Vowel Changes in Columbus, Ohio

Erik R. Thomas

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Erik R. Thomas
University of Texas at Austin

Linguistically, Columbus, Ohio, has two main characteristics: it is a part of the southern Midwest, and it is a city in which dialect mixture is important. As a southern Midwest dialect, Columbus speech has a North-South transitional flavor. Dialect mixture, nonetheless, accounts for most of the sociolinguistic variation within the community. The population is made up of blacks; whites of South Midland (Upper South) background, mostly from West Virginia and Kentucky; and whites of North Midland (Lower Northern) and Northern (or Upper Northern) background, who may be further subdivided into central Ohio natives and those from other areas in the North Midland and North.

These factors contributed to the plan of this study of changes in Columbus dialect. Historical records of Columbus speech and that of other regions affecting Columbus, in the form of phonetic transcriptions, are readily available (Kurath 1930, the Linguistic Atlas of the North Central States [LANCS], Kurath and McDavid 1961), so I determined that I would only interview younger speakers; an advantage to using younger informants is that the different dialects involved in the mixture have, to a large extent, coalesced in their speech. The informants were thirty-four volunteers from East High School in Columbus (see Table 1), interviewed in December 1985. The sample included nine black males, seven black females, ten white males, and eight white females. I did not request the specific ages of the informants; since the informants were all high schoolers, one could safely assume that their ages fell within the narrow range of fourteen to nineteen. Differences in the speech of various age groups within the high school are beyond the scope of this study. All volunteers were accepted; because dialect mixture is such a salient factor in Columbus, I felt that any selection process for particular informants would give an inaccurate picture of the processes affecting Columbus dialect. The fact that the informants were volunteers probably has little affect on the validity of the results. For one, the results match other observations I have made about Columbus speech, and second, the reading abilities of informants varied widely, as evidenced by the recordings of the reading passage, suggesting that the sample includes a good cross-section of

students at East High School. The "background" of an informant was the area(s) in which the informant's parents had grown up, which proved to be an important factor. Twenty-six of the informants were born and raised in the Columbus area, but the majority of parents of informants were from other areas, and, indeed, Columbusites with central Ohio lineage from both parents are today a decided minority. Differences in the speech of the eight informants who had largely grown up outside central Ohio are useful in determining what effects outside influence is having on the Columbus dialect.

The informants were asked to answer six questions, designed to elicit pronunciations of *wash*, *grease* (verb), *greasy*, *want*, *roof*, and the second-person plural pronoun, and to read a passage containing numerous phonological variables. The interviews, which were taped, were transcribed later. A set of typical central Ohio speech features became apparent; the graduation of features from those whose parents were Columbus natives to those who were recent immigrants was very steady, and local influence was obvious in the speech of every informant. The features that emerge bear a close resemblance to those found in studies throughout the North Midland and Southwest, such as those in Philadelphia (Labov 1972), central Illinois (Habick 1980 and Frazier 1983), Kansas City (Lusk 1970), Wichita (Wyatt 1976), Salt Lake City (Cook 1969), and metropolitan areas in California (Luthin 1986), especially with regard to the back vowel fronting that I will discuss later. It is instructive to compare these features with the vowel-shifting patterns described in Labov 1991. Labov finds two shifting patterns operating in the United States and elsewhere, a "Southern Shift" and a "Northern Cities Shift". The Southern Shift consists of a frontward movement of the nuclei of the /au/ of *now*, the /o/ of *go*, and the /u/ of *loose*; a laxing and lowering of the nuclei of the /e/ of *days* and the /i/ of *need*, accompanied by tensing of the /ɛ/ of *wet* and the /ɪ/ of *hit*; and raising of the /ɔ/ of *thought*. The Northern Cities Shift involves lengthening and raising of the /æ/ of *bad*, fronting of the /a/ of *crops*, lowering of /ɔ/, backing and rounding of the /ʌ/ of *sun*, backing or lowering of /ɛ/, and lowering of /I/. Each of these systems operates in close proximity to Columbus: the Southern Shift south of the Ohio River, and the Northern Cities Shift as close as Cleveland and Detroit.

As the similarities to other dialects in the North Midland and Southwest indicate, Columbus has already become more uniform than one might expect in view of the amount of dialect mixture. The recent immigrants may have contributed to the increasing Southernization of Columbus speech. By the same token, however, certain South Midland and Southern (or Lower Southern) speech characteristics have become stigmatized and are declining.

/r/-lessness is becoming uncommon among blacks; only four of sixteen blacks interviewed, two of whom had recently moved to Columbus from other states, were ever r-less for final or preconsonantal /r/, and all four /r/-less speakers articulated final and preconsonantal /r/ in some cases. Significantly, one of the two speakers with an intrusive /r/ in *wash* was black. Another declining feature, and one that is part of Labov's Southern Shift, is the tendency for /e/ and /i/ to be lax, relatively wide diphthongs. Whites of North Midland and Northern background were not adopting these values (showing for five words 62% [ei], 36% [e˳i], and only 2% [ɛi]), while those speakers with them—many blacks and certain whites of South Midland background—tended to be inconsistent in their usage (whites of South Midland background had 33% [ei], 57% [e˳i], and 10% [ɛi]; blacks had 16% [ei], 63% [e˳i], and 19% [ɛi]). The trend, then, is for /e/ and /i/ to stay tense, although /e/ always remains diphthongal except occasionally before /l/. Substitution of /ɪ/ for /ɛ/ before nasals is another such feature: for *dentist*, *fender*, and *ended*, blacks had 73% /ɪ/ but whites only 33%; even whites of South Midland background showed a high incidence of /ɛ/.[1] The fact that black speech, especially, is closely approximating white speech is underscored by the fact that the slight dominance (ten to eight) of /ʊ/ (as in *good*) in *roof* among white informants practically matched that (eight to six) of /ʊ/ in *roof* in black speech.

The vowels that are exhibiting Southern influence are the back and back-gliding classes. One important shift that shows South Midland and Southern influence is the fronting of the onset of /au/, as in *now*. According to both LANCS records (Thomas 1989) and Frazer 1978 (which is based on interviews from the *Dictionary of American Regional English*, Cassidy et al. 1985-), the onsets of /au/ and /ai/ (as in *nine*) were formerly more or less the same in the Columbus area. The northern limit of fronted /au/, which is usually regarded as a Southern and South Midland feature (Kurath and McDavid 1961), ran through southern Ohio. /au/ with a low central onset, which is generally considered typical of the North and much of the North Midland, predominated in most of Ohio. However, of thirty-three informants responding in this study (both black and white), all but one, informant 30 in Table 1, a white male with northern Ohio parents, had onsets of /au/ more fronted than their onsets of /ai/. South Midland immigration is the only obvious explanation for the fronting of /au/ in Columbus speech. A study I conducted with freshmen at Duke University in 1987 indicates that fronted /au/ has become

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[1] However, all sixteen blacks and ten of sixteeen whites responding had /ɪ/ in *again*.

predominant throughout the southern two-thirds of Ohio (Thomas 1989). In field work that I conducted in 1987 with vocational-school students from Knox and southern Richland Counties, northeast of Columbus, I found that thirty-seven out of forty-eight students interviewed had fronted /au/, also indicating that fronted /au/ predominates in the rural areas adjacent to Columbus.[2]

Informants in the East High School study with fronted /au/ generally articulated most instances of /au/ as [a.o], but higher values in the range of [æo] occurred frequently. The most favored environments for [æo] were after coronal and dorsal stops (including /n/) and before /n/. [æo] was more common in the speech of whites than in black speech. Most blacks showed some centralization of /au/ before voiceless consonants, to [ao] or rarely [ɐo]; this situation was much less frequent among whites. Glide shortening often accompanies centralization of /au/ before voiceless consonants, resulting in pronunciations such as [aə].

As with /au/, presence or absence of voicing of the following environment produces some allophonic variation with /ai/. The most common variation involved a situation in which offglides were longer before voiceless consonants than before voiced consonants, as in [*a*e] before voiceless consonants and [*a*ɛ] before voiced consonants (though of course the temporal duration was shorter before voiceless consonants). All but two informants, both whites of South Midland background, displayed this allophony to some degree. True glide shortening of /ai/ (to [*a*æ] or [*a*:]) is less common and occurred irregularly before voiced non-liquid consonants among whites of South Midland background and blacks; it appears to be stigmatized and declining. Among the informants in this study glide shortening never occurred before a voiceless consonant. All informants showed some glide shortening of /ai/ before /r/ and /l/, and of /ɔi/, as in *oil*, before /l/. However, glide shortening of /au/ before /r/ was rare: no informant lacked rounding on the glide in *power*, and only four lacked rounding on their glides in *towering*. Onsets of /ai/ did not show much variation in the sample.

Labov 1991 considers the fronting of /o/ and /u/ to be a shift related and parallel to the fronting of /au/. Historically, backed /o/ and /u/ predominated in central Ohio. LANCS field records show scattered informants in the southern half of Ohio, including one of the three in Columbus, with centralized or fronted /o/, but for the most part the region of /o/-fronting that was

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[2] In both the Duke and the vocational-school studies, speakers were asked to read word lists.

centered upon Pittsburgh (see Kurath and McDavid 1961) stopped at the Ohio border. Centralized /u/ is common but not universal among LANCS informants from central and southern Ohio. Centralization and fronting of /o/ and fronting of /u/ seems to have taken place coincidentally with fronting of /au/ in Columbus. Centralization or fronting of /o/ in positions other than before liquids was varied: 68% among black males, 75% among black females, 89% among white males, and 91% among white females. When /o/ and /u/ are centralized or fronted, they normally glide to a high central position. Before /l/ as in *pole* and *tool*, a different picture emerges: /o/ and /u/ both tend to remain backed before /l/. Whites almost without exception had backed /o/ before /l/, while blacks had centralized /o/ before /l/ in 44% of all cases, reversing their lower centralization frequency in other positions. The best explanation for this reversal is that blacks are centralizing /o/ from contact with whites but have not entirely picked up the positional variation present in white speech.

As Labov 1991 notes, centralization or fronting of /o/ and /u/ creates a void in the high back vowel space. The merger of /ɔr/ as in *horse* and /or/ as in *hoarse*, to [oə], and the raising of /ɔi/ as in *noise* to [oi] contribute to the filling of this phonetic space, but the principal source of new high back vowels is the effects of final and preconsonantal /l/ on preceding vowels. Phonetically, a velar /l/, as is found in American dialects, will induce backing of neighboring vowels, and in Columbus it has had a particularly strong effect on preceding vowels. Final and preconsonantal /l/ itself was almost always pronounced without lateralization or alveolar contact as a high, back, more or less rounded vowel, perhaps resulting from the acoustic similarity of the velar /l/ to [w] or [u]. In any case, the failure of vowels to become fronted before /l/ and the vocalization of final and preconsonantal /l/ have led to several mergers of back vowels before /l/. Three reasons may be posited which together account for these mergers: first, the tendency mentioned above of backed positional variants to develop before /l/, which then may converge with each other; second, the tendency of triphthongs, here produced by vocalization of /l/ after diphthongs, to become diphthongs; and, third, overloading of the diphthong inventory (as vocalized /l/ becomes an offglide). These mergers have been so pervasive that only ten out of thirty-one informants responding kept all backed vowels distinct before /l/. Conversely, because of dialect mixture not all speakers have the same mergers, and as many as eight patterns of back vowels before /l/ occur. The /ul/ of *tool* and the /ʊl/ of *pull* rhyme in one merger, which was common among blacks and especially common among whites of South Midland background. The merger of /ʊl/ and /ul/ has pre-

viously been reported to occur as close to Columbus as western Pennsylvania (Johnson 1971, Hankey 1972). The merger of /ʊl/ as in *pull* and /ol/ as in *pole* occurred among a few whites with native Ohio background. The tendency to have the same vowel in *bulge* as in *pull* (not a true merger since /ʌl/ still occurs in other words, but relevant here) is common among blacks but becoming rare among whites of South Midland background, and seems to be recessive. Merger of /ʌl/ as in *bulge* and /ɔl/ as in *wall* is gaining ground among all groups. Triple mergers, directly attributable to dialect mixture, are also a possibility. Field work that I conducted in 1992 in nearby Knox County indicates that one such triple merger is taking hold in central Ohio and that some of these mergers have even more currency in rural parts of central Ohio than in Columbus itself. Of twelve vocational-school students interviewed in Knox County, all twelve had the /ɔl~ʌl/ and /ʊl~ul/ mergers, and eight had /ol/ merged with /ʊl/ and /ul/, creating a triple merger of /ol~ʊl~ul/. Mergers of vowel classes other than those listed above are having less success. Those of /ɔil/ and /ol/, of /il/ and /ɪl/, and of /el/ and /ɛl/ do not seem to be taking hold in Columbus. A few blacks monophthongized and fronted /ai/ before /l/, merging /ail/ with /au/. Merger of /æl/ with /au/ was not tested, but I have noticed that it is common. At any rate, the high back space is filled by a cluster of presently unstable sound classes.

The low back vowels present a situation nearly as turbulent as that of vowels before /l/. Most informants merged the /*a*/ of *crops* and the /ɔ/ of *thought* before voiceless stops (the only environment tested for both classes); those who did not included six out of sixteen blacks and a white male (informant 26 in Table 1) who also kept all backed vowels distinct before /l/. Merger of /*a*/ and /ɔ/ usually produced a low, back, unrounded [*a*ˑ~ɑ], slightly more back than /*a*/ had been before the merger. Relics of the rounded /ɔ/ are, however, frequent before /g/, word-finally, and before nasals, and appeared in the speech of all but three of thirty-two informants responding. *Dogs* shows the strongest such tendency: twenty-four informants had upgliding diphthongs and three others had rounded monophthongs. For speakers without a consistent distinction between /*a*/ and /ɔ/, all of these variants might well be considered allophones of a single sound class, even though they represent parts of what were originally two sound classes. Historically, the merger is not unexpected in Columbus. In nearby Hocking County, Hartman found that four of his five elderly informants distinguished the vowels in *cot* and *caught*, compared with only two of eight middle-aged and one of six younger informants (1966). LANCS field records indicate that a backed /*a*/, that is, [*a*ˑ~ɑ~ɒ], has long been frequent or even predominant in the southern half

of Ohio. Furthermore, many LANCS informants in southeastern Ohio had already merged /*a*/ and /ɔ/, with an unrounded allophone before non-nasal stops (except /g/) and a rounded allophone in other environments (Thomas 1990). Nobbelin 1980 also mentions the /*a*~ɔ/ merger among LANCS informants in eastern Ohio. Kurath and McDavid 1961:Map 15 shows backed variants of /*a*/ to predominate throughout the South Midland and South. Unlike those areas, however, Ohio never became a stronghold of raised or upgliding /ɔ/ (except in a few phonetic environments), as it would be under the Southern Shift, and thus /*a*/ and /ɔ/ came to occupy phonetic space very close to each other, possibly inducing the merger. In contrast to the Cleveland metropolitan area, which follows the Northern Cities Shift pattern of fronting /*a*/, Columbus has followed the more Southern pattern of backing /*a*/.

One other vowel that might indicate Southern and South Midland influence is /æ/, as in *bad*. Although raising of /æ/ is prevalent in the nearby Cleveland area, this shift has gained little ground in Columbus. However, some speakers do have raised /æ/ as occasional variants in their speech, especially before nasals. Blacks in East High School tended to lack raised variants altogether, and whites with North Midland and Northern backgrounds were more likely to exhibit them than whites with South Midland backgrounds. South Midland influence is most likely retarding the raising of /æ/.

The tendency toward mergers seen with regard to /*a*/ and /ɔ/ and to vowels before /l/ is conspicuous among vowels before /r/. /ɛr/ and /ær/, as in *merry* and *marry*, and /ɔr/ and /or/, as in *horse* and *hoarse*, were already merging in Ohio at the turn of the century, as the LANCS field records show (see Nobbelin 1980 for a description of the /ɔr~or/ merger among LANCS informants). The East High School results indicate that these mergers have been completed in Columbus. I also investigated the merger of post-palatal /ur/ as in *sure* with stressed syllabic /r/, so that *sure* rhymes with *stir*. This merger shows a strong division down racial lines: whites invariably rhymed *sure* with *stir*, but most blacks preserved the pronunciation with [uə~uə]. Blacks, whites of South Midland background, and whites of central Ohio background rhymed *poor* with *door*, but whites with a background in the North Midland or North other than central Ohio pronounced *poor* as /pur/. The /ar/ sequence, as in *barn*, is neither fronting to [aə] nor rounding to [ɒə].

The /g/ of *geared*, like the liquids, has a strong effect on preceding vowels. As stated above, /ɔ/ tended to have an upglide before /g/, especially in *dogs*, which for many speakers had the same diphthong as *wall* (counting the vocalized /l/ in *wall* as an offglide). /ɛ/ before /g/, as in *leg*, not only consistently had an upglide, but was merged into the /e/ of *made* by every informant in the

study. /ɪ/ before /g/ was probably perceived by most speakers as having the /i/ of *need*, because all the informants had a similar vowel in *big*, but many had slightly wider glides for /ɪg/. /ʃ/ as in *push*, however, is losing its effect on proceeding vowels, much as Hartman 1966 found southeast of Columbus in Hocking County. East High School informants never articulated /u/ in *push* or /i/ in *official*, even though LANCS field records show found /u/ in *push* and /i/ in *dishes* to have been common in Ohio. [ɛɪ] in *special* occurred only once, in the speech of a white of South Midland background, and [æɪ] in *trash* was given by four speakers, all black. In *wash*, two informants had [or], four had [o~ʊ], and the remainder had a low back vowel.

One important feature of Columbus speech is that a component of Labov's Southern Shift has become established, namely the frontward movement of /au/, /o/, and /u/ (and sometimes of /ʌ/ and /ʊ/ as well). This fronting process, in addition to the backing of /*a*/ and the failure of /æ/ to be raised, points to Southern and South Midland influence on Columbus speech. Another feature in Columbus speech is a tendency toward mergers, of /*a*/ and /ɔ/ and of vowels before /l/, /r/, and /g/. The pre-/l/ mergers, in particular, provide an instance of speakers following norms based on geographic origins of their parents rather than coalescing to a local norm. The overall results of dialect mixture in Columbus are similar to those that Udell 1966 found in Akron, Ohio: indigenous speech patterns determine most features of the continually changing dialect, but immigration from other regions influences some features. One other significant factor in Columbus dialect is that black and white speech are showing signs of convergence. Characteristics of pronunciation associated with Black English, such as /r/-lessness, high values of /ʌ/, and glide shortening of /ai/ are waning among Columbus blacks. Although black and white speech remain quite distinct in Columbus, as Roberts 1966 finds in her study of Columbus natives, the differences are decreasing. The mixture of dialects in Columbus provides an opportunity to study the means by which differing linguistic influences fuse to form a new dialect. In general, dialect mixture has made Columbus part of the transition zone between regions dominated by the Northern Cities Shift and by the Southern Shift, and so Columbus fits in as part of the southern Midwest, a section of the larger dialect region of the North Midland.

Table 1: Informants from East High School, Columbus, Ohio. Interviews for Informants 14 and 28 are incomplete.

Inf.	Race	Sex	Other Places Lived	Background (Parents)
1	B	M	—	KY; TN
2	W	F	—	m/MI; f/IA
3	W	F	TN	both TN
4	B	F	CA until 4 yrs. prev.	m/CA; f/AL
5	B	F	Detroit, MI	both Portsmouth
6	W	F	—	m/KY
7	W	M	—	Columbus; KY
8	W	M	Baltimore, OH (25 m.)	m/Lorain; f/Columbus
9	B	M	—	both Columbus
10	B	F	—	both Columbus
11	B	M	—	both Columbus
12	W	F	—	both Columbus
13	W	M	—	m/WV; f/Columbus
14	W	M	3 yrs. in Morgan Co.	both Columbus
15	B	F	—	both Columbus
16	B	M	—	both Columbus
17	W	F	WV till 4 y.o., Cleveland till 9 y.o.	both WV
18	W	F	Oklahoma City, OK	both eastern PA
19	B	M	—	m/NY
20	B	M	Baltimore, MD	both Baltimore, MD
21	B	F	Huntington, WV	both Huntington, WV
22	B	F	Dublin (Columbus suburb)	both Chicago, IL
23	B	F	NM (born Columbus)	both Columbus
24	W	F	—	Pittsburgh, PA; Cleveland
25	W	M	—	m/CA; f/Columbus
26	W	M	—	m/Columbus; f/Portsmouth
27	B	M	—	m/Columbus; f/Los Angeles, CA
28	W	F	Dublin	m/Dublin; f/Pickerington (20 m.)
29	B	M	—	both Columbus
30	W	M	—	m/Perrysburg; f/Youngstown
31	W	M	—	Akron; WV
32	B	M	—	m/NY; f/Atlanta, GA
33	W	M	Scioto Co.	both Scioto Co.
34	W	M	—	both Columbus

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