



City and country: dialect acquisition in the Catskill Mountains of Upstate New York

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Individuals moving from one dialect-specific area to another often pick up some characteristics of the new region's speech patterns. Dialect acquisition is subtle in adults and therefore understudied in the field of sociolinguistics. This study collected speech samples from natives of the Catskill Mountains in upstate New York and Catskill residents originally from the New York City Metropolitan Area. A perceptual methodology using a 9-point scale was employed to determine acquisition (Munro *et al.* 1999). Post-hoc tests showed that ratings of the two groups differed significantly ($p < 0.0001$), but 33% of migrant ratings fell on the 'Catskill' end of the spectrum. This supported the hypothesis that the migrants would exhibit an intermediate degree of Catskill dialect. Qualitative data from interviews collected in this study pointed to the existence of a social conflict between Catskill natives and migrants from downstate, which poses a possible barrier to acquisition. Both groups exhibited some degree of prejudice toward the other, which can be partially attributed to issues of linguistic prestige in the Catskill dialect.

Keywords: upstate New York, dialect, acquisition, prestige, Catskill, perceptual, conflict, sociolinguistics.

Ciudad y campo: adquisición del dialecto en las montañas Catskill de Nueva York, al norte del estado. Las personas que se mudan de una zona dialectal a otra frecuentemente asimilan características del discurso de la nueva región. La adquisición del dialecto no está muy marcada en adultos y, por lo tanto, apenas se estudia en el ámbito de la sociolingüística. En este estudio, se recogieron muestras del discurso de nativos de las montañas de Catskill, en el norte del estado de Nueva York, y de los residentes de Catskill procedentes de la zona metropolitana de la ciudad de Nueva York. Se empleó una metodología perceptiva que utiliza una escala de 9 puntos con el fin de determinar la adquisición (Munro *et al.* 1999). Posteriormente, las pruebas han demostrado que los grupos difieren significativamente ($p < 0,0001$), pero que el 33% de los ratios de inmigrantes cayeron en el extremo del espectro de Catskill. Estos resultados apoyan la hipóte-

sis de que los inmigrantes exhiban un grado intermedio de dialecto de Catskill. Los datos cualitativos de las entrevistas recogidas en este estudio señalan la existencia de un conflicto social entre nativos de Catskill e inmigrantes del sur del estado, lo que podría plantearse como un posible obstáculo para la adquisición. Ambos grupos mostraron prejuicios en distintos grados hacia el otro, lo que, probablemente, pueda atribuirse a cuestiones de prestigio lingüístico en el dialecto de Catskill.

Palabras claves: el norte del estado Nueva York, dialecto, adquisición, prestigio, Catskill, percepción, conflicto, sociolingüística.

1. Review of the Literature

Most studies in dialect acquisition focus on children. Until late adolescence, people are more receptive to learning a new language or dialect (Flege 1987). The Critical Period Hypothesis (CPH) states that age has a negative correlation with ability to speak an L2 (second language) with native-like pronunciation (Oyama 1976). Early studies on the critical period showed a strong negative correlation between native-like pronunciation of an L2 and speaker's age at the time of learning the L2 (Flege 1987; Scovel 1988; Patkowski 1990). The critical period is generally hypothesized to end at around age 12 (Birdsong 2006; Granena and Long 2013).

However, age is not the only factor that contributes to a speaker's accent. Amount of L2 use also has a strong effect, with speakers who use their L2 more frequently exhibiting significantly less accent (Flege 1997). Additionally, it has been determined that length of residence (LOR) in the L2-speaking area reduces adults' accent strength to some degree (Flege and Liu 2001). Further inquiry into maturational constraints on acquisition revealed the possibility that it is not chronological age itself that causes later learners to have trouble mastering the phonology of an L2, but rather the greater development of the L1 phonetic system that comes with greater age (MacKay *et al.* 2006).

The variety of diminishing effects on the critical period has been used to discount the theory's validity. There have been claimed to be as many as 14 separate "critical period hypotheses" (Singleton 2005), which brings into question the CPH's plausibility. However, a survey of cognitive data (Birdsong 2006) indicates that there is in fact a linear decline in L2 ability as age increases. Significantly, this data was not used to imply that adults are incapable of reproducing L2s in a native-like fashion. Experiential and motivational factors allow adults to

acquire L2s (and D2s) to a level of native-like proficiency within the limitations of age (Birdsong 2006).

Notably, it has been pointed out that most studies assume that the goal of an L2 learner is to produce and perceive the L2 in a native fashion despite the fact that this is not always the case (Baker 2008). In some cases, immigrants deliberately retain a slight foreign accent to maintain group affiliation with their native culture (Gatbonton *et al.* 2004; Baker 2008).

Preliminary studies in accommodation between dialects were more psychological than linguistic, placing emphasis on speakers' accommodation as heard by other speakers, without real phonological analysis (Giles *et al.* 1973). This topic was further investigated on a more linguistic level by Bourhis and Giles (1976), where researchers took recordings of a desk clerk interacting with several customers of differing classes who spoke in different social dialects. It was shown that the incidence of 'lower class' phonetic features was higher in the clerk's speech when he was talking to a customer with a 'lower class' dialect, and vice versa with 'higher class' speakers. From these early studies came the concept of convergence, the idea that individuals switch their speech styles to be more like those with whom they are interacting, regardless of age. At its inception, this concept primarily applied to short-term accommodation, as that in a brief face-to-face encounter (Giles and Smith 1979).

Chambers (1992) collected speech samples from a migrant Canadian group residing in England and a native British group and compared the percentages of specific phonological features in the two groups. It was noticed that the older children (ages 15-17) had very low percentages of measurable dialect acquisition. However, the children had still noticeably replaced many Canadian speech features with British ones. This caused a situation wherein the older children sounded like they had acquired the British dialect despite a lack of measurable phonological acquisition. This aligns somewhat with the postulation of Hyltenstam and Abrahamsson (2000) that late learners can attain a level of proficiency in an L2 (or D2) that is perceived as native-like despite not being fully native-like under linguistic analysis.

Munro *et al.* (1999) studied second dialect acquisition with a different method, accounting for the fact that adult immigrants into an area will begin to sound like the inhabitants of that area, regardless of how much they have 'linguistically' acquired the area's speech forms. This required the use of speech raters. L2 studies, notably Ryan *et al.* (1977), Brennan and Brennan (1981), and Flege (1984) have shown that linguistically untrained raters generally perceive accent about as reliably as trained ones. Munro *et al.* (1999) applied this principle to D2 acquisition.

The basic methods of a speech rater study consist of eliciting speech samples from one immigrant speaker group and one native speaker

group. The samples are then played in a randomized order to a group of natives, who are asked to rate how close to their own speech the speakers sound. For example, the Munro *et al.* (1999) study asked native Canadians and native Alabamans to rate speech samples on a scale of 1 to 9 in terms of how close or far from their own speech the samples were. The speech samples came from three groups: native Canadians, native Alabamans, and Canadians living in Alabama. It was found that both native groups reliably rated the native Canadians as principally Canadian-sounding and the native Alabamans as principally Alabaman-sounding. The migrant group's ratings were spread out in a pattern that suggested incomplete acquisition of the Alabaman dialect and incomplete loss of the Canadian dialect, a finding that can be considered analogous to convergence theory. This was previously supported by findings such as those of Major (1992) and Sancier and Fowler (1997), which indicated that L1 speech changes as a result of L2 acquisition. The application of convergence to long-term accommodation suggested that "adult migrants to a new dialect area [are] able to acquire some but not all of the features of the D2 [second dialect]" (Munro *et al.* 1999).

The results of Munro *et al.* (1999) support previous claims that subjects can sound like they have acquired a D2 to the untrained ear despite not having acquired it perfectly. Not only that, but they may be capable of fooling the trained ear. This was suggested by the last part of the "Canadians in Alabama" study, which had phonetically trained listeners rate certain dialect-variable words from the two subject groups. In fact, the trained listeners rated the immigrants closer to the 'American' side of the spectrum than the untrained listeners. While this may be skewed by the use of a coarser rating scale (1-5 instead of 1-9), it still stands as evidence that untrained laymen are often capable of detecting speech difference approximately as well as professional linguists. While this theory had already been supported, it was not known previously whether it applied to D2 acquisition (Munro *et al.* 1999).

It is apparent that the methodology employed by Munro *et al.* (1999) can theoretically be applied to any region which has had a recent influx of immigrants or transplants from a different dialect area. It is curious, then, that very few studies have employed this methodology since. The original purpose of this study was to apply this methodology to a different native-migrant interaction in the United States, that occurring in the Catskill Mountain region of upstate New York. The Catskills were principally chosen because they were the author's home at the time of this study's inception, but this choice, albeit out of convenience, provided a wealth of unique linguistic data.

The Catskill Mountains are a range in southeastern-central New York State, located north and west of the Hudson Valley region.

Accounts vary on where exactly the boundaries of the Catskills are; this study defined them as Greene, Delaware, Ulster, and Sullivan Counties. This is with the notable exception of urban municipalities in the eastern part of Ulster and Greene Counties as these are generally considered part of the Hudson Valley (Birns 1988).

The Catskill region has several migrant populations, but the most notable is that of people ‘from away,’ namely, those from the New York City Metropolitan Area. At its broadest extent, this includes natives of the Five Boroughs, Long Island, northern New Jersey, and the lower Hudson Valley counties of Westchester, Rockland, Orange, and Putnam. The majority of this group own second homes in the Catskills which they occupy during the weekends and the summer. However, there is a noticeable pattern by which many ‘downstaters’ choose to sell their downstate residences and move to the Catskills full-time. This creates an interesting situation for the study of adult D2 acquisition. Based on the results of Munro *et al.* (1999), transplants from downstate would be expected to acquire some Catskill dialect features as perceived by Catskill natives. However, the economic dependence of the Catskills on downstate tourism creates an environment that is not necessarily receptive to such acquisition. Many Catskill natives feel overrun by tourists and resent their land being controlled by ‘flatlanders,’ whom they often perceive as condescending and obnoxious. It was of interest to this study whether the downstate migrants would acquire the Catskill dialect in the face of both hostility from natives and the difficulty of D2 acquisition outside the critical period.

There are several social pros and cons for a downstater acquiring the Catskill dialect. With any migration, speaking ‘locally’ (i.e. acquiring at least some of the region’s speech features) gives one a social edge and reduces one’s perception as an outsider (Lippi-Green 1997; Munro *et al.* 1999). In the case of the Catskill region and New York City, this effect is intensified by a complex interregional relationship with several historical and social facets.

The Catskill region has been a large part of the New York City Water Supply since the early 20th century, when several Catskill towns were evacuated to make room for the construction of reservoirs (Galusha 1999). This was continued into the 1950s, and some older Catskillians still feel resentment toward the city for their displacement. This resentment was enhanced by stricter land-use regulations within the watershed (Steuding 1989: 107-112).

The upstate-downstate relationship is further complicated by the historical ‘Borscht Belt’ of resorts and hotels in the Catskill region that catered to weekenders from the NYC Metropolitan Area during the 1940s-60s. During this period, the Catskills’ economy flourished, but the late 20th century brought economic downturns as many of these establishments went out of business. Today, the Catskill region retains a heavy eco-

conomic dependence on New York City. The majority of houses in many Catskill towns are owned by part-time residents who only come up during the weekends and summer. Many Catskill natives resent this proliferation of second-homeowners as they feel that the 'city people' do not respect the land and culture of their region (Stradling 2007). In addition, second homeowners drive up real estate prices, making it more difficult for locals to own property. Many also feel overlooked by the government, as state and federal funds for education and public works are usually directed toward wealthier areas of New York State, especially the downstate region. The combination of these factors has caused many Catskill natives to form strong prejudices against people from downstate, employing slurs such as 'flatlander' and, more harshly, 'citiot' against downstaters.

It is important to note a few key facts about the dialect of the Catskill region before the study itself is presented. The dialects of New York State were first investigated in the 1940s by the Linguistic Atlas Project. Dr. Hans Kurath supervised the creation of a linguistic map that placed a large area of southeastern New York (including the Catskills) in the Hudson Valley dialect area (Hawkins 1941). However, this claim was later challenged by a study (Birns 1988) that found incidence of Appalachian grammatical features in the Catskills. This provided evidence that the Catskill Mountains are not only geographically but also linguistically distinct from the Hudson Valley. Some notable Appalachian features present in the Catskills include double prepositioning (phrases such as 'up to,' 'over to,' 'up in'), irregular preterits ('seen a bear' *vs.* 'saw a bear') and irregular plurals ('deers', 'firemens'). Though the presence of Appalachian phonological features in the Catskills has not been tested, it is reasonable to infer from the grammatical data that the Catskill dialect aligns phonologically with the Appalachian region more than the Hudson Valley (Birns 1988).

Sociolinguistic studies in the Appalachian region (Luhman 1990; Dunstan 2013) have shown that Appalachian English often carries negative stereotypes, being associated with lower-class and uneducated speakers. This sort of stereotype can cause interpersonal conflict, as their speakers may be seen as inferior by the speakers of other less stigmatized social dialects (Fishman 1971). This could cause resistance to accommodation, as low prestige D2s are often not acquired by migrants into an area (Lippi-Green 1997).

2. Hypotheses

The central questions about acquisition in the Catskill region led to the development of a methodology based on that of Munro *et al.* (1999).

This methodology consisted of a 9-point scale where 1 signified ‘Definitely Catskill’ and 9 signified ‘Definitely Not Catskill.’ Two groups, one of Catskill natives and another of downstate migrants, had their speech samples rated with this scale. This design was intended to test the following hypotheses:

Hypothesis I: There will be a statistically significant difference in the ratings of the native and migrant speech samples based on the CPH.
Hypothesis II: At least 25% of the migrant ratings will fall in the 1-4 range on the 9-point scale based on “Canadians in Alabama.”

Confirmation of the first hypothesis would indicate that the migrants acquired the dialect in a manner befitting adults outside of the critical period. Confirmation of the second would provide evidence that some had in fact become ‘more Catskill’ in their speech.

3. Methods and Materials

3.1. Speakers

This study collected samples from 20 speakers in total: 10 natives, 10 migrants. Each was assigned a two-character alphanumeric pseudonym to ensure anonymity e.g. A1, B2. A signified ‘native,’ B signified ‘migrant.’ The numbers represent the order in which the speakers were interviewed. In an attempt to control for uniformity of age, all subjects had to be at least 25 years old.

The natives had all lived in the Catskill region (as defined in the Review of the Literature) until at least age 18. This was considered long enough for the speaker’s D1 to be exclusively Catskill. Some speakers had lived outside of the Catskill region during college and later years, but all currently resided in the region and all but one had returned no later than 5 years before the study took place. Most speakers came from the Delaware County towns of Margaretville and Fleischmanns, with several others from the Greene County town of Halcott Center and the Ulster County hamlet of Phoenicia.

The migrants had all grown up in the downstate region (as defined in the Review of Literature), all but two staying in the region until at least age 18. The availability of subjects forced the allowance of two exceptions. Subject B3 moved from Long Island to the Delaware County town of Roxbury at age 16, and Subject B4 spent part of her adolescence in an English-speaking neighborhood of Montreal. Both were considered to be acceptable samples as the estimate of 18 years is, in fact, based on no specific rule about the ‘critical period’ for speech

learning; it was merely selected due to the fact that it was well outside of the critical period. All migrants had lived in the Catskill region for at least 5 years.

Over the course of five months, twenty speakers were recorded. These speakers were either found through a personal connection or through responding to a flyer posted in several public locations in the Delaware County villages of Margaretville and Fleischmanns. The text of the flyer is contained in Appendix I.

3.2. Stimulus File

Subjects were recorded wherever was convenient, so long as it was quiet enough to get a high quality recording. Eight subjects were recorded at local libraries, eight in their offices or places of business, three in their own homes, and one in the researcher's home.

The Catskill speakers ranged in age from 28 to 70 with a mean of 55.5 and the migrant speakers ranged in age from 42 to 76 with a mean of 59.6. The LOR in the Catskill region for the transplants ranged from 7 years to 41 years, with a mean of 28.4 years.

Each subject was informed only that the researcher was performing research on life in the Catskill Mountains and the conflict between Catskill natives and downstate migrants; they were not told that the project had a linguistic purpose until after the speech sample was collected.

All of the recordings were collected with a Dayton Audio iMM-6 Calibrated Measurement Microphone connected to an Apple iPod Touch running the free application Voice Record Pro from BejBej Apps. Each subject provided two recordings, the first of which was a sociolinguistic interview as described by Wolfram and Fasold (1974). This consisted of asking the subject to relate their life story in a brief fashion and asking questions as they arose. Cues to subject interest in a particular topic were followed and served as fodder for further questions. The purpose behind this was to bring the subjects to a conversational speech level in which their most natural dialect patterns could emerge. It also served to collect qualitative judgments on Catskill life and insight about the upstate-downstate conflict from both sides of the issue. The interviewer is a native of the Catskill region born to parents from downstate. This provided a point of commonality with both the natives and the migrants, though the interviewer tried to maintain a dialectally neutral speech pattern throughout the interview. Many of the speakers were personal acquaintances, which theoretically intensified the comfort the speakers felt with the interview. Interviews ranged in length from about 10 minutes to just over 40 minutes. They were kept and used heavily in the qualitative part of the study's data analysis.

The second recording was a speech elicitation exercise drawing from the precedent set by Munro *et al.* (1999); subjects were asked to view and narrate a simple picture story (Appendix II). Eight panels in length, it portrayed a man entering a grocery store, purchasing several goods, and then slipping on a wet floor. The purpose of this was twofold: to elicit casual speech as well as possible pronunciation variations between upstate and downstate speakers. Subjects were presented with the picture story and asked simply to narrate what was going on in the picture. They were not told the purpose of the exercise until after they had finished narrating the story; they were merely told that it was not intended as a psychological test of any sort. These speech samples ranged in length from 30 seconds to 150 seconds.

In addition to the interview, the speakers were asked to fill out a brief sheet asking their age, place of birth, and (for the migrants) how many close friends and coworkers they had who were Catskill natives. This last piece of data was measured by the following multiple choice questions:

How many coworkers do you have who were born or grew up in the Catskills?

- 0-5
- 6-10
- 11-15
- 16-20
- 21 or more

How many close friends do you have who were born or grew up in the Catskills?

- 0-5
- 6-10
- 11-15
- 16-20
- 21 or more

Once all of the samples had been collected, they were copied into Audacity Sound Editing Software Version 2.0.5 and a ten-second sample was edited out from each. The original plan was to extract all the samples from the beginning to ensure similar content, as done in the precedent study (Munro *et al.* 1999). However, when the recordings were compared it was found that not all of the subjects provided ten seconds of relatively continuous speech within the first thirty seconds. This required altering the criteria and finding the utterance in each sample that came closest to ten seconds in length.

Once each file was edited, the twenty ten-second files were copied over twice into an iTunes playlist, for a total of forty files. The playlist was then shuffled to place the files in a random order. This order was recorded in a research notebook to be used in the creation of the stimulus file. The file started with a neutral voice relating the following instructions:

You will be presented with a series of recordings of speakers, each around ten seconds in length. Some of the speakers are from the Catskills, others are not. Please use the following scales to rate how much each speaker sounds like a Catskill native on the 9-point scale, with 1 being Definitely From the Catskills and 9 being Definitely Not from the Catskills. After being played each sample, you will have 2 seconds of silence to circle the number that represents how Catskill each speaker sounds. The samples will be played twice each in a random order, so you will hear the same sample more than once.

Please rate the speakers on the basis of their voice cues alone, as if you are speaking with them on the telephone or listening to them on the radio. The speech samples were extracted from longer recordings and are therefore often not complete sentences. Pay no attention to what is actually being said by the speakers; focus only on their accent and speech forms.

The following two recordings are a warm-up in order for you to get used to the rating process.

These instructions were followed by the presentation of two warm-up speech samples that were not part of the original group of twenty. These were provided by two separate volunteers, both migrants, one of whom had lived in the Catskill region for over 20 years, the other of whom did not reside in the region. Their samples came from a narration of the picture story. These samples' presentation was followed by this instruction:

Now that you have completed the practice, you will begin to rate the subjects, beginning with number one.

After this instruction, the samples appeared on the file in the random order determined earlier. The file also included a voice saying the number of each sample before it was played in order for the raters to keep in pace with the recording.

3.3. Raters

The raters were presented with a packet labeled ‘Catskill Rating Sheet,’ the first page of which contained the instructions related at the beginning of the stimulus file. Under these instructions were two 9-point number lines marked A and B. These corresponded to the two warmup samples.

The remaining pages consisted of identical number lines numbered 1 to 40, one for each of the speech samples in the stimulus file. An example of these number lines is shown below:

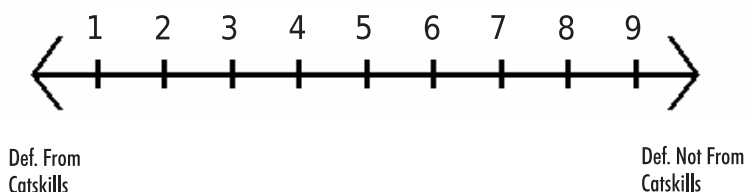


Figure 1. *Number line used by the raters to indicate the degree of Catskill dialect they perceived in speakers*

As most of the speakers lived in Delaware County, it was important that most of the raters were from a different part of the Catskill region to control for the possibility of them recognizing any of the speakers. The first rating session took place at Neversink Town Hall in the Sullivan County town of Grahamsville. This session collected ratings from thirteen subjects, mostly from the towns of Grahamsville and Denning. A later rating session took place in the Fairview Public Library in Margaretville, collecting ratings from six subjects. Several other separate rating sessions were performed in Sullivan County, which provided three more completed sheets, for a total of 22 raters. Subject selection reduced the possibility that the raters would recognize any of the speakers. Based on precedent, the rater group had to consist of about twenty people, so this was considered a sufficient number of data points. In total, 880 separate ratings were collected.

4. Results

Before the data could be collated, it was necessary to determine whether the raters were consistent in their perception of the speakers. Intra-rater reliability was found by calculating Pearson r correlations

between the first and second ratings of each speaker. These correlation coefficients varied significantly between raters, with the highest being 0.92 and the lowest being 0.18. It was necessary to discard some of the lower scores in order to boost the group reliability, so the 7 raters whose reliability fell below the threshold of 0.50 were removed from the data set. This boosted the mean intra-rater reliability from 0.53 to 0.69.

The relatively small population from which the raters were chosen represents a convenience sample and this helps to explain the comparatively low intra-rater reliability experienced. However, 13 out of the 22 raters had reliabilities above 0.55, which was considered a sufficient level of intra-rater reliability. Some of the raters reported that they found the task particularly difficult, and others used very few numbers on the scale. The most extreme example of this was the least reliable (0.18) rater, who almost exclusively rated speakers as 1 or 9. Because of the 7 discarded raters, the remainder of the statistical analyses were performed on only 15 raters.

Inter-rater reliability was found by calculating an Intraclass Correlation Coefficient between the remaining 15 raters using MedCalc software. The value of 0.72 was considered acceptable, especially considering the low intra-rater reliability. Even if they did not perceive the first and second presentation of each speaker with great consistency, at least the raters generally viewed the same speakers as 'high' and 'low' relative to each other.

The groups were distributed similarly, with a standard deviation of 2.56 for the natives and 2.58 for the migrants. The mean rating for the natives was 4.48; the mean for the migrants was 5.75, while the medians were 4 and 7 respectively. A paired-sample means t-test on speaker groups showed a significant effect of speaker group on ratings ($p < 0.0001$), as did an ANOVA performed on the pooled ratings of individual speakers, $F(19, 580) = 6.972$, $p < 0.0001$. This confirms the first hypothesis of this study: there was a statistically significant difference between the ratings of natives and migrants.

The frequency table (Figure 2) shows percentage of ratings assigned by the raters to each speaker group. Fully 33% of the migrant ratings fall in the 1-4 range set in this study's parameters as 'more Catskill,' which confirms this study's second hypothesis. A first glance at the frequency distribution points to lack of acquisition, as over 60% of migrant ratings fall in the 6-9 'Definitely Not Catskill' range. However, these results are in fact quite similar to those found in Munro *et al.* (1999). In that study, roughly 25% of migrant ratings fell in the 4-point 'sounds more Alabaman' end of the spectrum and roughly 60% fell in the 4-point 'sounds more Canadian' end. Despite the low rater reliabil-

ities experienced in this study, the results of rater data closely follow precedent.

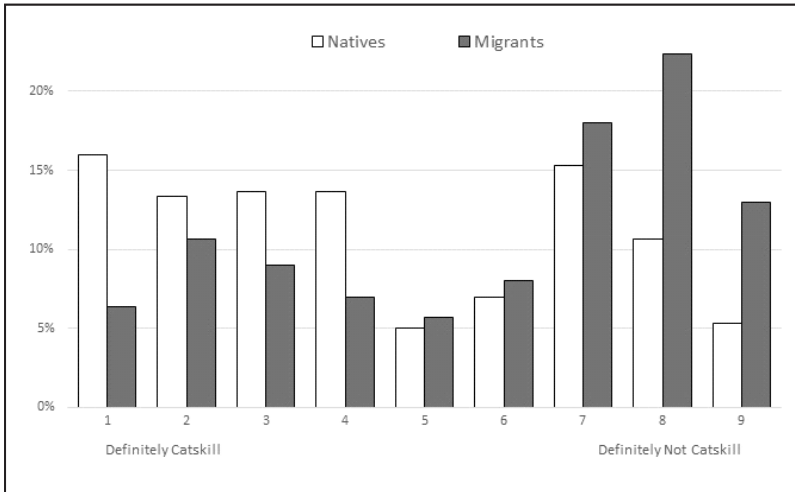
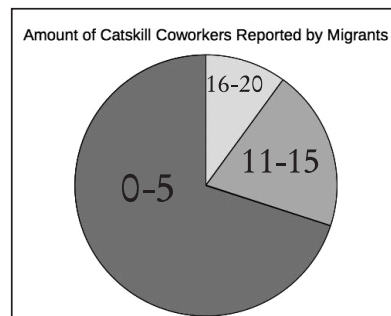
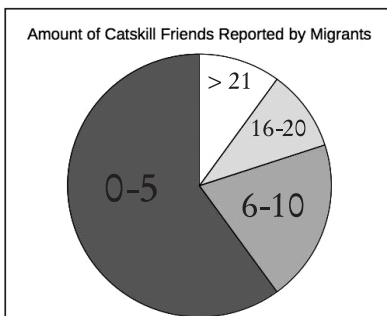


Figure 2. Percentage of ratings from 1-9 assigned to Catskill Natives and Downstate Migrants by the 15 raters

The pie charts below show the frequencies of each answer to the multiple-choice questions given to the downstate migrants. The fact that the majority of responses were in the 0-5 category shows a decided lack of social relationships between upstate and downstate, at least in this study’s sample. This likely resulted in a dearth of verbal contact between migrants and natives.



Figures 3 and 4. Percentages of close friends and coworkers who are Catskill natives as reported by migrant talker subjects

5. Discussion, conclusions, and significance

This study examined the perceptual D2 acquisition of people from the New York City Metropolitan Area living in the Catskill Mountains. Its primary goal was to determine whether the transplants would be perceived as having an intermediate degree of Catskill dialect in their speech, enough so that Catskill natives did not perceive them as totally foreign. The presence of over 25% of migrant ratings on the ‘Catskill’ end of the spectrum indicates that the migrants did indeed acquire some degree of proficiency in the Catskill dialect. This acquisition is shown to be partial by the t-test results and the presence of over 60% of ratings on the ‘Not Catskill’ end of the spectrum. As much of the methodology for this study was drawn from Munro *et al.* (1999), it is not surprising that the results are very similar. Aside from the similarity in distribution of migrant ratings, it is noteworthy that this study’s average migrant rating was 5.75, and that of Munro *et al.* (1999) was 5.80. Some insight into this study’s contributions to the field can be gained by examining its methodological limitations and sociolinguistic implications.

The first methodological limitation in this study’s design was rater reliability. Precedent studies (Ryan *et al.* 1977; Flege 1984) have shown that linguistically untrained raters can perceive differences in speech reliably, so it is not likely that the use of laymen as raters threw off the data. It is more likely that the warmup for the rating task was not sufficient. Only two warmup speech samples were included before the rating task, which was a break from precedent as Munro *et al.* (1999) included eight. Several of the raters appeared visibly stressed by the fast pace of the rating task, which also could have thrown off their perception. Many raters (especially those with lower reliability coefficients) reported that they found the task very difficult. The ratings of both the natives and the transplants are clustered towards the extremes of the scale, which may indicate that the raters did not feel confident enough to assign intermediate ratings. Those who rated speakers more extremely tended to have lower reliabilities, as rating the first presentation of a speaker with a 7 and the second with a 2 is less reliable than rating the first a 5 and the second a 4. Though raters are a good metric for acquisition outside of the critical period, they can be a large source of human error. Future studies using speech raters could minimize this error by ensuring that the raters have been given adequate instructions and practice in the speech rating task.

This study’s sample size, though based on precedent, was a significant limitation. Munro *et al.* (1999) had a larger population of both

natives and migrants to draw from as well as a budget to compensate subjects for their time. The groups of ten speakers were heavily selected for a specific distribution of age and LOR, which created a more normal data set both linguistically and statistically. This study had to draw from a convenience sample of speakers and thus could not heavily control for age or LOR. The difficulty of finding subjects in this study stemmed both from a lack of budget and from the nature of the geographic area being studied. The Catskill region is an area with a drastically smaller population than surrounding parts of New York State such as the Hudson Valley and the Capital Region. This made finding subjects more difficult. This should not discourage future research in rural areas; it should merely suggest that future studies account for the increased difficulty of finding subjects ahead of time. However, it is likely that much of this difficulty could be alleviated by having a budget with which to compensate speakers.

It is possible that the breadth of the speech samples themselves had a shortcoming that affected results. Flege and Fletcher (1992) found presence of a ‘range effect’ on ratings of L2 learners wherein “the larger the proportion of native (or near-native) speakers included in a set of [speech samples] being evaluated, the more strongly accented listeners judged sentences spoken by non-native speakers to be.” The raters may have perceived the downstate speakers as more foreign simply because their speech contained any ‘city’ features at all. Had the stimuli contained speech samples from New York City/Long Island speakers, the migrant ratings may have clustered closer toward the intermediate range. Though the speech differences between L2 learners and native speakers are more noticeable than those between D2 learners and native speakers, the same range effect may have been present. This conclusion is also supported by the “Canadians in Alabama” study: “Although both listener groups rated the immigrant Canadians as more Canadian-sounding than American-sounding, their sensitivity to differences between the two groups of Canadian speakers led them to rate the Canadian immigrants to Alabama as having an intermediate degree of American accent” (Munro *et al.* 1999).

A final methodological concern is that of speech elicitation. The data collection methods were considered sound based on precedent and counsel from professional mentors. However, the speech elicitation was not always performed in a controlled environment. At times, there were distractions during the interviews and picture story tasks that could not be accounted for, such as outside noise or phone calls. This was another function of working outside of a controlled setting.

Despite this study’s success in replicating the design of Munro *et al.* (1999), it should be pointed out that this design does not permit us to

draw firm conclusions about why adult migrants only partially acquire their D2. As to this study's relevance to the Critical Period Hypothesis, it should be noted that only complete native-like acquisition by the migrants would have posed problems for the CPH. The lack of a young population of full-time migrants to the Catskills from downstate prevents the drawing of any strong conclusions about maturational factors in this study. If speech samples were collected from a younger population and rated in the same manner as the adult samples in this study, comparisons could be made that might lead to conclusions about the CPH. As is, this study's data can mostly be taken as evidence that provides more support for the CPH but does not present any truly unique empirical data on maturational constraints.

Though the differences between the migrants and natives were often subtle (certainly more so than the contrast between Inland Urban Canadian English and Alabaman English), the raters were still capable of detecting dialectal differences. The similarity to Munro *et al.* (1999) in percentages of rating clusters suggest that the Catskill and downstate dialects are linguistically different enough to behave as separate varieties of American English. This provides further evidence for the findings of Birns (1988) as it places the Catskills in a separate dialect region from downstate New York.

It is regrettable that there is only one recent academic catalogue of the Catskill dialect (Birns 1988), as this prevented the research from taking a more empirical linguistic perspective on the features that were or were not acquired by the migrants. The 1988 dissertation "Dialect in the Catskills: a study in language and culture" by Dr. William Birns takes a solely grammatical survey of the Catskill dialect. This was sufficient to draw the conclusion that the Catskills are linguistically separate from the Hudson Valley due to the presence of 'Mountain Speech.' However, the fact that the only extant valid data on the Catskill dialect is grammatical in nature makes it difficult to perform meaningful analysis on acquisition in the manner that studies such as Munro *et al.* (1999) do. The perceptual methods were originally only part of the study; the earlier plan was to quantify presence of Catskill grammatical features in interview recordings of Catskill natives and downstate migrants. However, it was concluded that this would be difficult due to the noticeability of grammatical variation in everyday speech. Lexical and grammatical differences are considered 'easier to subdue' than phonological features. Because of the lack of data on the phonology of the Catskill region, it was nearly impossible to determine what aspects of the speech samples had the greatest effect on ratings. It is highly possible that some raters rated subjects as more 'Catskill' simply because they did not exhibit any downstate features in their speech, which is contributed to by the range effect discussed earlier.

It is possible that acquisition was affected by the social context of upstate-downstate interaction. Munro *et al.* (1999) concluded its discussion of the Canadian immigrants to Alabama with the following:

Another promising area for investigation of the degree of D2 acquisition is the attitude of the migrant group towards the host culture. Unlike L2 learners, immigrants to a new dialect region may have little need to acquire D2 characteristics, except where there are problems with intelligibility across the dialects in question. In future work, an examination of the relationships among attitudes, critical features for intelligibility, and listeners' ratings of D2 accent may yield interesting findings.

This study did not investigate any of the critical features for intelligibility between the downstate and upstate dialects, as the Catskill dialect does not have an abundance of phonetic features that impair understanding. However, it did examine attitude of the migrant group towards the host culture, as well as vice versa.

A proportional sample of upstate-downstate prejudice was found in the ten natives interviewed during this study. Several reported that they did not care for the presence of second-homeowners in their communities, two of the most salient examples being subjects A2 and A7. Subject A2 complained that his hometown had been overtaken by 'boutiques' and other 'touristy' establishments catering people from downstate, and that he was no longer able to buy 'country' goods such as building supplies without driving to a different town. Subject A7 related an account of working in his local volunteer fire department as an example of why his bias against downstaters was justified. He claimed that during the flood of 1996 a man from the city called the department to ask if they would build a fire in his weekend home so it would be warm when he arrived. He stressed that the man did not seem to understand that the firemen could not move more than two blocks in any direction due to the weather. This anecdote, whether fully true or not, is a good example of the Catskill view of downstaters as demanding, weak, and impractical.

Not all of the Catskill natives reported negative attitudes towards downstate; some claimed to have no bias against downstaters. However, all reported that they believed a conflict was present between the two groups. It is worth noting that those who exhibited the strongest negative attitudes had spent the majority of their lives in the Catskill region, and those who had lived outside of the region, even if only for four years of college, generally had more tolerant views. When questioned, many of these people said that they believed their experience living in other places could be the source of their less prejudiced attitudes.

On the converse side of the upstate-downstate relationship, many downstaters reported experiencing difficulty becoming part of the community once they decided to become full-time residents of the Catskill region. Seven of them had worked in the Catskill region for at least part of their lives; the other three had retired to the region. Those who retired reported the most difficulty, as they did not have the opportunity to form working relationships with Catskill natives. The most extreme example of this was Subject B4, who claimed that she had zero friends who were Catskill natives. The town she lived in had a large enough population of downstate transplants that she was able to maintain a social circle without making friends with locals. She did not give the impression that she disliked Catskill people, just that she felt unwelcome in their community.

The prejudice experienced by downstate migrants creates a barrier to D2 acquisition. Very few migrants have a large volume of verbal interaction with natives. Catskill natives may shift towards more standard speech forms when interacting with downstaters due to a lack of comfort or familiarity between social groups. The main incentive for a downstater to accommodate to the Catskill dialect would be to become part of the community, which is not socially necessary for people like Subject B4 who have a network of fellow downstaters living in the Catskill region.

It is clear from the interviews of both groups that the prejudice exists and prevents sociolinguistic contact between upstaters and downstaters. This study was not designed to systematically identify any direct effect of upstate-downstate prejudice on acquisition in the Catskills. However, there was enough qualitative evidence of the upstate-downstate conflict to suggest that it impacted acquisition.

The effect of the Catskill dialect's low prestige on acquisition was only directly evidenced by the interview of one subject. Subject B3 related an anecdote that expressed this prejudice; after living in the Catskill region for several months she heard her younger brother say he went to the 'crick,' and immediately slapped him in the face. This is an (albeit anecdotal) example of the violent aversion 'Mountain Speech' can elicit in non-speakers. Munro *et al.* (1999) referred to class stereotypes as a possible factor working against acquisition in Alabama, as Southern American English carries many of the same stereotypes as Appalachian English. There remains the possibility that migrants from downstate would rather go on sounding like 'flatlanders' than start talking like 'hillbillies.' This could of course be investigated further by future research, perhaps employing methodology similar to that of Bourhis and Giles (1976) in which a neutral speaker is asked to interact with both downstaters and Catskill natives and the speaker's accommo-

dition to both is measured. This is an area that can be further probed by sociolinguistic inquiry.

This study supported many commonly held perceptions in modern acquisition study. It used perceptual methods to quantify adult dialect acquisition, a method that was chosen due to its rarity in the field. The somewhat inconclusive rater reliability in this study causes this to remain relatively unexplored linguistic territory; the only other adult D2 acquisition study to employ perceptual methods remains the “Canadians in Alabama” study. Perceptual D2 acquisition is an area that warrants further sociolinguistic study. Future research might look to pinpoint the specific characteristics that make speech raters reliable to determine whether accent sensitivity is a systematic attribute. The nature of perceptual D2 acquisition also has great potential for interesting results: further inquiry might investigate how well perceived dialect strength correlates with quantified presence of acquired features.

This study’s quantitative data supported the hypothesis that adult migrants to the Catskill region would show an intermediate degree of Catskill dialect acquisition when rated by Catskill natives. This was indicated by the statistically significant difference between native and migrant ratings, as well as the presence of 33% of migrant ratings on the ‘Catskill’ end of the spectrum. Qualitative data from interviews collected in this study pointed to the existence of a social conflict between Catskill natives and migrants from downstate, which poses a possible barrier to acquisition. Both Catskill natives and downstate migrants reported experiencing animosity from the other group and displayed bias in conversation. The Catskill region is understudied in sociolinguistics and offers tremendous opportunity to study motivational and prestige factors in D2 acquisition.

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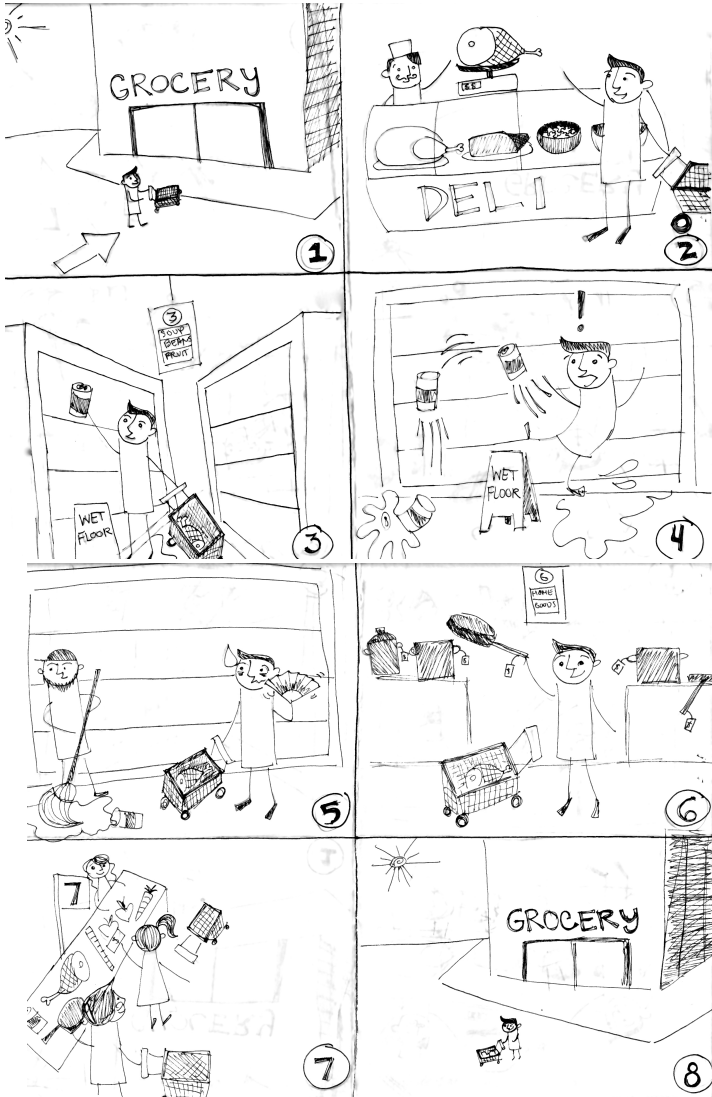
Appendix I. Text of subject recruitment flyer

Just how "Catskill" are you?

Performing research on Catskill life and culture. Looking for interview subjects: both Catskill natives and full-time residents who are originally from downstate New York, including NYC and Long Island. Interviews will last less than an hour and will be recorded for data purposes. Subjects must be at least 25 years old. Non-natives must have lived in the Catskills for at least 5 years. Contact me at catskillstudy@yahoo.com or [home phone number] if you are interested in helping further our knowledge about the Catskills and its people.

Please provide your age, place of birth, and length of residence in the Catskills.

Appendix II. Picture story used in speech elicitation



The elicitation cartoon was drawn by Alana Moskowitz.