10-1-2015

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Abstract
Across the continent, many Native American and Canadian First Nations people are linguistically constructing a shared ethnic identity through English dialect features. Although many tribes and regions have their own localized English features (e.g., Leap 1993, Bowie et al. 2013, Dannenberg and Wolfram 1998, Coggshall 2008), we suggest that certain features may be shared across much wider distances, particularly prosodic features. Our study is based on cultural insiders’ research, analysis, and interpretation of data recorded in Native communities on Standing Rock Reservation, Northwest Territories, Canada, and among the Native community at Dartmouth (Hanover, New Hampshire). By investigating speakers from diverse tribes and regions, we find evidence that Native identity is indexed to English prosodic features: contour pitch accent (L*+H), high-rising, mid, or high-falling terminals, lengthened utterance-final syllables, and syllable timing. In this way, modern Native Americans are using English, a foreign language, to construct a shared ethnic identity across vast distances.
English Prosody and Native American Ethnic Identity

Kalina Newmark, Nacole Walker and James Stanford*

1 Introduction

Across the continent, many Native American and Canadian First Nations people are linguistically constructing a shared ethnic identity through a set of English dialect features. Although many tribes and regions have their own local English features (e.g., Leap 1993, Bowie et al. 2013, Dannenberg and Wolfram 1998), we suggest that certain features may be shared across much wider distances, especially prosodic features. The present study provides new progress in describing these features, while also empowering Native/Indigenous communities to value and take ownership of their English dialect features. In this study, cultural insiders (co-authors Newmark and Walker) used their status as Native community members to gain entry into the Native communities at Dartmouth College, Standing Rock Reservation, and Northwest Territories, Canada. On this basis, we are able to more fully understand the cultural and linguistic elements involved in the daily use of Native American English features. By investigating speakers from these different tribes and regions, we can test the hypothesis that a shared Native ethnic identity is being constructed through a particular set of distinctive prosodic features.

In designing this study, we wanted to ensure that the research provides value for the field of linguistics, but also for the communities themselves. Native people have not usually participated to a high degree in the research design, fieldwork, interpretation and presentation of data from their communities. This is what differentiates our study from others, and thus provides an unusual glimpse into the thoughts and speech patterns of Native communities.

What precipitated our interest in Native American English was our involvement in the Native American community at Dartmouth College (Hanover, New Hampshire). At Dartmouth, there are more Native students than all the other Ivy League schools combined (roughly 180–200 self-identifying Native students), which provides a unique and diverse set of tribal backgrounds. From there, we expanded our research locations to include the Standing Rock Sioux Reservation in North and South Dakota (Lakota/Dakota) and the Sahtu Dene community of Tulita, Northwest Territories, Canada. Working with these communities, we interviewed 75 people and collected data samples that helped illuminate several prosodic features found in Native American English.


Looking at the “sing-song” quality that other researchers have suggested, we hypothesize that the following pitch and rhythm effects may be involved as speakers use English to index a distinctive Native identity: First, we observe a pitch contour in certain words such that the stressed syllable is low and the following syllable is high (L*L+H). We have also observed that the end of utterances sometimes has a high-rising, mid, or high-falling contour. The end of utterances is sometimes lengthened as well. Some speakers use a “syllable-timed” speaking style such that syllables

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*We would like to thank many people who have provided insights, field research, and data analysis during this project. First, we gratefully acknowledge the “frybread recordings” and analysis conducted by Sydney Allard, Kayla Aitcity, Zachary Cooper, and Maggie Seawright. We also received research help from Jacob Ammon, Emily Grabowski, Emily Harwell, Abbie Kouzmanoff, and Andrew Zulker. We received valuable suggestions from Bruce Duthu, Dennis Preston, Nick Reo, Marianna Di Paolo, Naomi Nagy, and the audience at NWAV 43. We are thankful for support and other help from Dartmouth’s Native American Studies and Native American Program, Native Americans at Dartmouth, the Neukom Institute, and NSF Grant #BCS1251324. Special thanks to all of the Native communities who participated in this study.

This study includes communities in Canada and the United States. A number of different terms are used in different locations: Indigenous, First Nations, Aboriginal, Native American, Native. For simplicity in this paper, we will use the term Native, while recognizing that such terminological distinctions are an ongoing process, and different communities may prefer different terms.
have more uniform duration (see Coggshall 2008). We also find that questions in Native American English sometimes have a different pitch contour than other dialects of English, as some Native people occasionally use a more level contour for yes/no questions, unlike other dialects where yes/no questions tend to rise (Leap 1993).

We recognize that a range of other linguistic features may be relevant as well, such as consonant or vowel variation as discussed in Leap 1993 (pp. 44–50), especially in particular regions. However, since our study emphasizes cross-continental features, we have chosen to focus on the most likely variables to have a widespread Native indexicality, and the results have consistently pointed in the direction of prosody.

2 Prior Work

Leap (1993) provides a comprehensive examination of Native American English, including grammatical features and phonological features from various tribes, as well as history and educational issues. Most other work has focused on individual regions or tribes, such as Leap (1977), Leechman and Hall (1955), Alford (1974), Malancon and Malancon (1977), Bartelt, Pennfield-Jasper and Hoffer (1982), Wolfram (1984), Flanigan (1987), and Liebe-Harkort (1983). Pragmatic and anthropological linguistic issues have been examined as well, including Basso’s (1970) study of silence in Apache and other scholars’ work in the ethnography of communication, e.g., Philips (1974) and Scollon and Wong-Scollon (1990).

More recently, Meek (2006) discusses how the popular media culture portrays Native American English. In addition, a number of researchers have studied grammatical features of Lumbee English (Dannenberg and Wolfram 1998, Wolfram et al. 2002, Dannenberg 2002, Schilling-Estes 2004). Anderson (1999) researches /ai/ and /oi/ in Cherokee English, and Hazen (2000) examines variants of be among the Haliwa-Saponi tribe of North Carolina. Rowicka (2005) investigates voiceless stops in Quinault, and Ball and Bernhardt (2008) sketch some English features of Canadian First Nations people for reference by speech pathologists. The recent study most relevant to our project is Coggshall (2008), which examines syllable-timing in Eastern Cherokee and Lumbee. Coggshall raises the possibility that syllable-timing may be found across a wider range of Native speakers, although she only analyzed data from two tribes located in North Carolina. We go further to suggest that the shared prosodic features may span large distances across the continent and may include pitch and other features beyond syllable-timing. For this reason, our study expands the geographic and tribal scope, as well as the scope of linguistic features to examine.

English dialect features play a role in indexing speakers’ Native identities, but the tribal/regional range and the specific features remain understudied, especially phonological features. In past research, scholars have correctly pointed out the variability of English dialect features in different tribes and locations. But our study suggests that Native people across the continent may be constructing a shared sense of ethnic identity and unity through a certain subset of features, specifically pitch and timing. We also note that Native people themselves often report a sense of shared dialect features among speakers across large distances. For example, a Native student at Dartmouth explained that her use of Native American English features depends on the identity of her interlocutors: “I think it has to do with your familiarity and whether or not they also speak the same way — ’cause there’s sort of a Pan-Indian dialect that exists, that people who aren’t Native might not understand.” This matches our own observations as cultural insiders as well (co-authors Newmark and Walker). As a Native American website says, “The rez accent [reservation accent] knows no borders.” Therefore, we believe it is reasonable to hypothesize that a set of shared features may extend beyond local tribes, even as other more localized features are more geographically restricted.

Leap (1993) draws the following conclusion:

Just as there is no single nonstandard English, so there is no single Indian English code…In part, such diversity reflects the unique properties of each community’s ancestral language and cultural traditions… (p. 143)
From the point of view of descriptive linguistics, it is clear that a great deal of variability exists, just as Leap suggests. No single overarching grammar or set of rules could encompass such a diverse set of tribes and locations where Native American English is spoken. From a sociolinguistic point of view, however, we should be careful not to overlook the possibility of unity in a subset of features, and the important role that such features may play in constructing Native identity. As Rowicka (2005) points out, it is possible that “a shared AIE [American Indian English] substratum is developing, based on non-standard English features rather than on specific ancestral language transfer features. Leap’s 1993 assertion that no general AIE variety is on the rise may be worth reexamination” (p. 301).

2.1 Background on Native American/Aboriginal Boarding Schools

There are a number of possible historical origins for shared prosodic features. The off-reservation boarding school system is one way that Native children from different locations have interacted since the late 1800s. In the late nineteenth and early twentieth century, many Native American and Aboriginal children in the United States and Canada were taken away from their families and placed within boarding schools. Children were forced to learn English and punished for speaking their Native languages, often through beatings or other threats. In recent years, both the American and Canadian governments have acknowledged the harmful effects that the boarding school era had on Native languages, cultures, and communities. Hornberger and McKay (2010:409) summarize this boarding school era and the role of Native American English:

The historical oppression that Native Americans have endured through institutions like boarding schools led to the loss of tribal languages and to the emergence of distinctive linguistic features of Native American English. … Analyzing samples of student writing, Leap [1993] and others found that the English that Native American children were using shared features that made it distinct from the English they were learning at school.

Leap (1993:157–69), Malancon and Malancon (1977), and Coggshall (2008) have all suggested the possibility that Native American English may have some of its origins in these boarding school interactions. In such an environment, it is plausible that the children would construct distinctive English features and share them across communities. More recently, there has also been a considerable amount of interaction through urban relocation and intermarriage across tribes, especially in the era following the Indian Relocation Act of 1956. In addition, many Native languages are tonal, which naturally suggests that one or more tonal languages could have been the source for some of the pitch related features described here. At the same time, we note that high rising terminals and other pitch-related features can appear in non-tonal languages, e.g., New Zealand English (Guy et al. 1986), so this remains an open historical question.

For the present study, we focus primarily on the modern, synchronic scope of these shared prosodic features. Modern Native culture involves a high level of intertribal contact through a wide range of activities, as well as an increasing presence on social media. It appears that these features are found in modern Native society across vast distances, much like other features of English can spread homogeneously across other modern North American communities (e.g., Labov et al. 2006).

3 Methods

Since this study seeks to determine whether prosodic features are being used to index Native identity in diverse locations, we designed the fieldwork to involve a wide range of tribes and locations. Fieldwork was conducted in three sites: (1) the Standing Rock Reservation in North and South Dakota, home to the Lakhota/Dakhota people, (2) the community of Tulita in the Canadian Northwest Territories, home to Slavey Dene people, and (3) on the Dartmouth College campus in Hanover, New Hampshire, with students from diverse tribal backgrounds and regions.
3.1 Interviews

All interviews were held in Native-friendly environments: the Dartmouth Native American House (a residential affinity community), Standing Rock’s tribal community college (Sitting Bull), and, in the case of Tulita, within individuals’ homes. In all cases, the interviewer and the interviewee were all Native, thus helping to build a Native cultural environment. Interviews consisted of two types: one-on-one interviews and casual group settings. The one-on-one sessions involved a “Toy Game” activity adapted from McDonough and Lachler 2012, which was designed to elicit naturalistic speech. In the Toy Game, the interviewer and the participant have identical sets of small toys (animals, trees, etc.). The two people are separated by a small poster-board which blocks the line of vision. The goal of the game is to arrange both sets of toys in an identical pattern without looking past the poster-board to the other person’s side. The interviewer and the participant ask each other questions about the placement of each other’s toys, e.g., “Where is the horse?” “The horse is next to the tree.” At the end, the poster-board is removed, and both people can see how closely their toy sets match. In addition to the Toy Game, the one-on-one interviews also included autobiographical questions, questions relating to Native American issues, and free descriptions of a wordless children’s book.

The second type of interview consisted of casual group settings. In one instance, a group of seven students gathered to make frybread and visit with one another at the Dartmouth Native American House. This group of seven students were all in their first year of college and represent diverse tribal affiliations, including Cherokee, Oto-Missouri, Iowa, Navajo, Tuscarora, Acoma Pueblo, Lakhota, Hochunk, Creek, and Potowatomi. They were also from geographically diverse regions: Arizona, New York, Oklahoma, South Dakota, and Michigan. This casual style of group interviewing was also implemented on Standing Rock Reservation on the Sitting Bull College campus, in the Tribal Administration Headquarters, and other locations. Likewise, for the Tulita field site, a family barbecue was held along with a number of other casual gatherings. As discussed below, this group-oriented methodology turned out to be far more effective and culturally appropriate. Individual interviews are always difficult in Native communities, while large group activities garner more support, as evident in the local schools: One-on-one parent/teacher conferences are often feared, while large-group parent involvement activities are welcomed.

3.2 Recording and Analysis Methods

Interviews were recorded with an Edirol R05 handheld digital recorder at 44.1 KHz sampling rate, 16-bit, WAV format. We analyzed the recordings using both emic and etic approaches. First, we examined the Toy Game recordings impressionistically to see what Native features might be present. We then invited a Native American community member to listen to one of the group settings (Dartmouth “frybread party”) and mark each time a feature was perceived to be distinctively “Native-sounding.” We recognize that this is a subjective method, but it provided an emic perspective about which features are being perceived in this way. Since many of these features had not been explored in detail before, we used this method to help ensure that we were not overlooking features that might be perceived as important by the Native community. Future studies could conduct this analysis with a series of speakers, rather than just one, but this initial exploration provided useful perspectives for our other analysis. Finally, pitch tracks (F0) were analyzed with a “sociotonetics” script in R (Stanford 2008, 2013), which plots and normalizes pitch tracks, allowing for statistical comparisons of pitch and slope at any point in the pitch track.

4 Results

4.1 Results of the One-on-One Interviews

The Toy Game activity and other one-on-one interview activities yielded few of the targeted Native features. Even though the interviews were Native-only settings where participants discussed Native issues, the interviewees still largely used Standard English. The only speakers who used

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³Many Native people identify with multiple tribal affiliations.
Native features were a few people who use these features in any environment (see Section 4.2). For most other speakers, the individual interview style was too formal to elicit the types of distinctively Native features that we had observed in daily life prior to the study. Although the interview environment was meant to be informal, the formality of a one-on-one interview apparently caused most interviewees to avoid distinctively Native features. This finding has implications for the social meaning of the prosodic features found in this study.

By contrast, the casual “frybread party” and the other group settings were very effective in generating distinctively Native features. This result is understandable since many Native students have reported that they tend to use these features in casual settings, especially when joking or teasing friends, rather than in formal settings like classrooms interactions. Even so, we had expected that a Native-only personal interview environment would have been sufficient to generate the indexing of Native identity through these features. It turns out, however, that these features primarily appear in casual settings and are best viewed in terms of their situated social meaning in the particular discourse moments of natural interactions (cf. Silverstein 2003).

4.2 Initial Impressionistic Analysis of a Group Setting

The Dartmouth “frybread party” recordings consisted of seven speakers talking casually together for a total of 44 minutes, amounting to 772 utterances. As an initial exploratory stage of the data analysis, we invited a Native cultural insider to listen to the recordings and mark a Praat TextGrid (Boersma and Weenink 2014) whenever she perceived a feature as “Native-sounding.” In this way, we were able to produce an initial sketch of the types of features that may be indexing Native identity. Of course, a more extensive sample of listeners would be required if the primary goal of the study were perceptual in nature. But for our purposes in this primarily production-based study, this initial exploration served as a useful way to focus our acoustic analysis. Among the features tagged as “Native-sounding” in the initial analysis, we noted that 185 were prosodic features: 22 contoured pitch-accented items (1- and 2-syllables), 8 high-falling syllables in utterance-final position, 39 low tonic syllables, 48 instances of high rise terminal, and 55 lengthened syllables in utterance-final position. Examining these results statistically, we find that utterance-final features (high-falling final, high-rise terminal, lengthened terminal) were the most common $p < 0.0002$.

One speaker (male college student, Navajo) produced these features throughout the recordings, but the other speakers produced them only in specific discourse moments. For most speakers, “Native-sounding” prosodic features occurred in the context of joking, story-telling, ironic imitations, expressing offense, and expressing solidarity. In fact, even when talking about serious Native issues, such as personal experiences and hardships back home, etc., these prosodic features did not necessarily appear. But speakers frequently produced these features in playful moments or when trying to make a particularly salient point. On this basis, we categorized our participants into four general speaker groups that represent the sets of speech patterns we found in the data set. These speaker types may allow researchers to understand why some Native features are more prevalent in certain environments than others.

- Speaker Type 1: Near-constant use of Native features, regardless of context or environment
- Speaker Type 2: Frequently switches between Standard English and Native features in different contexts and environments
- Speaker Type 3: Occasionally uses Native features to “fit in” with a Native environment
- Speaker Type 4: Never uses Native features

4.3 Acoustic Analysis

Our analyses of the recordings and other observations suggest that the following prosodic features may be present when speakers are indexing Native identity in casual group settings: (1) contoured pitch accent, (2) high-falling, mid, or high-rising syllable in utterance-final position, (3) low tonic syllables, (4) lengthened utterance-final syllables, and (5) syllable timing. Building on Coggshall’s observations about syllable timing in North Carolina (2008) and Leap’s earlier discussion of “singsong” features (1993), we believe that our list represents the prosodic features commonly used to index Native American ethnic identity.
First, consider the contoured pitch accent. We find that some words follow the pattern L*+H (Arvaniti and Harding 2008, citing Pierrehumbert 1980). In other words, when speakers choose to use this feature, they place the H tone on the syllable following the stressed syllable. This typically occurs as a contour (Figure 1). Secondly, we found that a number of features involve the utterance-final position: high-falling, mid or high-rising, and lengthened syllables. The prevalence of these utterance-final effects suggests that utterance-final position may be central to the prosodic construction of Native ethnic identity.

4.4 Contour Pitch Accent

Among the possible prosodic features indexing Native identity, we selected the contour pitch accent feature for acoustic study since it is especially salient in comparison to other North American dialects. In future work, we plan to acoustically analyze the other features as well. We find that a very similar contour pitch accent appears in all three of our locations. Figures 2–4 show representative mean pitch tracks from the three locations. Figure 2 plots the results from a Standing Rock recording, showing the mean pitch track for two-syllable pitch-accented words with this feature. Figure 3 shows a similar mean contour in the Dartmouth “frybread recording” with one-syllable contour pitch-accented words, and Figure 4 shows two-syllable mean contour pitch-accented words from that set. Similar features were found for Tulita as well.

Figure 1: L*+H contour pitch-accent pronunciation of the word “Thomas.”

Figure 2: Standing Rock: Contour pitch accent feature in two-syllable words. Three speakers, Sitting Bull College, 16 tokens.
Figure 3: Dartmouth “frybread recording”: Contour pitch accent feature in one-syllable words, three speakers, 9 tokens.

Figure 4: Dartmouth “frybread recording”: Contour pitch accent feature in two-syllable words, three speakers, 5 tokens.

5 Conclusion

Our study suggests that many Native American and Canadian First Nations people are linguistically constructing a shared indigenous ethnic identity through a set of English prosodic features. Many regions and tribes have their own distinctive English features, such as segmental features related to local languages or local English dialects, but we suggest that there is also a subset of (prosodic) features that are shared across a much wider range. This shared sociolinguistic identity is evident through the data collected from Standing Rock Reservation (Lakhota/Dakhota), Tulita, Canada (Slavey), and Dartmouth (diverse tribes). Of course, not every Native person uses these features, and the features are used in different ways by different speakers. For some people, these features are used consistently in daily speech. For others, these features are only used ironically or in a joking and teasing environment. But regardless of the moment-to-moment discourse purposes of individual speakers, we suggest that the following prosodic features are likely to index Native identity across many parts of the continent: contour pitch accent, high-falling, high-rising or mid terminals, lengthened utterance-final syllables, low tonic syllables, and syllable timing.

In the future we hope to examine other regions, especially the east coast, which may be different due to its earlier contact with Europeans. It would also be valuable to consider more ethnographic and historical perspectives to determine why and how these features arose and are continuing to spread. Naturally, since many Native languages are tonal, it is plausible that these distinc-
tive pitch patterns developed from one or more substrates. Like other researchers, we suspect that the off-reservation boarding school system played a significant role as well in the development of these features. But regardless of the diachronic origin, what our study shows is that modern Native people are synchronically using these features across a very wide range of locations and communities.

Native American English functions as a form of resilience and resistance for Native people. While the boarding school system was meant to completely eradicate Native ways of living and speaking, it actually caused Native people to find creative ways to adapt English to Native speaking patterns and construct their own ethnic identity. In other words, Native people have found a way to construct their ethnic identity through a foreign language. Among diverse tribes and across vast distances in North America, they are using English in a resilient and distinctive way, countering the assimilationist efforts of the past, and creatively building their own modern Native American future.

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