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Change on top of Change

Social and Regional Accommodation to the
Northern Cities Chain Shift

How language changes was, for many years, the central question of European linguistics, and how intra-language varieties (i.e., "dialects") arise, persist, are acquired, mutate, and disappear were the concerns which linked the earliest explorations of dialect variation with historical linguistics. From its beginnings, however, dialectology recognized a social dimension, but such consideration was often limited to two factors – ones which we might refer to as those of "tribe" and "network," themselves closely related notions. The linguistic distinctiveness of groups ("tribes") lies at the root of ethnolinguistic distinctiveness, and a great deal of language variation study (then and now) has been devoted to investigating the dispersion of languages through "tribal wanderings" (e.g., the Latin wedge driven into Slavic territory in what was to become a Rumanian language area) and the subsequent influences on them (and on the languages they came into contact with). As Bloomfield (1933) notes, however, communication networks must also to be taken into account. Why would dispersion lead to change (setting aside contact-influenced and "internal" change) unless it entails the loss of frequent interaction between interlocutors? Rumanian is different, therefore, at least in part, because there were no longer dense communication networks between its speakers and those of varieties of Latin with whom they were no longer in contact.

It is odd that linguists had to be reminded of the importance of dense networks by Lesley Milroy (1980), although Labov's earlier work on New York City gangs (1972a) exploited the idea from a different perspective by using "sociograms" to characterize the centrality (or peripherality) of membership in such community-based social structures. Whatever the social science basis of such representations in more recent sociolinguistic work, the underlying presupposition is the same as Bloomfield's much earlier characteriza-

tion: frequent interaction supports language similarity. What is essentially different about Labov's and particularly Milroy's (and subsequent) work is that 1) frequency of interaction is determined by a variety of predictors of social (as well as strictly geographical) distance and 2) the social science bases of underlying network relationships on which such frequency of inter-action is based are considerably more sophisticated, both in calculation (e.g., through such quantitative methods as those suggested by Milroy 1980) and in theoretical underpinnings (e.g., Milroy's appeal to such social science concepts of "friends of friends" and the construction of such theories as "accommodation" by social psychologists of language, e.g., Giles and Smith 1979). One main effect of this attention to networks has been a much more sensitive account of differences within (as well as between) communities. Such a perspective allows researchers to consider not only the classic demo-graphic characteristics of age, sex, ethnicity, and status (in addition to the even more classic dimension of location) but also the even more subtle (but equally powerful predictors of language variety) demographic characteris-tics which have to do with the locally situated individual's ongoing con-struction of his or her identity, as shown in, for example, the work of Wolf-ram (1974, in the characterization of Puerto Rican adolescent immigrant's "choices" in constructing an African-American or Hispanic identity) and Eckert (1988, in the characterization of adolescent, suburban Detroiters' (Michigan USA) choices in belonging to a "street values" ["burnout"] or a "mainstream values" ["jock"] subculture).

Earlier European scholars had established an important (and too-long ignored) precedent in investigating speech-community internal factors in variation and change. In Charmay (Switzerland), for example, sex (as well as the more obvious age) differences were shown to be powerful predictors of variety (Gauchat 1905), but this important work was not vigorously taken up in the following years of dialect investigations in most of Europe, and, since American dialect research had its foundation in the work of European scholars, it was not obvious to the first scholars that such locale-internal variation was important, although the earliest US atlas studies did record age, sex, ethnicity, and status differences, but these categories were not more centrally exploited in that tradition in a large project until the LAGS (Linguistic Atlas of the Gulf States) project (Pederson et al., 1986-92). A number of US scholars have returned to the earlier atlas projects' data to mine them for such internal distinctions (e.g., McDavid 1988 for sex), but, in many cases, the original sources only accidentally provide the opportunity for such treatment.

It was, of course, the Labovian revolution in linguistics which embedded language variation and change in a wide range of social as well as linguistic characteristics, particularly after the publication of Labov 1966. Of course, it did not hurt this upsurge in focus on social facts that a Hymesian revolution occurred at about the same time. Although the latter was admittedly a more anthropologically and ethnographically centered one, it nevertheless framed the linguistically central study of variation in the emerging quantitative paradigm as one of importance to the more general concerns of an ethnography of language and communication (e.g., Hymes 1972, 1974).

Among European scholars, however, the importance of social type and identity was not completely buried between the investigations in Charmay and that later work (such as Milroy's and Trudgill's) which began to pay full attention to social characteristics. We will not review all that work here (although, to speak frankly, like American work in the same period, it would not require too much space to do so).

This present study recognizes and celebrates the work of one such scholar, Dr. Jo Daan, who, for many years, particularly in her association with the P.J. Meertens-Institute in Amsterdam, carried out not only the painstaking fieldwork collection and historically sensitive work of traditional dialectology but was always sensitive to the role of variation in local identity as a potential for the expression of language variety.[2]

In the spirit of Daan's interest in how local groups and identities align themselves in accommodating to (whether fully or partially) or rejecting emerging norms, we have looked at three minority groups in Michigan and studied the degree to which they participate in the massive vowel change known as the "Northern Cities Chain Shift" (NCCS).[3] We chose these three groups because they differ minimally to considerably from the mainstream or majority local group, one which, in urban areas in southeastern Michigan, is fully participating in the NCCS. We shall try to characterize how internal differences within these subgroups provide a better account of how accommodation to an emerging local speech norm develops.

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[2]   The senior author was delighted to be able to arrange and publish the translation of Dr. Daan's part of Daan and Blok (1970) into English (Daan 1999) so that even more of her work has become available to a larger audience.

[3]   We are aware that some (e.g., Stockwell and Minkova 1997) do not agree that the series of vowel changes known as the "Northern Cities Chain Shift" is chain-like. Our work here is based on vowel changes which have certainly been made and are ongoing; whether they are a part of a chain-shift system or not is beyond the discussion here, but surely such studies as these will contribute to the debate about this issue.

Table 1: The three groups under study and the "model" Northern Cities Chain Shift (NCCS) group (Shaded areas are "same" as "Model" group)

Features/ Groups	"Original" Dialect	Ethnicity	Current Location	Recency in Location	Difference from "Model"
Model (NCCS)	Inland Northern	European - American	Urban SE Michigan	Long-term	0
Rural Mid-Michigan	Inland Northern	European-American	Rural Central MI	Long-term	1
Appalachian	Appalachian	European-American	Urban SE Michigan	Short-term	2
African-American	African-American	African-American	Urban SE Michigan	Short-term Mid-term	3

As Table 1 shows, the "model" for this emerging norm is composed of European-American, long-term residents of urban, southeastern Michigan. We characterize them (and the other groups studied here) for four characteristics: original dialect, ethnicity, current location, and length of residence in that location. Rural mid-Michiganders differ from the model group only in their place of residence. They live in ethnically homogeneous (European-American) small towns in central lower Michigan (near the town of Clare); they mostly have agriculturalist backgrounds, although some are now employed in small industry, and a few of the middle-class respondents work in such typical local support professions as law, education, and medicine. They represent a long-standing British Isles population who came to Michigan in early years of westward expansion along the lakes and waterways of the region. Their US dialect background would have been primarily Eastern and Western New England and Upstate New York, with mixture from some other varieties from farther south. Foreign language input to the area was principally German and Scandinavian in the early and mid-nineteenth century, and the large southern and eastern European immigrations on the late nineteenth and early twentieth centuries did not influence the area. There is a small Native American population in this area (Ojibwe).

The variety of this area (and considerable surrounding territory) has come to be known as "Inland Northern" among US dialectologists. Its vowel system (like that of the "North Midland" area just to its south) is the one most often represented in introductory linguistics textbooks as the "General

American" vowel system, shown here in Figure 1 (see p. 67). As the column "Original Dialect" shows in Table 1, this vowel system was shared (before the influence of the NCCS) by the "Model" and "Mid-Michigan" groups.

"Appalachian" speakers in our study are residents of Ypsilanti, Michigan who moved there from areas of Eastern Kentucky, Tennessee, West Virginia, and nearby states and areas (and their descendents). Most came during or shortly after World War II to find work in the burgeoning war and postwar automobile economy. A Ford Motor Company plant was (and is) a prominent feature of downtown Ypsilanti. The distinctiveness of this population is reflected in the city's nickname for its east side ("Ypsitucky," a blend of "Ypsilanti" and "Kentucky") and even in that area's bars, markets, and churches, many of which cater primarily to this population. The original dialect of this group differs dramatically from the Inland Northern of the first two. It was a "South Midlands" dialect, originating in the Appalachian highlands and piedmont areas of the upper south, although now much more widely distributed (by subsequent immigration) to considerably farther western areas of the south (e.g., as far as west Texas). Unlike the settlers from the New England and New York areas, who had their roots in central and southern England, the population which formed the largest portion of these South Midland speakers were Scottish, Irish, and north of England people. Like the model group (but unlike the rural Mid-Michiganders), these Ypsituckians (as they call themselves) found themselves in an urban area which included not only the majority of original English and Germanic settlement groups but also African-American and South and East-European immigrants from later periods. They do not differ from the model group, therefore, in location, but they differ on two points: original dialect and length of residence in urban, southeastern Michigan.

African-Americans in Lansing form a sizeable part of the population and began to arrive in fairly large numbers well before the World War II industrial boom in the area (although many more came during that period as well). Immigration statistics show that the largest part of the African-American population of Michigan came from Georgia, Alabama, Mississippi, and, to a lesser extent, Arkansas (Wolfram 1969). Like the Ypsituckians, Lansing African-Americans found themselves in an urban environment but without the same ethnic diversity as Ypsilanti. Interestingly, there are no "Lansituckians." Local respondents, who remember southern European-Americans coming to the area at the same time and for the same purpose (there is a large General Motors plant in Lansing), have suggested that they found rural Mid-Michiganders in the auto plants, and, working side by side with them, found them so similar in tastes, beliefs, and the like that they accommodated to the

"Michigan norm" and felt no need to preserve their Appalachian distinctiveness. Whatever the reason, they have indeed been completely assimilated.

The vast majority of African-Americans in the north differ in original dialect from the surrounding majority, and Lansing African-Americans are no exception. Although aspects of African-American Vernacular English (AAVE) may have arisen after immigration to the north, it is clear that many aspects of this variety are continuations of what we call in Table 1 the "original" dialect, and it is also clear that many aspects of it are not completely different from European-Americans from the south. As Table 1 shows, however, African-Americans differ from the majority population in three of the four characteristics listed there.

In this research we have focused on the participation of the three minority groups in the first step of the NCCS, the fronting and raising of the low front vowel /æ/ ('cat'). We choose this vowel because it is usually regarded as the first step in this series of changes and therefore perhaps most likely to be evidenced in the systems of minority speakers. It is also the most dramatically shifted of these vowels (in phonetic space) and may therefore offer more robust evidence of change even in early stages.

Our aim is not only to show which of these groups is leading and lagging in accommodation to this vowel change and to correlate that position with the degree of difference from the majority group outlined in Table 1 but also to show how internal characteristics of each group (age, gender, status, and network) help more fully characterize such participation (or lack). Generally speaking, we will adopt the following generally well-accepted sociolinguistic commonplaces regarding the behavior of demographic subgroups.

1. Age. Younger speakers should be more advanced.
2. Sex. Women should be more advanced.
3. Status. Working Class speakers should be most advanced in the earliest stages of change from below; Middle Class speakers should be most advanced in later stages of change from below, after the change has secured itself as a new community speech norm; Middle Class speakers may also lead even in the earliest stages if change is from above.
4. Network. Loose ("open") networks should show greater susceptibility to change.

Figure 1: The "Pre-Northern Cities Shift Vowel System (Peterson and Barney 1952, with additional /ey/ and /ow/ data from Stevens 1998)
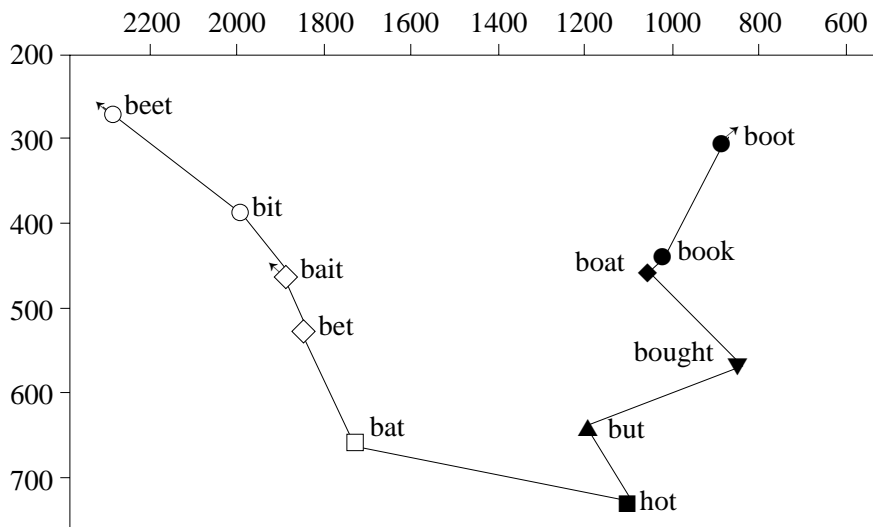

Figure 2: Janice R., female, 14, Detroit MI (adapted from Labov 1996, Figure 2)
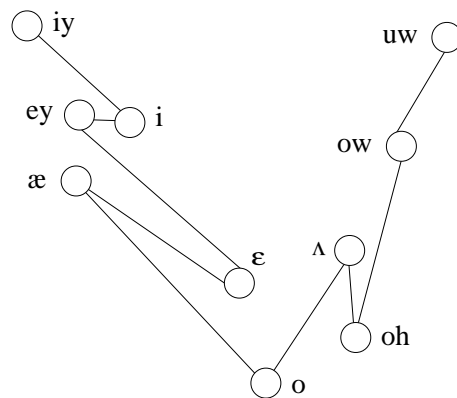
Figure 1 shows the position of the /æ/ vowel in its pre-NCCS position. Note that it is lower and backer than /ɛ/ (the lax mid-vowel). This was pretty certainly the system of both the model and Mid-Michigan groups before any NCCS influence.[4] Figure 2 shows the results of the NCCS in a Detroit speaker. Note that the /æ/ vowel is considerably higher and fronter than /ɛ/. We will use this repositioning of /æ/ as our benchmark for the measure of accommodation to the NCCS among the three minority groups studied here.

Although there is some controversy about both fronting and raising of this vowel in Appalachian and African-American systems (e.g., Thomas 1997), our work with tapes from respondents for DARE (the Dictionary of American Regional English) for both groups suggests that raising is not characteristic of either but that some Appalachian and many African-Americans would have exhibited fronting in their original dialects. Although we will continue to take fronting into consideration, our primary focus on accommodation will, therefore, be on raising, although it is likely that fronting as well as raising is a good indicator for the mid-Michigan group.

We characterize the fronting and raising of /æ/ on the basis of acoustic data derived from mini-disk digital recordings from the three respondent groups. Except in a few cases in which data were supplemented from interview or reading passage recordings, the data are derived from word-list performances. The F1 (vowel height) and F2 (vowel front-back position) were calculated by means of LPC (linear predictive coding) analyses performed on a Kay Elemetrics CLS (Computer Speech Lab) system. Since these data were not normalized across respondents, index scores were assigned to indicate the status of the vowels on both dimensions. These index scores are based on a comparison of means scores of the "target" /æ/ vowels with the means scores of comparison vowels (as shown in Tables 2 and 3). These means scores excluded tokens in phonetic environments which are well-known for their effect on F1 and F2 characteristics of vowels (e.g., before liquids, after glides). In both cases (F1 and F2), the lowest score ("1") represents an pre-NCCS position (as in Figure 1) and the highest number ("5") represents the most advanced one. In Figure 2, for example, although we have not done the statistical work, it is clear that the speaker there would have scored at least a '4' for both fronting and raising.

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[4]   We cannot trace the history of the NCCS here and how it came to Michigan in the first place; Labov 1994 provides a detailed background.

Table 2: F2 (front-back) index scores for /æ/

F2 Index "Fronting"	1	/æ/ is significantly back of /ɛ/
	2	/æ/ is not significantly different from /ɛ/
	3	/æ/ is significantly front of /ɛ/ but closer to /ɛ/ than /iy/
	4	/æ/ is significantly front of /ɛ/ but closer to /iy/
	5	/æ/ is not significantly different from /iy/

Table 3: F1 (height) index scores for /æ/

F1 Index "Raising"	1	/æ/ is significantly lower than /ɛ/
	2	/æ/ is not significantly different from /ɛ/
	3	/æ/ is significantly higher than /ɛ/
	4	/æ/ is significantly higher than /ɛ/ but closer to /^/
	5	/æ/ is not significantly different from /^/

The remaining demographic characteristics included sex and age (for which we regarded ages 16 - 34 as "young" and 35 - 80 as "old"). In addition we used Warner's (1960) social class index to divide our respondents into "working" and "middle" class groups. Scores 1 - 7 were assigned occupation, housing, neighborhood, and occupation (with the lowest number indicating the highest status, housing, education, and neighborhood). Occupation was multiplied by four, education and housing by three, and neighborhood by 2; the following classification system was used, based on the totals of those scores

Ratings	12-17	Upper	18-22	Upper-Upper Middle
	23-24	Upper Middle-Upper	25-33	Upper Middle
	34-37	Upper Middle-Lower Middle	38-50	Lower Middle
	51-53	Lower Middle-Upper Lower	54-62	Upper Lower
	63-66	Upper Lower-Lower Lower	67-69	Lower Lower-Upper Lower
	70-84	Lower Lower		

We assigned respondents who scored 20 - 50 the rank 'Middle Class' and those who scored 51 - 70 the rank 'Working Class'; respondents outside

these score areas were not used. High school students and non-working spouses have the same scores as the principal working member of the family (except in cases which could be independently determined).

Finally we determined the respondents' social network by means of a scale developed by Milroy (1980).

A: Membership in high-density territorially-based network:
B: Substantial kinship ties in neighborhood (more than one household in addition to the respondent's own)
C: Work at the same place with at least two people from neighborhood
D: Work at same place with at least two people from neighborhood of same sex as respondent
E: Associates extensively with people from place of work in leisure time activities

Each of the above network categories was determined for each respondent, and a score of one was assigned for each one which was determined to hold. A respondent with a score of zero (for whom none of the categories held) would, of course, be one with the loosest or weakest network relations; one with a score of five would be one with the strongest network ties.

We begin with the most general characterization of our results: means scores of the F1 and F2 index values for our respondent groups. As Table 4 shows, no group reaches even the "3" level for any characteristic; recall that it was minimally the "4" level which we would have assigned the Detroit respondent shown in Figure 2.

Table 4: Mean index scores

	F2	F1
Mid-Michigan	2.64	2.14
Appalachian	1.64	1.32
African-American	2.34	1.50

At first glance, this ordering would seem to confirm what is suggested in Table 1: that Mid-Michiganders, due to their differing from the model NCCS group by only one demographic characteristic (i.e., region), are most like them (although considerably behind them in advancement). The remaining scores, however, are not so clear. As we suggested above, some F1 (fronting) and some F2 (raising) has been reported for the original dialects for both the Appalachian and African-American groups. The scores shown here, how-

ever, would suggest that both fronting and raising must have been minimal for the Appalachian group but that, perhaps, fronting was already established among African-Americans. If that is so, and we disregard the difference between mean fronting scores for these two groups, how can we account for the fact that they are otherwise so similar when they differ as much from one another as the Mid-Michigan group does from the model group (at least in terms of the features specified in Table 1)? We shall try to use more detailed accounts of the status of these groups' adaptations to outline a possible account of these differences.

Figure 3: Mid-Michigan fronting (F2) index scores by age (percentage of respondents)
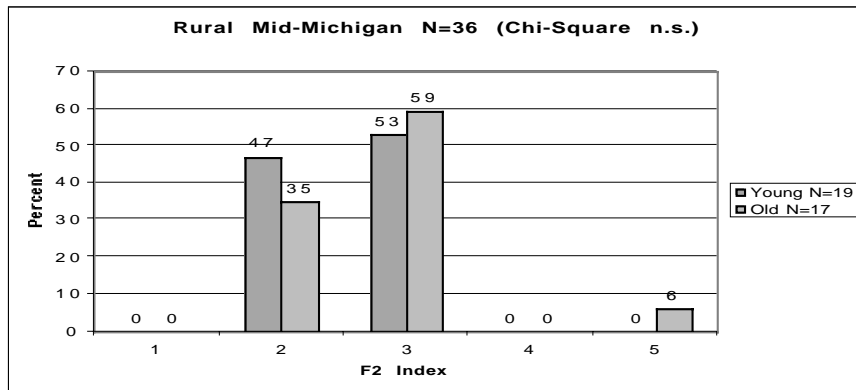
Figure 4: African-American fronting (F2) index scores by age (percentage of respondents)
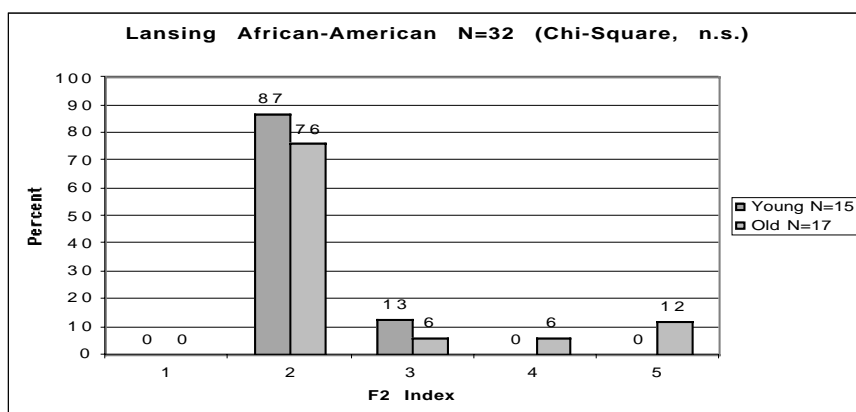
Figure 5: Appalachian fronting (F2) index scores by age (percentage of respondents)
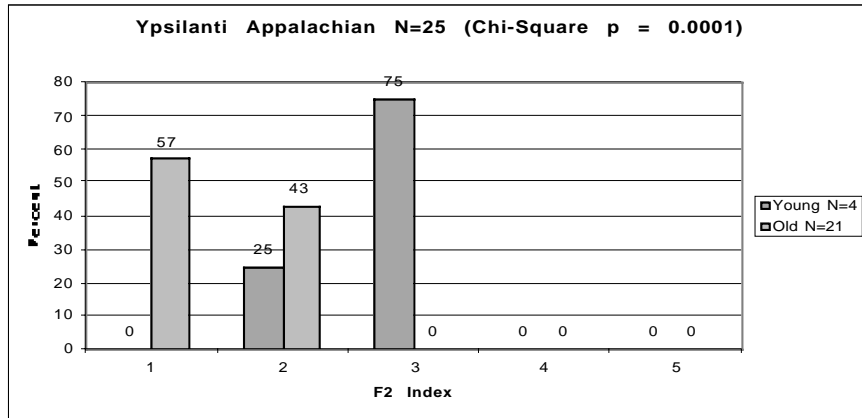
Figures 3, 4 and 5 show the percentages of respondents (on the y-axis) who received various index scores (on the x-axis) for fronting (F2) divided by age. The Mid-Michigan group is, in fact, not interestingly divided by this characteristic. Although the one respondent with a "5" index score is younger, in general, although some respondents seem more advanced ("3") than others ("2"), age is not important.[5] Similarly, age is not important in the African-American pattern of accommodation. Most speakers seem to have an F2 with an index of "2," suggesting, perhaps, except for a few outliers, that that position may be a relatively stable one, and, as suggested above, already in place in the "original" dialect. That is obviously not the case for Appalachian respondents; many young speakers are out in front, and many older speakers till have a score of "1," suggesting that that was probably the case in the original dialect. The Ypsilanti group is obviously the more "normally" configured as regards age in on-going change.

Figures 6, 7, and 8 show the same fronting results by sex for the three groups. In this case, both the Mid-Michigan and Appalachian groups are led by women; again, there is no interesting difference for the African-American group. If, however, an F2 of "2" is the norm for the African-American group

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[5] We do not limit our interpretation of "important" differences to those which show a significant chi-square; we believe the trends are quite clear and only the relatively small numbers of respondents in some cells prevents a more strict statistical interpretation of the data.

in general, it would be surprising to find index score differences among sub-groups. On the other hand, if the Mid-Michigan and Appalachian groups are adapting to an emerging (but fairly well-established) norm, then it is not surprising to find women in the lead. We will need to return, however, to the puzzle of why younger speakers are not leading in Mid-Michigan.

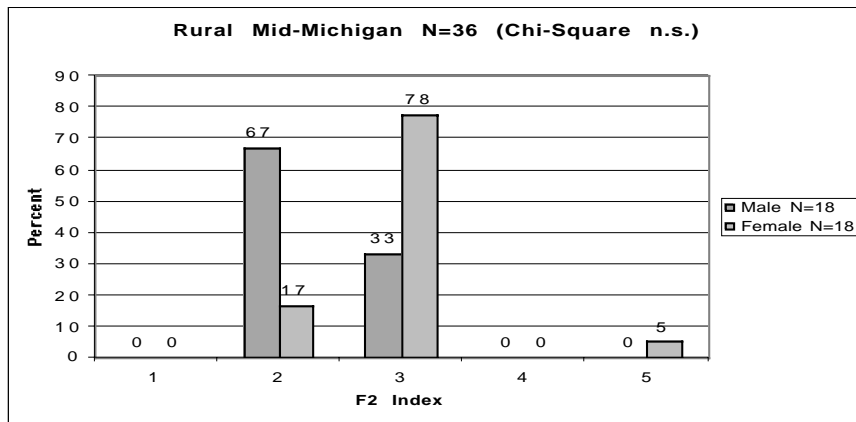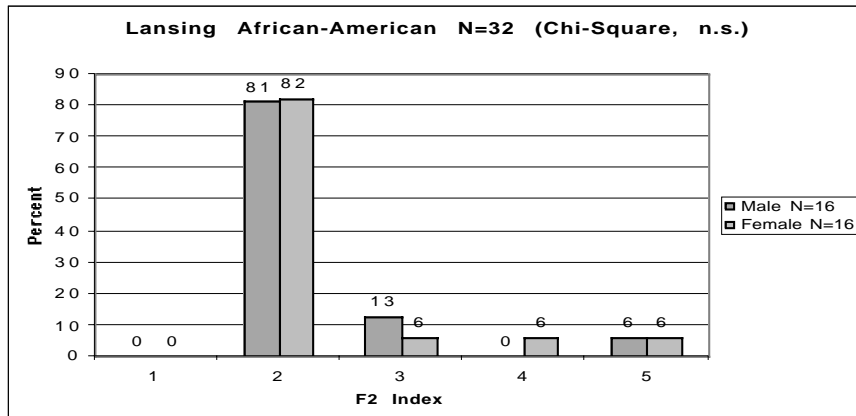Figure 6: Mid-Michigan fronting (F2) index scores by sex (percentage of respondents)

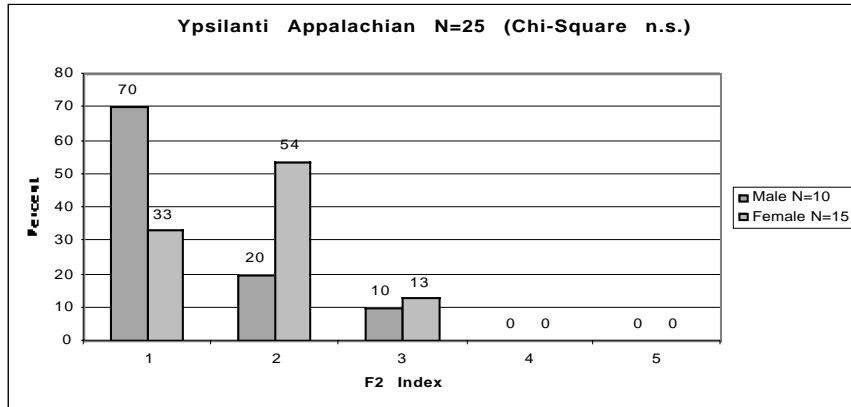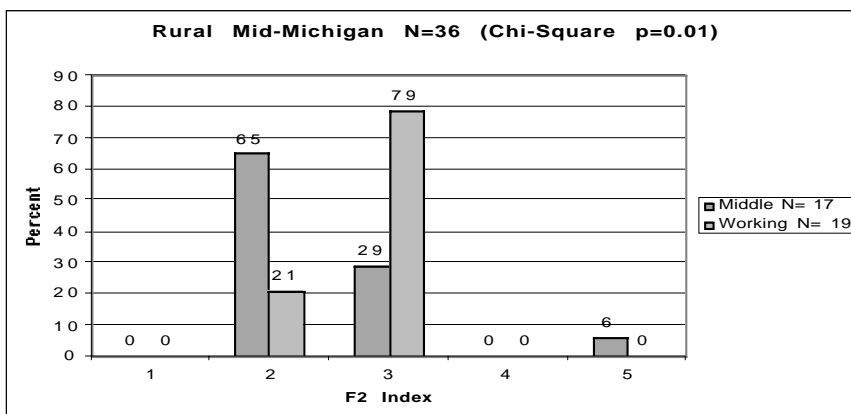Figure 7: African-American fronting (F2) index scores by sex (percentage of respondents)

Figure 8: Appalachian fronting (F2) index scores by sex (percentage of respondents)

Figures 9, 10, and 11 show fronting results by social status. Not surprisingly, F2 is again not an important factor among African-Americans. Perhaps most surprisingly, although age is not important and women are in the lead, it is the working class which is in the lead in Mid-Michigan. On the other hand, and more consistent with change in the direction of an established norm, the Appalachian respondents show a middle-class preference for the NCCS fronted form.

In general, then, our African-American respondents, by showing no important demographic subdivisions in their fronting index scores, seem to

Figure 9: Mid-Michigan fronting (F2) index scores by status (percentage of respondents)

Figure 10: African-American fronting (F2) index scores by status (percentage of respondents)

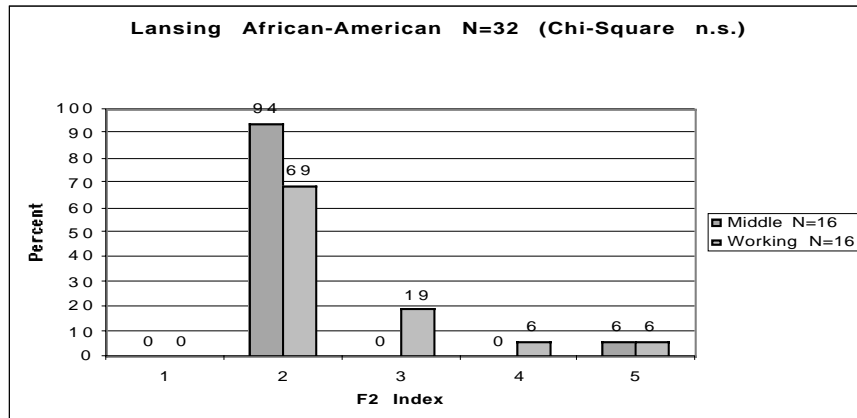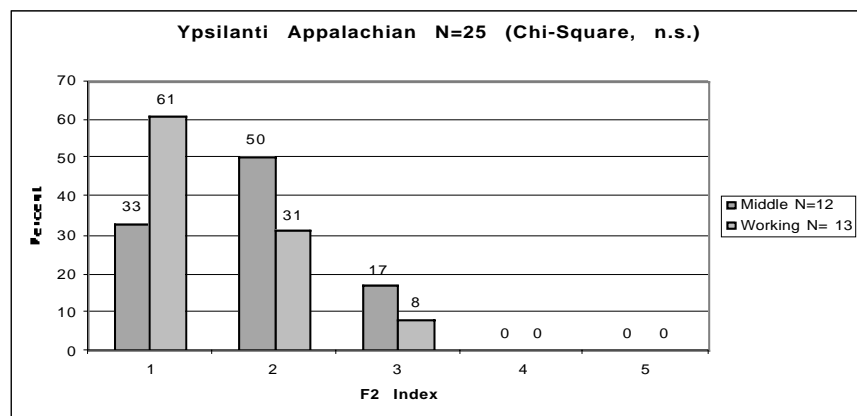**Lansing African-American N=32 (Chi-Square n.s.)**

Figure 11: Appalachian fronting (F2) index scores by status (percentage of respondents)

Ypsilanti Appalachian N=25 (Chi-Square, n.s.)

confirm the notion that this is a stable (and pre-existing) feature of their linguistic makeup. Appalachian respondents show the typical preference for change in the direction of an established norm, being led by younger, female, middle-class speakers. We will defer further discussion of our more puzzling Mid-Michigan group until we have had a look at their F1 (raising)scores.

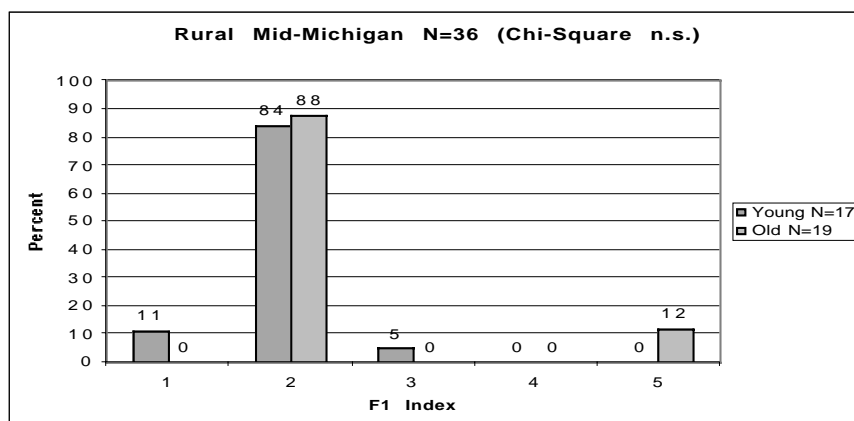Figure 12: Mid-Michigan raising (F1) index scores by age (percentage of respondents)

Rural Mid-Michigan N=36 (Chi-Square n.s.)

Figure 13: African-American raising (F1) index scores by age (percentage of respondents)

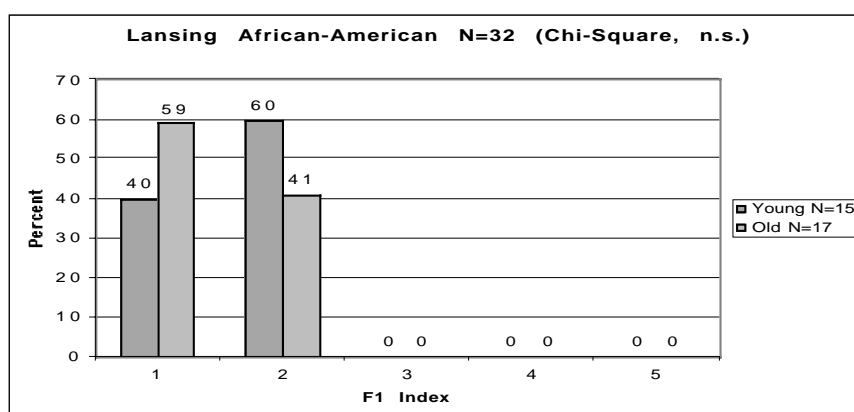Lansing African-American N=32 (Chi-Square, n.s.)

Figure 12 shows that Mid-Michigan respondents have very little distinctiveness by age for raising (as they also did not for fronting). Both other groups, however, show the expected younger speaker leadership in adaptation to the NCCS model. This is particularly important to show for the African-American group, of course, since we have not been able to use their advancement in F2 (fronting) in accounting for whatever accommodation they may be making to the NCCS.

Figure 14: Appalachian raising (F1) index scores by age (percentage of respondents)

Ypsilanti Appalachian N=25 (Chi-Square n.s. [.08])
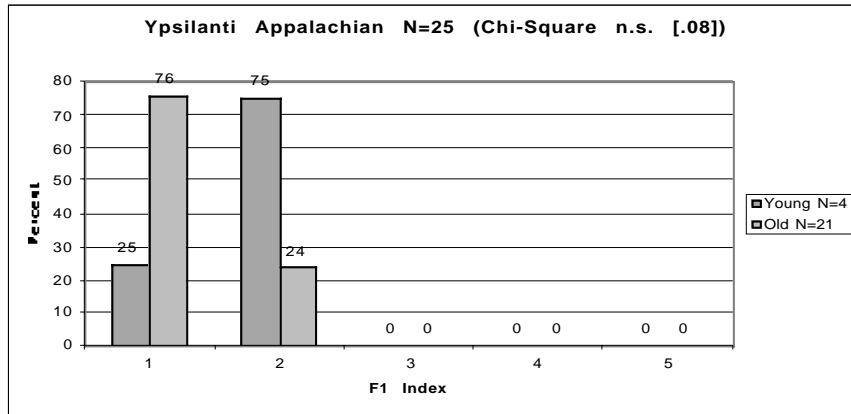
Figures 15, 16, and 17 (for sex) and 18, 19 and 20 (for status) show exactly the same configuration. Sex does not predict raising for the Mid-Michigan group, but women are in the lead in both other groups, and status is not important in Mid-Michigan, but middle class speakers lead in both other groups.

Figure 15: Mid-Michigan raising (F1) index scores by sex (percentage of respondents)

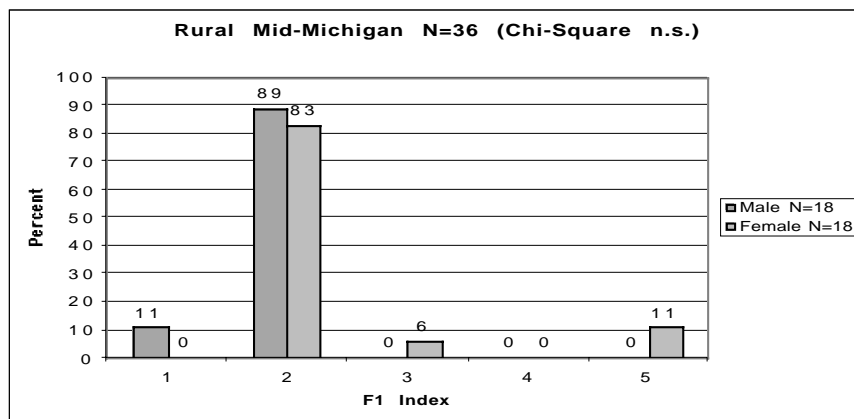**Rural Mid-Michigan N=36 (Chi-Square n.s.)**

Figure 16: African-American raising (F1) index scores by sex (percentage of respondents)

Figure 17: Appalachian raising (F1) index scores by sex (percentage of respondents)

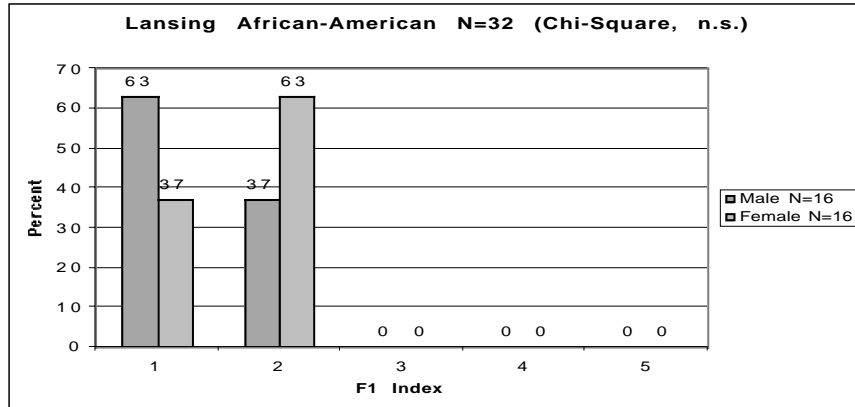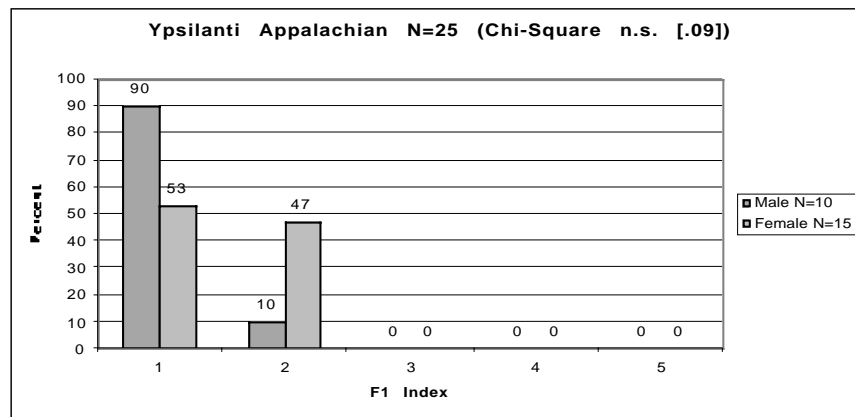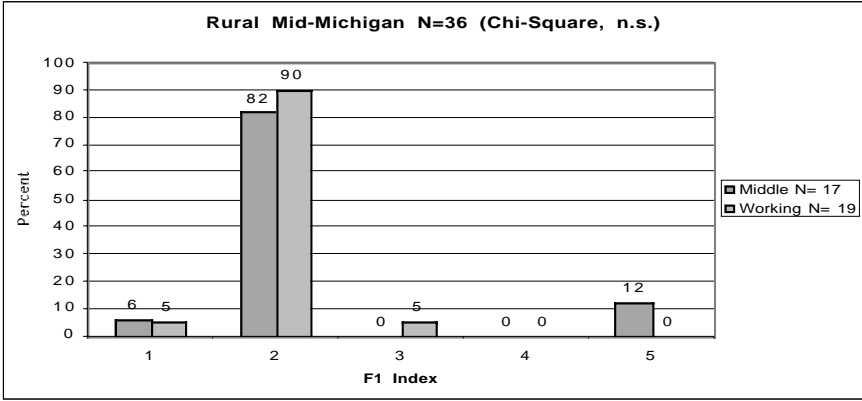Figure 18: Mid-Michigan raising (F1) index scores by status (percentage of respondents)

Rural Mid-Michigan N=36 (Chi-Square, n.s.)

Figure 19: African-American raising (F1) index scores by status (percentage of respondents)

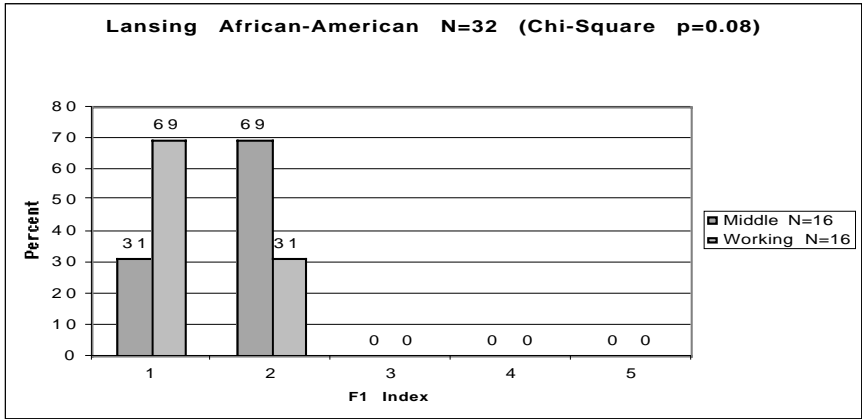**Lansing African-American N=32 (Chi-Square p=0.08)**

Figure 20: Appalachian raising (F1) index scores by status (percentage of respondents)
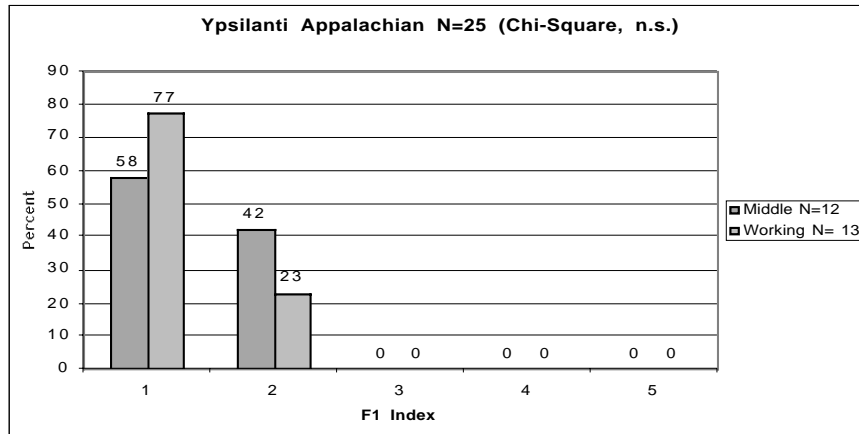

Table 5 shows the relationship of network to both F2 (fronting) and F1 (raising). Recall that the higher the score, the denser (or more "internally oriented") the network. Therefore, a negative correlation (as measured by a Pearson Product-Moment correlation test) should exist between a low network score and an advanced NCCS score if network is a good measure of advancement in the NCCS. As Table 5 shows, however, that correlation does not exist in every case. First, and not unexpectedly, network does correlate with F2 for the Mid-Michigan respondents, reflecting the fact that F2 for these respondents is important for both gender (Figure 4) and status (Figure 7) distributions. On the other hand, just as no demographic subdivision of Mid-Michigan speakers could be correlated with F1, network scores are also not important.

Table 5 also shows, similarly, that network is not correlated to African-American respondents' F2 scores, but, as shown above, no demographic

Table 5: Network correlations

	F1	F2
Mid-Michigan N=36	n.s.	r= -.39 p=.02
Lansing AA N=32	n.s.	n.s.
Ypsilanti N=25	r= -.48 p=.02	r= -.40 p=.05

characteristics are related to fronting, and we have concluded that an F2 index of "2" is very likely the norm for these respondents even before their exposure to the NCCS. On the other hand, age, gender, and status are important to F1 (raising) in the African-American speech community, but, again, as Table 5 shows, network position is not. This is all the more puzzling when we note that the Appalachian scores, important in every demographic category for both fronting and raising, are also correlated with network position. Table 6 summarizes these network findings and the general patterns of fronting and raising.

Table 6: Summary of results (X = no group difference)

F2	Age	Sex	Status	Network	Mean Index Score
Mid-Michigan	X	Female	Working	.02	2.64
Appalachian	Young	Female	Middle	.05	1.64
African- American	X	X	X	n.s.	2.34
F1					
Mid-Michigan	X	X	X	n.s.	2.14
Appalachian	Young	Female	Middle	.02	1.32
African- American	Young	Female	Middle	n.s.	1.50

Taking all these factors into consideration, we may now be able to characterize in greater detail what sorts of change are at work here. First, the Mid-Michigan scores, although more advanced than the other groups, as Table 1 would suggest from demographic similarity to the model group, are, nevertheless, not very advanced, and the F1 (raising) dimension shows no demographic sensitivity whatsoever, suggesting that this aspect of the shift has not even reached the "indicator" level, in which variation shows social discrimination although no stylistic differentiation (Labov 1972b). Since age is not important to fronting or raising, we suggest that this is not only an incipient case of change but also one which is moving very slowly.

On the other hand, fronting (F2) is sensitive to both sex and status, the network score does negatively correlate with it, and it is women and working class speakers who lead. This is surely an indication of "change from below" (Labov 1972b) in the "awareness" sense, for it is certainly the case that these speakers are not at all aware of the incipient change in which they are participating (e.g., Preston 1997). F2 (fronting) is also clearly an "indica-

tor," which Labov says acts as a defining characteristic of group membership within the speech community (1972b:178). Since both female and working class groups prefer this fronting, that group membership condition is met, but why would these two groups lead in this incipient change? Labov further notes that leading groups in incipient change are those whose "…separate identity … had been weakened by internal or external pressures" (1972b:178). We suggest that striking economic changes in Mid-Michigan rural communities help explain the weakened traditional identities of both women and the working class.

Of course, it is not only rural Mid-Michigan which has seen a much greater proportion of women entering the work force, but that entry in rural, previously small-farm agricultural communities has not stemmed from women gaining equal professional status. In fact, the loss of independent family income from agriculture in working class families has caused both men and women to lose the dense, local network identity which would have characterized that population in the past. Both have had to seek employment in areas (often nearby urban or large town locales) away from their local neighborhoods. Contrary to the ordinary pattern, then, working class women and men have disproportionately looser networks than the local middle class (whose bureaucratic and professional jobs are intact in spite of the changing economy and who have not been "displaced" from their local communities). Milroy (1980) observed the same sort of early entry into wider community speech norms by a working-class female group in a area of severe economic depression in Belfast (although there the working-class males retained local norms since they could find no employment and remained in the tightly-knit local neighborhood structures).

Appalachian speakers, on the other hand, as Table 6 reveals, show network significance for both F1 and F2, but the pattern of change is importantly different in two respects from the Mid-Michiganders: it is the middle rather than working class which leads, although women are again out in front, and younger speakers are also in the lead. Recall that, unlike the Mid-Michigan group, the Appalachian immigrants live in urban, southeastern Michigan, the area where the NCCS is most advanced. It appears to them, therefore, to be the local norm, and their age, class, gender, and network scores reflect the rather rapid adoption of that prestige form, a case of change involving a "marker" rather than an "indicator." Labov notes the following concerning such a variable at the stage we believe the Appalachian group has begun to acquire it:

> As the sound change with its associated values reached the limits of its expansion, the linguistic variable became one of the norms of the speech community, and all members of the speech community reacted in a uniform manner to it sue (without necessarily being aware of it). The variable is now a "marker" and begins to show stylistic variation. (1972b:179)

In spite of the fact that this features of the NCCS are different from the traditional Appalachian pattern the older speakers in this group would have brought with them, there is no indication that they are aware of its emerging status in the local area, and it is not, therefore, a case of "change from above."

At first, putting aside the lack of any change in F2 for the African-American group, they would appear to parallel to the Appalachian group since young, female, and middle class speakers lead in raising (F1). We agree that for Lansing African-Americans the pattern of acquisition of raising indicates the adoption of a local, prestige norm, but we find the lack of any network correlation to the F1 movement (which is even more dramatic than that for the Appalachian group) in need of further explanation. In short, if a lack of Appalachian network density predicts participation in the NCCS for Appalachians why doesn't it for African-Americans?

We believe the answer lies, quite simply, in the racial difference between the two groups. The Appalachian speakers, particularly in the locally-raised second generation, are allowed full participation in the local majority speech community; there is no visual barrier to that participation, and they may fully integrate. We believe the less dense network scores of those who make that adjustment makes that clear. African-Americans, however, who have encountered racial barriers to full participation in the larger society have apparently chosen to adopt NCCS (and other norms of the wider speech community) for instrumental rather than integrative purposes. That is, younger, female, middle-class speakers have found a need to copy the norms of the majority speech community for educational and economic advancement. Those who have made that choice, however, apparently have not done so on the basis of weaker network ties to their home speech community. Experience with these (and many other African-American respondents) suggests to us that, unlike their Appalachian peers, they are not linguistically assimilating to the majority, surrounding speech norm. Instead, they borrow parts of it as they are seen necessary to social advancement and are, most often, made a part of a larger linguistic repertoire which contains an ability to perform within the narrower, network dense community. In short, we believe even the younger, female, middle class group of African-American speakers are code-switchers, and, although that identity in itself may have

some future influence over their ability to control the home system, their continuing identity as African-Americans (as regards language as well as other cultural facts) seems intact, a claim we would not like to make for the younger Appalachian respondents.

In summary, the NCCS is establishing itself very slowly in Mid-Michigan nonurban areas. It is being led by working-class groups and women with unusually low-density network relations, although they come from a background which would have supported such networks only one generation past. Although they are acquiring this new system very slowly, we do not believe there is a strong caricature of the NCCS system (an "anti-urban" mentality) as might have been suggested in Ito and Preston (1998); instead, we suspect that there is a considerable variation in local loyalty and urban favor or disfavor. For example, although young women often focus on the fact that urban areas are more fashionable, they also note how they are bad places to raise families due to crime, drugs, and other big-city woes. Young men, although they may have been displaced from local agricultural work, are still very much a part of the local "hunting culture" (whether they are participants or not) and deride the urban weekend hunters, who are fancy-dressers, don't spend enough time in the woods, and shoot small deer (Ito 1999).

Appalachians in Ypsilanti and African-Americans in Lansing are both originally speakers of stigmatized dialects. The Appalachian group is adopting local pronunciation and, due to racial similarity with the surrounding majority, the degree to which that adoption is taking place is reflected in lower density network scores with the home Appalachian population. African-Americans, on the other hand, have, at least in certain groups, found it important to acquire some aspects of the surrounding majority speech norm, but they do not do it in connection with a loss of home network density. We suspect that their acquisition of the NCCS reflects an instrumental rather than integrative motivation and that they retain (in the mode popularly knows as "code-switching") an ability in the home variety which allows them to maintain local network strength.

In conclusion, we have found here, as Jo Daan has suggested in her own work in Dutch, that local identities are important in the delimitation of dialects and the progress of dialect change, and we are happy to have been able to make this small contribution in her honor.

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