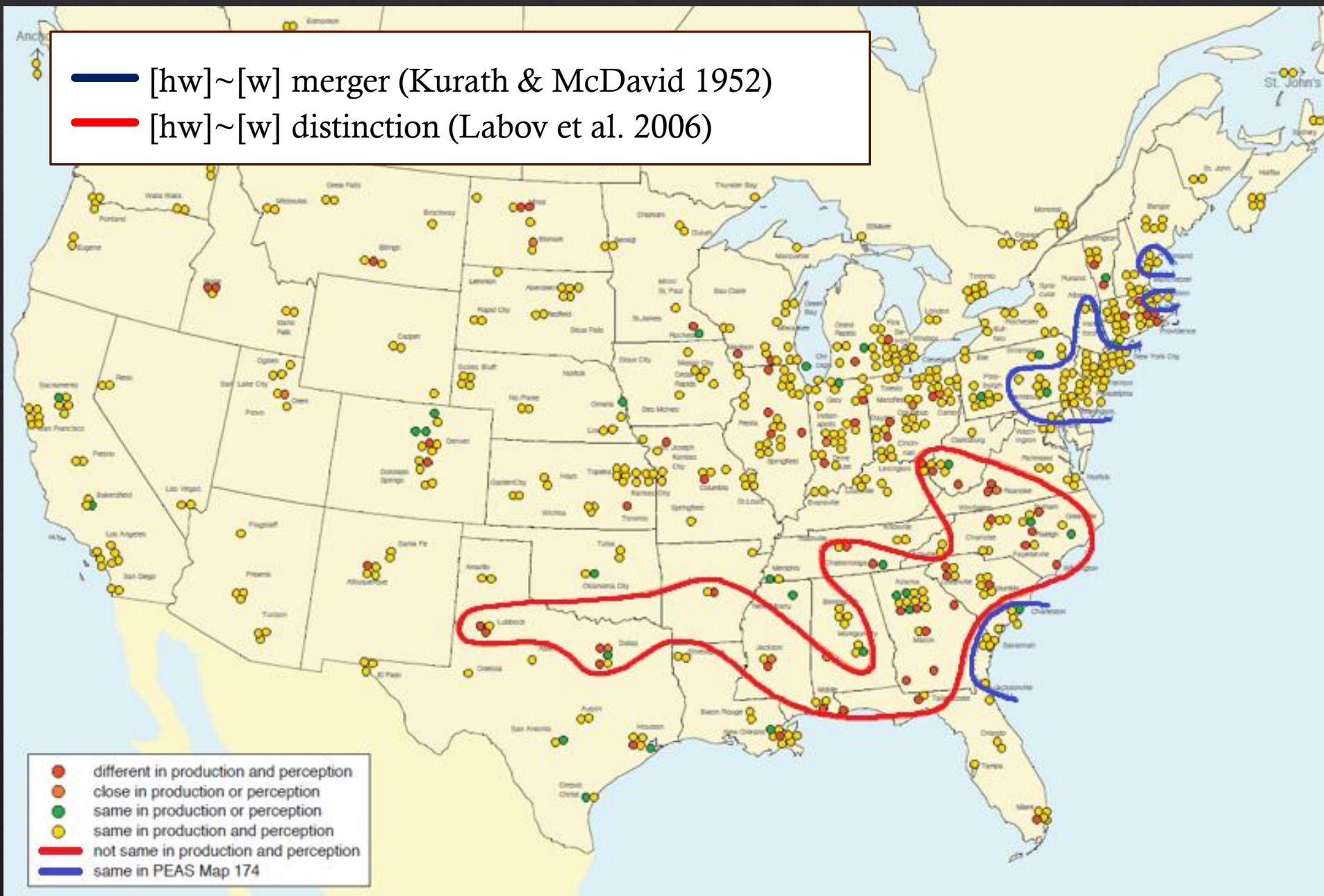


Salience and Southernness: A Perception Study on [hw]

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New Ways of Analyzing Variation (NWAV51)

Saturday, October 14, 2023

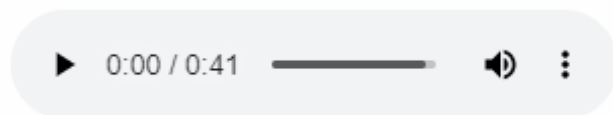


Research Questions

1. Is [hw] perceived as a Southern feature by US listeners?
2. How salient is [hw] to US listeners?

	older [hw]	young [hw]	young [w]
when	w	w	w
whittle	hw	hw	w
while	hw	hw	w
whistles	hw	hw	w
whetstone	hw	w	w
wherever	w	hw	w
whiskey	hw	hw	w

Listen to the following clip and answer the questions below:



What part of the United States do you think this speaker is from? Be as specific as possible.

Each of the sound clips below contain a single sentence from the passage you just heard. As you listen to each clip, listen for anything that causes you to wonder where the speaker is from, or that confirms where you already think they are from. For each of the sentences below, highlight any words that made you think about the speaker's location.

▶ 0:00 / 0:04 — 🔊 ⋮

Then in the evenings, my grandfather would whittle toys for me out of pine and cedar wood.

▶ 0:00 / 0:04 — 🔊 ⋮

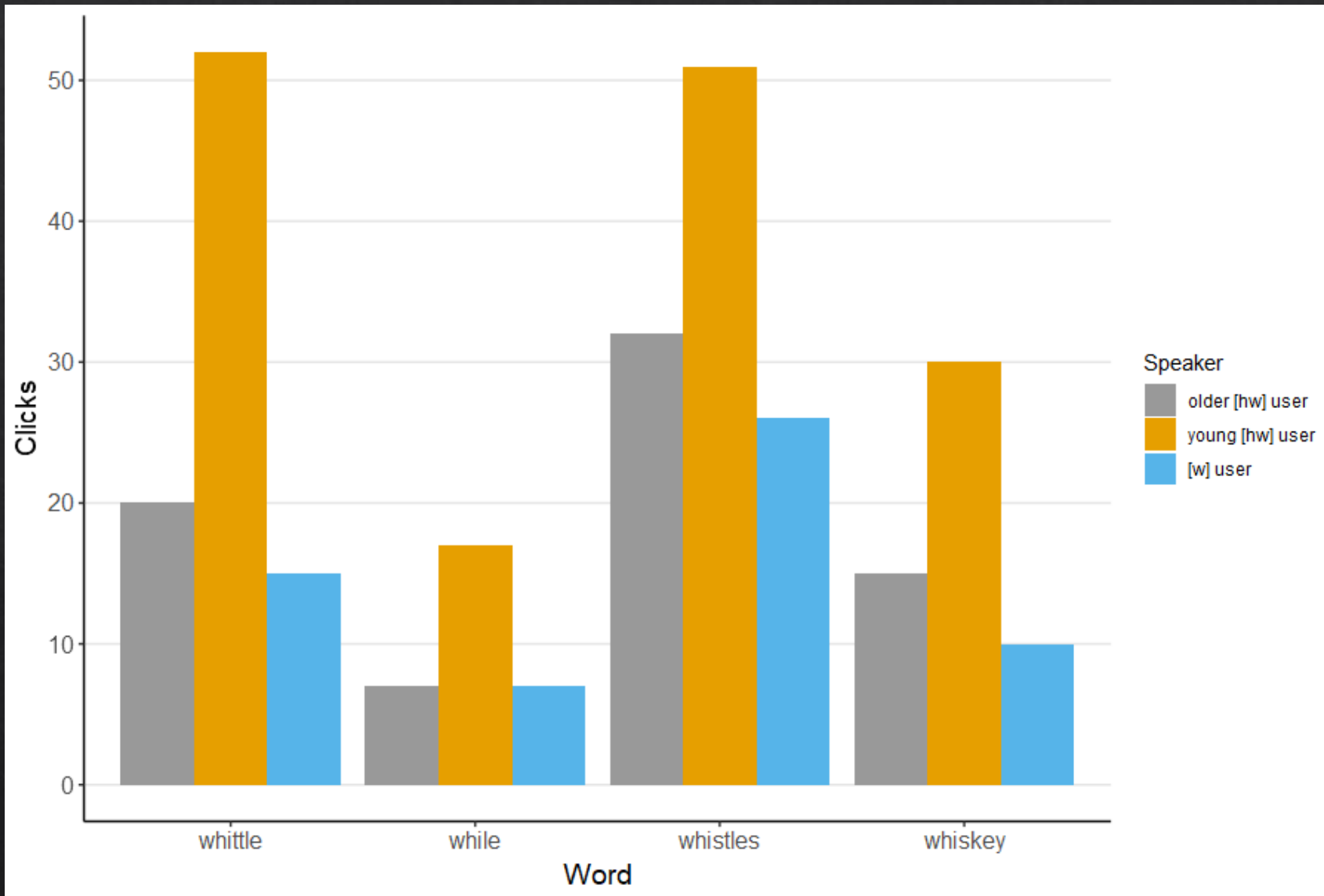
Highlight

The two of us would sit on the front porch together while he carved things like tops or whistles.

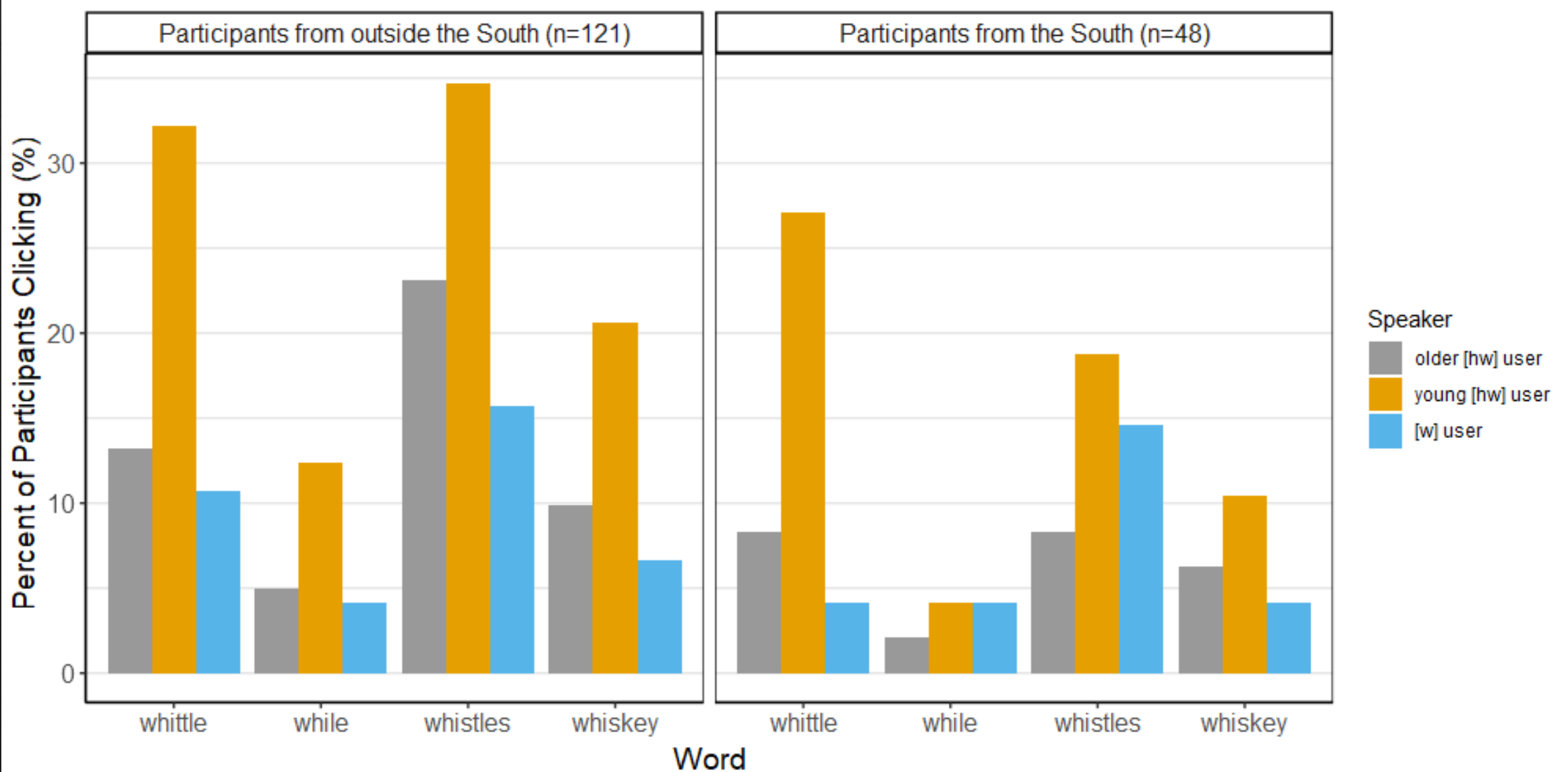
Hypotheses

1. [hw] is regional
2. [hw] is less salient to Southerners
3. [hw] is more salient in younger speakers
4. [hw] is perceived as Southern

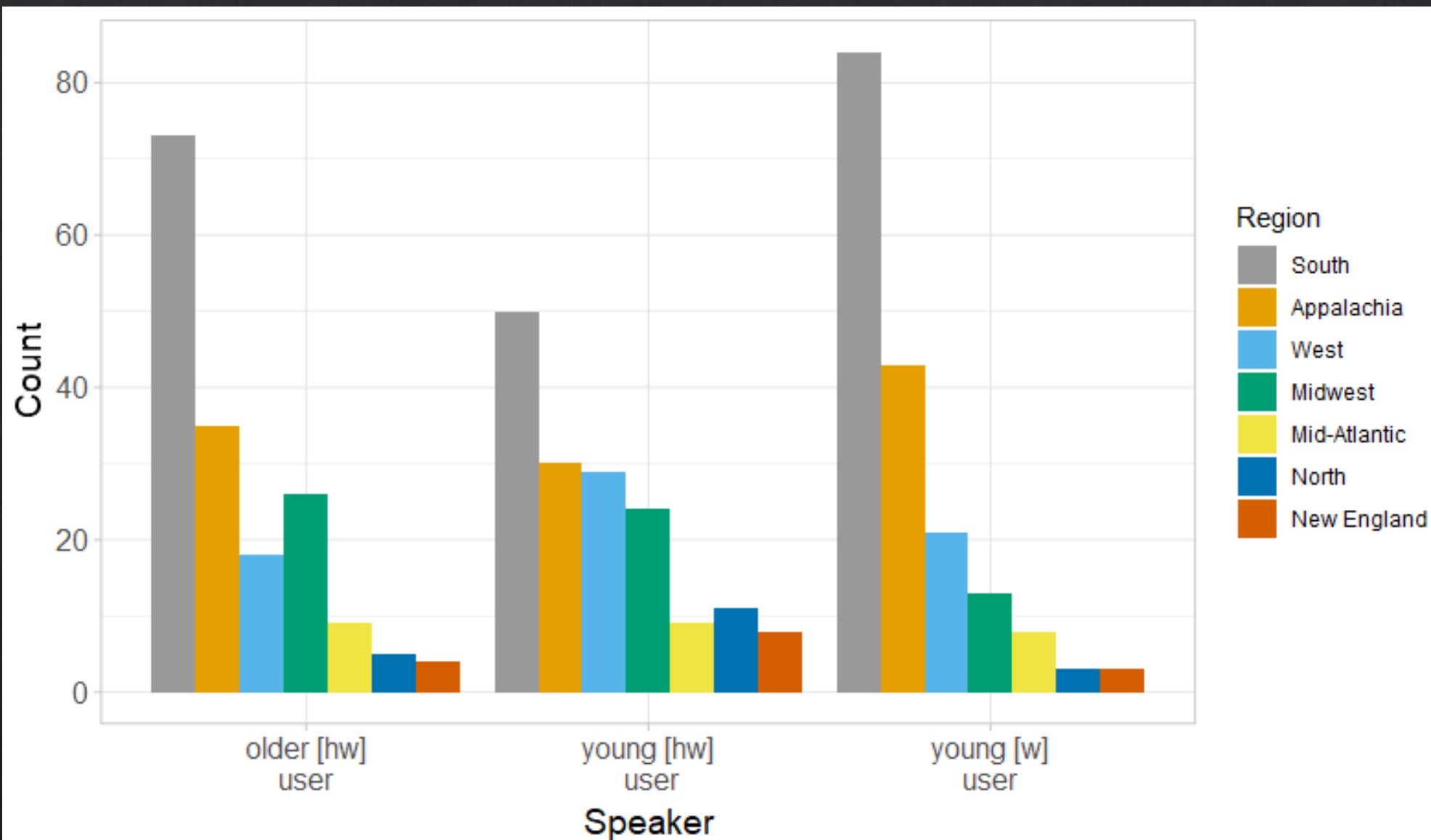
young [hw] user > older [hw] user, [w] user ($p < .0001$)



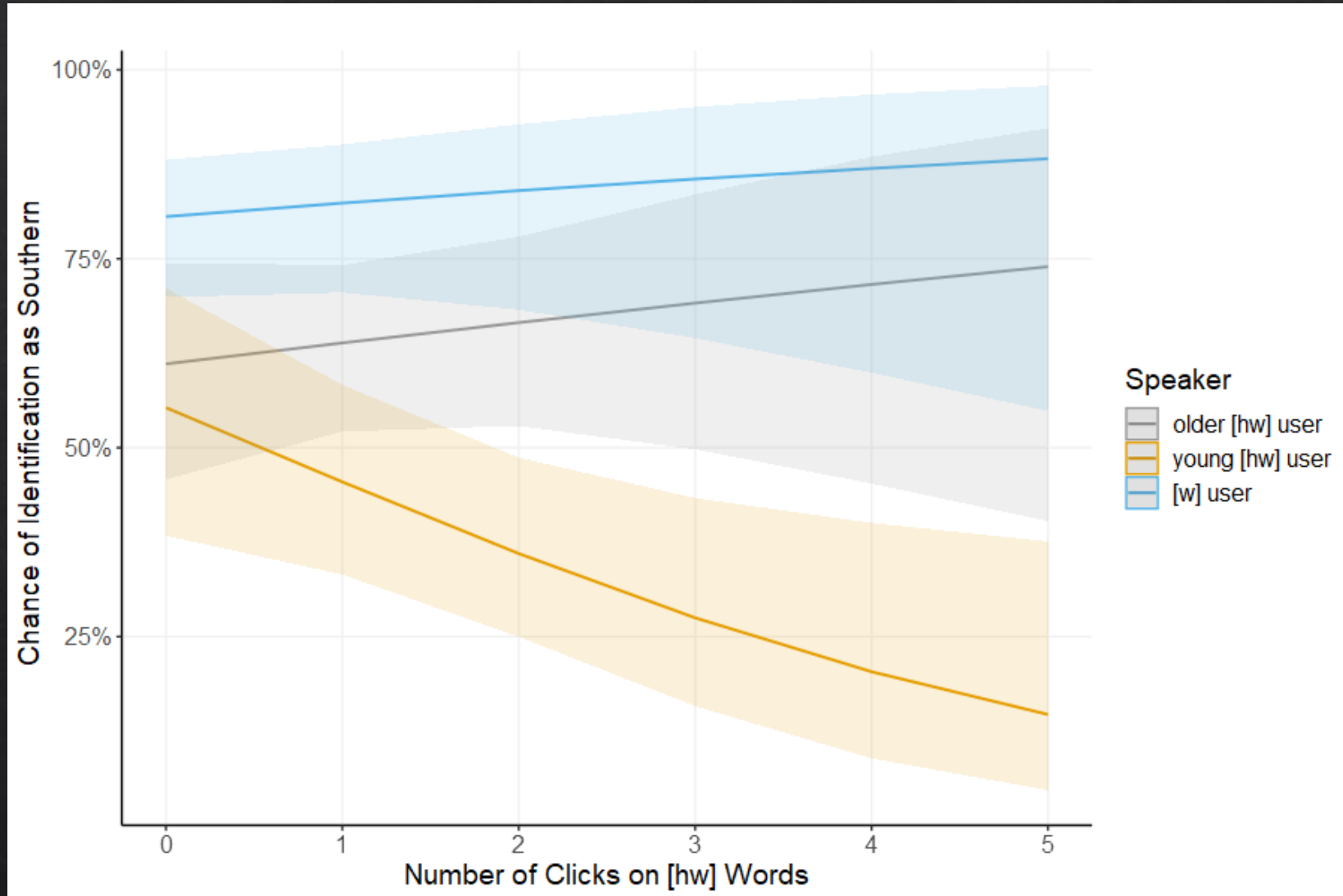
non-Southern participants $\approx$ Southern participants ($p > .05$)



All participants most often identified as Southern



young [hw] user identified as Southern less as clicks on [hw] increased



perceived region $\sim$ speaker * hw clicks + participant gender

Participant Commentary

[hw] was noticed:

He would make an "h" sound whenever there was a wh so it sounded like he said h-wiskey

[hw] is confusing:

really confusing, I hear mid western speech and southern speech but he also has a very strange w sound that I don't recognize

[hw] is regional:

South of Appalachia, due to the H in WH words. Maybe Alabama or Mississippi

I have heard people in Maryland pronounce words like "whittle" as "whittle", so maybe he is from Maryland or Pennsylvania.

[hw] is old:

He REALLY pronounces his wh. I am not sure where that is from, I associate it more with the older generation than any region.

Hypotheses

1. [hw] is regional  for young [hw]
2. [hw] is less salient to Southerners trend?
3. [hw] is more salient in younger speakers  - ?
4. [hw] is perceived as Southern 

Conclusions

- ◇ [hw] can be very noticeable to speakers of US English
- ◇ [hw] does not appear to be perceived as a Southern feature by non-linguist US listeners
- ◇ What does this mean for its use to satirize conservative or bigoted viewpoints?
 - ◇ A feature with roots in Southern speech, now distanced from its direct indices?
 - ◇ An aberrant, humorous pronunciation suitable for mockery?

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Additional Slides

Special case of young [hw] user

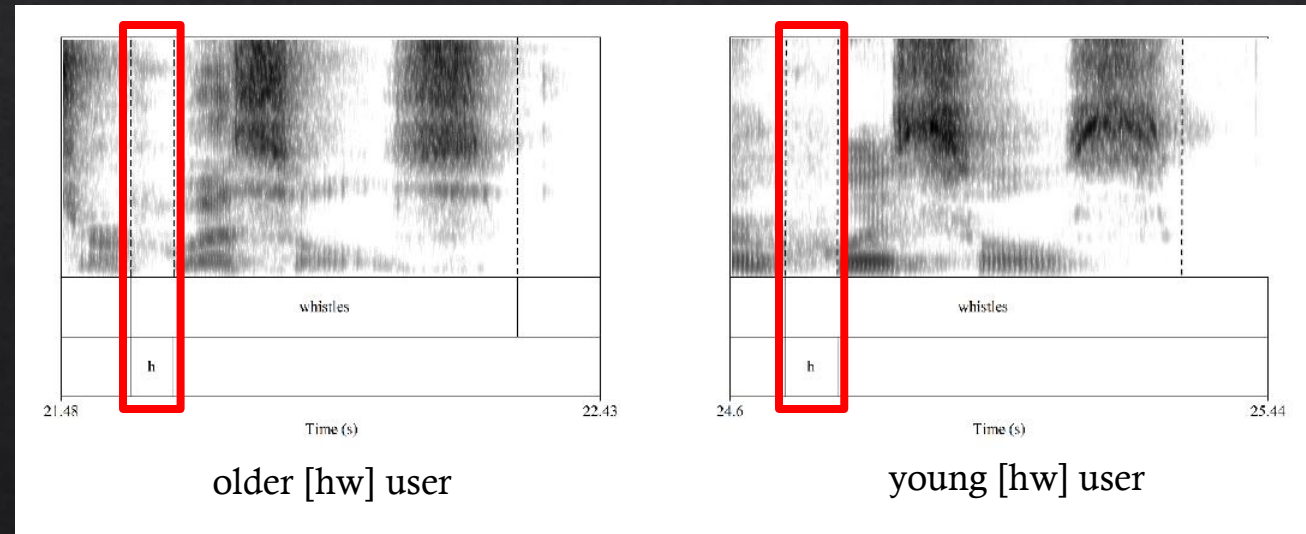
- ◇ Why was [hw] so much more salient for the young [hw]-using speaker?
- ◇ Age? Perceived Southernness? Acoustics?

Duration (ms)

	Speaker A	Speaker B
whittle	98	117
while	81	51
whistles	75	82
whetstone	58	---
wherever	---	53
whiskey	60	82

COG (Hz)

	Speaker A	Speaker B
whittle	4070	659
while	1006	522
whistles	1564	612
whetstone	1149	---
wherever	---	602
whiskey	1583	860



[hw] is regional

Participant	Speaker	Comment
102	B	that hard WH is throwing me. it's not common, so maybe it's an isolated community? I said Spokane before, but maybe now I'd say west virginia.
112	B	South of Appalachia, due to the H in WH words. Maybe Alabama or Mississippi
115	B	The speaker may be from somewhere in non-coastal northeast. His pronunciation of the "hw" sound in w-words is very distinct, but his vowels and other sounds do not sound southern or midwestern.
172	A	I have heard people in Maryland pronounce words like “whittle” as “whittle”, so maybe he is from Maryland or Pennsylvania.

[hw] is old

Participant	Speaker	Comment
114	A	He REALLY pronounces his wh. I am not sure where that is from, I associate it more with the older generation than any region.

[hw] is European

Participant	Speaker	Comment
114	B	I would believe it if you told me he was originally Scottish or something.
124	B	This one is really hard to place. I went Delmarva because I detect a tiny bit of southern, but also a bit of what I believe to be Irish, which I would not expect out of a more urban deep southerner like I initially thought.
206	B	It just seems to me that there's some European influence on his speech. The "hwuh" sound before every "wh" is most noticeable. Then, out of the blue, you'll get an occasional Southern-drawl-esque syllable like the "stone" in "whetstone", which is puzzling.

[hw] was noticed

Participant	Speaker	Comment
88	B	[...] I found myself focused more on the hard endings to various words, as well as a very pronounced "wh" sound. [...]
104	B	Unusual pronunciation of “wh”, you can hear the “h”
105	B	He would make an "h" sound whenever there was a wh so it sounded like he said h-wiskey
121	B	Lots of interesting vowels. and he has the "hw" sound.
136	B	The way he says "whistle" and "whittle" is distinct. I don't know where he's from, though.
204	B	There is a lot of simplifying th and t sounds to d sounds. Also, again the tone was very NYCish. Also, pronounced the "wh" as different than a "w"

[hw] is confusing

Participant	Speaker	Comment
120	B	The strong "wh" sound (blowing a lot of air) is throwing me. I don't know if that's a regional thing, or a thing that just this guy does. Based on the fact that he pronounces "eh" as "ih" ("memories" sounds like "mimories"), and the long "O" sounds more like "ah," I'm guessing "deep south."
143	B	really confusing, I hear mid western speech and southern speech but he also has a very strange w sound that I don't recognize

When I was young, I always spent the summer on my grandparents' farm. During the day, I climbed trees, played with the dogs, and helped with chores like milking the cows and feeding the chickens. Then in the evenings, my grandfather would **whittle** toys for me out of pine and cedar wood. The two of us would sit on the front porch together **while** he carved things like tops or **whistles**. One day, I asked him to teach me, so he showed me how to hold his knife carefully and carve away from my body. For my twelfth birthday, he gave me my own knife and **whetstone** so that I could work **wherever** I wanted. Still, my favorite memories are of sitting on the porch with Grandpa, carving together as he drank **whiskey** and I drank lemonade. I always enjoyed the time we spent together.

Table 2. Features of Southern US English for each speaker

Feature	Speaker A	Speaker B	Speaker C
monophthongized PRICE	<i>I₁, I₂, I₃, climbed, pine, my₁, while, like, I₄, knife₁, my₂, my₃, my₄, knife₂, I₅, my₅, I₇, I₈, time</i>	<i>while</i>	<i>I₁, I₂, I₃, climbed, while, I₄, my₂, my₃, I₅, my₅, I₈, time</i>
lowered FACE	<i>day₁, day₂, away, birthday, favorite, drank₁, drank₂, lemonade</i>	<i>played, day₂</i>	<i>day₁, played, day₂, birthday, drank₁, lemonade</i>
fronted GOAT	<i>so₁, showed, whetstone</i>	<i>so₁, showed, so₂</i>	<i>so₁, showed, own, whetstone, so₂</i>
unmerged THOUGHT	<i>always₁, dogs, wanted, always₂</i>	<i>always₁, dogs, wanted, always₂</i>	<i>always₁, always₂</i>
pin-pen merger	<i>when, spent₁, then, memories, enjoyed, spent₂</i>	<i>when, spent₁, then, memories, lemonade, enjoyed, spent₂</i>	<i>spent₁, memories, lemonade, enjoyed, spent₂</i>
alveolar palatalization before [u]	<i>during</i>	<i>during</i>	
(ING) as -in	<i>milking</i>		<i>during, milking</i>

Table B1. Participant demographics by age group

Age	Count	%
18-22	25	14.7
23-29	65	38.2
30-39	51	30.0
40-49	15	8.8
50-59	2	1.2
70+	3	1.8
no response	5	2.9

Table B2. Participant demographics by race/ethnicity

Race/Ethnicity	Count	%
White	92	54.2
Black or African American	18	10.6
Hispanic or Latino	17	10.0
Native American or Alaska Native	10	5.9
Native Hawaiian or Pacific Islander	4	2.4
Asian	2	1.2
Multiple responses*	22	12.9
No response	5	2.9

Table B3. Participant demographics by languages spoken at home

Languages	Count
Only English	143
English + other language*	19
No response	8

Table B4. Participant demographics by highest level of education reached

Education Level	Count	%
Less than high school	5	2.9
High school graduate	20	11.8
Some college	49	28.8
2-year degree	6	3.5
4-year degree	46	27.1
Master's degree	27	15.9
Professional degree	4	2.4
Doctorate	11	6.5
No response	2	1.2

Results: Word clicks – [w] user

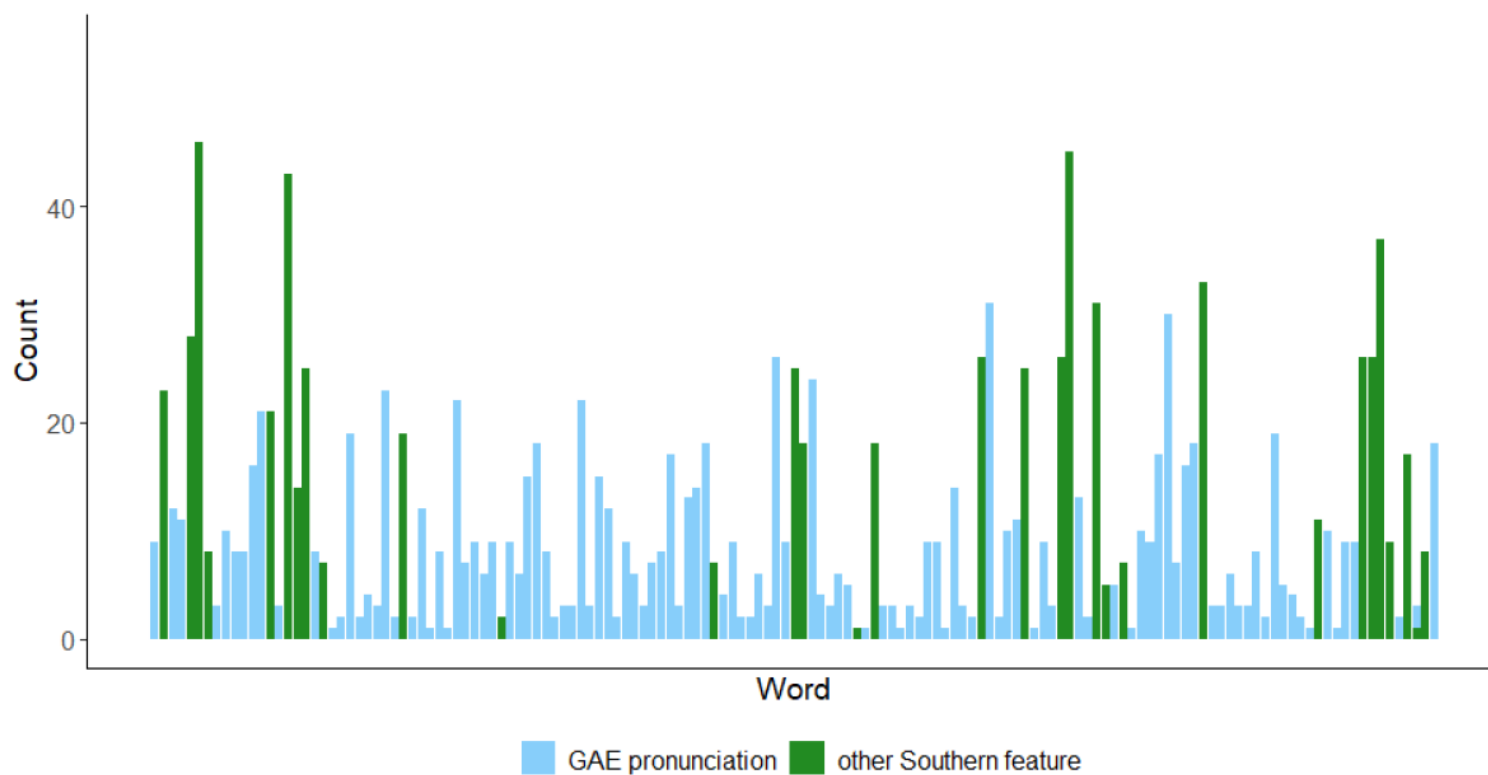


Figure 9. Frequency of clicks on each word in Speaker C's passage

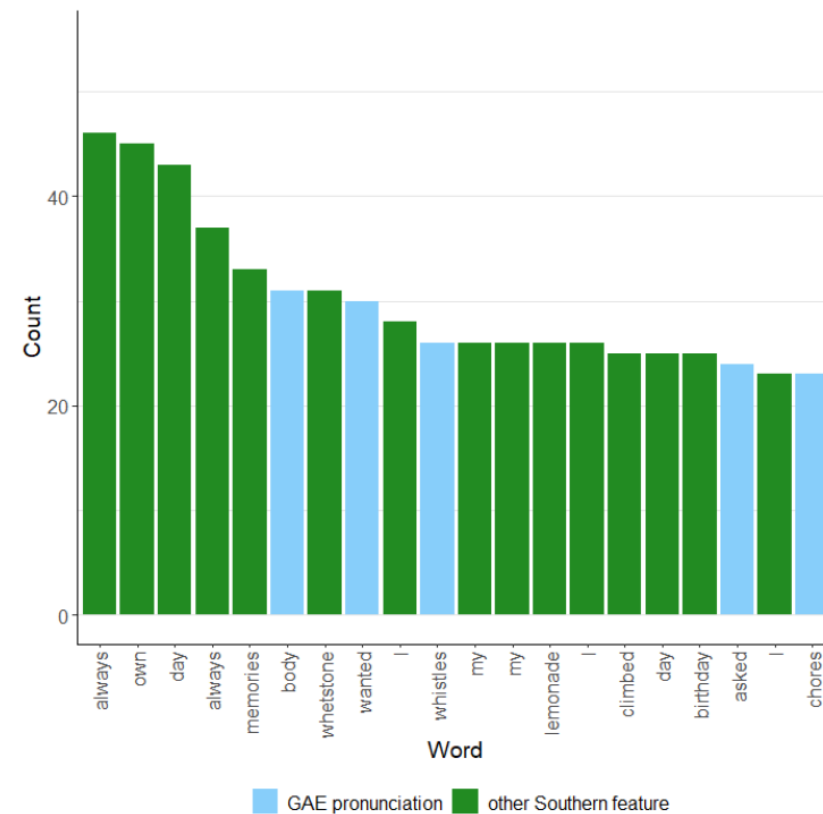


Figure 10. 20 most clicked words for Speaker C

Results: Word clicks – older [hw] user

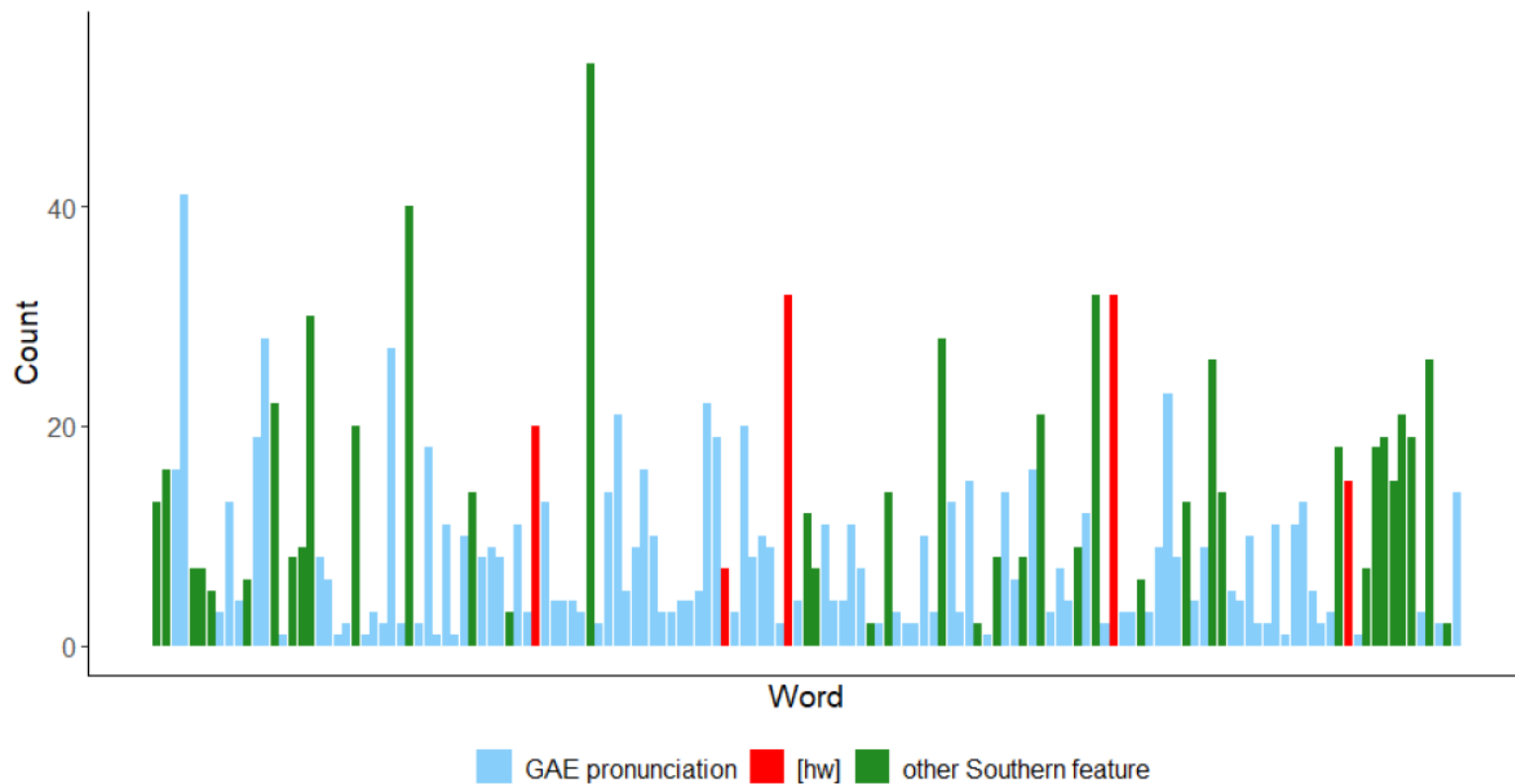


Figure 5. Frequency of clicks on each word in Speaker A's passage

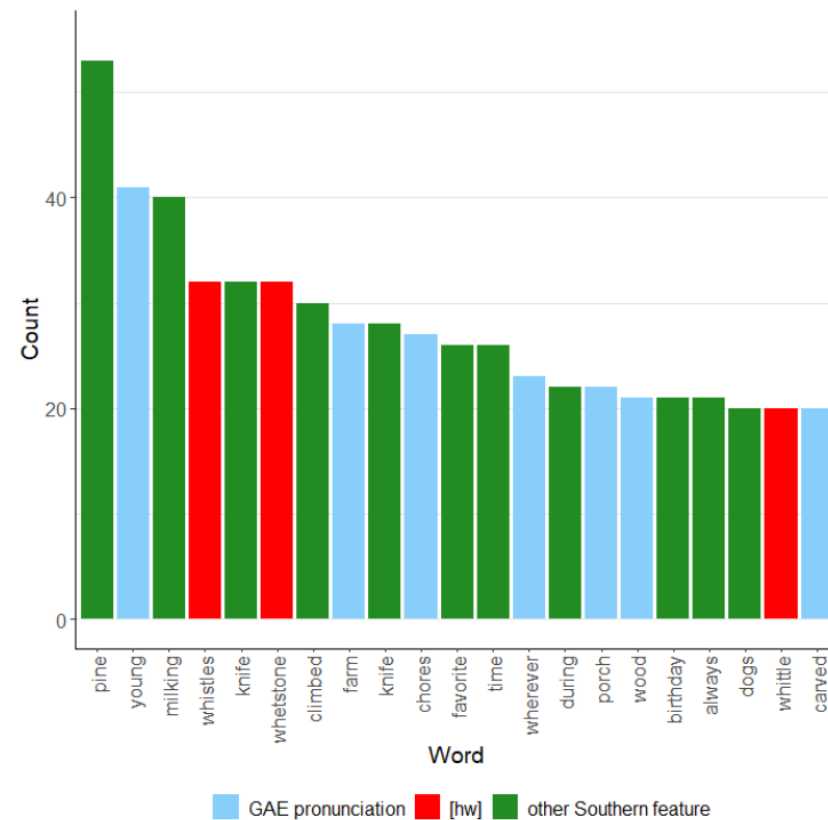


Figure 6. 20+ most clicked words for Speaker A

Results: Word clicks – young [hw] user

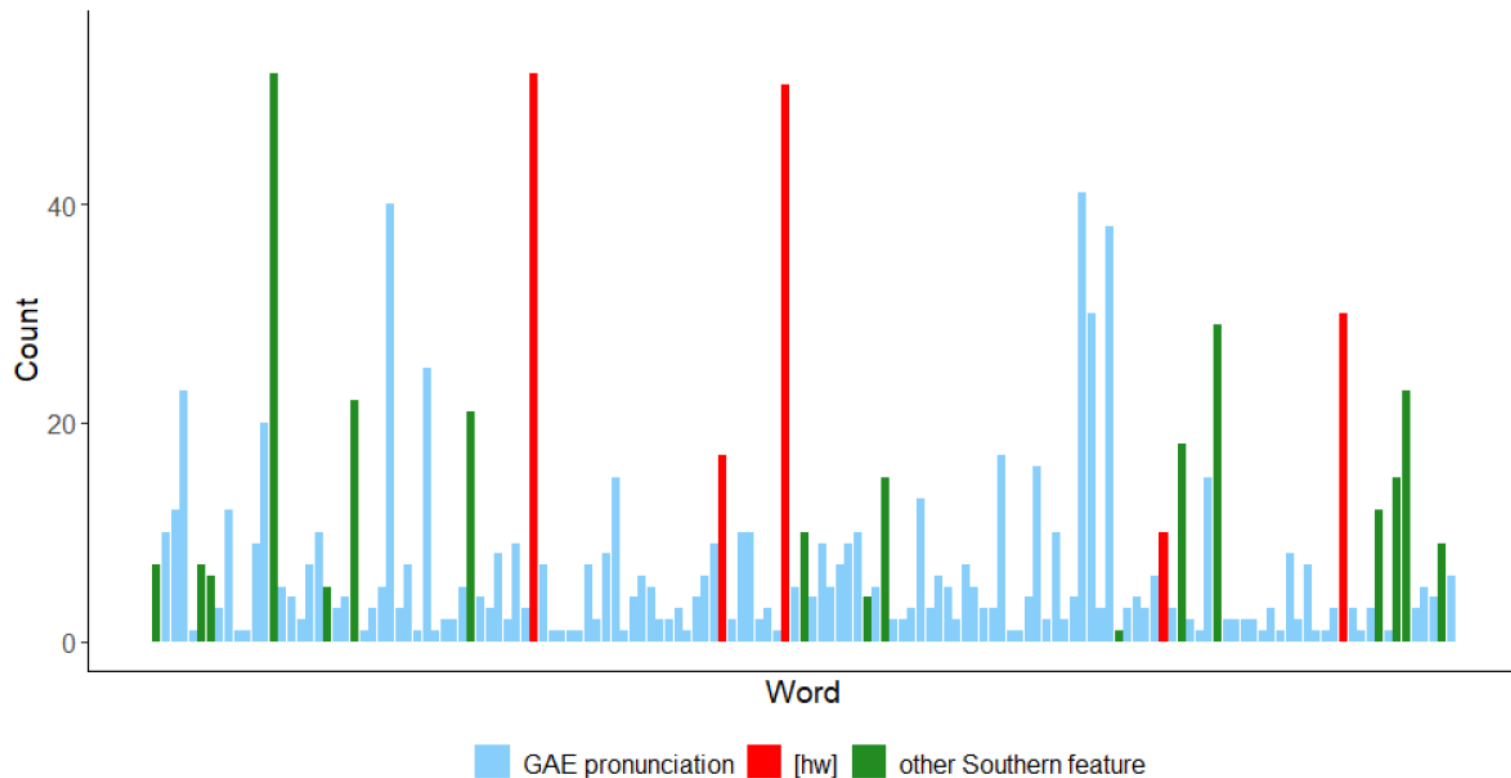


Figure 7. Frequency of clicks on each word in Speaker B's passage

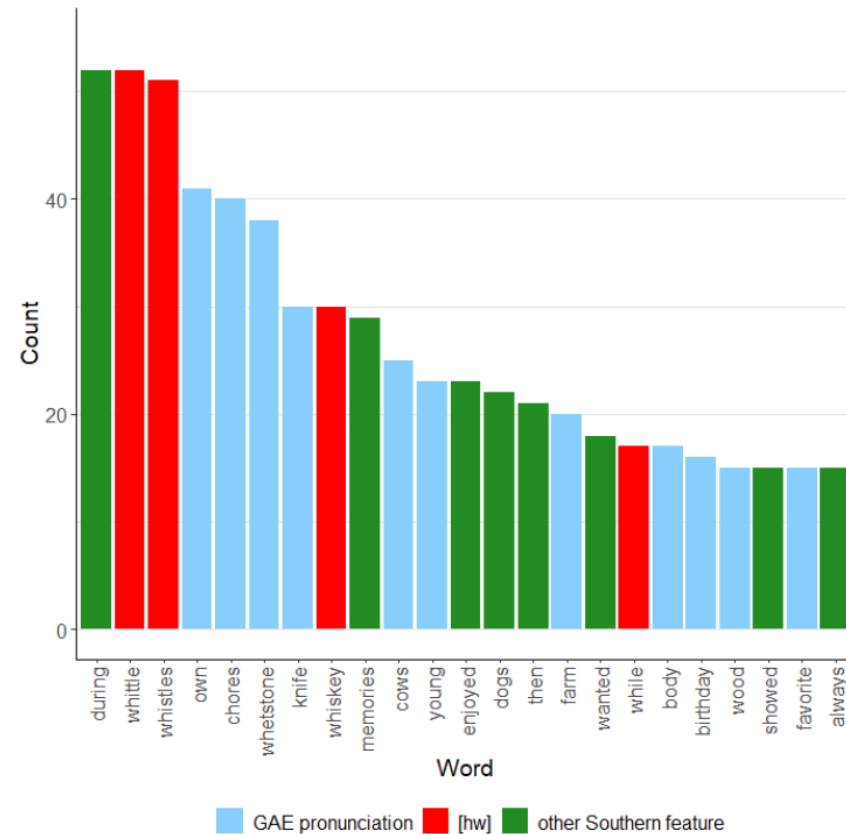


Figure 8. 20+ most clicked words for Speaker B

Table 9. Relationship between [hw] selection and perceived region of speaker A

	Southern	not Southern	Total
Clicked on at least one [hw]	24 (53.3%)	21 (46.7%)	45 (100.0%)
Did not click on any [hw]s	46 (59.0%)	32 (41.0%)	78 (100.0%)

Table 10. Relationship between [hw] selection and perceived region of speaker B

	Southern	not Southern	Total
Clicked on at least one [hw]	17 (34.0%)	33 (66.0%)	50 (100.0%)
Did not click on any [hw]s	26 (37.1%)	44 (62.9%)	70 (100.0%)

Chi-square tests:

Speaker A: $\chi^2(1)=0.18, p>.10$

Speaker B: $\chi^2(1)=0.03, p>.10$

Log-linear model:

$\chi^2(4)=1.04, p>.10$

Table 11. Relationship between [hw] selection and perceived region for Southern participants

	Southern	not Southern	Total
Clicked on at least one [hw]	8 (36.4%)	14 (63.6%)	22 (100.0%)
Did not click on any [hw]s	24 (48.0%)	26 (52.0%)	50 (100.0%)

Table 12. Relationship between [hw] selection and perceived region for non-Southern participants

	Southern	not Southern	Total
Clicked on at least one [hw]	33 (45.2%)	40 (54.8%)	73 (100.0%)
Did not click on any [hw]s	48 (49.0%)	50 (51.0%)	98 (100.0%)

Chi-square tests:

Southern participants: $\chi^2(1)=0.23, p>.10$

Non-Southern participants: $\chi^2(1)=0.10, p>.10$

Log-linear model:

$\chi^2(4)=4.46, p>.10$

Table 13. Logistic regression model results (*perceived region ~ speaker*hw clicks + gender*)

Variable	Level	Odds ratio	95% CI	p-value	
(Intercept)		1.570	(0.850, 2.951)	0.153	
Speaker (<i>ref = A</i>)	speaker B	0.788	(0.329, 1.876)	0.590	
	speaker C	2.643	(1.223, 5.794)	0.014	*
[hw] clicks		1.126	(0.800, 1.618)	0.505	
Gender (<i>ref = female</i>)	male	0.664	(0.378, 1.160)	0.151	
	nonbinary	7.936	(1.065, 170.385)	0.082	.
Speaker * [hw] clicks (<i>ref = A</i>)	speaker B	0.599	(0.367, 0.953)	0.034	*