Linguistic Profiling and the Listener's Perception of Speakers' Dialects

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Linguistic profiling is discrimination based on auditory cues in a speaker's dialect. The question, "What personal characteristics are perceived differently depending on the variety of English spoken?" addresses the basis for this phenomenon. In this article, a matched-guise study is conducted in which participants listen to twelve recordings and rate the speakers' personal qualities based solely on their voices. The accents studied include Standard American, Southern American, Chinese American, Mexican American, and New England varieties of English. The results show that those who speak in alternate dialects are perceived differently than those who use a Standard dialect, indicating potential for linguistic profiling.

s both an individual and universal social construct, language varies between each person but also is used to exchange ideas between groups of people. When a group of people who speak the same language use similar phonetics, syntax, and lexicon that are specific to their region or social group, it is called a dialect. In the English language, there are many different dialects; however, there are standard English dialects that many seem to consider to be the most "normal." When someone speaks in a different English dialect, the listeners tend to identify that person according to the stereotypes associated with that variety. This is referred to as linguistic profiling.

This article will focus on the phenomenon of linguistic profiling and will attempt to determine which personal characteristics are perceived differently depending on the variety of English a person is speaking. The purpose of this study is to bring awareness to the fact that the way people speak affects how others see them and how this can often be a determiner in discriminatory circumstances. Just as it is important to continue gaining equal opportunities regardless of one's appearance, it is also important to extend equal opportunities regardless of one's dialect.

Literature Review

According to Miriam Meyerhoff (2018), "We draw very powerful inferences about people from the way they talk" (p. 63). Whether purposeful or not, the way someone uses language can both negatively and positively influence the attitudes that people have toward him or her. The term *linguistic profiling* was coined by Dr. John Baugh in response to his realization that racial discrimination occurs based on the way people speak and not just the way they look; it is considered the auditory version of racial profiling (Ball, 2005). Baugh conducted a study in which he called different phone numbers that listed available apartments in one area and asked the person who answered if the apartment was still available for viewing. Each time he called the same number, he used a different accent: once speaking in his African American Vernacular English, once using the Chicano English dialect he picked up when growing up, and once using his educated, "White" voice. He found that the apartments were more likely to be "available" when he spoke in his Standard American English dialect than when he spoke in either of the other two dialects (Baugh, 2019). This kind

of profiling most often occurs in relation to ethnicity, but bias can occur against any dialect that is considered nonstandard.

It requires very little input for a listener to identify a specific dialect. Purnell et al. (1999) claims that this dialect identification occurs by acoustic-phonetic measures, which refers to the physical properties of speech sounds. For that reason, Baugh's study used the same script to control for grammatical and lexical differences so that reactions were based solely on accent. It was found that listeners use acoustic attributes such as stop bursts (momentary articulatory obstructions of air in the mouth before allowing the air to explode out) and vowel formant transitions (the change in frequencies where speech sounds overlap) to categorize speakers by dialect (Clopper, 2004). The most reliable acoustic attributes tend to be stable across speakers of a dialect, but identification by the listener is not always as accurate if dialects are regional as opposed to ethnic. Ethnic dialects are more clearly identifiable by the listener, but they are also, consequently, the dialects that result in more linguistic profiling.

There are many studies that have examined African American Vernacular English (AAVE) and the language attitudes that people have about it as a way of illustrating linguistic profiling. One study stated, "Like other dialects typically associated with people of low socioeconomic status (for example, Appalachian English or Cockney English), the dialect [AAVE] has been devalued and is often seen as 'incorrect' or 'simplified' English" (MacNeal et al., 2019). In an attempt to disprove that popular opinion, the same study investigated the grammar of AAVE to show that it, like all other dialects, has a set of strict grammatical rules that governs the language and to prove that people who use these dialects are not any less intelligent than those who speak in a Standard American English dialect.

Consequences of linguistic profiling are far reaching, extending to many important aspects of modern society, as illustrated in the realm of education. Accent bias in schools is harmful to the development of children because it reduces the opportunities for linguistically diverse students to access certain educational resources (Chin, 2010). Profiling based on language needs to be addressed more fully so that opportunity barriers due to dialectal differences can be minimized and that, ultimately, the path toward equal opportunity can be opened up in other social areas as well.

Methodology

The purpose of this study was to explore the ways in which speakers are perceived differently depending on the variety of English they are speaking. In order to do this, I used a matched-guise technique, which measures differing attitudes toward the same person speaking in two different accents. I first wrote a short script containing many words with high phonetic variability so that different accents have the environments needed to express their diverse linguistic features. This script is included in Appendix A. I then found four different people who both speak in a Standard American English dialect and are familiar with a second dialect. These people recorded themselves speaking the script in both dialects to provide eight matched-guise audio recordings; the alternate varieties I received are Southern American English, Chinese American English, Mexican American English, and New England English. Four other people recorded themselves speaking the same script in their own dialects to bring the total to twelve. These recordings were used as "filler voices" and were not used for any analysis, seeing that they are not matched guise. All the individuals who recorded their voices were females in their twenties in order to control for gender and age bias.

To detect the attitudes and perceptions that people have about these varieties, I created a survey for each of the twelve voices. The survey asked participants to rate each voice on a scale of zero (not at all) to five (very) for seven different qualities. The participants rated how confident, educated, trustworthy, kind, intelligent, physically attractive, and honest they believed the speakers to be based only on how they speak. They were asked to ignore stereotypes and indicate their answers according to their "gut reaction." To ensure that this would stay as true as possible, they were only permitted to listen to each recording one to two times. The participants were not able to change their ratings on previous recordings after moving on.

There were thirty participants in total: a mix of nineteen males and ten females. The individuals currently live in Utah but have grown up in various regions around the United States. However, they were all about the same age (in their twenties), which means that the outcome of the study must be taken in that context. The study's results will therefore indicate the perceptions that young adults have on the speakers based on the accent being used.

Results

There are a few clear results from each of the matched-guise tests that are important to note. Although seven characteristics were measured for each voice, only the most significant results for each dialect will be referenced; see Appendix B for the raw data for the referenced results. Below, we will consider the differences in perceptions between the Standard American English dialect and the dialect indicated by each section.

Southern American English

The Southern American English dialect is a regional variety found in the southeastern part of the United States. Although there are many variations of this dialect depending on the state one lives in or how rural the area is, the accent used in this study was a stereotypical and easily identifiable one. From this point on, I will refer to it simply as a "Southern" accent, and the individual for the Southern accent matched-guise test will be referred to as Person #1. See Figure 1 for results.

Figure 1 Southern American English Dialect: Notable Results



Although the exact same person spoke in both the Standard dialect as well as the Southern accent, there seemed to be several large differences in the way participants perceived this speaker in each accent. Firstly, there seemed to be a trend among participants that the Southern accent was viewed as an indication of someone who was not only less intelligent but less educated as well. Person #1 speaking in a Standard accent was rated as more intelligent and educated, receiving a solid rating of four for both, while the Southern accent was strongly rated as a three on both accounts. The results of these two qualities were by far the most distinct, with very little overlap between them. On the other hand, it was perceived that Southern accents indicate that a person is kinder. However, it appears that kindness and physical attractiveness did not coincide as much as education level and intelligence; the voice with the Southern accent received lower and more dispersed ratings on physical attractiveness compared to the same person speaking in her Standard accent.

Chinese American English

The Asian American varieties of English are far less researched than other dialects. In this study, we will be looking specifically at the Chinese American dialect since the recording of the Asian American dialect belongs to a female of Chinese descent. From this point on, she will be referred to as Person #2. See Figure 2 for results.

Figure 2
Asian American English Dialect: Notable Results

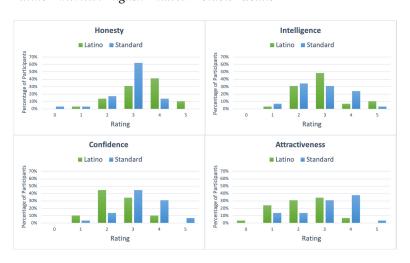


The results from this matched-guise test were surprisingly similar to those of the Southern accent test, although not quite as distinct. It seems that while the education level and intelligence ratings of Person #1 were both mainly a three for the Southern accent and a four for the Standard accent, the same ratings for the Chinese American and Standard accents were mainly two and three respectively. So, while in general Person #2 was perceived as both less intelligent and less educated than Person #1 (they both have, in fact, received the same amount of schooling and are both highly intelligent people), Person #2's ratings for her normal accent versus her Chinese American accent follow the same pattern as they did for Person #1. She was, out of all the recordings, the only person to receive any votes—two of them of zero on perceived education level. Also following the pattern from Person #1 are the ratings on kindness. The Asian accent was seen as kinder than the Standard accent. At the same time, it was perceived as less confident than the Standard.

Mexican American English

Speakers of the Latino American English dialect live all over the United States and come from a large variety of Spanish- and Portuguese-speaking countries. For further reference, the speaker of the Latino American dialect (from here on out referred to as Person #3) is Mexican American and has grown up here in Utah. I will refer to her accent as a Mexican American accent. See Figure 3 for results.

Figure 3 Latino American English Dialect: Notable Results



Just as with Person #2, Person #3 received a lower confidence rating on her nonstandard dialect by a fairly even margin. And as with Person #1, she was rated as less physically attractive when speaking in her Mexican American accent than when using her Standard accent. The Mexican American accent, however, did score noticeably higher for honesty (as well as for trustworthiness). It had a more evenly distributed score than the Standard accent did, but it was skewed higher as well. This was slightly surprising, but even more surprising were the results on the intelligence ranking. Both dialects by Person #3 were perceived to be at about the same level of intelligence, but the voice with the Mexican American accent was seen as slightly more intelligent than its counterpart. Considering how the other nonstandard dialects tended to score lower in intelligence than their Standard counterparts, these results are both interesting and notable and will be analyzed further in the Discussion section.

New England English

The last dialect in question is the New England English variety. This is the dialect that the participants in this study are least likely to have personally encountered. However, it is also the accent with the most consensus among the participants on each of the qualities: that is, the New England dialect has less dispersed ratings than the others and had at least several people who rated in the same way in almost all cases. The speaker of this dialect—Person #4—grew up on Long Island, and while still present, a lot of her Long Island accent has faded. Her matched-guise test produced some interesting findings. See Figure 4 for results.

According to the participants, the New England accent is the only accent that allows the speaker to be perceived as more physically attractive than their Standard English counterparts. The results for physical attractiveness were tied for most ratings of two, but they were skewed with almost the same distribution in opposite directions, leaving Person #4's Standard accent to have the most votes out of any of the dialects to have a zero on this quality. The confidence rating of the New England accent was also strikingly higher than the Standard accent of the same person. What was surprisingly contradictory to stereotypes was that the New England accent was rated as sounding kinder than the normal voice of the same person, where two-thirds of the participants gave the accent a three on kindness.

Figure 4 New England English Dialect: Notable Results



Discussion

There were many instances in the study in which the results reinforced certain stereotypes about the speakers of the different dialects. One case of this was when the Southern accent was rated as seeming kinder than the Standard, reinforcing the "Southern hospitality" stereotype. Southerners are thought to be very welcoming and courteous, and they stereotypically speak with a "sugary sweet" Southern drawl. Another example is the New England dialect being thought of as more confident. This matches the stereotype that New Englanders tend to be more headstrong and confident people. A third reinforced stereotype was that the Chinese American accent sounds less confident but kinder as well. Interestingly, Person #2 said that when she speaks with her parents or other Asian Americans, her tone is higher and full of pauses. She also believes that she sounds more timid when speaking in this accent. The participants rating the voices seemed to catch on to these qualities as well. Higher voices tend to be associated with kinder people, and many pauses are often correlated with lower confidence. This pattern may be rooted in Asian culture, where more feminine and demure females are often seen as more desirable.

Some of the results of the study were surprising. One of these interesting outcomes was the fact that the Mexican American accent was seen as equally intelligent as the Standard English counterpart, if not slightly more. Considering how both the Southern and Chinese American accents were seen as clearly less intelligent than their respective Standard dialects, it was surprising to see this result. Because Hispanic people live throughout the United States, a large portion of the country's citizens have come in contact with the Latino American dialects. The result indicating that the Mexican American accent was seen as more intelligent than the Standard may have occurred because the people who participated in the survey here in this region of Utah have come in contact with far more people who speak this dialect than with any of the others, so that familiarity might make them more aware of the intelligence of these bilingual speakers. Another interesting result was that the New England accent was perceived as kinder than the Standard. New Englanders are often thought of as colder and ruder, but one participant who has previously lived in New Jersey pointed out to me that although most people think of the accent as less kind, Person #4 sounded like one of the nicest New Englanders. It seems that the relative unfamiliarity that speakers have with the dialect could have been a strong influence. Most of the participants have only come in contact with the New England accent in the media and in movies, and many of those people are often portraved as villain-like. Because this voice sounded nicer than most of the ones these individuals have heard with the New England accent, they likely perceived this person to be kinder than others.

Conclusion

In this study, I found that the accent with which people speak really does affect how listeners perceive them. In this study, intelligence, kindness, and confidence were the perceived characteristics most affected by one's accent. Due to logistics, the research was limited by the small sample size and the geographical region where it was done, but in future research, I would conduct this same study on a larger scale and with more matched-guise tests. I would also like to investigate gender bias in both the speakers and the listeners. I am interested to see how hearing a male's voice in certain dialects could change a listener's perception, as well as how males and females perceive the speaker in different ways.

Linguistic profiling is not composed of the perceptions themselves that people have of a speaker's voice but rather the different actions people may take based on these perceptions. The results of this study express the perceptions that people have of a speaker's personal qualities based on how the individual speaks, which can lead to linguistic profiling. Thus, active discriminatory measures—an example of the effect of linguistic profiling—is a potential result of these perceptions. This article was written in an attempt to shed light on the signs that lead to linguistic profiling and to indicate that this form of discrimination has larger consequences if left unexamined. Linguistic profiling can affect educational opportunities, legal institutions, and social connections in profound ways, and these effects can spread to have an impact on all members of society, no matter who they are or which dialects they speak.

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Appendix A: Script

"I've been planning to leave at three because I feel like she won't be very happy if I'm late. Something tells me this is more important than just a small party, but I am too afraid to ask her about it. I want to know, though—is it cold outside today? I don't want to forget to bring my coat like I did last weekend."

Appendix B: Data

The following tables display the percentages received for each rating for each of the above discussed categories.

Southern: Education Level

Rating	Southern (%)	Standard(%)
0	0.0	0.0
1	3.4	0.0
2	41.4	0.0
3	48.3	20.7
4	6.9	55.2
5	0.0	24.1

Southern: Intelligence

Rating	Southern (%)	Standard(%)
0	0.0	0.0
1	3.4	0.0
2	24.1	0.0
3	65.5	24.1
4	6.9	58.6
5	0.0	17.2

Southern: Kindness

Rating	Southern (%)	Standard(%)
0	0.0	0.0
1	3.4	3.4

2	20.7	34.5
3	10.3	27.6
4	48.3	31.0
5	17.4	3.4

Southern: Attractiveness

Rating	Southern (%)	Standard(%)
0	3.4	0
1	17.2	3.4
2	27.6	6.9
3	34.5	20.7
4	13.8	5.7
5	2.4	17.2

Asian American: Education Level

Rating	Asian (%)	Standard(%)
0	6.9	0.0
1	20.7	6.9
2	31.0	24.1
3	24.1	44.8
4	13.8	20.7
5	3.4	3.4

Asian American: Intelligence

Rating	Asian (%)	Standard(%)
0	0.0	0.0
1	20.7	13.8
2	44.8	20.7
3	24.1	41.4
4	6.9	24.1
5	3.4	0

Asian American: Kindness

Rating	Asian (%)	Standard(%)
0	0.0	6.9
1	6.9	24.1
2	20.7	34.5
3	31.0	27.6
4	34.5	3.4
5	6.9	3.4

Asian American: Confidence

Rating	Asian (%)	Standard(%)
0	10.3	3.4
1	48.3	20.7
2	27.6	44.8
3	6.9	17.2
4	6.9	10.3
5	0.0	3.4

Latino American: Honesty

Rating	Latino (%)	Standard(%)
0	0.0	3.4
1	3.4	3.4
2	13.8	17.2
3	31.0	62.1
4	41.4	13.8
5	10.3	0.0

Latino American: Intelligence

Rating	Latino (%)	Standard(%)
0	0.0	0.0
1	3.4	6.9

2	31.0	34.5
3	48.3	31.0
4	6.9	24.1
5	10.3	3.4

Latino American: Confidence

Rating	Latino (%)	Standard(%)
0	0.0	0.0
1	10.3	3.4
2	44.8	13.8
3	34.5	44.8
4	10.3	31.0
5	0.0	6.9

Latino American: Attractiveness

Rating	Latino (%)	Standard(%)
0	3.4	0.0
1	24.1	13.8
2	31.0	13.8
3	34.5	31.0
4	6.9	37.9
5	0.0	3.4

New England: Confidence

Rating	New England (%)	Standard(%)
0	0.0	13.7
1	0.0	24.1
2	10.3	34.5
3	24.1	27.6
4	51.7	0.0
5	13.8	0.0

New England: Kindness

Rating	New England (%)	Standard(%)
0	0.0	10.3
1	3.4	27.6
2	24.1	41.4
3	62.1	17.2
4	10.3	3.4
5	0.0	0.0

New England: Attractiveness

Rating	New England (%)	Standard(%)
0	0.0	3.4
1	3.4	3.4
2	13.8	17.2
3	31.0	62.1
4	41.4	13.8
5	10.3	0.0