Representing American Southern Prosody in the Media: Prosodic Style-Shifting in Two Southern Television Characters

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Abstract

A case study of two fictional characters in two television series investigates American Southern prosody and introduces prosodic analysis into studies of language and media. Using media to investigate prosody is new to both the fields of prosody and media studies. Media representations are built off of assumed shared knowledge between the producer and the viewer (Bubel & Spitz 2006). Thus, the question becomes what linguistic features are indexical enough to be used to that end. Are prosodic features used by individuals to mark regional identity? If they do use prosody to index region, what features are used? To investigate these questions, this study examines style-shifting in pitch accent and boundary tone type and frequency as well as pitch accent and boundary tone per word measures. The characters both show evidence of prosodic style-shifting, indicating that prosody is playing into their characterizations rather than remaining static throughout the performance. The characters vary their prosody in different ways, one with an emphasis on pitch accents and the other on boundary tones, indicating speaker specific prosodic strategies. Results indicate that Southern prosodic features may be utilized in media representations of dialect.

Index Terms: Dialect variation, American Southern English, prosody in the media, prosodic style-shifting

1. Introduction

Recent research has begun examining what prosodic features might play into differentiations between American regional dialects [1-3]. The present study investigates American regional prosody from the standpoint of media by investigating how regional prosodic features may play a role in fictional media. This approach is new to prosodic study, and prosody has not yet been addressed in media research. A case study of two American Southern characters in fictional crime dramas investigates how prosody may be used to characterize or index regional identity in television.

As a case study, this paper is focused more on the individual than the community. In media, however, individuals are often representative of communities, using general community norms (e.g. Southern) to index membership in more specific communities (e.g. Atlanta, Georgia). Thus, media offers insight into linguistic properties as dialect is often used for characterization of the players in a performance [4]. Media representations are built off of assumed common knowledge. Specifically, in order for characterization to be successful, the actor must produce linguistic features that will be perceived as representative of a specific dialect. Which features will be produced is based on assumed common knowledge shared by the producers and audience [5].

The main question addressed in this study is whether prosody is used in media to characterize speakers. If so, the question is what features seem to be salient enough that they are produced and potentially used to index regional identity. In order to examine these questions, this paper investigates whether prosody undergoes style-shifting and, if so, whether it follows expected patterns based on general style-shifting norms (e.g. whether characters shift to be more Southern around other Southerners) and previously observed patterns in phonological style-shifting (e.g. a character using more features of the Southern Vowel Shift in a certain scene).

2. Background

American Southern prosody has been studied within the autosegmental model [6] using ToBI transcriptions and acoustic measures of F0 pitch accent contours [1-3]. In one study, for instance, North Carolina speakers were shown to have a shorter duration from vowel onset to maximum F0, higher maximum F0 compared to F0 at vowel offset, and higher F0 at vowel offset compared to Ohio and Wisconsin speakers [2]. This result indicates that Southerners have more dynamic pitch contours.

Clopper and Smiljanic [1] use a ToBI analysis to investigate regional prosody in reading passages. They examine speaking rate, pausing, and frequency of pitch accents, phrase accents, and phrasal-boundary tone combinations in Southern and Midland speakers. Southern males had more pauses per intonational phrase (IP) than Southern females, Midland males, and Midland females. Midland females used more L- phrase accents than Southern females and Southern females more H- phrase accents than Midland females. No group was significantly different from another in differences in speaking rate, pause duration, and phrasal-boundary tone combination within the passages. Clopper and Smiljanic [1] examined reading passages, which are typically more formal in register and thus might show less evidence of vernacular dialect. That these differences were found in spite of that suggests that these differences would also be evidenced in casual speech.

While American regional prosody, and prosody in general, has not been the focus of language and media research in the past, acoustic analyses of vowel productions have been performed. The present paper extends one such study that examines acoustic analysis through the lens of dialect authenticity [7]. The acoustic analysis measures the vowel space of two characters, Brenda and Calleigh, to determine what features of the Southern Vowel Shift might be present and index their Southernness. The same characters are

analyzed in the present study to allow for comparison of phonological results with prosodic ones.

Brenda and Calleigh are characters from two popular fictional crime dramas that ran in the 2000s. The characters hold similar positions of power and their shows are in the same genre. Brenda is the main character in *The Closer*. She is from Atlanta, though the actor who plays her is from New York and has spent no notable time in the South (i.e., she is played by a non-Southerner performing a Southern dialect). The show takes place in Los Angeles, California and frequently highlights Brenda's Southernness. The other character, Calleigh, is one of the main characters in *CSI: Miami*. Miami, while in Florida, is not a particularly Southern city, and the show does not have many Southern speakers aside from one of the police detectives who works with Calleigh on occasion. The actor who plays Calleigh is from North Carolina and, though Calleigh is from Louisiana, it appears the actor uses her native North Carolina accent. Analyzing a Southerner and a non-Southerner allows for the investigation of features that might be emphasized by the non-Southerner in particular while controlling for performance. Both are performing, but one is using her native dialect.

Heaton [7] found that Brenda uses more features of the Southern Vowel Shift than Calleigh. Brenda uses five Southern vocalic features (PIN-PEN merger, BAT raising, BET-BAIT reversal, /ai/ glide weakening, and back vowel fronting). Calleigh uses 3.5 (PIN-PEN merger, separation of COT-CAUGHT, back vowel fronting, and half of the BET-BAIT reversal). In addition, Brenda uses the more salient Southern features of /ai/ glide weakening and velar nasal fronting more frequently than Calleigh, who uses these salient features rarely, if ever. Brenda demonstrates sharp shifts in specific scenes (reveal scenes, to be discussed in the Methods section) in which she uses more Southern variants in the prereveal then shifts to a significantly smaller percentage in the postreveal. Because these shifts are within a single scene, the difference in feature frequency is highlighted.

This paper is an extension of the authenticity study described above. It is a production study focused specifically on style-shifting comparing a Southerner using her native dialect in a television show and a non-Southerner performing a Southern dialect. By comparing patterns of style-shifting in these characters, we can see (1) how the two individuals differ prosodically and (2) what and how prosodic features shift and whether they follow similar patterns to phonological variation.

3. Method

Audio was ripped from DVDs using VLC player. Each audio file was then coded using ToBI [8]. Each episode was split into different scene types to investigate style-shifting. Calleigh's scene types were interrogation (questioning a suspect in an official interrogation room), interview (speaking to a person or suspect outside of an official interrogation), five coworker subsets (her boss, Horatio; series regulars, Eric, Ryan, Alex, Tim, and Natalia; recurring series characters, Valera and Dan; ex-boyfriends, Hagan and Peter; and a Southern police detective, Frank), and other (not interrogation, interview, or coworker). The coworker subsets were created to account for differences in style-shifting that may occur due to power (e.g. boss), frequency of interaction (e.g. more with regulars than nonregulars), and when talking to someone with a similar dialect (e.g. a fellow Southerner).

Brenda's scene types were addressing officers who work under her, speaking with her family/mother, and three types of

interrogation scenes, including the reveal scenes noted earlier. In reveal scenes, Brenda is interrogating a suspect. She knows the suspect has committed the crime, but the suspect does not know Brenda knows. In the prereveal, Brenda typically acts polite and friendly. As soon as she gets the information she needs to pin the crime on the suspect, she reveals that the person can now be convicted and shifts to a more professional mannerism (the postreveal). Brenda uses more Southern phonological features in the prereveal than the postreveal (or any other scene type studied) [7]. These shifts are noticeable and tend to be abrupt, making them ideal to investigate whether prosodic properties follow a similar pattern.

Six episodes (two in Seasons 1, 2, and 4) were analyzed for Calleigh. Three reveal scenes across three seasons (1, 2, and 4) were analyzed for Brenda. For Brenda, three nonreveal interrogation scenes, one family scene, and seven addressing officer scenes came from two episodes in the first season. In total, Calleigh's scenes had 3206 words in 814 seconds and Brenda's 3022 in 914 seconds.

In order to be comparable with previous studies of Southern prosody, the variables measured were pitch accent, phrase accent, and phrasal-boundary tone combination frequency across the scene types, and pitch accents, medial phrase accents, and boundary tones per word. These measures represent movement and level of stress within a phrase.

4. Results

All frequencies were calculated as percentages (e.g. of all the phrasal-boundary tone combination tones, 57% were L-L%). Raw total token counts are listed in Table 1.

		Pitch accent	Phrase accent	Phrasal-boundary combination
Brenda	Prereveal	218	28	85
	Postreveal	341	44	107
	Nonreveal	472	35	164
	Officers	440	54	148
	Family	83	5	44
Calleigh	Boss	105	5	33
	Regular	398	24	147
	Nonregular	56	4	20
	Southern	184	13	59
	Exes	112	10	33
	Interview	183	14	72
	Interrog.	276	20	84
	Other	73	8	21

Table 1. *Raw totals of pitch accents, medial phrase accents, phrasal-boundary tone combinations by speaker and scene.*

No discernible patterns appeared across the five types of pitch accents that were coded. Pitch accent frequencies were, therefore, collapsed into monotonal (H*, L*, and !H*) and bitonal (L*+H, L+H*) categories. This allowed for an evaluation of dynamic pitch movement with monotonal pitch accents showing less movement and bitonal showing more.

When there were medial phrase accents, L- was favored in all contexts except Calleigh's Other scenes (see Table 2). As there was no variation in medial phrase accent data, they will not be discussed further.

		L-	H-
Brenda	Prereveal	20	8
	Postreveal	30	14
	Nonreveal	25	10
	Officers	40	14
	Family	3	2
Calleigh	Boss	4	1
	Regular	18	6
	Nonregular	2	2
	Southern	13	0
	Exes	9	1
	Interview	13	1
	Interrogation	17	3
	Other	3	5

Table 2. *Raw number of phrase accents by speaker and scene.*

4.1. Pitch accent frequency

Of the pitch accents in Brenda's postreveals, 19.6% were bitonal, compared to 13.3% in the prereveal, 7.5% when addressing officers, 7.2% when talking with her mother, and 6.3% in non reveal interrogations (see Table 3).

	Monotonal	Bitonal	Unsure
Prereveal	83.9	13.6	2.8
Postreveal	76.0	19.6	4.4
Nonreveal	93.7	6.3	0
Officers	92.5	7.5	0
Family	92.8	7.2	0

Table 3. *Brenda's pitch accent percentages by scene.*

Thus, pre and postreveals have more dynamic pitch contours with bitonal pitch accents increasing from pre to postreveal. This increase is interesting as Brenda's phonological data indicates that she uses the most Southern features in prereveals. Postreveal phonological data fits in with averages of her other scene types in terms of number of features used and use of salient Southern features [7]. According to Fox et al. [2], Southerners have more dynamic pitch contours. There is a mismatch, then, between Brenda's prosodic and phonological features. The shift here, however, may be a reflection of the rhetorical style of the postreveal and requires further investigation.

Contrary to Brenda, Calleigh's bitonal pitch accents followed Fox et al's results. She uses the most bitonal pitch accents, and thus most dynamic, when she is talking with her Southern coworker, Frank (see Table 4).

	Monotonal	Bitonal
Boss	97.1	2.9
Regular	91.6	8.3
Nonregular	92.9	7.2
Southern	86.9	13.1
Exes	93.8	6.3
Interview	92.3	7.6
Interrogation	92.8	7.3
Other	91.7	8.2

Table 4. *Calleigh's pitch accent percentages by scene.*

Just over 13% of her pitch accents are bitonal in such scenes. All her other scenes fall between 6.3% and 8.3% with the exception of scenes with her boss, Horatio, which drop to 2.9%. This drop could be a function of the power relationship.

She is less dynamic (and potentially less Southern) when talking to an authority figure.

4.2. Phrasal-boundary tone combination frequency

Overall, Brenda had wide variation across scenes in phrasal-boundary tone combination frequency (see Table 5).

	L-L%	H-H%	L-H%	H-L%
Prereveal	45.9	5.9	47.1	1.2
Postreveal	57.9	6.5	28.0	7.5
Nonreveal	56.1	3.7	11.6	28.7
Officers	43.2	6.8	18.2	31.8
Family	40.9	13.6	15.9	29.5

Table 5. *Brenda's phrasal-boundary tone percentages.*

Brenda's prereveals also stood out for their L-H% frequency. Of Brenda's prereveal phrasal-boundary tone combinations, 47.1% were L-H%. For comparison, the next closest percentage, the postreveals, drops to 28%. More L-L% are used in postreveals than prereveals (57.9% compared to 45.9%). This finding makes sense as one would expect more declarative sentences once Brenda has gotten the suspect to give the information she needs and is explaining that she can now arrest them. Brenda rarely uses H-H%, but that combination shows up nearly twice as often when she is talking with her mother.

Calleigh shows less variation across scene types in phrasal-boundary tone combination frequency (see Table 6).

	L-L%	H-H%	L-H%	H-L%
Boss	72.7	3.0	9.1	15.2
Regular	64.6	6.1	11.6	17.7
Nonregular	55.0	15.0	15.0	15.0
Southern	83.1	3.4	8.5	5.1
Exes	60.6	9.1	12.1	18.2
Interview	70.8	11.1	6.9	11.1
Interrogation	65.5	9.5	14.3	10.7
Other	42.9	14.3	28.6	14.3

Table 6. *Calleigh's phrasal-boundary tone percentages.*

L-L% dominates with the highest percentage in every scene type. The lowest percentage (42.9 in Other) is higher than highest percentage in any of the other combinations. All scene types aside from Other had L-L% combinations over 50% of the time. The highest percentage of a phrasal-boundary tone combination other than L-L% was 28.6% for L-H% in "other" scenes, after which frequencies all drop below 20%. In comparison, Brenda's phrasal-boundary tone combination frequencies only rise higher than 50% in postreveals (57.9%) and nonreveal interrogations (56.1%).

4.3. Pitch accents and boundary tones per word

While Brenda has more pitch accents per word, Calleigh has a wider range in her pitch accents per word across scene types (see Table 7).

		Pitch accents per word	Boundary tones per word
Brenda	Prereveal	0.495	0.190
	Postreveal	0.506	0.112
	Nonreveal	0.497	0.173
	Officers	0.539	0.181
	Family	0.549	0.291
Calleigh	Boss	0.515	0.162
	Regular	0.421	0.155
	Nonregular	0.438	0.156
	Southern	0.376	0.120
	Exes	0.467	0.138
	Interview	0.403	0.159
	Interrogation	0.488	0.148
	Other	0.451	0.130

Table 7. *Pitch accents and boundary tones per word by scene and speaker.*

Brenda's pitch accents per word range from 0.495 (prereveals) to 0.549 (family), giving her a range of 0.054. Calleigh's range is 0.376 (Frank) to 0.515 (Horatio), for a range of 0.139. Calleigh's scene types do not seem to cluster, but instead are spread across her range. Thus, Brenda has more pitch accents per word and is more consistent across scenes than Calleigh, indicating that she is accenting more words across her scenes.

Brenda has more boundary tones per word than Calleigh. Brenda's lowest (postreveal at 0.112) is lower than Calleigh's lowest (0.120 for Frank) and all Brenda's other scenes are higher than Calleigh's highest (0.162 for Horatio). Calleigh's entire range is encompassed within Brenda's range. Brenda's family scenes (her highest at 0.291) may be an outlier, as the next highest is prereveal scenes at 0.190. Thus, Brenda has more phrases than Calleigh. even though she has fewer total words, indicating more breaks in her speech. Calleigh's numbers, on the other hand, are spaced evenly across her range.

5. Discussion

Overall, in both frequency and per word calculations, Brenda appears to style shift more in boundary tones while Calleigh shifts more in pitch accents. Brenda's reveal scenes showed strong evidence of shifting in pitch accent frequency, though the patterns did not follow predicted patterns based on Fox et al. [2] and Heaton [7].

This leads back to the main questions of the study. Is prosody used to characterize speakers in media? If so, what prosodic features are produced that might index regional identity? Both Calleigh and Brenda show evidence of prosodic variation. Calleigh's variation more clearly points to a Southern identity based on research of Southern prosody. She uses more dynamic pitch contours when talking with another Southerner and less when talking to a superior.

Brenda, on the other hand, is clearly doing something prosodically. She shows style-shifting between scenes. It is, however, unclear what role Southern prosody specifically plays in her shifting. She does not manipulate prosody the same way as she does Southern phonological features. This difference may be because prosody is not as salient as the phonological features. A listener may perceive variation, but not be conscious enough of prosody as a linguistic feature to replicate that variation in a natural way. Thus, a non-native dialect speaker may manipulate prosody to reflect a regional dialect, but not be conscious enough of prosodic features to vary the prosody systematically or accurately.

Perception studies both in media and outside of it are needed to draw definitive conclusions. The broad pattern found in Heaton [7] in which Brenda is showing more phonological variability than Calleigh appears to carry over generally to the prosodic data. How exactly these prosodic differences contribute to Southernness or authenticity requires continued study of both production and perception.

6. Conclusions

This paper establishes that prosody is a productive line of study in research about characterization of speakers in media. In particular, style-shifting in pitch accent and phrasal-boundary tone combination indicate utilization of prosodic features for characterization, though boundary tone data may be more a function of show genre than character region. Patterns in pitch accents seem to be more indicative of Southern identity.

This paper has also presented a method through which researchers might study regional prosody in the form of the fictional media. Observing non-native Southerners performing Southern dialects may highlight what features are believed to be (or are) particularly salient as Southern and lead to further investigation into why these prosodic features appear to be picked up on and what differences there may be between Southern prosody and media Southern prosody.

Of course, these differences cannot be essentialized. Some of the prosodic differences seen in this study could be indexes of other identities or combinations of identities. These characters are far more than just Southerners. Perception studies should be conducted to investigate whether differences in prosody found in media are actually perceived in the ways being assumed. This study, though, acts as a first step in the investigation of how media might be integrated into studies of prosody, particularly American regional prosody.

7. Acknowledgements

8. References

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