What we hear and what it expresses: The perception and meaning of vowel differences among dialects

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THE SOUTHERN SHIFT

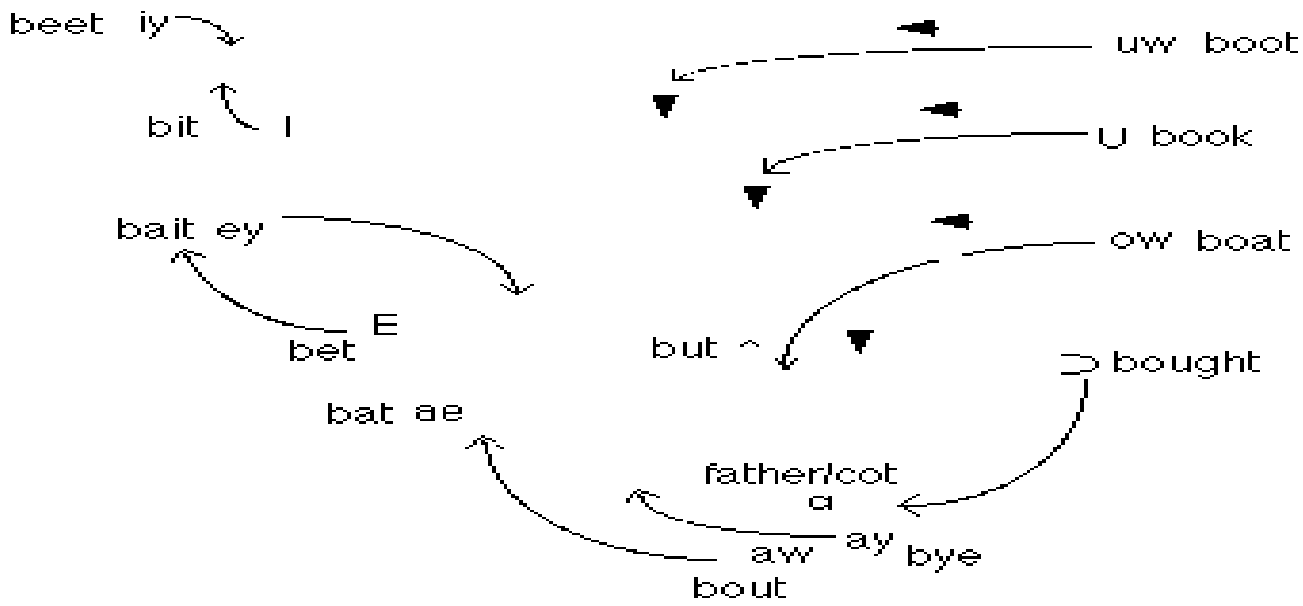


Figure 1: Stages of the Southern Shift Revised

Memphis Speakers' Productive Systems:

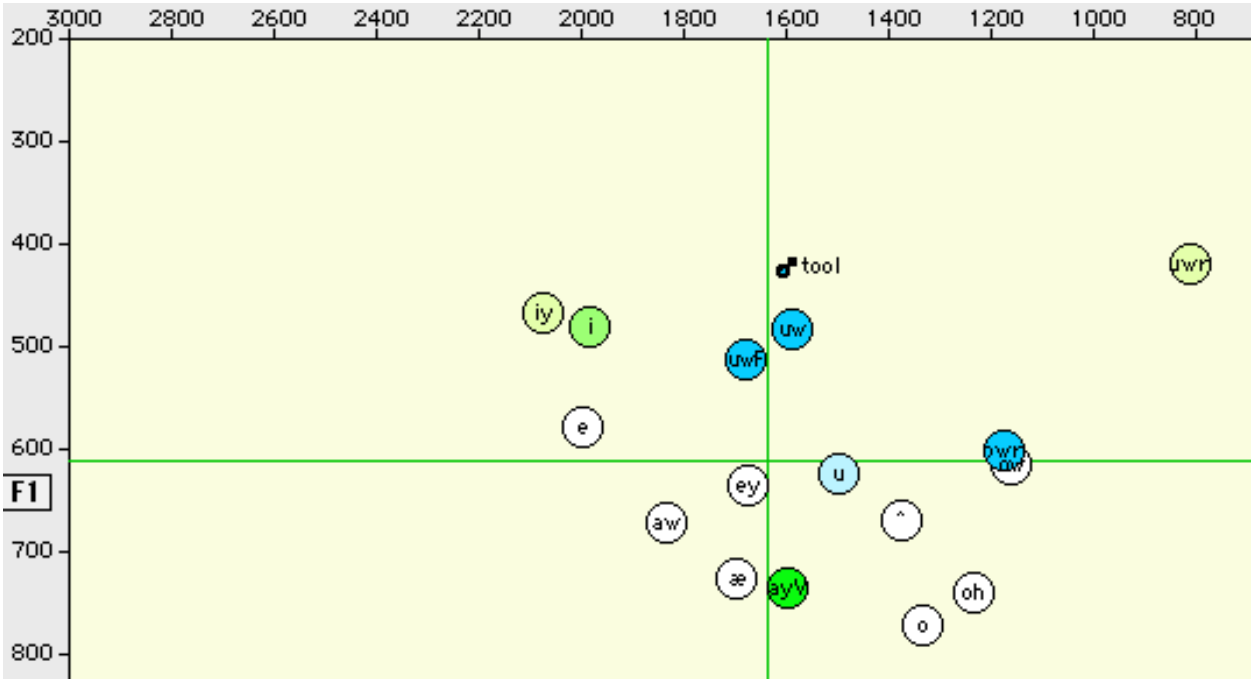


Figure 1: Sally, Over 40 European American

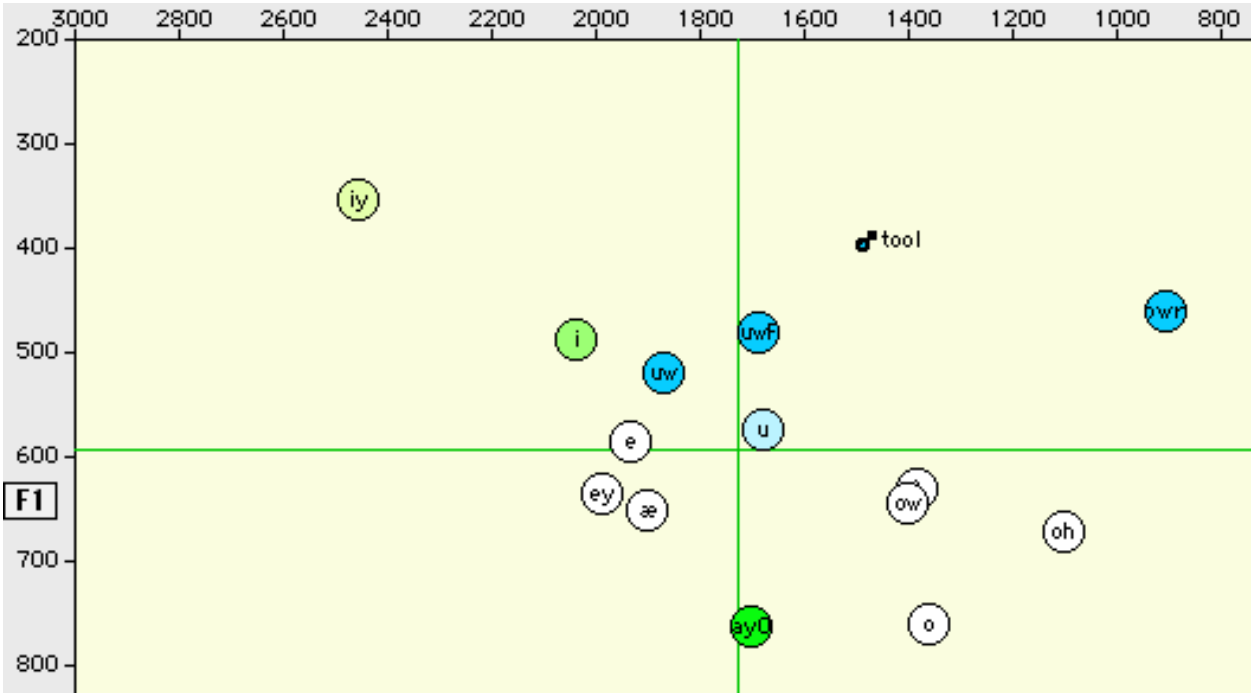


Figure 2: Mike, Under 25 European American

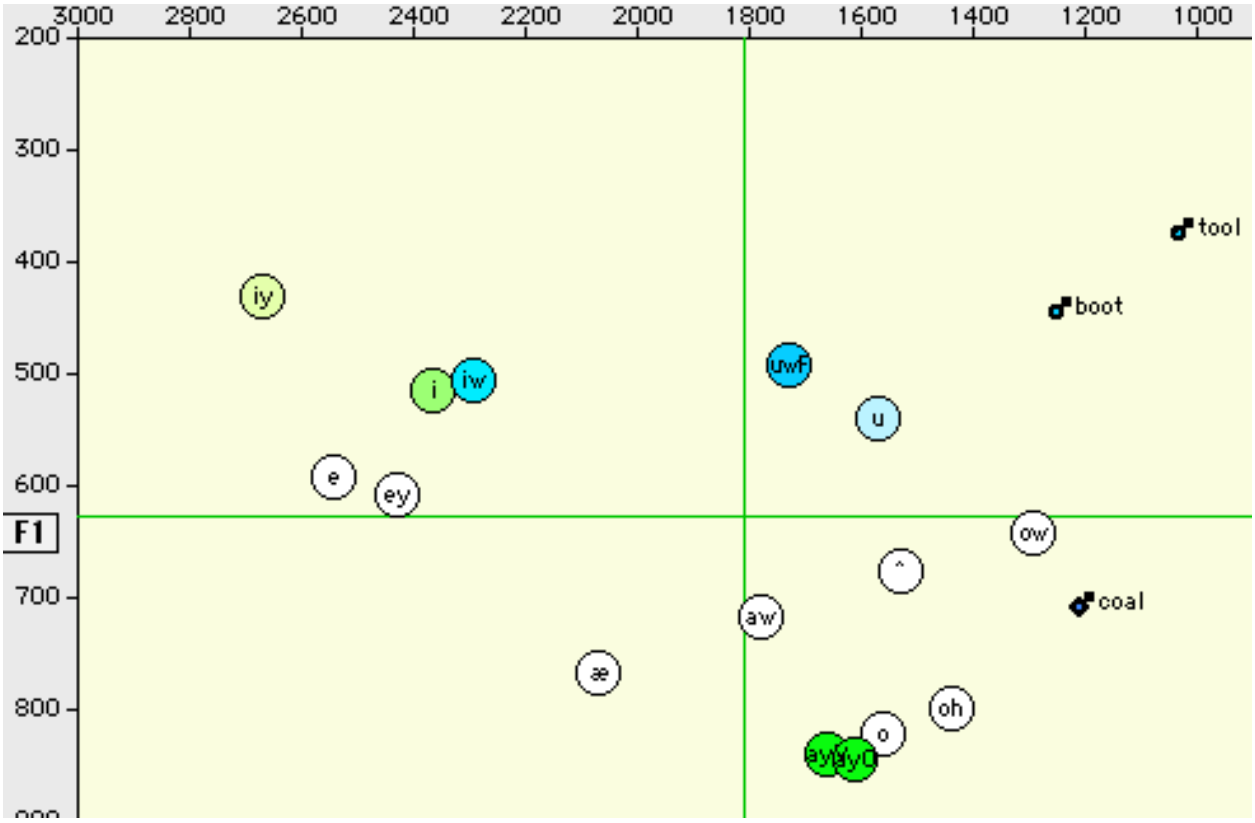


Figure 3: Valessa, Over 40 African-American

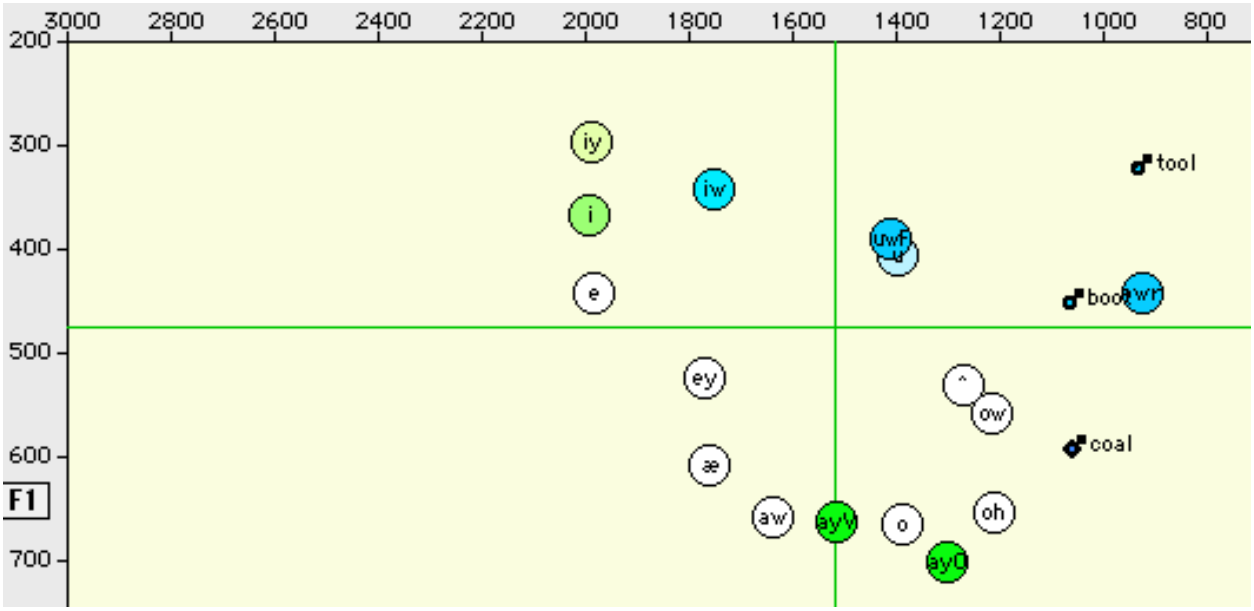
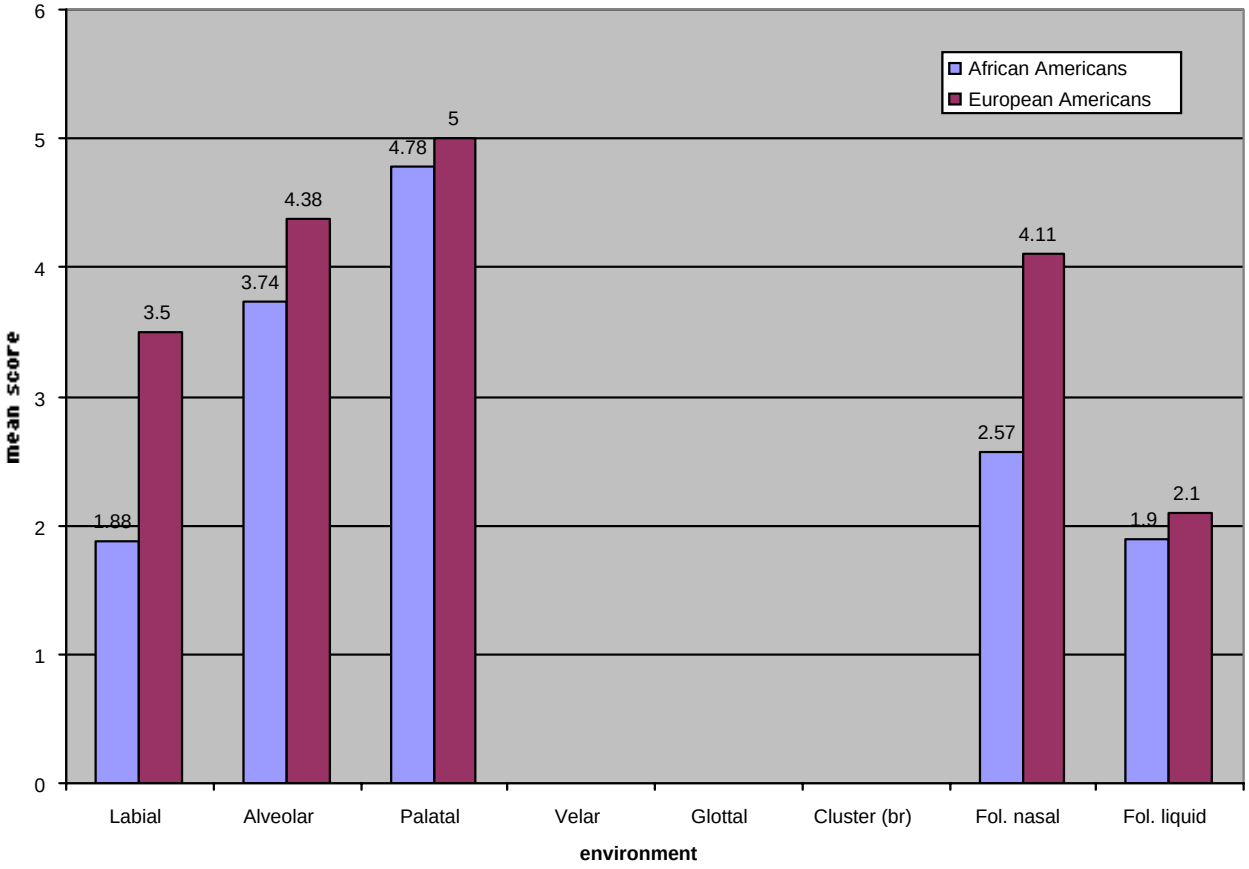


Figure 4: Ben, Under 25 African-American

Comparison of /uw/ fronting by environment



Comparison of fronting by vowel class between African-Americans and European-Americans

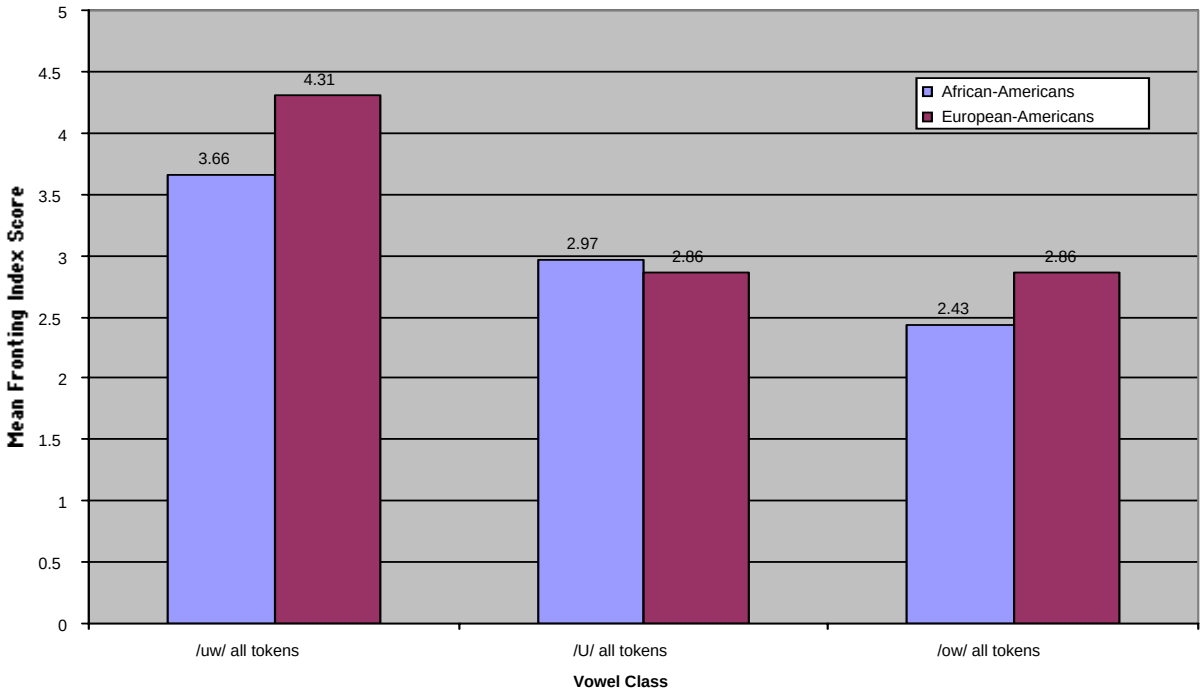


TABLE 1:OVERALL RESULTS SUMMARY- /ay/ glide weakening

European Americans

	% weak	%monophthong	% full
Voiceless	25	0	75
Voiced	68	15	18
Free	44	36	20
All Env. Combined	**55**	**17**	**27**

African Americans

	% weak	%monophthong	% full
Voiceless	51	0	49
Voiced	63	26	12
Free	61	33	6
All Env. Combined	**60**	**23**	**17**

Table 4: Low back-vowel means comparisons by overall merger indices, glide score indices and number of monophthongs.

overall merger index **m=2.2** **1=full merger, 3=no merger**	Black: 2.0	Male: 2.35
	Whites: 2.4	Female: 2.05
glide score index **m=2.06** **1=short glide, 3=full glide**	Black: 2.3	Male: 1.92
	Whites: 1.82	Female: 2.20
# of Monophthongs **m=1.55**	Black: 0.7	Male: 1.70
	Whites: 2.4	Female: 1.40

SUMMARY PERCEPTION STUDY RESULTS:

Table 5: Mean and Standard Deviation for variables in rating the more southern word accurately.		
By Vowel Class	**Mean**	**Standard Deviation**
/i/	.6709	.1869
/I/	.3901	.2302
/e/	.8422	.2079
/ɛ/	.4858	.2685
/u/	.5372	.2834
/U/	.5121	.2383
/o/	.6206	.2298
By Front vs. Back Vowel Groups:		
/i/,/I/	**.5461**	**.1482**
/e/,/ɛ/	**.6640**	**.1644**
/i/,/I/,/e/,/ɛ/	**.6016**	**.1165**
/u/,/U/,/o/	**.5622**	**.1695**
all vowels	.5816	.0099

- The table above lists all the means and standard deviations for the vowel classes used in the comparisons. Participants were measured for accuracy in the selection of the most "Southern" guises. Participants were accurate at identifying which word was the more Southern shifted token at an overall rate of 58%, with accuracy rates for individual vowels varying from 84% to 39%. In addition, participants were more accurate in choosing the more southern guise for the front subsystems as a group than for the back subsystems as a group at a significance level of $t(140) = 2.23$, $p < .05$.

Table 6
Mean Scores for Education and Pleasantness Ratings by Northern and Southern shifts

Education *Scale from 1 to 3 (least to most)*	**Pleasantness** *Scale from 1 to 3 (least to most)*
Southern Shifted Tokens Combined: m = 1.85 (SD = .22)	Southern Shifted Tokens Combined: m = 1.79 (SD = .28)
Northern Shifted Tokens Combined: m = 2.04 (SD = .25)	Northern Shifted Tokens Combined: m = 1.90 (SD = .29)

Education and pleasantness scores by vowel sub-system (Front vowels vs. back vowels)

	Education	Pleasantness
Front vowels shifted Southern	1.67 (SD = .26)	1.72 (SD = .37)
Front vowels shifted Northern	1.86 (SD = .36)	1.77 (SD = .38)
Back vowels shifted Southern	2.11 (SD = .32)	1.89 (SD = .35)
Back vowels shifted Northern	2.14 (SD = .30)	1.99 (SD = .40)

Table 7: ANOVAS on Southern Accuracy Ratings by Vowel Class.

Front Vowels:

iy

no main effects or interactions

I

main effect of race, $F = 5.36$, $p < .05$
Whites: m = .44 (SD = .23)
Blacks: m = .36 (SD = .23)

ey

no main effects or interactions

E

no main effects or interactions

Back Vowels:

uw

Interaction of race and gender, $F = 13.0$ $p < .01$
White males = .57
White females = .44

Black males = .43
Black females = .58

U

main effect of race, $F = 13.17$, $p < .01$
Whites: m = .59 (SD = .28)
Blacks: m = .45 (SD = .26)

main effect of gender, $F = 5.8$, $p < .05$
Males: m = .57 (SD = .29)
Females: m = .47 (SD = .26)

mean scores as interaction- not significant:
White males = .65
White females = .52

Black males = .46
Black females = .42

ow

no main effects or interactions