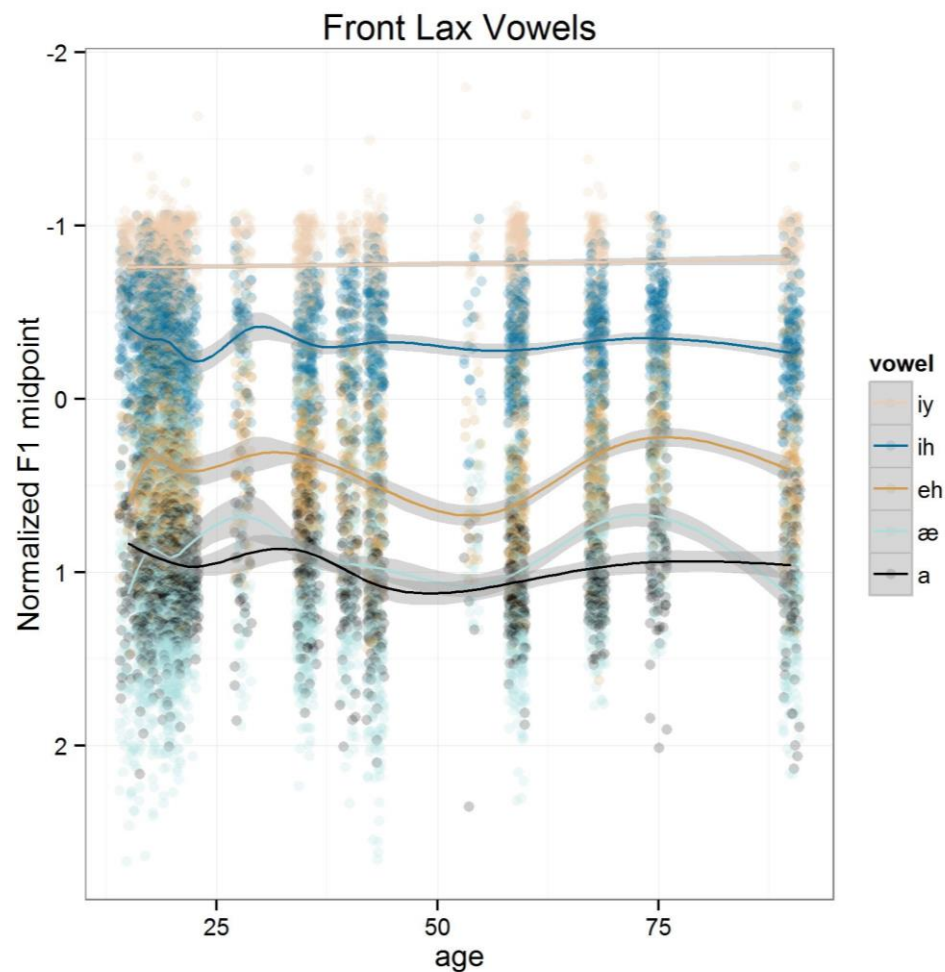
Of the front lax vowels

F1 Front Lax vowels

No significant change over time

- /æ/ and /ɑ/ in close proximity

Contrasts findings from
D'Onofrio, Eckert, Podesva, Pratt
& Van Hofwegen (2015); Durian
(2012), both of whom found /ɑ/
raising



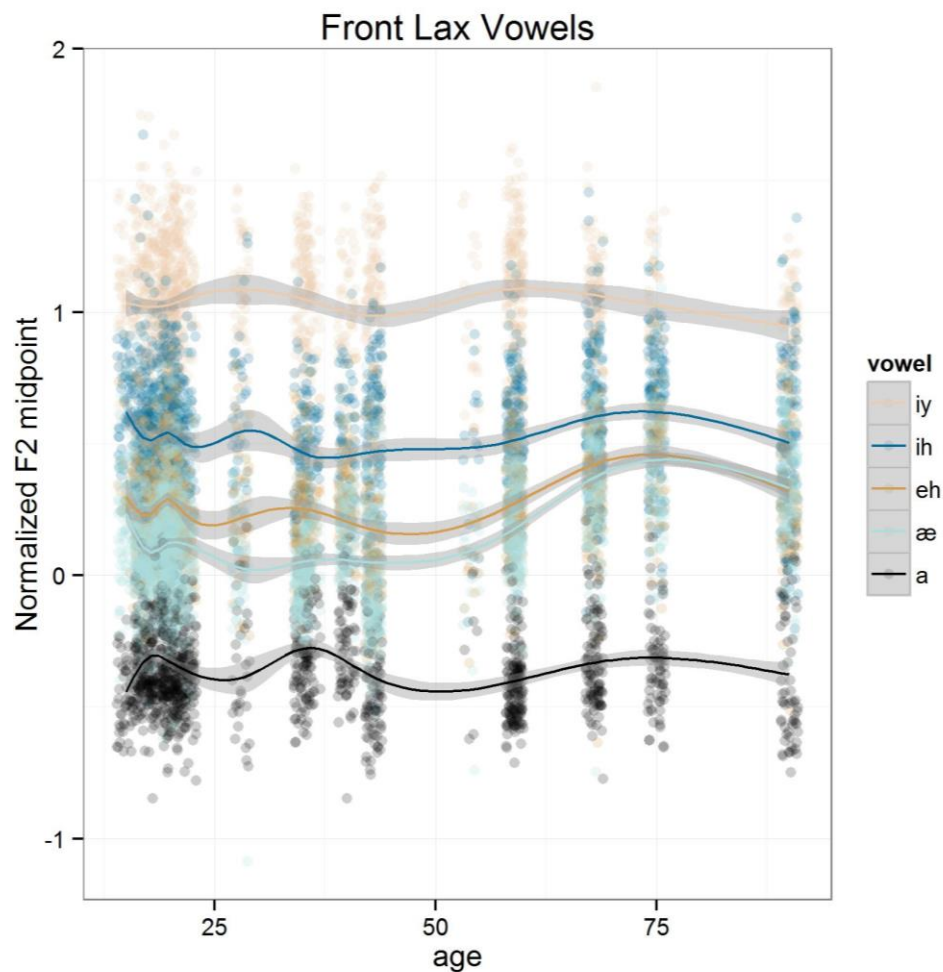
F2 Front Lax vowels

Age is significant for:

- /æ/** (0.003, $t=3.53$, $P=.01$)
- /ɛ/* (.002, $t=2.09$, $P=.05$)

Although phonetic factors are stronger

Similar to patterns found in Ohio (Durian 2012) and California (D'Onofrio et al 2012), but distinct from Kansas City where backing only occurs on /æ/ and /ɑ/ (Strelluf 2014)



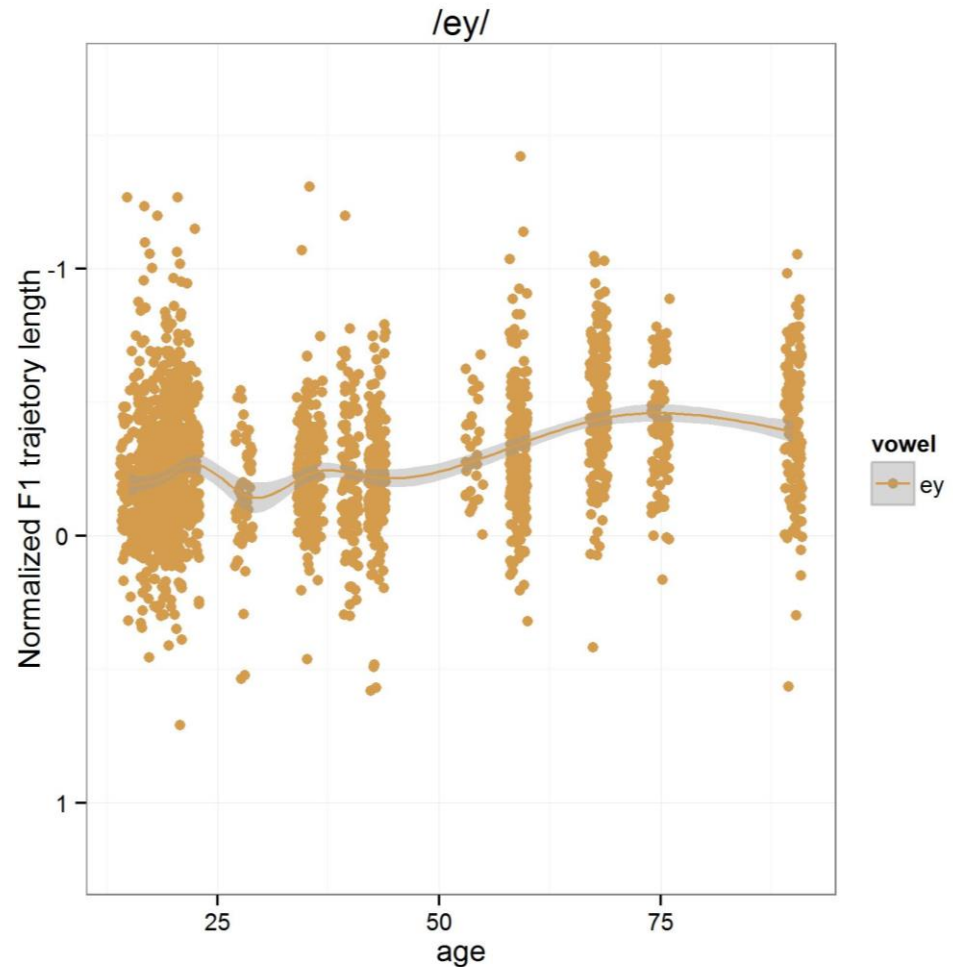
Non-Third Shift Changes: /EY/ F1

Age is significant ($-.003$,
 $t=-5.05$, $p = .001$)

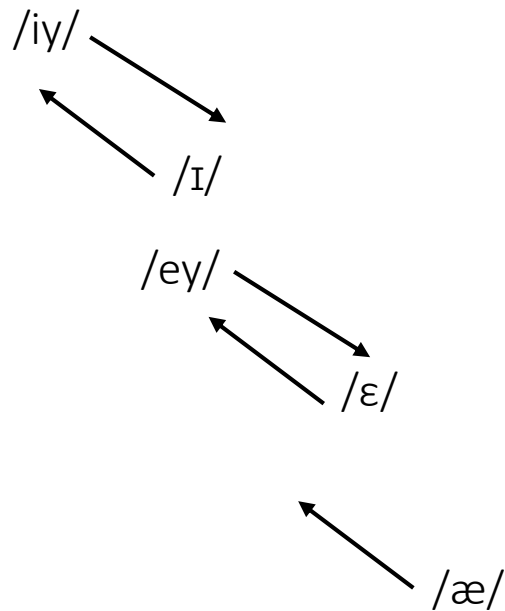
Although phonetic factors are
stronger

- Duration = $-.93$, $t=-13.81$, $p = .000$
- Following velar = $-.12$, $t= -5.15$, $p = .000$

Previously undocumented in 3rd
shift speech



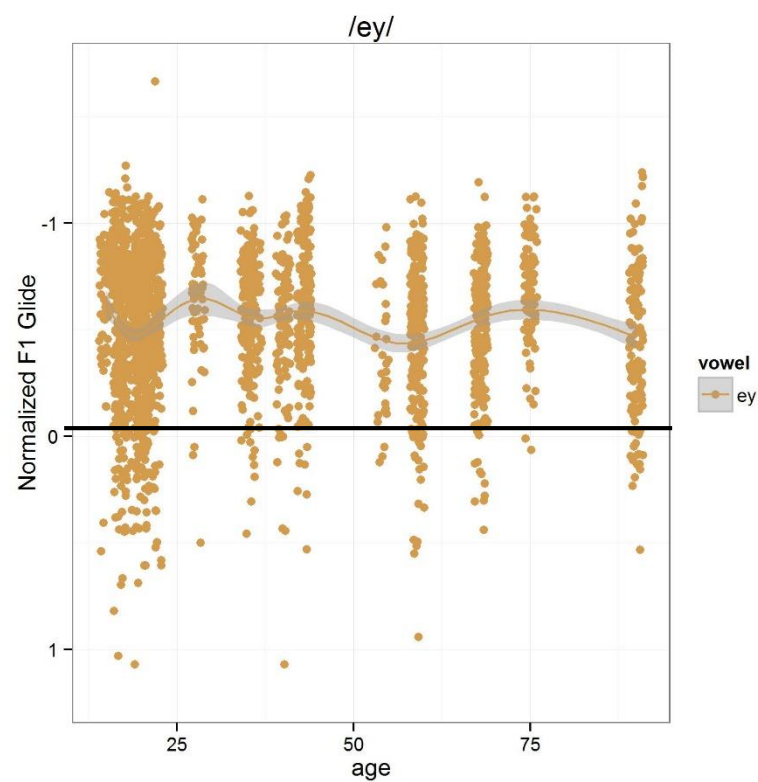
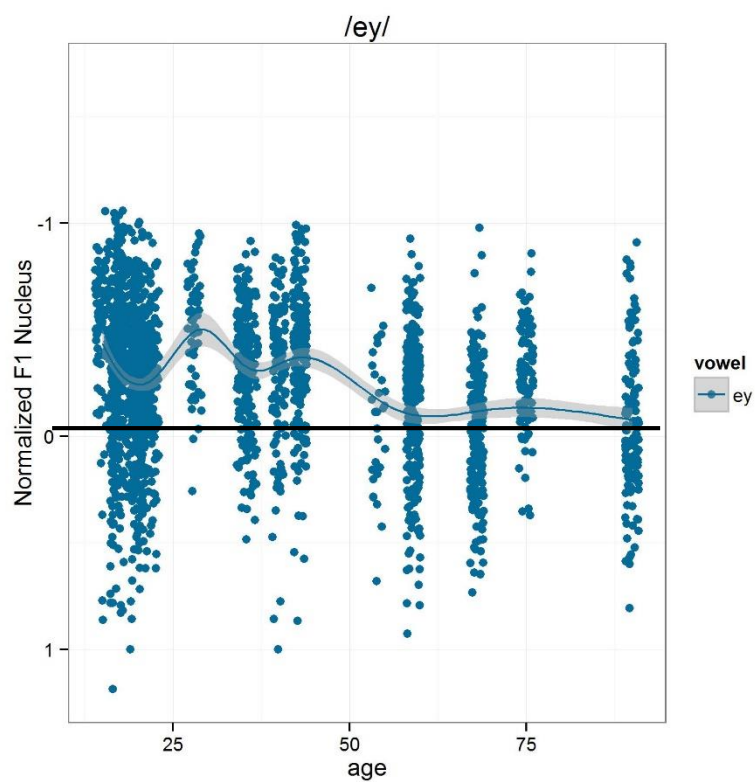
Fleeing the South??



Front tense and lax vowels interact in the Southern Vowel Shift so that the NUCLEUS of the tense vowels lower creating MORE diphthongal vowels

Rural Kansas displays the exact opposite pattern

Change occurs on nucleus



GOAL 1: DOCUMENT SOUND CHANGE

The third shift has been present in rural Kansas for at least 90 years.

- /æ/ and /ɛ/ are still in the process of backing, even as they do not participate in lowering
- /ey/ is becoming less diphthongal over time



GOAL 2 : SITUATE SOUND CHANGES IN REFERENCE TO OTHER REGIONAL SOUND CHANGES IN THE US

While some of the same mechanisms may be at play, this regional system demonstrates unique patterns compared to contemporary California.

- /æ/ and /ɑ/ maintain similar F1 values across time in contrast to California (D'Onofrio et al 2015) and Ohio (Durian 2012)
- /ɛ/ backs in apparent time, in contrast to Kansas City (Strelluf 2014)
- /ey/ distances from lax vowels through increasing monophthongization (though this variable may simply not have been explored yet)

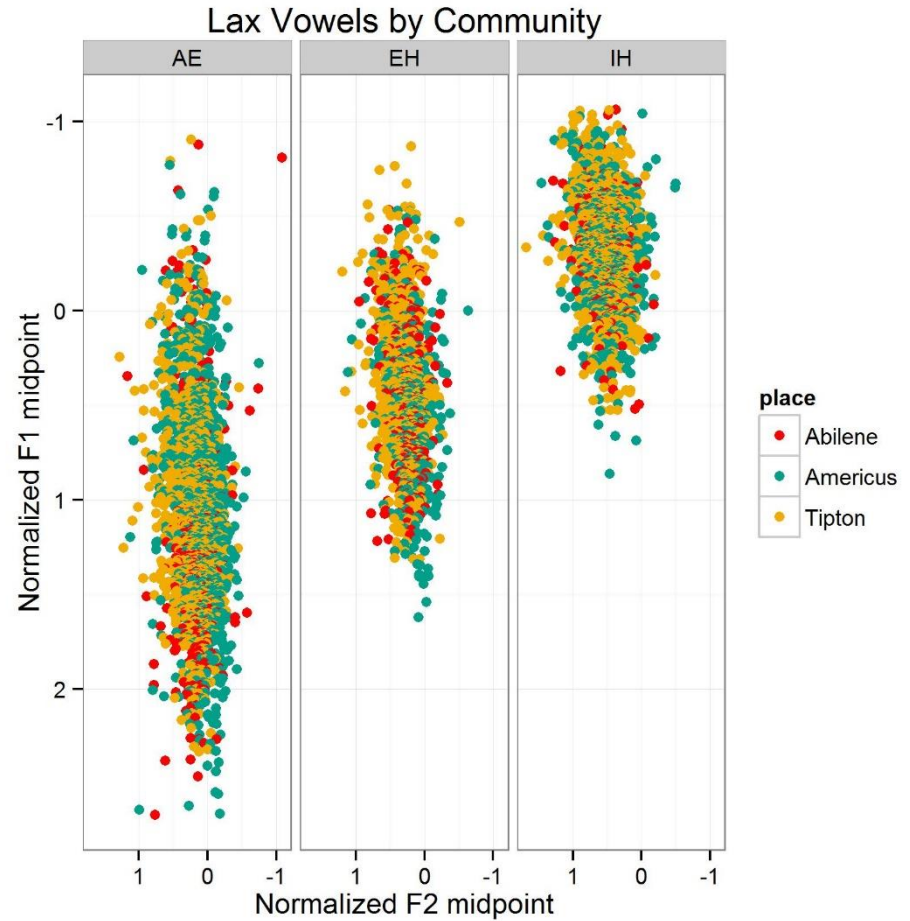


Goal 3

Identify whether sound change patterns are distinct across rural, suburban, and urban communities, or whether patterns appear more uniform in this region

Community differences

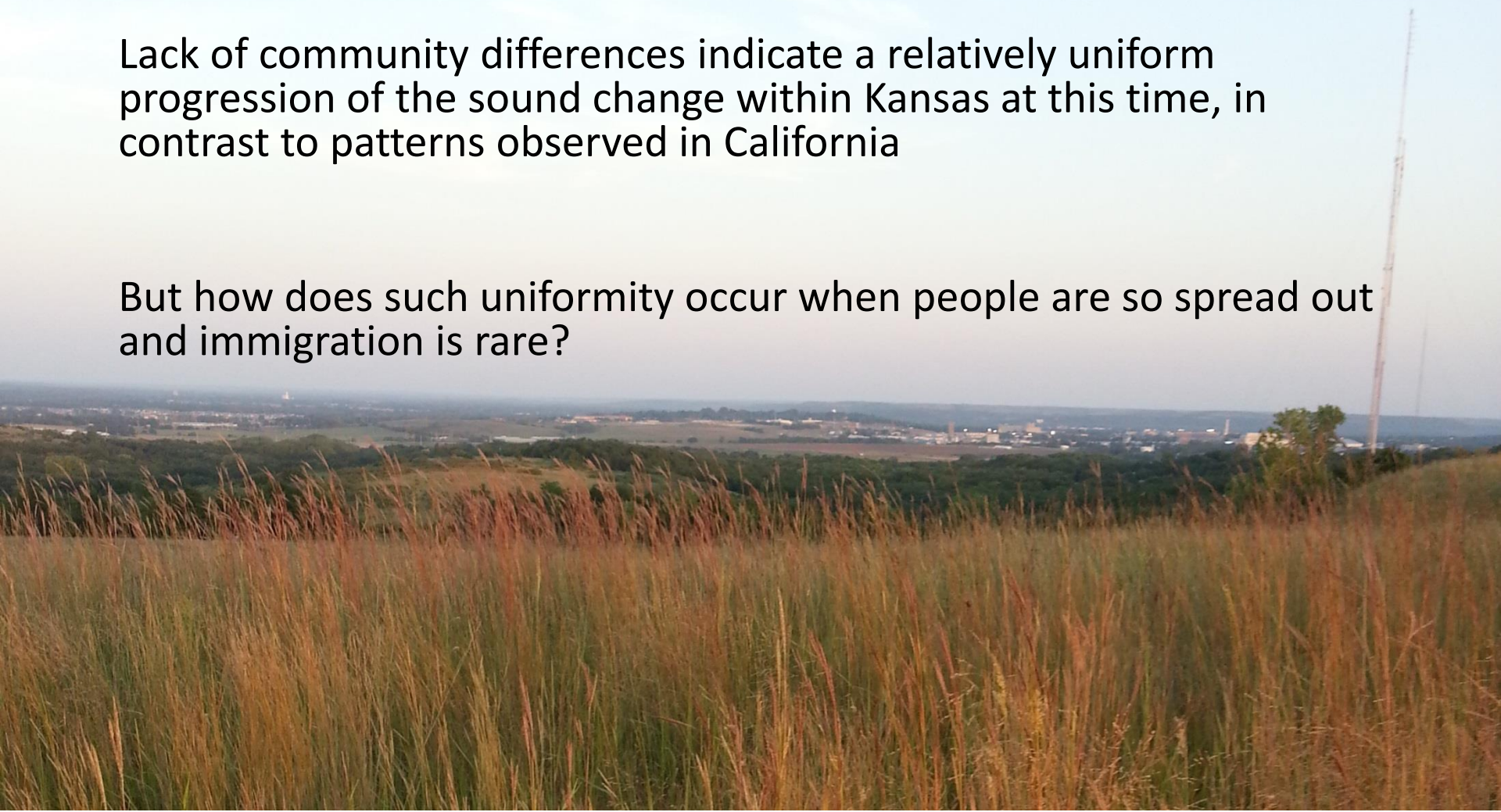
Unlike D'Onofrio, et al. (2015), community differences do not exist when age is included in the model



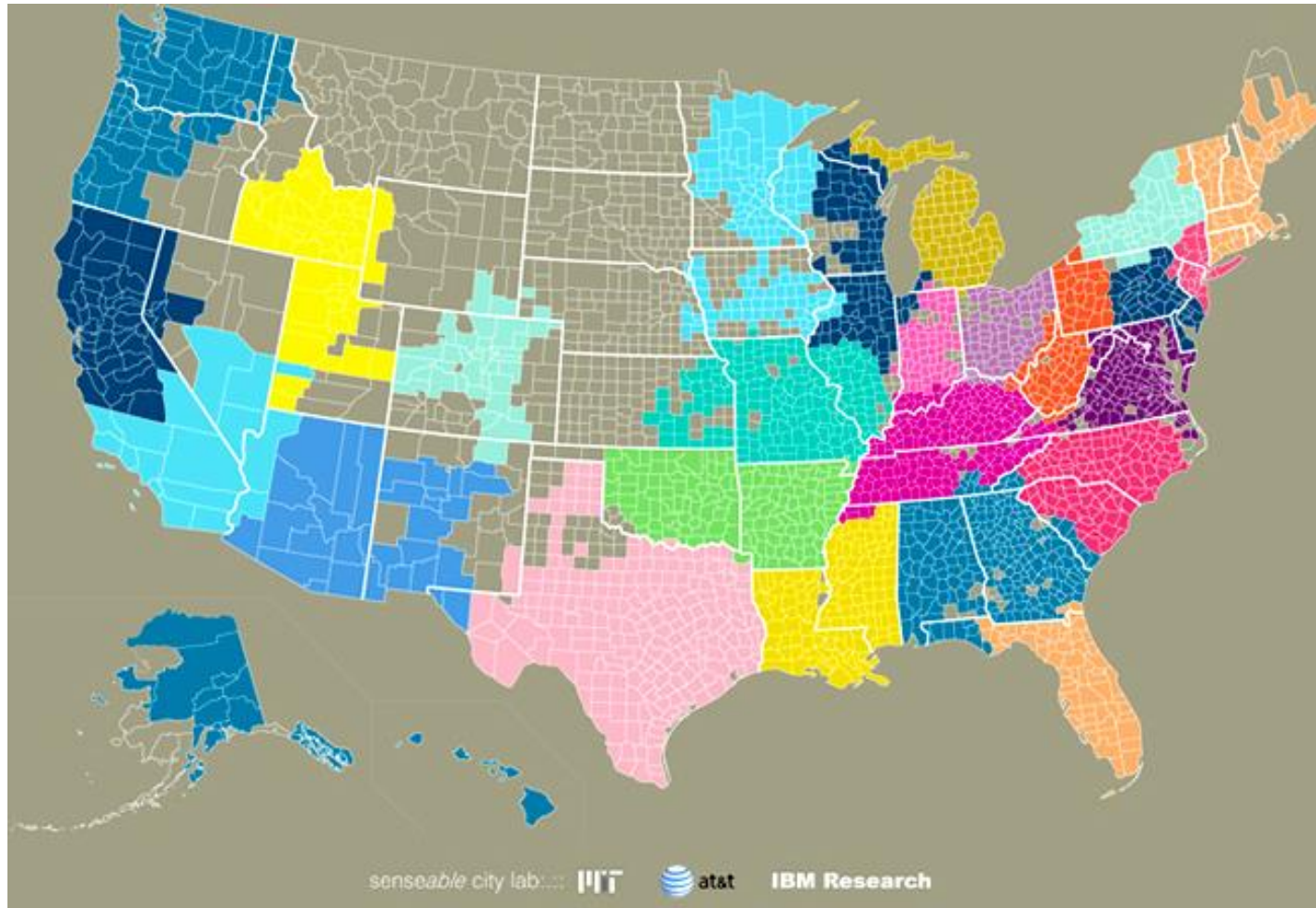
GOAL 3 : IDENTIFY WHETHER SOUND CHANGE PATTERNS ARE DISTINCT ACROSS RURAL, SUBURBAN, AND URBAN COMMUNITIES

Lack of community differences indicate a relatively uniform progression of the sound change within Kansas at this time, in contrast to patterns observed in California

But how does such uniformity occur when people are so spread out and immigration is rare?



Who does rural Kansas talk to?
Not enough cell phone data...



High School Sports Divisions

3A

Co-ed Schools 64
Range: 193-117

Anthony/	
Harper-Chaparral	178
Arma-Northeast	129
Atchison-Maur Hill-	
Mount Academy	133
Belle Plaine	136
Beloit	176
Caney-Caney Valley	168
Centralia/Wetmore	117
Cheney	180
Cherokee-Southeast	173
Cherryvale	175
Cimarron	119
Conway Springs	164
Council Grove	161
Douglass	168
Easton-Pleasant Ridge	176
Effingham-Atchison Co	
Community	170
Ellsworth	121
Erie	127
Eureka	134
Fredonia	162
Galena	185
Garden Plain	141
Gypsum-SE of Saline	179
Halstead	189
Hays-Thomas More	
Prep-Marian	183
Hesston	190
Hiawatha	185
Hillsboro	117

2-1A

Co-ed Schools 40
Range: 117-60

Allen-Northern Heights	103
Alma-Wabaunsee	117
Belleville-Republic	
County	105
Bennington	97
Blue Rapids-Valley Hts.	78
Brookville-Ell-Saline	115
Cottonwood Falls-	
Chase County	95
Elkhart	104
Ellis	104
Eskridge-	
Mission Valley	108
Herington	87
Highland-Doniphan West	73
Holton-Jackson Heights	94
Inman	91
Johnson-Stanton County	98
La Crosse	60
Leavenworth-Immaculata	76
Leoti-Wichita County	92
Lyndon	94
Marion	116
Meade	104
Medicine Lodge	96
Moundridge	102
Oakley	102
Olpe	83
Onaga	88
Oswego	100
Phillipsburg	107
Plainville	82

8-Man Division I

Co-ed Schools 50
Range: 98-63

Atwood-Rawlins County	72
Burden-Central	65
Burlingame	82
Canton-Galva	83
Cedar Vale/Dexter	68
Clafin-Central Plains	80
Clyde-Clifton Clyde	68
Coldwater-South Central	82
Dighton/Healy	64
Downs-Lakeside	64
Ellinwood	97
Goessel	68
Greensburg-Kiowa County	84
Hanover	64
Hill City	76
Howard-West Elk	78
Jetmore-Hodgeman	
County	76
Kinsley	84
Lebo	70
Lincoln	72
Little River	89
Logan/Palco	69
Macksville	68
Madison/Hamilton	85
Mankato-Rock Hills	64
Melvorn-Marais	
Des Cygnes Valley	71
Montezuma-South Gray	80
Moran-Marmaton Valley	63
Ness City	82
Oberlin-Decatur	

8-Man Division II

Co-ed Schools 49
Range: 63-31

Almena-Northern Valley	45
Ashland	51
Attica/Argonia	63
Axtell	50
Beloit-St. John's/	
Tipton Catholic	56
Bird City-Cheylin	31
Bucklin	49
Buffalo-Altoona Midway	45
Burrton	55
Caldwell	48
Chase	39
Chetopa	50
Colony-Crest	44
Cunningham	32
Deerfield	53
Fowler	34
Frankfort	53
Glasco/Miltonvale	
(Southern Cloud)	47
Grainfield-	
Wheatland/Grinnell	40
Hartford	61
Hoxie	53
Ingalls	52
Kensington-	
Thunder Ridge	61
Kiowa-South Barber	49
Langdon-Fairfield	55
Leroy-Southern	
Coffey County	57
Linn	46

INTERLINKED COMMUNITIES?

- Sports and other high school activities spark early contact with similar small towns
 - Tipton high schoolers travel to nearby Beloit to play 8-man football
 - Americus high schoolers play 2-A football or go to Emporia for after-school activities
- A small town network emerges, keeping small town sound changes in-step with each other
- “Weak Links” to urban hubs may also allow for rapid spread of sound, though the sound change may be progressing independently



CONCLUSIONS

- 3rd Dialect Shift is alive and well in the Great Plains region
- Locally-instantiated version of the shift is NOT identical to California, Ohio, or even Kansas City for this sample
- Sound change is uniform across communities with very different network profiles, similar to patterns emerging within the study of rural Canada (Roeder 2012)



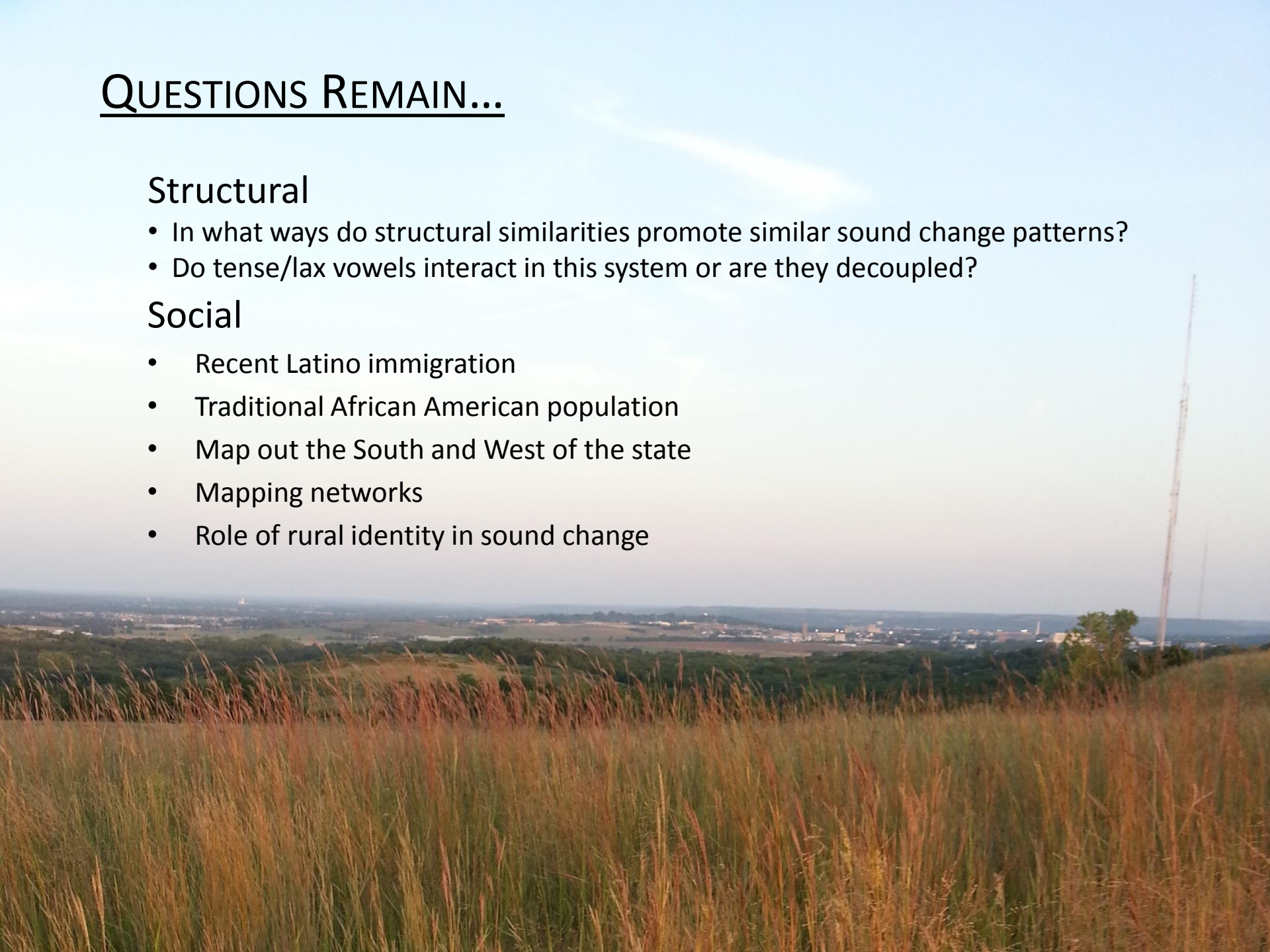
QUESTIONS REMAIN...

Structural

- In what ways do structural similarities promote similar sound change patterns?
- Do tense/lax vowels interact in this system or are they decoupled?

Social

- Recent Latino immigration
- Traditional African American population
- Map out the South and West of the state
- Mapping networks
- Role of rural identity in sound change



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