Dissertation Proposal: A Retreat from the Northern Cities Shift in the St. Louis Corridor

Lauren Friedman

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1 Introduction

Previous work in the Saint Louis Corridor has shown a piecemeal but consistent finding: speakers in the area exhibit some of the criteria of the Northern Cities Shift (NCS) characteristic of the Inland North, but its prevalence is neither connected to speaker age nor city size (Labov 2007). The dialects in other nearby towns have generally been shown not to contain NCS features. Also, although the dialects of various small towns in Illinois have been studied in depth (McDonough County in Frazer 1983 and Farmer City in Habick 1993) and some small towns have been included in larger surveys of the US (Labov, Ash, and Boberg 2006, Kurath 1940, and others), this study will provide a broader dialectal picture of this area of Central Illinois using the variables of the NCS (/æ/, /ɛ/, /ɑ/, /ʌ/, /ɔ/, and /ɪ/).

This proposal aims to answer the following questions: (1) Based upon speaker's data in apparent time, when was the actuation of the NCS in the Corridor? (2) Did the NCS diffuse to the Corridor from Chicago directly or through St. Louis, the next largest city in the area? (3) Can linguistic data and census data together determine the percentage of Inland North speakers necessary for a chain shift to diffuse into a dialect? And (4) Is this retreat part of a larger pattern of NCS retreat at the edges of the Inland North (Dinkin 2009 and Jacewicz et al 2011)? In the following proposal, I plan a large-scale data collection plan in the Corridor to answer these questions. This plan for data collection will be based upon previous research as well as the results from analysis of 30 Corridor speakers: 17 speakers from my own pilot study, 9 from the Atlas, an additional 2 from the Atlas that were not previously measured, and 2 from the University of Illinois-Springfield Archives. Based upon this current data, I concur with previous findings that the NCS does exist in the dialect of the area, especially for Springfield and St. Louis. However, the data from the Atlas as well as my own appear to indicate that only older speakers participate in the /ɑ/, /ɛ/, and /ʌ/ movement of the NCS, specifically those born between 1929 and 1946 (average year of birth 1938). The majority of speakers grew up in St. Louis and Springfield, the largest cities in the Corridor. Therefore, it appears as though

the NCS infiltrated the dialect in the area sometime before 1930 and what we are seeing is the older speakers with later stages of the NCS and speakers of all ages with a slight tensing of /æ/.

The proposal is laid out as follows. First, I set out a review of previous literature on the NCS and the Corridor in Section 2, including a description, chronology, and timeline for the NCS. I will also discuss the literature on perception of the NCS by both NCS and non-NCS speakers, in addition to techniques that have been utilized in the past to model the spread of dialectal features. Second, in Section 3 I describe the data found in the Atlas, my pilot study, and available census data, all of which constitute the foundation for this proposal. Finally, in Section 4, I state my hypothesis and lay out my plan for further data collection in my dissertation research and how it will prove or disprove my hypothesis.

2 Literature Review

2.1 The Northern Cities Shift: Chronology and Timeframe

A great deal of the following proposal centers on a chain shift of vowels that occur in the large cities in the Midwest along the Great Lakes, many times referred to as the Northern Cities Shift (Labov, Yaeger, and Steiner 1972, Labov, Ash, and Boberg 2006). The presence of the NCS in this geographical area, referred to by Labov, Yaeger, and Steiner as the Inland North, was first recognized in academia in the 1950's and 1960's (Kurath and McDaid 1961, Marckwardt 1957, and Allen 1964). As Labov (1994:178) points out, Fasold (1969) was the first to recognize that this combination of vowel movements an unpublished paper. In this paper, he shows that data from Shuy, Wolfram, and Riley (1966) that demonstrate the raising of /æ/, /ɑ/ and /ɔ/ in Detroit.

The NCS is a clockwise chain shift of 6 vowels, /æ/, /ɑ/, /ɔ/, /ʌ/, /e/, and /ɪ/, where the vowels have moved into the position formerly occupied by the previous sound.[1] For example, /æ/ is fronted and raised while /ɑ/ is fronted, moving into the former position of /æ/, and so on. Labov argues that this shift is mainly a combination of pull chain shifts and one push chain (1994:195). As shown in the three stages in Figure 1, this process first

[1] Labov, Yaeger, and Steiner (1972) argue /æ/, which does not move into the space of a displaced vowel, to be the first stage of the shift.

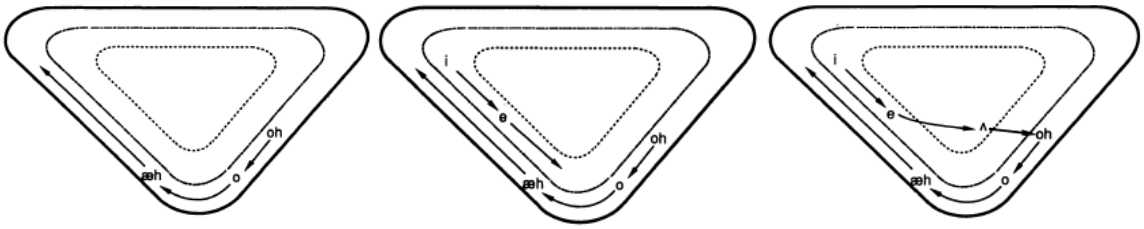

Figure 1 The three stages of the NCS, as postulated from apparent time data from the 1970's in Labov 1994.

affects /æ/, /ɑ/, and /ɔ/, followed by /e/ and /ɪ/, and finally /ʌ/. From left to right, Labov (1994) argues that the initial three changes are part of a pull chain, where the raising of /æ/ leaves an open space for /ɑ/ to move to the front and /ɔ/ to lower and front into the initial position of /ɑ/. In the second stage, /ɛ/ lowers and backs, to the area near where /æ/ used to occupy, leaving an open space for /ɪ/ to lower. Labov 1994 states that for the final steps, evidence supports a push chain where /ɛ/ instead moves back to the /ʌ/ space and the /ʌ/ is pushed back to the spot previously held by /ɔ/ (195). Gordon (2001) points out that this theory of the chronology of the NCS is based upon apparent time data of speakers from the 1970's from different locations (Buffalo, Detroit, Chicago). (34). Later, in the Atlas of North American English, Labov, Ash, and Boberg determine based upon further data from their study (collected 1992-2004) that the NCS has the order in Figure 2. They conclude that /ɪ/ is likely the final stage of the shift because of its inconsistent

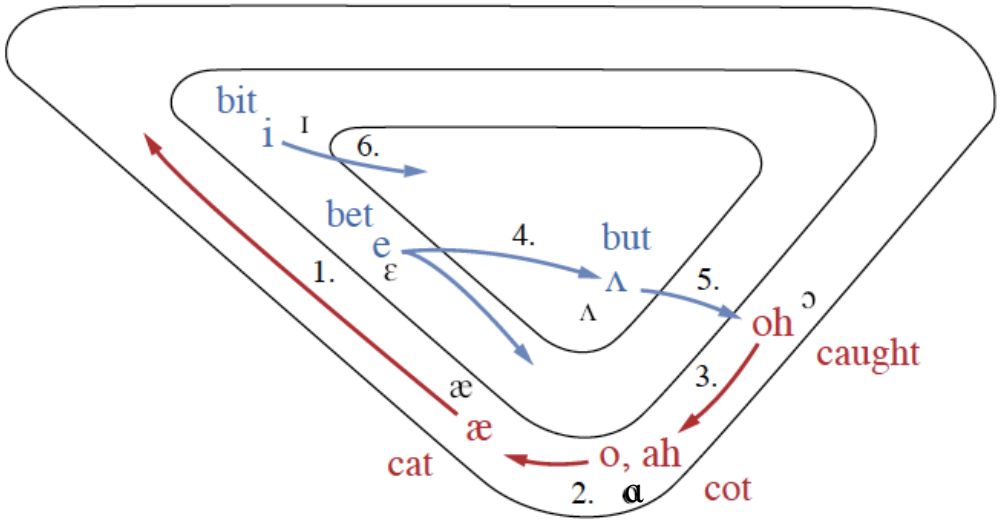

Figure 2 The Northern Cities Shift (Labov, Ash, and Boberg 2006:190) with IPA symbols in black by author.

lowering. They also point out that /ɔ/ lowering was inconsistent for Inland North speakers despite the claim by Eckert (1988) and Labov (1994) that it is an early vowel movement in the shift (2006:191). The ordering of /ɛ/ backing before /ʌ/ backing is motivated by Eckert's (1988) findings in Detroit. Labov, Ash and Boberg also point out that although this is the general picture adopted for the Atlas, different orderings may be in effect in other cities and within social groups (2006:191).

Gordon (2001) and Stockwell and Minkova (1997) each present alternative views of the NCS that challenge its characterization as a series of push and drag chains. However, there is substantial evidence that /ae/ tensing and raising is one of the older, if not the oldest, vowel movements in the NCS, while /ɛ/ backing is relatively much more recent (Callary, 1975, Labov, 1994, Eckert 1988, and others). In fact, in her study of NCS speakers in suburban Detroit, Eckert (1988) found that /æ/, /ɑ/, and /ɔ/ (the more established NCS vowel changes) were led by females of both social groups while the teenages in the burnout social group led the advancement of /ʌ/ and /ɛ/. As Labov (1990) points out, the tendency in changes from below in progress is for women to be more advanced or "innovators" (Principle II) and this split in participation for these different vowels in the shift points to these gender-driven changes as the incumbent and those tied to social group as the incoming change.

Although there is no clear beginning date for the NCS, Gordon (2000) describes a few studies with a possible NCS (Emerson 1891 and Monroe 1896), but determines that Thomas's (1935-37) study of upstate New York shows the first conclusive evidence of a shift. Thomas shows /æ/ raising, /ɛ/ and /ɪ/ lowering, and fronted variants of /ɑ/ and /ɔ/, leading Gordon to conclude that this was the first legitimate example of the full NCS. On the other hand, the studies from the late 19th century demonstrated some generalized fronting of /æ/ and NCS in certain lexical items in addition to movement of /ɑ/ and /ɔ/. However, /æ/ fronting has been found in other Northern areas outside the Inland North and the /ɑ ɔ/ vowels could be a part of the caught-cot merger. This places the timeframe for the actuation of the shift in upstate New York sometime between 1890 and 1930.

However, not all studies show a significant increase of NCS vowels in the Inland North over time. Dinkin found two New York communities (Cooperstown and Sidney)

to be receding from the NCS (Dinkin 2009, 2010) in a timeline that I will show would parallel the results in Section 3.1 of this proposal. He shows that Cooperstown and Sidney, which seem to be "fringe" Inland North communities, show a retreat from the NCS features in apparent time, particularly after 1965, as shown in Figure 3 below. After

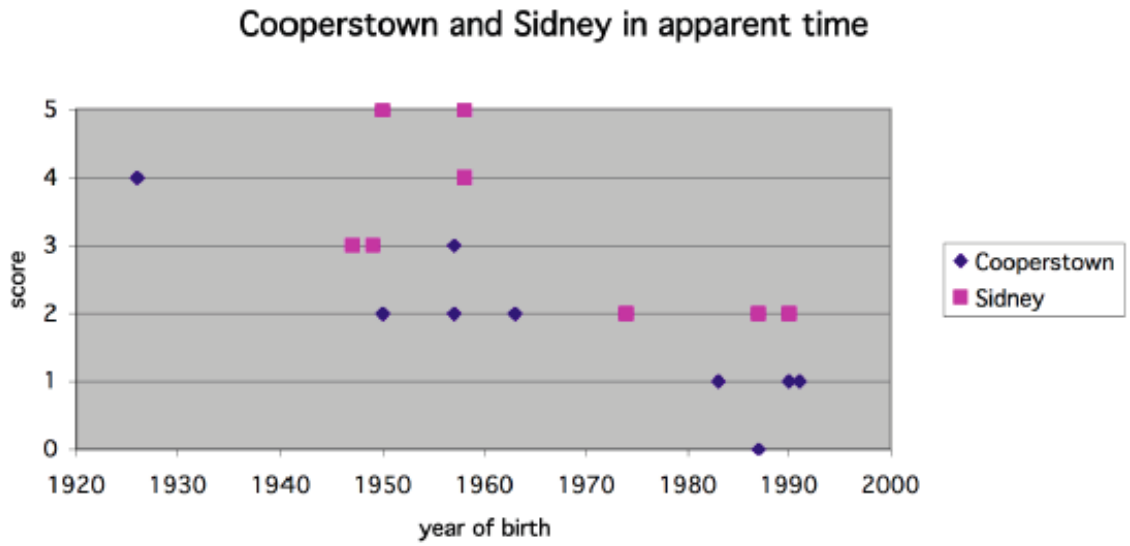

Figure 3 NCS scores in Cooperstown and Sidney versus age (fig. 3.10, Dinkin 2009:74).

considering a number of other towns with differing amounts of NCS criteria in apparent time, Dinkin concludes that both are retreating from the NCS (Cooperstown from a "fringe" NCS community and Sidney from a "core" NCS community). In fact, he finds the Pearson correlation between year of birth and NCS criteria score to be significant at $p<.002$ or better (74). Dinkin describes these two retreating villages as being "regionally affiliated" with a medium-sized city non-NCS (Oneta) nearby, giving the increased contact with non-NCS speakers as an explanation for the retreat (110). In their study of speakers from three different dialect groups (Inland North, Midlands, and Inland South), Jacewicz et al (2011) find a pattern of retreat similar to Dinkin's. In particular, for those from Milwaukee, Wisconsin (part of the Inland North), there appears to be significant /æ/ lowering as well as some /ɪ/ fronting for the youngest group (/æ/, /ɛ/, and /ɪ/ were the only vowels under investigation). Their conclusion, the fact that younger speakers' vowels are becoming closer to General American, is thought-provoking even if most NCS vowels (or those relevant to the other dialect areas) were not under investigation in this study.

Also, if this European trend (Labov 2001:333) to level out regional dialects in favor of a less regionally-bound dialect is occurring in the U.S., it is a phenomenon that deserves linguists' attention. Studies have shown that stigmatized varieties have been leveled out in recent years, mainly in Europe (Milroy 1980, Holmquist 1988 for Spain, and Gal 1980 for Austria, among others) but also in the US (a retreat from Southern variables in Charleston in Baranowski 2008, Dinkin 2009, and Jacewicz et al 2011). The question remains: is a retreat only occurring for those stigmatized variants, as it appears to be in Europe? Or is a retreat taking place in areas where speakers are generally unaware of their dialect, such as the Corridor or upstate New York? If the latter, as I argue it is, then it is crucial to examine the role social networks play when a dialect is in retreat and below the level of consciousness.

2.2 The St. Louis Corridor vs. the Inland North

The St. Louis Corridor is an Inland North dialect enclave surrounded by the Midland dialect (Carver 1986, Labov, Ash, and Boberg 2006 and Bigham 2010, among others). Murray (1992, 2002) comes to the conclusion that St. Louis, the Southwest end of the Corridor, is also becoming more similar to the North based upon other criteria (mainly lexical). The speech found in this area indicates that the NCS permeates the dialect border between the Inland North and Midland, a border that is quite strong in states farther east. For instance, Thomas (2010) found the parallel North/Midland border in Ohio to be quite stable. In his study of both old and newly acquired data, old boundaries from DARE based primarily on lexical data from speakers born 1880-1906 was fairly consistent with new phonetic data from speakers born almost 100 years later (1970-1993). Bigham (2010) studied the Corridor by comparing the height of /æ/ and the distinction between /ɔ/ and /ɑ/ (a merger that is found in the Midland) in interviews with native Illinois college students (nine from the Corridor, nine from the Chicagoland area, and eight from Southern Illinois). He concluded that the F2 of /ɔ/ and /ɑ/ were significantly different (i.e., not merged) for Corridor natives and the Inland North Chicagoans but were not significantly different for Southern Illinoisans (merged) and the F1 of /æ/ for Corridor speakers was between that for Southern Illinoisans and Chicagoans. This sparse amount of data points to the robustness of the presence of the

NCS in the Corridor and just how more detailed of a look one could obtain by collecting more data from the area.

Dinkin (2009) achieved just that for the NCS boundary as compared with other New England dialects in upstate New York using a combination of phone and in-person interviews. With approximately 100 speakers, he demonstrated the interaction between different distinct dialects with respect to the low-back merger and the raising and tensing of /æ/ in New York: allophones in the NCS seem to slow the low-back merger but not stop its spread in upstate New York and the nasal /æ/ system of New England blocked the raising of /æ/ any higher than to /e/. This study would aim to cover this large area in a similar fashion, focusing on speakers from larger incorporated areas (ex. Springfield) and using the results to determine dialect boundaries in the Corridor.

Although this has been observed in various locations in the St. Louis Corridor, the Atlas and Labov 2010 point out that based upon the four criteria of /æ/ raising (the AE1 criteria), reversal in backing of /ɑ/ and /ʌ/ (UD), fronting of /ɑ/ (O2), and reversal of height and fronting of /æ/ and /e/ (EQ), the St. Louis Corridor does not show nearly as much uniformity of dialect as the Inland North. He shows that none of the 5 Corridor speakers and one of the four St. Louis speakers follow the four criteria while 42% (28 of 67) of the Inland North speakers do (Labov 2010:341). At the same time, those from the Corridor vary widely in their satisfaction of individual criteria. This result could be a function of the NCS being mainly an urban dialect, since 16 of the 28 of the Inland North speakers that follow all the criteria are from big cities. However, if St. Louis is also a big city following the NCS, it should also consistently follow this pattern. In addition, past studies found people who had once lived in the small towns of the Corridor but were living in a different place at the time of the recording. In the Atlas of North American English, investigators only looked for people who lived in cities of 50,000 or more, which would not have included smaller Corridor towns. In the Corridor, the only towns that have this many residents (as of the 1990 census, since speakers were recorded between 1992 and 2004) are St. Louis, Springfield, and Bloomington. One goal of this proposal is to determine whether this under-sampling of small towns gives the impression that the NCS is more widespread in the Corridor than it is in reality or if in fact speakers from smaller Corridor towns do show the NCS in their speech.

According to Labov (2007, 2010), the Atlas data from the St. Louis Corridor suggests that adoption of the NCS is the result of dialect diffusion, that it entered the community through diffusion to adult speakers. He comes to this conclusion mainly because the pattern shown by the Atlas is not following the predictable progression of the chain shift (2010) and because of a negative correlation of age with rank in number of NCS variables (2007:49). This is one hypothesis that will be tested through new data from the same geographical area. However, the sound changes under investigation for this proposal are the fronting and raising of /æ/ (stage 1), the fronting of /ɑ/ (stage 2), the fronting and lowering of /ɔ/[2] (stage 3), the backing of /ɛ/ (stage 4), and the backing of /ʌ/ (stage 5). I intend to re-measure all ATLAS speakers (including those not measured for the ATLAS) in the course of my future research.

The speakers of the Inland North acquire this collection of sound changes as a chain shift, which was triggered by the fronting and raising of /æ/ (Labov 2010:113). In areas where this pattern is not acquired in childhood through regular dialect transmission, it can be diffused through an adult population, although the end result is many times of a different character. For instance, in Payne's (1976, 1980) study of acquisition of dialects in King of Prussia, the children who moved to the area later in life were categorically less likely to acquire variables of the Philadelphia dialect. It has been shown through the King of Prussia study and other studies that the diffusion of dialectal variables from one area to another through adults results in a different type of dialect, one that is not as faithful to the original as when it is transmitted through dialect transmission in childhood. Labov (2007) shows that in the Inland North, unlike the Corridor, the number of criteria satisfied increases with age (with a correlation between age and rank of NCS at .74), showing that the speech of younger speakers has more NCS characteristics. Labov argues that because there is no significant correlation between age and rank in the Corridor speakers' speech, this shift was diffused from the Inland North to the adult population of the Corridor (2007:48). On the other hand, I believe that an increase in the

[2] /ɔ/ does not exist in the NCS criteria from the Atlas, mainly because its lowering was inconsistent for Inland North speakers (2006:191). Therefore, at this point, it is unclear if /ɔ/ is a part of the NCS present in the speech of the advanced older speakers in the Corridor, but this will be investigated in my future research. In Section 3.1, /ɔ/ will not be included in the NCS criteria measurements, but will be included in the vowel means.

number of speakers in the sample, from 9 to 31 has shown that there are three general age groups of speakers, at least in the Springfield and St. Louis areas: those born before 1925, those born between 1925 and 1950, and those born after 1950. Although these lines are not exact, the proposed scope of the interviews I plan to collect will strengthen these lines.

2.3 Modeling dialect spread

In considering which criteria to use in determining a person's relationship to one city over another, social networks should be taken into account. Although Bloomfield (1933) considered only face-to-face interactions in building a city's dialect, one must consider a different approach when individuals sometimes do not leave their town or interact with outsiders themselves. Milroy (1980) addressed this issue in her study of stable variation in Belfast, where there already seems to be some correlation with age and gender. In addition to those clear-cut variables, Milroy also categorized speakers according to their social network, considering both how dense their local social network was and what connections they had to others in the neighborhood, including family, colleagues, and how much social time they spent with those they knew from work (Milroy 1980:141-2). She found that although external predictors, such as gender and age, did correlate with use of variables, that the social networks added a level of explanation and clarified those correlations further. Also, social networks were better indicators than strictly neighborhood, which very poorly correlated with these variables. In the Philadelphia neighborhood study, Labov (2001) centered the network indices on density of actual interaction, potential interaction, and friendship, both on and off of the block individuals lived on. However, a higher local density of friends and interactions on their own block did not necessarily correlate with stronger variables, as some speakers with strong non-local connections ended up being leaders of linguistic change.

Although these studies were much more local than the study I plan to undertake, I intend to use the same general line of questioning, asking about speakers' familial relations with those in Chicago and St. Louis as well as their potential interactions with people originally from those places. Despite the fact that those with businesses along Route 66 or reasons to frequently move throughout the state would be more likely to have

face-to-face interactions with people from the big cities, the lines of communication in the Corridor are likely less intimate and consider long-distance relationships or interactions with migrants to the area. I will further discuss the role of social networks in my planned study of the Corridor in Section 4.3.

There have also been some attempts to use mathematical formulas in the explanation of geographical dialect movement. For instance, Trudgill's (1974) gravity model used city size and geographical distance between city centers to determine the linguistic effect one city would have upon another. His theory was that features were more likely to spread between big city centers than to smaller towns that were relatively closer because of the interaction between size and linguistic influence. Trudgill used this theory to explain the spread of London variables to Norwich and the lack of London variables in towns outside of Norwich. However, so far in the data from my pilot study and the ATLAS, we see variables of the city center dialect, in this case NCS, in speakers from some smaller towns (namely Fairbury and Staunton, among others). Also, past attempts to use the gravity model to explain the spread of the NCS through the Inland North, particularly around Chicago, have not been successful. Initially, in his study of college students at Northwestern University, Callary (1975) found /æ/ raising to be correlated with hometown size. Working with this same data, however, Chambers and Trudgill (1980) found the gravity model unsuccessful at predicting /æ/ raising. Although I will consider the role of the gravity model and the possibility that these other speakers are exceptions, it may not be able to explain the spread of NCS in the Corridor, as it was insufficient in Chambers and Trudgill's study. On the other hand, Trudgill's point about the change in transportation patterns in Brunlanes Norwegian really resonates in the Corridor, where transportation patterns appear to play a large role. It is very possible that the paving of Route 66 in the mid 1920's played a large role in the introduction of NCS features to the area, especially to Springfield and other corridor towns, although further research will hopefully illuminate this possibility.

There have not been many examples of new mathematical techniques used to explain the presence or absence of dialect features geographically. However, Yang (2009) used data from Johnson's (2007) study of eastern New England to model the necessary migration of merged individuals in order to affect the dialect system of those from the

area. Using a probabilistic model and a system of rewards and punishments for individuals using merged or unmerged tokens in a certain system, Yang applied this model to the information gathered by Johnson of school-aged children and their parents. Although children growing up in an unmerged family are more likely to be unmerged, once 20% of the population is merged, this force will overtake a child's initial state of unmerging set by their parents. Although the probability for individuals to merge vowels is arguably stronger than other types of language change, I will consider a possible "tipping point" of dialect change in my study. In addition, Yang concludes that a reversal of a merger requires almost four times the number of speakers to migrate into the community (11), the actuation of a vowel change appears to be far more likely to be reversed and so would require a separate model than that for mergers.

In addition, Stanford and Kenney (in press) recently used Agent-Based Modeling (ABM) to model the NCS in Chicago and St. Louis, as well as to test Seguy's Curve (1971) on diffusion from a large central city. Their NCS model showed individuals acting as groups of individuals with the same age and dialect features as exist in the real world of Chicago and St. Louis (namely a full chain shift in Chicago and portions of the shift in St. Louis) and ran the model, allowing diffusion and incrementation to occur over a few generations. It showed that the NCS in Chicago would become stronger over generations, as has happened in real life, and became slightly stronger but remained about the same in St. Louis. Therefore, Stanford and Kenney demonstrate that if this is a true model, the NCS was unlikely to progress in St. Louis like it has in Chicago. However, since I am proposing that is likely disappearing from the area, this model may not be accurate. Also, this model does not consider the role of the Corridor and transportation patterns in the same way that Trudgill does, nor do they touch upon the diffusion of the NCS to the area in the first place. Because transportation patterns are not considered in much of the traditional dialect geography, which considered bodies of water and natural or political barriers to be important to the spread and boundaries of dialects, many of the techniques used in Europe, where dialect geography has a longer history, cannot be used to model the Corridor. In addition, current population numbers cannot be used when running models, like Stanford and Kenney did; considering the change in population would be more accurate. Therefore, I will attempt to use these techniques over the area

of the Corridor to model change in population and how dialects might have moved with the population.

2.4 Misunderstandings

One manner in which the NCS differs from other types of sound changes, such as the East Coast /æ/ tensing distinction and the caught/cot merger, is that vowels do not change phonemic categories in such a widespread way. Although misunderstandings can abound with mergers because of the overlap of sounds, this chain shift provides new opportunities for misunderstandings to occur across all vowels involved in the shift. Even with a pull chain theory, where most vowels do not overlap or merge with the sound in the new vowel space they are moving to, speakers can misunderstand vowels as others. For instance, /æ/ moves into the space occupied by /ɪ/, so words such as *Ian* and *cinnamon* can be misunderstood by NCS listeners as *Ann* and *salmon* respectively (Labov 1994:197). However, Labov points out that a theory that incorporates the periphery as a crucial characteristic of long vowels (and not of short), these sounds are unlikely to be mistaken for the other. In Labov's theory of the periphery, long vowels rise along a peripheral track and short vowels fall along a non-peripheral track. This is drawn from a number of documented historical sound changes, such as the Great Vowel Shift, as well as the NCS. The difference in peripheral movement can be seen in Figure 2 in Section 2.1, where /æ/ appears to be moving upwards on the periphery while /ɪ/ moves downwards on the interior. Since these vowels are theoretically divided into these two categories (peripheral vs. non-peripheral), confusion across this feature appears unlikely.

To scientifically determine people's perceptions of the NCS vowels, Labov and his colleagues carried out two similar experiments on cross-dialectal (and dialect-internal) misunderstandings in the 1980's and 1990's: Sherry Ash's replication of the Peterson-Barney experiment and the Gating Experiment. In the first, /æ/, /ɑ/, and /ɔ/ as spoken by Chicagoans were heard more accurately by Chicagoans, but /ɔ/ and /ɛ/ were misunderstood by all three groups /ɑ/ and /ʌ/ respectively, the vowel they misplaced in the NCS (2010:53). In the later Gating Experiment, most errors were "dialect motivated errors," as shown in Figure 4. Although there is a very slight hometown advantage for Chicagoans in terms of most vowels (except /æ/ and backed /ɛ/) with the word by itself,

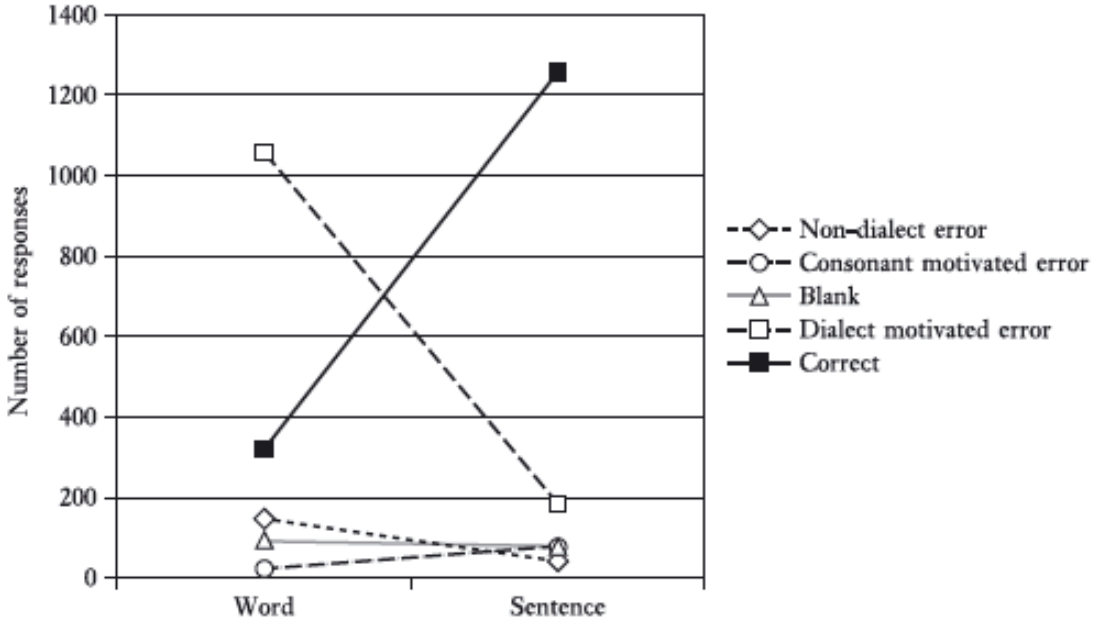

Figure 4 Number of response types to Chicago speech for Chicago listeners: word and sentence [N = 1602] (Labov 2010:64).

this advantage disappears for sentence contexts (2010:70). Therefore, it is highly likely that Chicagoans and non-Chicagoans (Birmingham and Philadelphia) are misunderstanding the NCS vowels for the vowels they misplace, which has implications for the diffusion of the NCS. First, it would follow that both NCS speakers and non NCS speakers would be more likely than others to reclassify these sounds as other phonemes. In the case of /æ/, for instance, it could (and is) reclassified as /e/ before (for instance, giving pain and pang the same vowel), but it could also be misunderstood as /ɛ/. For instance, at the phrase level, most people misunderstood "rafts," the /æ/ vowel closest to the F1 formant area of /ɛ/ and /e/ as /ɛ/ ("rest" and "arrest") while "that" had an F1 closer to /ɪ/ and was most frequently misunderstood by Philadelphians as /e/ ("blank") (2010:70-71).

When considering the hypothetical interactions between NCS speakers and non-NCS speakers, it is important to note that the rest of a speaker's dialect plays a role in others' perceptions of their speech. Plichta and Rakerd's (2010) find in their study of two groups of Michiganders that despite the fact the value of a token was digitally altered along a continuum of F2 values between /ɑ/ and /æ/, there was a split in perception. Participants from the NCS area (Detroit) were more likely to consider a more fronted stimulus as /ɑ/

if the speaker otherwise demonstrated the NCS, while those from a non-shifted area did not show any effect according to speaker dialect. This points out that those who do not interact much with NCS speakers do not take other dialectal cues in their perception of vowel categories. On the other hand, other studies (Preston 2010, Labov and Ash 1997, Labov 2010) demonstrate that a slight advantage exists for NCS speakers in perceiving other NCS speakers correctly, but this advantage is not equal among the NCS vowels. For instance, in Ash's Pearson-Barney replication, Chicagoans misunderstood /ɛ/ more so than the Birmingham speakers (more than 50% identified it as /ʌ/) and misidentified /ɪ/ more than both Birmingham and Philadelphia speakers (Labov 2010:53). In Preston's study, /æ/, /ɑ/, and /ʌ/ were the least misunderstood by all speakers, particularly those living in or near NCS areas. In fact, in his study, the young people who lived closest to the NCS dialect area did comprehend it better than those who lived farther away, but did not find a statistically significant effect.

In each of these studies, the researchers tried to adequately capture the variety of sounds affected by the NCS, sometimes also attempting to use a consistent environment for each sound (Peterson and Barney 1952, Hillenbrand, et al. 1995) or allow for misunderstandings that were also possible lexical items (Preston 2010). Labov (2010) addresses this, stating that in the Gating Experiment, words that had lexical equivalences for the shifted vowel were 7% more likely to be misunderstood as that vowel (71). I intend to test this in the St. Louis Corridor, in particular for /æ/, which shows less effects of age than others. See Section 4.2 for further discussion of this proposed perception experiment.

3 Data

3.1 Pilot Study and Additional Data Sources

In this section, I analyze the results of my pilot study of the Corridor. The speakers discussed in this section as well as throughout the rest of the proposal come from three separate data sources: 17 speakers from my pilot study, the 9 original Atlas speakers, 2 additional Atlas speakers from Bloomington, and 2 speakers from the University of Illinois-Springfield's Oral History Archives, as shown in Table 1. The pilot study data was collected in the Spring of 2011 by phone interview (4) and in-person sociolinguistic

			F1(æ)< 700	F2(ɑ)>1450	/æ/ ~ /ɛ/ reversal	F2(ɛ) – F2(ɑ) < 375 Hz.	F2(ʌ)<F2(ɑ)
Name	**YOB**	**Town**	**AE1**	**O2**	**EQ**	**ED**	**UD**
Irene S	**1900**	**Springfield, IL**	-	-	-	-	-
Burt H	**1904**	**Springfield, IL**	~	-	-	-	-
Darlene D	1920	Bloomington, IL	+	-	-	-	-
Joe S	**1922**	**Springfield, IL**	-	-	-	-	-
Weston K	**1927**	**Springfield, IL (2)**	-	-	-	-	+
Anne C	1929	Staunton, IL	~	+	-	+	+
Arthur K	**1934**	**Springfield, IL AK**	+	-	-	+	+
Moira O	1934	Bloomington, IL	+	-	-	-	~
James D	1936	Girard, IL	-	-	-	-	-
Judy H	**1937**	**St. Louis, MO (2)**	+	+	-	+	+
Sam M	1938	Litchfield, IL	-	-	-	-	-
Pat L	**1939**	**Springfield, IL**	~	+	-	+	+
Fran S	1941	New Holland, IL	~	-	-	-	-
Walt H	**1941**	**St. Louis, MO**	+	+	+	+	+
Joyce H	**1941**	**St. Louis, MO (3)**	-	-	-	+	-
Martin H	**1946**	**St. Louis, MO (1)**	+	+	+	+	+
Virginia P	1946	East St. Louis, IL / Alton	-	-	-	-	-
Will F	1956	Shirley, IL	-	-	-	-	-
Rose M	**1956**	**St. Louis, MO (4)**	-	-	-	+	-
Barb A	**1961**	**Springfield, IL**	~	-	-	+	-
Kent R	**1966**	**Springfield, IL (1)**	-	-	-	+	-
Virginia R	1968	Fairbury, IL	+	-	-	+	-
Kirk S	1968	Bloomington, IL	+	-	-	+	-
Amy T	1971	Lincoln, IL	~	-	-	-	-
Bea L	**1976**	**St. Louis, MO**	~	-	-	-	-
Karen G	1978	Edwardsville, IL	~	-	-	-	-
Autumn K	1981	Lincoln, IL	-	~	-	-	-
Jack C	1986	Lincoln, IL	-	-	-	-	-
Tim A	**1986**	**Springfield, IL**	~	-	-	-	-
Jason B	**1993**	**Springfield, IL**	~	+	-	-	~

Table 1 NCS criteria as determined in the ATLAS, for 29 speakers, collected in 1995-1998 (Atlas, colored in red for analysis in Atlas and in blue for personal analysis) and and 2011 (Route 66 pilot study, no highlighting). Six advanced NCS speakers are in italics and "~" indicates token was less than 50 Hz from satisfying the criteria.

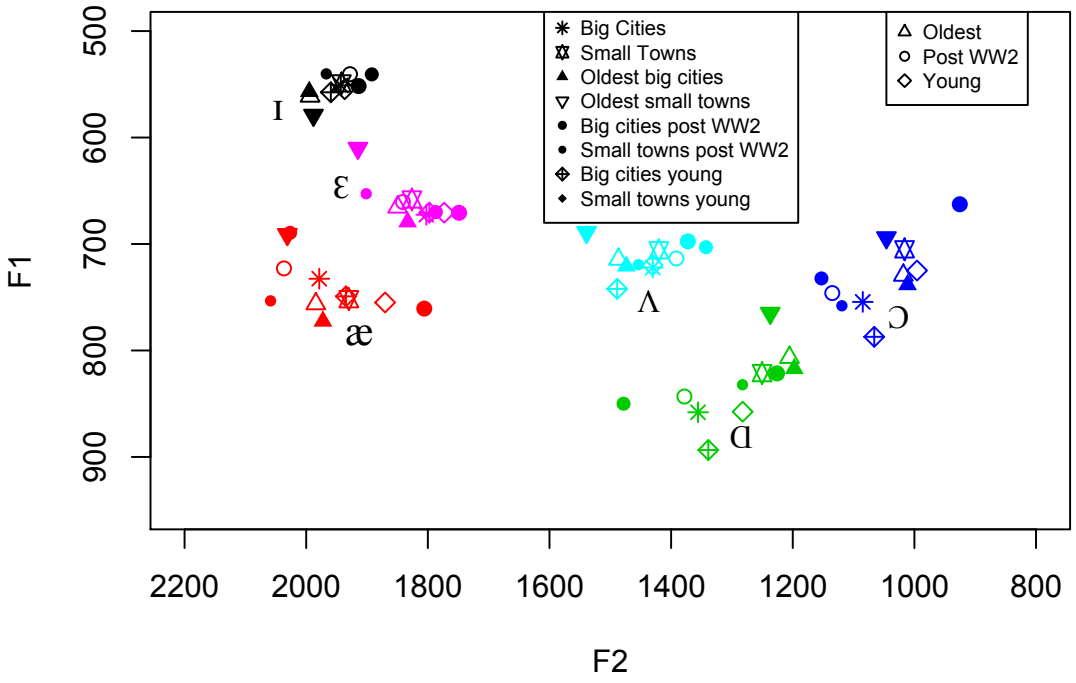

Figure 5 Vowel means[3] for all speakers, according to age and town size.[4]

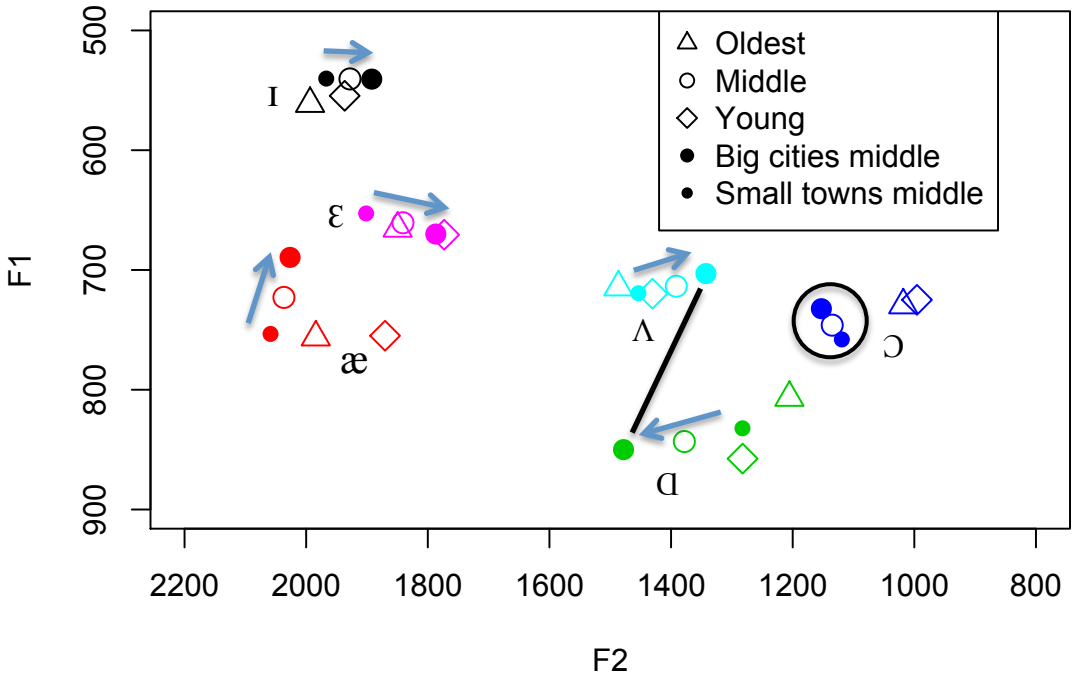

Figure 6 Vowel means for all speakers, according to age and, for the middle age group, town size.

[3] Vowel means were normalized using Plotnik 10.3's Lobanov option.
[4] Note that the category "Small towns oldest" is comprised of just one speaker: Darlene D, born 1920 in Bloomington.

interviews (13). I did not remeasure the 9 Atlas speakers, but did measure the vowels of two additional speakers from the Atlas that were not previously analyzed as well as two speakers from the UIS Archives who were interviewed in the 1970's and 1980's. I transcribed these 21 interviews using the ELAN program (Brugman and Russel 2004), then forced-aligned and extracted vowels using the FAVE program by Rosenfelder, Fruehwald, Evanini, and Yuan (2011). These measurements were then normalized using the Lobanov (1971) feature of Plotnik 10.3 (Labov 2012), where I hand-checked outlying vowels for accuracy before vowel means were calculated. The number of vowels for each speaker varied based upon a number of factors, including length of interview and type of interview (phone interviews had decidedly less speech than in-person interviews), but approximately 500-1500 vowels[5] were measured for each speaker.

When Labov (2007) considered the Corridor speakers in the Atlas, there was already a non-significant correlation between criteria and age. In considering the criteria of all three sources of data, there is an even less significant correlation with age than just those Atlas speakers (0.17 vs. 0.21). However, I have preliminarily found one pattern which mainly concerns the fronting of /ɑ/ (NCS stage 2), in addition to the backing of /ɛ/ and /ʌ/ (stages 4 and 5). All six of the advanced speakers[6] that show movement of these particular vowels are born between 1929 and 1946 and grew up in the big cities of St. Louis and Springfield[7]. Those that just satisfy the ED (F2(ɛ) – F2(ɑ) < 375 Hz) or UD (F2(ʌ) < F2(ɑ)) tend to also be from the same area, but also include younger speakers (from two different data collections, Rose M., 1956, from St. Louis and Barb A., 1961, from Springfield).

This appears in some ways to be a relative movement of NCS vowels. There are five speakers who satisfy the ED and UD criteria, both of which might imply a relative

[5] A number of interviews could not be included in the analysis because of lack of speech, including an in-person interview and a number of additional Atlas interviews.
[6] Arthur K, 1935, may be included in this group as he does satisfy ED and UD but not O2 (F2[ɑ]< 1450 Hz). However, he otherwise fits into the demographic group and so I will include him as a part of this group of advanced NCS speakers.
[7] The exception to the "big cities" connection is Anne from Staunton, who nonetheless spent a great deal of time in Chicago during her childhood and moved to St. Louis to find work after high school.

movement forward of /ɑ/ but not necessarily require fronting above 1450 Hz[8]. The Atlas speakers also satisfied the ED criteria much more often (eight out of nine speakers versus four of the remaining twenty-one), which might point to its additional ineffectiveness of O2 as a criterion in the Corridor. However, counting only those speakers with a reversal of /ɑ/ and /ʌ/ adds one final speaker to the advanced NCS group: Weston K, who as a speaker from Springfield born in 1927 generally fits the demographics of this group of speakers.

When the means of all speakers are divided into both age and town size, as shown in Figure 5, it is the middle age group born in big cities that shows the highest amount of all NCS criteria, as is shown with blue arrows in Figure 6. In particular, it is the only group that satisfies the UD criteria of F2 reversal of /ʌ/ and /ɑ/, as is demonstrated with the black line, again in Figure 6. The averages also show that the middle age group has the lowest and frontest /ɔ/, as circled in Figure 6. In addition, the middle age group also shows the farthest back /ʌ/ and /ɛ/, farthest forward /ɑ/, and highest /æ/ of the three age groups.

When considering this data as compared to Dinkin's (2009) data from Cooperstown and Sidney (the two New York towns in retreat), the similarities are striking. Below I reproduce the graph of Dinkin's data from Figure 3 above and set it alongside a similarly-presented graph of my data in Figure 7. For the Big Cities data (Springfield and St. Louis), the similarity is striking, considering the difference between the two age groups 1925-1965 and 1966-2000[9]. Although the end-point for my pilot is likely a few years earlier, around 1950, the pattern still holds and I will collect data in the hopes of constructing a more exact changing point for the Corridor.

In summary, the data collected so far from all three sources indicates that the Northern Cities Shift is strongest in speakers born in bigger cities from the middle age group (born 1929-1946). This is true when considering both the strict criteria, as in

[8] In fact, personal communication with Labov about the 1450-1500 Hz distinction leads me to believe that this is more of an artificial distinction whose aim was to find an artificial distinction to indicate /ɑ/ fronting.

[9] The graph in Figure 7 does not include a number of speakers from my study in order to provide a comparison to Dinkin's data. His oldest speaker was born in approximately 1926 while my oldest speaker was born in 1900.

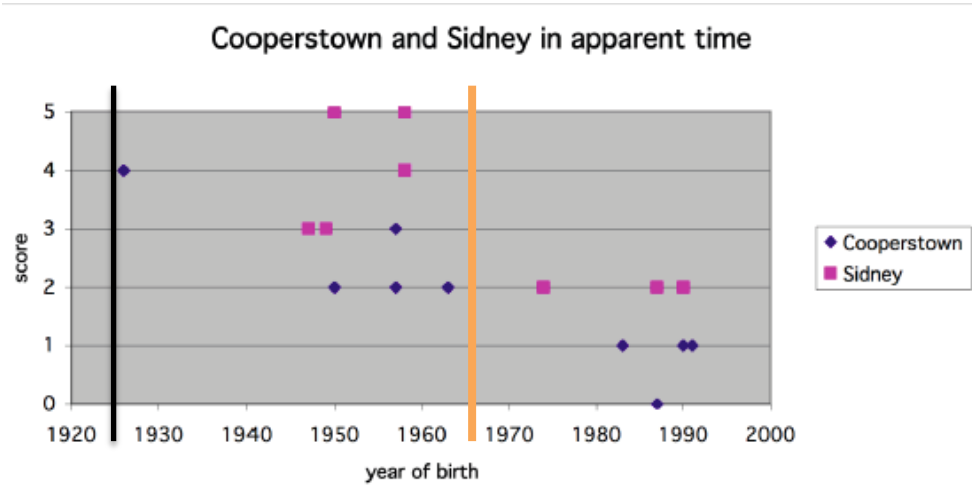

Figure 3 NCS scores in Cooperstown and Sidney versus age (fig. 3.10, Dinkin 2009:74).

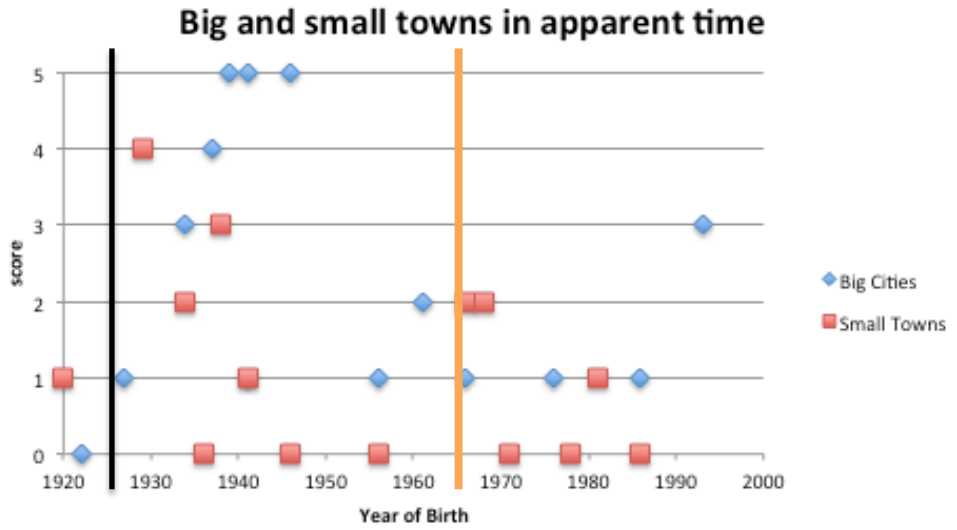

Figure 7 NCS scores in 30 speakers versus age, divided by town size.

Table 1, and the actual values of vowels, as in both Figure 5 and Figure 6. Although this data comes from disparate sources, this is compelling evidence that the same pattern will arise after conducting more interviews, perhaps including more cities in the big cities group, such as Peoria or Champaign.

3.2 Census Data and History of the Corridor

Information about population movement in the area comes mainly from local histories and data gathered in the census. Census data from 1950, as presented in

governmental reports, points to a large migration of people into the area around Springfield (Brunsman 1953), therefore this middle age group of more advanced speakers, as determined in Section 3.1, were an average of 12 years old. The economic area that includes Springfield, Bloomington, and the surrounding smaller towns saw a 6.6% migration to the area between 1949 and 1950. Since 36% of these migrants came from different economic areas in the same state, it is likely they migrated from the Chicago area and would have arrived at the ideal time to influence the dialect of local peers.

Migration statistics are not very comparable between 1950 and 1940 (the first year that the migration question was introduced) because in 1940 they were asked for location

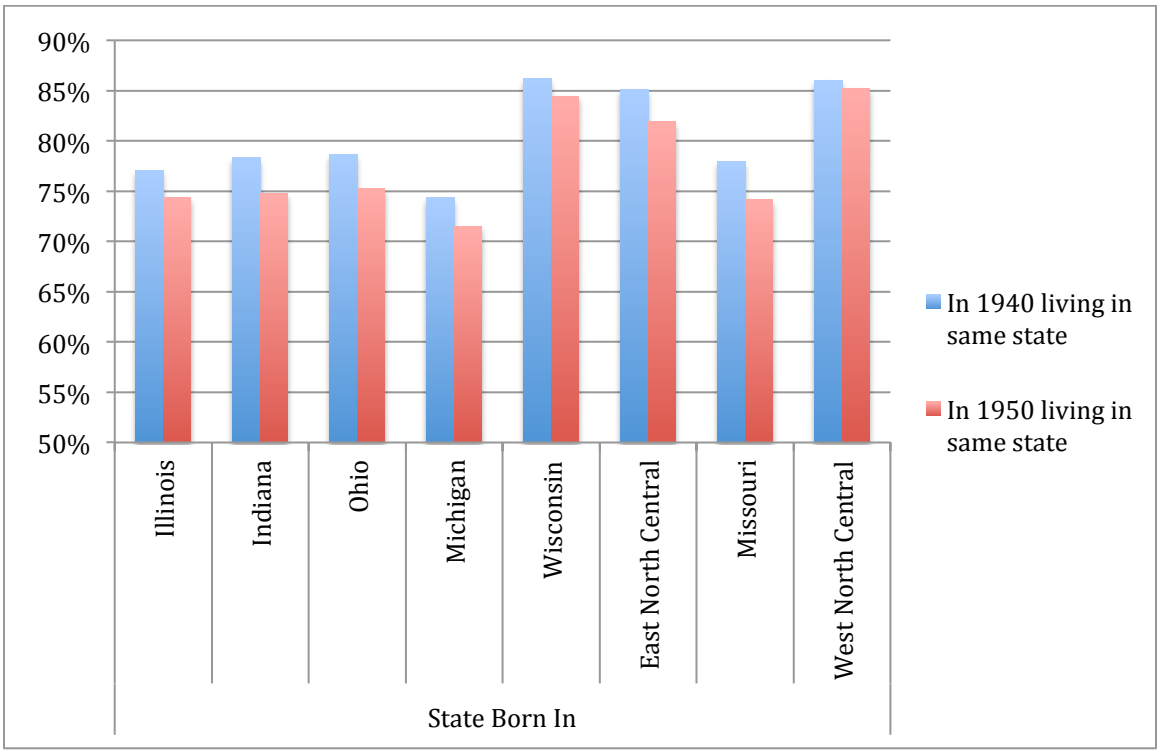

Figure 8 Selected census data on migration from 1940 and 1950.

of residence five years prior instead of one year prior (the question asked in 1950). However, the data for individuals born in the same state they were living appeared in both 1940 and 1950, showing that less people were living in the state and region of their birth in 1950 than in 1940, as shown in Figure 2. Although the 1960 census does not show state-level or economic area-level migration, the "central cities" lost 5% of their population while "fringe" urban areas gained 10% between 1950 and 1960.

The advanced NCS group I am looking at was born between 1929 and 1946, and therefore primarily acquired their dialect between 1935 and 1964. This census data does not indicate specifics such as the number of individuals who would have moved from St. Louis or Chicago to the Springfield area. However, the data it does provide gives a snapshot of migration in Illinois and state economic areas during the time period under investigation.

Although the census data did not give this information, the population center of the state is calculated each year. This calculation finds the center of the state not based upon area but on population concentration. The center of population, which used to be in the physical center of the state in Springfield in the 1840's, has moved along I-55 towards Chicago since 1850 (Erickson 2011). The map in Figure 9 shows that the only time period that the population center moved southward was during the Depression in the 1930's, shown by the 1940 census data point. Judging from the populations of the counties during that period, Prof. Mike Sublett states the population was not moving towards populated areas but towards farmland and direct food sources (Erikson 2011). In

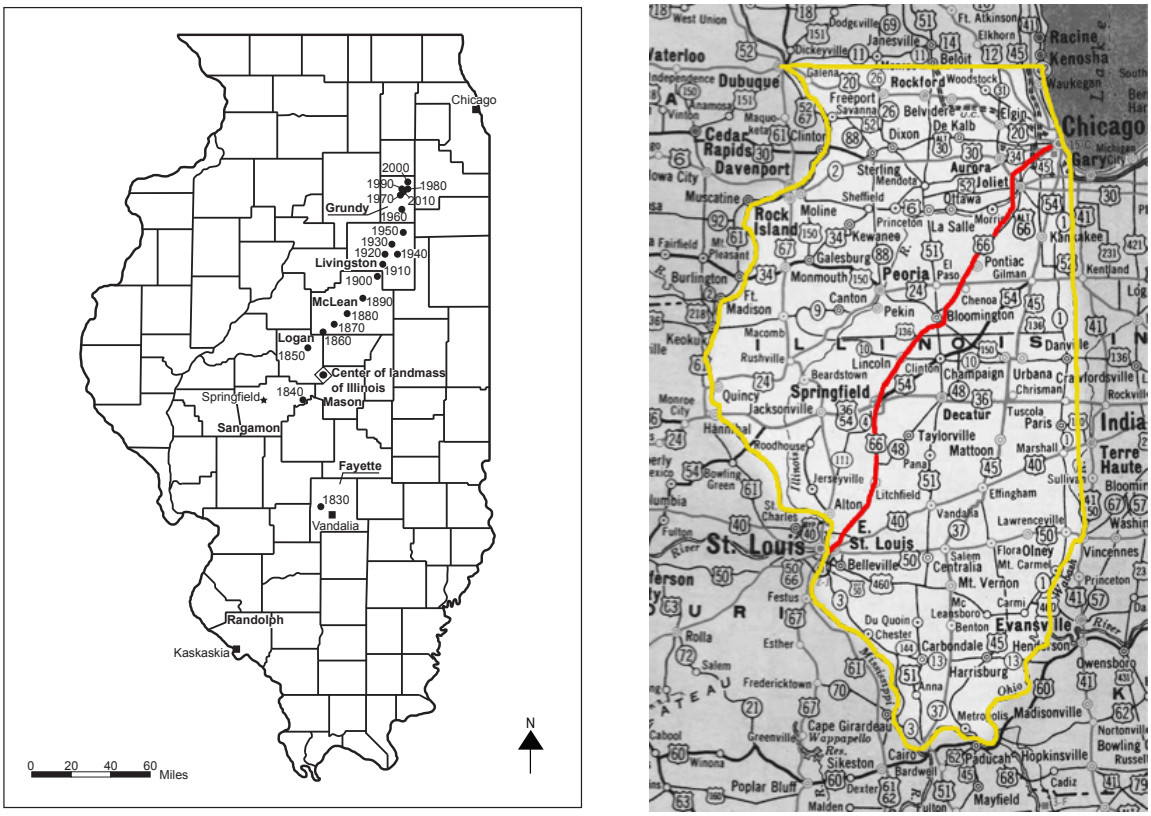

Figure 9 Maps of Center of population (left) and Route 66 from 1957 (right).

comparison to the rest of this area of Central Illinois, the area along Route 66 had more factories and industry than farmland. The movement of the center of population along Route 66, although a coincidence, demonstrates that there was not a large increase either the northwest or southeast of the highway and that the population center really has moved towards the Chicago area.

Additionally, the 1920's through the 1930's were a time when people were abandoning agriculture and building businesses that catered to those traveling Route 66, the only paved road across Illinois. Ryburn-LaMonte (1995) points out that those who had worked and relied on the land for their livelihoods before were becoming poorer during this time and looked for occupations and businesses that did not parallel the volatility of the economy (5). These types of jobs were primarily in the service industry. Also, the increased popularity of Route 66 in the early 1930's as a gateway to the West lead to increased business during the Great Depression, which was compounded during the Dust Bowl. Therefore, during this time, people in central Illinois had greater interaction with people not from their area, as well as with outside businessmen who were trying to capitalize on the relative prosperity of Route 66. This possible increase in contact with outsiders might have influenced the dialects of people in this area.

Comparing the data from my pilot study and this general census and population history, it is possible to see that the 1920's and 1930's could in fact constitute a time when a large number of NCS dialect speakers were entering the Corridor. As the big cities like Chicago became less prosperous and this area offered new opportunities, a number of people were likely to have relocated to the area. Census data shows that those living in Illinois in 1940 and 1950 were as likely to have been living in Illinois 5 or 10 years previous as nearby state Indiana and it was the Midwestern state Michigan, not Illinois, that seemed to have an influx of out-of-state migrants during this time. Further exploration of the 1940 and census, as described in Section 4.3 below, will hopefully illuminate intra-state migration in the 1930's. Overall, the general history of the relative prosperity in the Springfield area supports a possible migration from Chicago or St. Louis to Springfield during the Great Depression, as well as a fall from importance in the 1960's and 1970's after I-55 bypassed these small towns.

4 Dissertation Plan

In this section, I will cover my intermediate conclusions and set out my plans for both linguistic and non-linguistic data collection. I will detail my hypotheses for the actuation and spread of the NCS through the Corridor in Section 4.1. These hypotheses are based upon both linguistic evidence, such as the interviews I will collect, and non-linguistic evidence, such as an in-depth analysis of the 1940 census. In Section 4.2, I will cover my plan for collecting linguistic data in both phone interviews and in-person meetings. Part of these planned interviews will include non-linguistic data, such as individuals' relationships to different nearby cities. This, as well as my planned analysis of the 1940 census data, will be covered in Section 4.3. Finally, in Section 4.4, I put forward my proposed timeline for the completion of my dissertation.

4.1 Hypothesis

Based upon the data from the Atlas and my pilot study, as well as the population history of the area from Section 3.2, I hypothesize that the actuation of the NCS in St. Louis was either in the 1920's or before. This hypothesis is based primarily upon the establishment of Route 66, the first paved road through Illinois as well as preliminary data. The small number of interviews I have so far analyzed point to the likelihood that the NCS entering the Springfield area dialect either at the same time or soon afterwards. Because of the similarity in dialect and age of the advanced speakers from the Corridor, there are two possibilities for how the dialect spread.

The first possibility is that the dialect spread from Chicago to St. Louis before the 1920's, as other forms of transportation brought people from Chicago to St. Louis (waterways, trains, etc.). Because the speakers I have encountered have virtually no evidence of /ɪ/ backing and even the most advanced speakers only moderately satisfy the Atlas criteria, the NCS was likely not very advanced yet in Chicago at that time. Therefore, this moderate chain shift might represent the dialect diffusion of an earlier form of the chain shift. Then the dialect would have later spread from St. Louis to Springfield once Route 66 was paved, replacing railroads as the main form of transportation and leading to more movement along the Corridor itself.

The second possibility is that the chain shift, which was not fully formed yet in in the Inland North, spread from Chicago to St. Louis, Springfield, and the rest of the Corridor simultaneously in the 1920's and 1930's. The diffusion of this dialect likely boomed in the small towns during the 1930's, when the population center moved Southward from Chicago and Illinoisans moved closer to primary food sources, as Sublett (Erickson 2011) claims. This population might have moved back into the bigger cities in the area, such as St. Louis and Springfield instead of Chicago, once the Great Depression ended in the 1940's and 1950's. If not everyone moved to the bigger city centers, this would explain why there are isolated instances of advanced NCS speakers in smaller towns along Route 66. Also, it is likely that the NCS would have been adopted by Corridor adults in this diffusion, but to a lesser degree, especially if this dialect was a linguistic minority.

Regardless of which hypothesis is correct, the NCS in the Corridor outside of St. Louis appears to only remain in the speech of people in that age group, born 1929 to 1946. This mainly contrasts with speakers who were born in the 1960's and later and do not satisfy either the O2 or the UD criteria or neither criterion. This could be due to a sampling error; therefore, I intend to conduct more interviews in both Springfield and the surrounding areas, as detailed in Section 4.2. These interviews will mainly help in determining which generations had the NCS and how much of it, plus how and when the NCS disappeared. Because of constraints on real world data, the oldest speakers I am likely to find are about the age of the oldest speakers I have found with the NCS (namely 80-year-olds) and therefore I am unlikely to find the actuation of NCS in the Corridor through new interviews. However, in the following section, I will investigate other possible sources of oral histories that might provide me with older speakers and therefore come closer to determining a more exact actuation date for the NCS in the Corridor.

Next, when considering Yang's (2009) theory for the caught-cot merger in eastern New England, I hypothesize that a similar model could account for the influx of NCS vowels into the Corridor. Yang calculated that 20% of the population would need to be merged for it to spread to an entire generation. However, since in general mergers tend to expand more rapidly than entire chain shifts, I posit that there would have needed to be greater than 20% of the population with the NCS for the NCS to be diffused into the area. This is mainly because of the added complexity involved in the adoption of a full system

of changes, as opposed to one affecting only 2 vowels. A fuller analysis of the census data from 1940 will hopefully show what percentage of those living in Springfield and other small Corridor towns were from elsewhere, allowing me to prove or disprove this hypothesis.

I also posit that the 1950's and 1960's generally constitute a time of linguistic retreat at the fringes of the Inland North. This has been shown in multiple studies in apparent time (Dinkin 2009, Jacewicz et al 2011) in addition to my own. I will investigate further what major events occurred during this period that would have instigated a change throughout a larger geographical area, or if this is truly due to coincidence. My perceptual studies in addition to questions in my planned interviews will also hopefully illuminate any underlying connotations these dialects have for fringe Inland North speakers.

The final question is the origin the NCS of the dialect of older speakers in the Springfield and Corridor area. It is possible that the NCS spread from St. Louis, Chicago, or both. I will use the yardstick of social networks (and extended social networks) to determine whether speakers are more oriented towards Chicago or St. Louis in their family history, neighbors, and friends. Also, I will focus on obtaining interviews from speakers born in the 1940's through the 1960's to find if there is a more solid split between speakers and what events may have led to a retreat from the NCS. Finally, I will investigate whether natives of Peoria or Champaign, nearby towns of comparable size, do not have NCS features or have features closer to that of Chicago (such as the EQ criteria) or do not have speakers born in the 1930's and 1940's who have NCS features. These characteristics would give weight to the theory that Springfield's dialect came from St. Louis rather than Chicago and were possibly as or more accessible before the paving of Route 66. This conclusion derives from the fact that these towns would have had comparable histories in terms of relationship to Chicago. Gathering more interviews with people who grew up in these towns will hopefully illuminate the relationship between Springfield and Chicago.

4.2 Linguistic data collection plan

To test the hypotheses from the previous section, I will collect linguistic data mainly through phone and in-person sociolinguistic interviews. For the geographical location of the following towns, please refer to the map in Figure 10. I intend to begin sampling the dialect by continuing with my previously gathered data and obtain interviews from 12 large and medium sized towns. To sample this large geographical area, I plan to first record data from the big towns in the area using phone surveys (Bloomington, Decatur, Peoria, and Champaign, noted on the map in Figure 10 in pink and in a census map of the most populated areas of Illinois in Figure 11). I aim to obtain at least two interviews

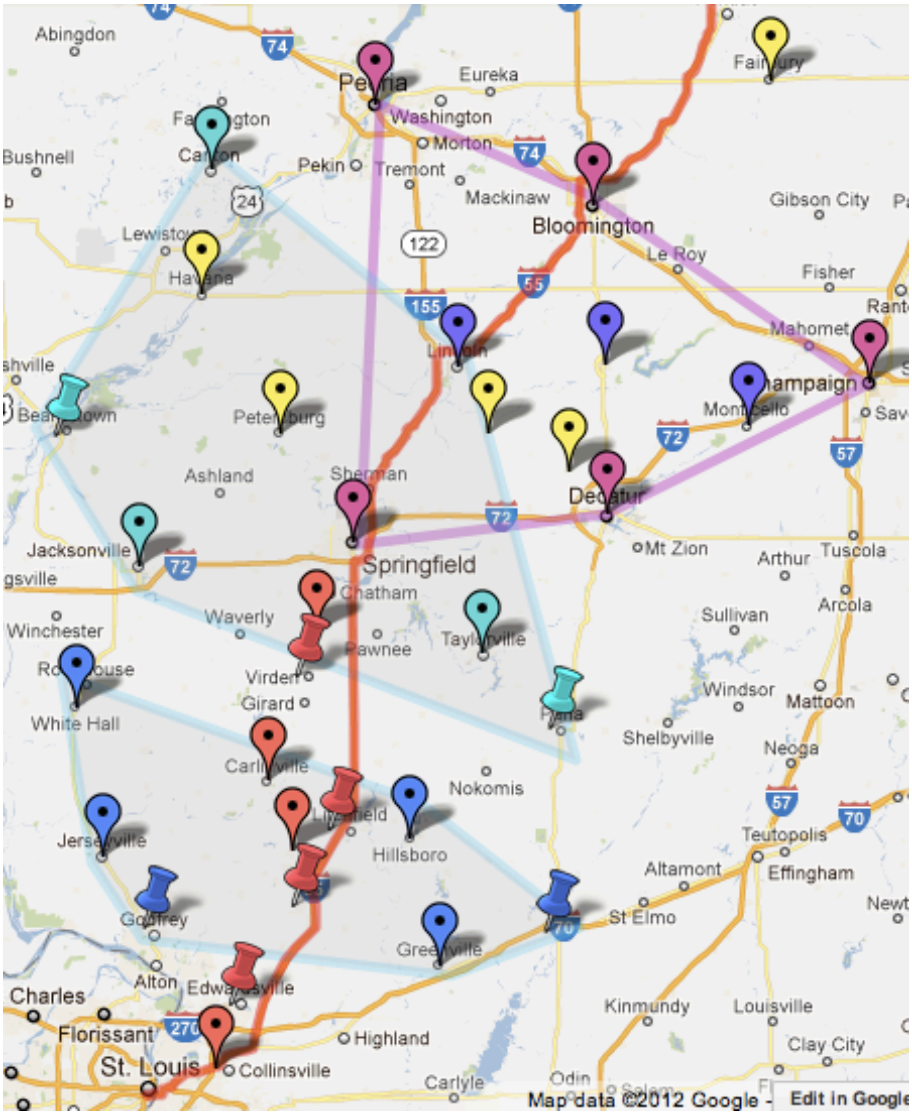

Figure 10 Map of towns for projected interviewees. pins with black dots are referred to in this section, while pushpins refer to towns where I have already collected speakers (red) or will find more, based upon analysis of interviews nearby.

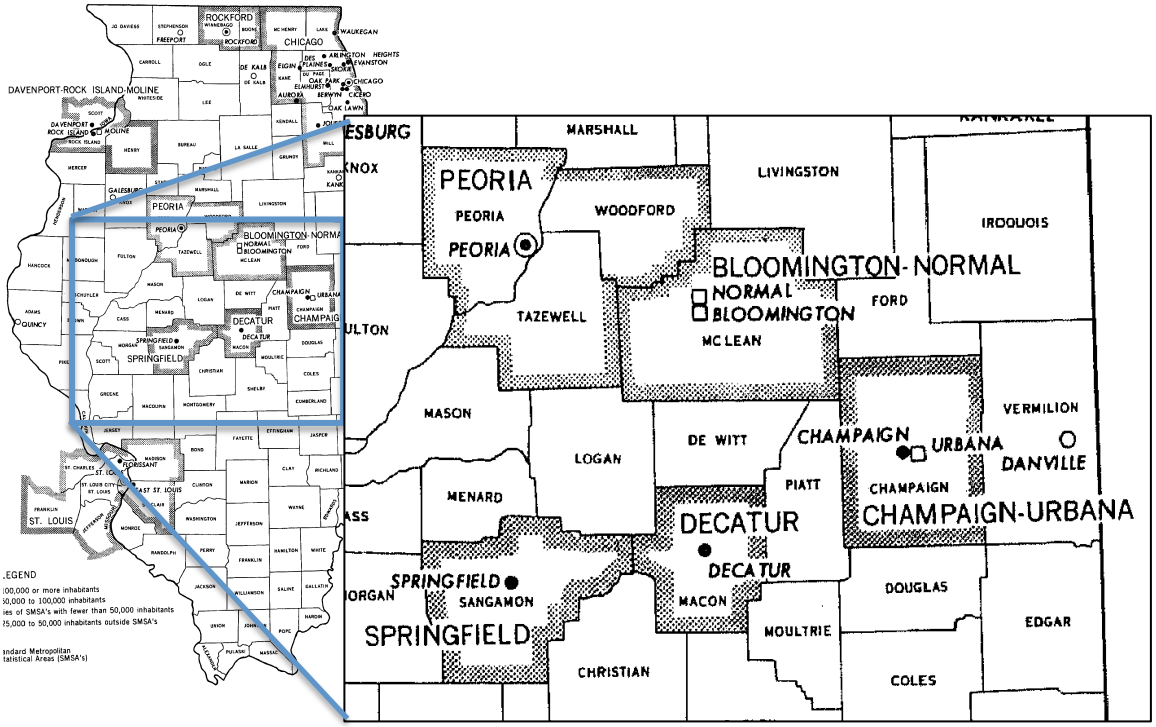

Figure 11 Section of a map specifying the most populated areas in Central Illinois in 1970.

from each town: at least one speaker born between 1930 and 1950 (advanced speaker age group) and one born between 1960 and 1990. If these interviews show speakers with NCS features in big towns other than Springfield, I will then attempt to obtain phone interviews with speakers in medium sized towns (with populations of 6,000-19,000) that lay between them (Clinton, Monticello, and Lincoln, in purple) and at various distances from Springfield in other directions (Jacksonville, Taylorville, and Canton, in green). Finally, I will also attempt to obtain more interviews from the larger communities along Route 66 between Springfield and St. Louis (Auburn, Virden, Carlinville, Litchfield, Mount Olive, Edwardsville, and Collinsville, noted in red) and towns of equivalent size that surround Route 66 but are not on it (Hillsboro, Greenville, White Hall, and Jerseyville, in blue). Following Dinkin, I hope to obtain at least 2 phone interviews from each community before visiting the area again. Also if the big towns show NCS features, I plan on sampling a few smaller towns at various distances from Springfield (Petersburg, Havana, Mt. Pulaski, Warrensburg, in yellow).

However, because phone interviews alone do not generally produce a sufficient amount of interviews and data, I will use the results of the phone interviews to determine where to conduct in-person interviews. I intend to find speakers from smaller towns that are near any towns whose residents show any fronting of /ɑ/ or backing of /ɛ/ or /ʌ/. For instance, if residents of Taylorville (southeast of Springfield, population 11,246) show NCS features, I will then conduct in-person interviews with more Taylorville residents in addition to residents of Pana, a town further Southeast of Springfield with a population of 5,847, and Edinburg, a town of 1,078 between Taylorville and Springfield.

Although the pilot telephone survey captured a good amount of relevant speech, there are a few changes I will make. Because the pivotal vowel for the three most important criteria is /ɑ/ (it appears in O2, ED, and UD), I will alter the current TELSUR telephone survey to include more instances of this vowel. I will also increase the number of pairs that contrast /ɑ/ with /ɛ/ and /ʌ/ as well as more words that show the Midland distinction between /æ/ before voiceless stops and anterior voiceless fricatives and a possible merger between /ɑ/ and /ɔ/ before /t/. This alteration follows the results of Thomas (2010), where he found /ɔ/ was unrounded before /t/ in Midland areas.

Additionally, I intend to conduct a perception experiment much like Preston's (2010) study of NCS vowel perceptions in Michigan, where I will test speakers from Springfield, a small town on the Corridor, and a small town outside the corridor. By testing speaker's abilities to identify NCS variables, I intend to determine if there is some effect of perception or increased misunderstanding that leads to sounds being further distinguished in some way. However, unlike Preston's study, I hope to include more of the older age group as well, to hopefully pinpoint those with farther advanced NCS vowels. I will also use Plichta and Rakerd's (2010) methodology of using the speech of one NCS speaker and one Midlands speaker as well as word context in the experiment to test whether they are aware of the NCS dialect and therefore use it to more correctly categorize vowels.

Finally, I will include a number of older speakers by analyzing a number of oral histories that are widely available from the University of Illinois Springfield Archives Oral History Collections. The collection contains recordings of interviews done in the 1970's to 1990's with speakers from the Saint Louis Corridor whose years of birth span 1884 to 1945. I have already transcribed and analyzed two of those speakers in my data

set (Irene S, 1900, and Burt H, 1904, from Springfield). These interviews, in addition to being about certain events or time periods in the state's history, all begin with a short family history and where the person has lived, which is useful information for my study. In addition, archivists and interviewees I met during the pilot study have referenced other older oral history collections, which I will investigate and also intend to analyze. I hope to use these interviews to expand my sample to speakers older than those I would find today, especially those born before 1930 (I have had a hard time finding speakers older than that using regular interviewing techniques), and those who grew up in smaller towns where there are currently very few residents.

4.3 Non-linguistic data collection

Although the collection of recordings of participants' speech is arguably the most important aspect of the study, there are a number of non-linguistic items that I plan to collect as well. First, in the interviews, I will ask questions to determine the speaker's connections with St. Louis, Springfield, and Chicago. In the pilot study, I asked approximately how many times they had visited each town per year and if they had family living in either place. These questions were intended to expose whether they had personal contact with these cities and if it would be possible that the NCS pattern in the area was a result of direct influence from these city centers. However, based upon the fact that speakers born before 1950 are primarily the ones with NCS features, I will change this line of questioning to whether older speakers had primary contact (meaning they visited these places) or secondary contact (had family who lived there) with these cities or people from these cities in their childhood and early adulthood. Younger speakers will be asked about their experience as well as about their parents' experience, if they are aware of it. I also intend to include questions about their affinity for certain food items or sports teams that are associated with the area to determine what their feelings are towards these areas. For instance, I will ask if they prefer deep-dish pizza or thin-crust pizza, with the deep dish pointing towards a cultural connection with Chicago. I plan to model other questions at least in part on those in Milroy's (1980) Belfast study and the Philadelphia neighborhood study in Labov (2001), as discussed in Section 2.3.

Although the network scales in these other studies focus on personal interactions with neighbors, those in nearby blocks, and kinship in the local community, mine will focus on actual and potential interaction with those from Chicago and St. Louis and family members and friends who live or have lived in those cities. Also, in place of questions that ask for the number of people that they interact with or would interact with, I will ask of the people they see on a regular basis doing these activities, if any of them are from Chicago, St. Louis, or Springfield. Unlike other studies, the goal is to determine if there are close ties with and potential contact with another community, not within their immediate community. In addition, I have found that interviewers in the Atlas asked speakers which is the closest big city they would go to for entertainment or shopping, a question I will be asking. Labov found that interactions with non-neighbors were most significantly related to the strength of their dialect (2000:336-7), another reason that this line of inquiry is worthwhile.

I also intend to cull through newly available census data more to determine where people living in this area came from originally. The census reports on where individuals were born and, in the 1940 census and after, the place a person was living 5-10 years ago. However, easily accessible census reports written in years past do not have this information for the Corridor area. I intend to sample individual census forms from Springfield and a few towns of varying sizes on Route 66 using the 1930 census, which is available in microfilm at the National Archives in Washington, DC, as well as the 1940 census, which has been recently been made available online. By comparing the dialect in the areas according to an apparent time interpretation alongside the population data for the same time period, I hope to illuminate where the NCS present in people's dialects originated from (Chicago, St. Louis, or elsewhere). I will begin with the 1940 data, as it is now available online and has information about where those residents lived in 1935 as well as their birth state.

These pieces of information about subjects and people who lived in the area in the time period under consideration (1930's and 1940's) do not directly shed light on where a dialect comes from or how it diffuses into a community. However, using them in tandem with linguistic data can provide a better picture of population movements or relationships between the Corridor and the Inland North. Linguists have recently used population data

to account for the linguistic patterns that appear in apparent time studies (Yang 2009, Evanini 2009, Dinkin 2008, Johnson 2007, Herold 1990, among others). Building upon this research, I hope to not only use population data to help explain linguistic phenomena, such as actuation and the percentage of a population necessary to spread a chain shift, but also use linguistic data to illuminate lines of communication through a geographic area, a difficult phenomenon to track.

4.4 Timeline

Considering the breadth of my proposed dissertation research, I plan to complete my dissertation in the following timeframe. First, in Summer 2012, I will complete a concrete phone interview script and specific questions to ask in in-person interviews, as well as obtain IRB approval for my study, both phone and in-person. After that, I plan to conduct initial phone interviews and plan where exactly I will look for participants for my in-person interviews. I will follow up with contacts made in my pilot study (Spring 2011) and continue to contact resources at historical societies and archival centers in the Corridor. In Fall 2012, I will continue my phone interviews and collect in-person interviews in the Corridor as well as begin analyzing these new interviews. In the winter and spring of 2013, I will analyze newly collected interviews along with archival data from the University of Illinois Springfield Oral History Archives as well as others I will hopefully come across in making contacts in the area. I will also spend approximately one month analyzing the original 1940 census data that was released in April 2012, determining where individual residents at that time had migrated from. Finally, I will begin writing and submitting chapters of my dissertation to my committee in Spring 2013 and continue through the fall, possibly collecting more data if necessary through phone interviews. I intend to complete my dissertation in November of 2013, putting me in a position to graduate in December 2013.

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