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**Adaptive Sociophonetic Strategies
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Bridget L. Anderson

1. Introduction

Developing varieties of Native American English offer unique insights into the sociolinguistic dimensions of language contact situations. More specifically, an investigation of how these groups utilize assimilative features, such as those adopted from local, non-Native American contact communities, and, at the same time, features unique to the Native American English variety, such as those which have developed as a result of source-to-target language transfer, is particularly diagnostic in terms of how Native Americans situate themselves sociolinguistically with respect to surrounding non-Native American contact communities and other Native American groups. Such an investigation must take into account the effects of source-language interference, the English language learning situation, and dialect competition from surrounding non-Native American communities.

Previous studies of Native American varieties of English in the Southwest (Craig 1991; Leap 1977; Wolfram et al. 1979, Wolfram 1980, 1984), indicate that these varieties utilize both the assimilated dialect features of surrounding non-Native American

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communities and source language transfer features. Leechman and Hall (1955) even propose that a more expansive pan-lectal variety of English developed out of the various situations in which English was learned and used in relation to the Native American language. Although some sociolinguistic situations involving Southwestern varieties have now been investigated, comparable situations in the eastern United States have received little attention from the linguistic research community.

This study is a preliminary investigation of a language contact situation between two very distinct linguistic groups who have been in close contact with each other for at least the past two hundred years in isolated, mountainous Graham County in the heart of the Great Smoky Mountains of Western North Carolina. Appalachian whites of the area speak a Southern Highland variety of English, comparable to what is described in general by Wolfram and Christian (1976) and more particularly, for the Smoky Mountain region, by Joseph Hall (1942). The Snowbird Cherokee of the Eastern Band of the Cherokee Nation who reside in Graham County primarily spoke their ancestral language of Cherokee until early in this century when a shift toward bilingualism in Cherokee and English began. An investigation of the contact situation in Graham County, focusing on the patterning of a diagnostic vowel variant, the monophthongization of /ay/ as in *ride* [ra:d] and *type* [ta:p] for the two ethnic groups will yield insights into the mechanisms of language contact, language assimilation, and language shift. The monophthongized variant of /ay/ is widespread throughout the South and is a prominent feature of Appalachian English. This variable is expected to be a fairly diagnostic variable of assimilation.

2. The Cherokee Situation in Western North Carolina

Neely (1991:15) estimates the Cherokee to have been living in the Southern Appalachian Mountains for at least the past four thousand years. Furthermore, she notes that in the early part of the nineteenth century the estimated 20,000-member Cherokee nation was one of the largest Indian nations north of Mexico. One-fourth

to one-half of the 16,000 Cherokee people forced to march west in 1830 to what is now Oklahoma in what has become known as the "Trail of Tears" died during their tragic relocation (Neely 1991:22). This event, of course, considerably altered the lifestyles of the surviving members of the Cherokee Nation. About one thousand Cherokees hid in the Great Smoky Mountains in order to elude the forced removal, and it is their descendants who now make up the Eastern Band of the Cherokee situated in Western North Carolina.

The Eastern Band consists primarily of Cherokees living in Western North Carolina on the Qualla Boundary of Swain and Jackson Counties and, fifty miles to the southwest, in the Snowbird and Cheoah mountains of Graham County. There is also a small number of Eastern Cherokees who live in the Tomotla area of Cherokee County. The Eastern Band holds 56,572 acres of communal lands in Swain, Jackson, Cherokee, and Graham Counties in Western North Carolina (Neely 1991:24).

2.1. The Sociolinguistic Situation

The Snowbird Cherokee are considered to be the most traditional of the three Cherokee groups residing in Western North Carolina, and it is this community that is the focus of the present study. The Snowbird group is distinctive from other groups of Cherokees in Western North Carolina in terms of Native American "traditionalism" and "conservatism," their assimilation to encroaching white culture, and their percentage of native Cherokee speakers.

The Snowbird Community comprises only a small percentage of Eastern Cherokees. Most of the 9,000 members of the Eastern Band live on the Qualla Boundary. The 380-member Snowbird Community, however, comprises only 6.9 percent of all resident North Carolina Cherokee and 5.2 percent of Graham County's total population (Neely 1991:38), making them a small minority in relation to Qualla Boundary Band members and the 7,217-member white population of Graham County (1980 census).

Snowbird has the highest percentage of full-bloods of any Eastern Cherokee community (Neely 1991:7). The government "standard" for self-identification as an American Indian is that a

person must demonstrate that he or she is "certifiably" of at least one-eighth American Indian ancestry. Full-bloods, of course, are of total Native American ancestry. Native American activist and scholar Ward Churchill (1994) notes that in 1900 about one-half of federally recognized, racially defined Native Americans in the United States qualified as "full-bloods." By 1990, this proportion was only at about twenty percent (Churchill 1994:92). In spite of the significant decline of the number of federally recognized full-bloods among American Indians, the Snowbird Community has maintained a large percentage of full-bloods. In the mid-1970s, 91.4 percent of Snowbird Cherokee adults were legally three-fourth to full-blood range (Neely 1991:7).

Perhaps the high percentage of full-bloods in the Snowbird Community is the reason the community has also been successful in maintaining its ancestral language. Full-bloods tend to have more traditionalist Native American values, such as native language maintenance, than people with minimal Native American ancestry. Most adults over age forty in Snowbird are bilingual, while the significantly higher populated Qualla Boundary is estimated to have less than 10 percent native language speakers (King 1975:2). The tiny Snowbird Community comprises only 6.9 percent of the North Carolina Cherokees, but it contains nearly one-third of the total Cherokee-speaking population in the East (Neely 1991:147).

The Snowbird Community is unique in its success in maintaining a large number of full-bloods and native language speakers. Fifty miles to the northeast of Snowbird in the Qualla Boundary the Cherokee language seems to be disappearing rapidly. Both groups have had extensive contact with white English speakers. The high percentage of ancestral language speakers in the Snowbird Community indicates that the Snowbird Cherokee have made a group effort to maintain their cultural identity as "traditional" Cherokee Indians. The Qualla Boundary group has a high percentage of what one of my informants referred to as "white Indians," or people with minimal Cherokee ancestry who both look and "act" like white people. Snowbird, however, has few "white Indians." Consequently, Snowbird Cherokees are a much more homogeneous group than the more acculturated Qualla Boundary group. Snowbird Cherokee, therefore, do not face the

same intraethnic competition between traditionalist Native American values, which seem to have a strong connection with being a full-blood Cherokee, and anglicized "white Indian" values of people with only minimal Cherokee ancestry. Several Snowbird informants indicated to me that they consider themselves, but not Qualla Boundary Cherokees, to be "real Indians."

Perhaps one factor that has aided Snowbird Cherokees in maintaining their ancestral language and other important cultural traditions is the geographical isolation which has served to protect them from tourism, which affects many Native American reservations, including the Qualla Boundary. Snowbird is unique in that it has virtually no tourism, due in large part to the depressed economy and rugged terrain of the county in which it is situated. Eighty-five percent of Graham County is undeveloped forests, some of which are among the only virgin forests east of the Mississippi. Only one other North Carolina county has less land cleared for industry and farming (Neely 1991:37). Cherokees in this county continue to reside on their ancestral homeland, once the Cheoah township of the Cherokee nation, which the Cheoah Cherokee actually purchased from the state in the weeks immediately following the removal (22). The Snowbird Cherokee are descendants of the Cheoah and continue to reside on this land, 2,249 acres of scattered tracts concentrated in what is commonly referred to as the Snowbird area of Graham County. Thus far, I have conducted sociolinguistic interviews with twenty-five Cherokee English speakers of different ages in the area. For preliminary comparative purposes, I have also conducted a few interviews with Cherokees from the Qualla Boundary and members of the white contact population of Graham County. Evidence gleaned from these interviews demonstrates that both Cherokee groups exhibit at least some assimilation to the language norms of the surrounding mountain white communities. In this study, I will attempt to quantify the degree of assimilation through a quantitative analysis of monophthongal /ay/, as in [ra:d] *ride* and [fa:t] *fight*, a prominent feature of Appalachian English and one of the most salient features of Southern speech in general.

3. The History and Status of Monophthongal /ay/

The monophthongization of /ay/ as in [ra:d] *ride* and [la:t] *light* is one of the most salient features of Southern speech (Bernstein and Gregory 1993). In an investigation of how this variable patterns in Cherokee English there are several linguistic and sociolinguistic dimensions unique to a contact situation that must be considered. First, it is important to determine what the relationship of /ay/ is to the phonological system of Cherokee, the first language of most middle-aged and older speakers in the Snowbird Community. A second consideration is the history and status of /ay/ in the white contact community. In addition, since Snowbird has a high percentage of bilingual speakers, it is important to consider the status of /ay/ in the English language learning model for older and middle-aged speakers who learned English in school. And finally, what is the synchronic sociolinguistic distribution of this variable among current speakers?

In a community where most adults over age forty are bilingual in Cherokee and English, linguistic interference from the source language to the target language is to be expected. Thomason and Kaufman (1988:37) indicate that in the case of language shift, interference will most likely be structural—that is, phonological, phonetic, or syntactic—interference rather than lexical interference. Although Cherokee has no clear-cut cases of tautosyllabic nucleus combinations such as [aI], vowel combinations with epenthetic [y], such as [aye] and [ayo], do occur (Huff 1977:23). Thus, there is a phonological model for upgliding in the source language, although it is not tautosyllabic.

There is also, however, a phonological model for monophthongal [a:] in the source language. Huff (1977) observes the following vowel-glide sequence patterns for Cherokee: /a/ plus any vowel except /a/ and, most significantly, /i/, in the underlying form yields a surface form of [a] + epenthetic [y] + vowel. A vowel combination of /a/ + /i/ or /a/ occurring in the underlying form will, therefore, be realized in the surface form as [a]. In other words, when /a/ precedes /a/ or /i/ in the underlying form of the source language the resulting surface form is [a], but when [a] is

combined with vowels other than /i/ or /a/ in the underlying form the surface form will be realized as a vowel-glide sequence. So, the source language of Cherokee provides models for both monophthongal [a:] and vowel-glide sequences involving [a] + epenthetic [y] + vowel.

The next consideration, then, is the history and status of /ay/ in the surrounding white contact community. Hall (1942:43) describes a pattern of glide weakening for his data from the Smoky Mountains, indicating that /ay/ is most often realized as [a:] in all phonetic environments. He notes, in fact, that although the tendency in general Southern speech at that time was to monophthongize /ay/ in voiced environments but to retain the diphthong in voiceless environments, the pattern did not hold true for Smoky Mountain English, where monophthongal [a:] was preferred in all phonetic environments (Hall 1942:43). Kurath and McDavid (1961) found tokens of [a²] and [a³] in Western North Carolina for the word *twice* and tokens of [a⁴] in Macon County, which borders Graham County, for the words *nine* and *might*. The data for the word *might* provided by the LAMSAS office at the University of Georgia indicates /ay/ was monophthongal in Western North Carolina in both prevoiced and prevoiceless environments in the 1930s, and that prevoiceless diphthongal /ay/ was already a relic form in this area. Wolfram and Christian (1976:64) found that Appalachian English speakers in their study participated in the monophthongization of /ay/, and they determined the linguistic constraint order for following phonetic environments for this feature to be pause > voiced obstruent > voiceless obstruent. This ordering falls in line with the traditional constraint pattern for Southern speech and is in contrast to Hall's (1942) observation that /ay/ was monophthongal in all following phonetic environments in the Smoky Mountain region of Western North Carolina. Williams (1992:14) also contends that /ay/ in Appalachian English is most often monophthongal, and, although he does utilize the classic example of the general Southern pronunciation of [a:s] for *ice*, he does not go into a discussion of the effect of following phonetic environment on the patterning of the variable. Pederson

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(1983:73) indicates that /ay/ for seventy East Tennessean informants is realized most often as a monophthong and, less frequently, as a short diphthong. He further notes that /ay/ is typically monophthongal before voiceless consonants, as in *write* or *light*, for all age and social groups of the region (75).

My data for the white contact population of Graham County for /ay/ indicates that current-day Smoky Mountain English is largely monophthongal for /ay/ in all following phonetic environments. Tabulations of the /ay/ variable for nine lifelong white residents of Graham County indicate that these informants are categorical monophthongizers of /ay/ in all phonetic environments. So the current contact model is one of expansive and generalized monophthongization.

Another important consideration is, of course, the contact model of the initial language learning situation of many of the middle-aged and older speakers. Beginning in 1880, white Quakers began using formal education in an attempt to acculturate the Cherokee into Anglo-American society. These schools emphasized Anglo-American culture and values and gave little attention to Cherokee culture (Neely 1991:29). The teachers of these schools were not local to the area. They are not expected, therefore, to have served as the agents of transmission for monophthongal /ay/.

The Quaker schools closed when the Bureau of Indian Affairs (BIA) gained control of the Cherokee educational system in the early 1900s. Neely (1991:29) characterizes the BIA-run boarding schools as "dictatorial," as did several of my older Cherokee informants who attended the boarding school on the Qualla Boundary. Students were taught to adopt white cultural attitudes and were severely beaten for speaking Cherokee at any time. A few middle-aged and older informants in my study who did not speak Cherokee indicated to me that their parents, who were fluent in English and Cherokee, chose not to teach their children Cherokee because of their experiences in the boarding schools. Again, all the teachers were white and few of them were from the South, so they also are not expected to have been agents of transmission for monophthongal /ay/.

Snowbird Cherokee attended an all-Indian BIA day school for the elementary grades until 1965 (Neely 1991:31). Snowbird students who wished to attend high school were forced

to leave the area to attend boarding schools either on the Qualla Boundary or out of state. Understandably, many older Snowbird residents chose not to attend high school. The Snowbird day school, which was in operation until 1965, was run by two non-local white teachers. Students were allowed to speak Cherokee to each other. Again, we do not expect these teachers to have been /ay/ monophthongizers, and one informant referred to one of these teachers as "the Yankee." In 1954 the boarding school on the Qualla Boundary closed and Snowbird students began attending Graham County's Robinsville High School (Neely 1991:31) where monophthongization for /ay/ would have been the language learning model.

Finally, it is important to consider the different groups of speakers within Snowbird. There are striking differences in terms of frequency of contact with white Graham County residents. I divided the Cherokees in this study into two groups based primarily on interaction frequency with the surrounding white community. Cherokees that fall under the category "low-interaction" are those Cherokees who have had minimal contact with whites. They typically have not worked outside the community or intermarried with whites. Speakers from this group include seven women ranging in age from 37 to 83 and six men ranging in age from 31 to 94. All of the speakers in this group, except for the one Qualla Boundary woman who is included in this analysis only for preliminary comparative purposes, have maintained regular social networks primarily within the Snowbird Community and have married other Cherokees. All speakers in this group spoke Cherokee as their first language and did not learn English until they attended elementary school.

Cherokees classified as "high-interaction" tend to have more extensive contact with the surrounding white community in their jobs and, in some cases, through marrying monolingual whites. Speakers comprising this group consists of three females, ranging in age from 16 to early 50's, and eleven men ranging in ages from 22 to 83. Three of the men in this group married monolingual white women, and all speakers in this group, with the exception of the sixteen-year-old student, have primarily held jobs which brought them into contact with local whites, such as forest service and wage labor jobs. Additionally, several of the men in

this group held jobs, such as welding and boiler-making, that took them out of the region for extensive periods of time. It is important, also, to keep in mind that middle-aged Snowbird speakers in both groups attended high school with their white neighbors after the Snowbird School closed in the mid sixties, and younger speakers attended the public school in Robinsville.

4. Monophthongal /ay/ in Appalachian and Cherokee English

Using the preceding sociolinguistic background as a framework, now consider the incidence of /ay/ monophthongization in three speaker groups: low-interaction Cherokee, high-interaction Cherokee, and the external reference group of Appalachian whites. The white external reference group consists of five males and four females ranging in age from 24 to 90. Table 1 gives the raw figures and monophthongization percentages for the three groups by several following phonetic environments: liquid, nasal, voiced obstruent, voiceless obstruent, word boundary + vowel (as in *eye appointment*), word boundary + consonant (as in *lie down*) and utterance final position (as in *Oh, my*).

Table 1 indicates that high-interaction speakers have a significantly higher percentage rate for monophthongization than do low-interaction speakers. In the data under investigation, high-interaction speakers were monophthongal for /ay/ most often in the following environment of liquid, followed by voiceless and voiced obstruents, word boundary + consonant, and nasal. Raw percentages are clearly much lower for monophthongization in the following environments of word boundary + pause and word boundary + vowel.

Low-interaction Cherokee English speakers also participate in the monophthongization of /ay/, but not nearly to the extent of their high-interaction counterparts or white cohorts. Low-interaction Cherokees show the highest incidence of monophthongization with the following environments of voiceless and voiced obstruents, followed by pre-nasal and pre-word boundary + consonant environments.

Appalachian whites are nearly categorical monophthongizers of /ay/. Only one speaker, a forty-seven year-old male, has even slight evidence of diphthongal /ay/, which occurred twice with a following environment of voiceless obstruent. The age range of the speakers in this group (the oldest being ninety) indicates that white speakers in this region have been ungliding in all environments at least since the early part of this century.

The results of a VARBRUL analysis, including both internal and external factor groups, is provided in Table 2.

Internal constraints consist of the following phonetic environments: nasal, voiced and voiceless obstruents, word boundary + consonant, word boundary + vowel, and word boundary + pause. Pre-liquid following environment is not included as a constraint

Speaker Groups	Liquid		Nasal		Vd. Obst.	
	a:	ay	a:	ay	a:	ay
Low-Interaction Cherokee English n=13	0	0	35	56	51	50
	NA		38.5 % Monoph.		50.5%	
High-Interaction Cherokee English n=14	14	0	37	17	69	20
	100 %		68.5 %		77.5 %	
Appalachian White n=9	9	0	89	0	90	0
	100 %		100 %		100 %	

Table 1. Incidence of /ay/ Monophthongization for Three Speaker Groups (continued on the next page).

Speaker Groups	Vl. Obst.		Word Bound + Vowel		Word Bound + Con.		Word Bound + Pause	
	a:	ay	a:	ay	a:	ay	a:	ay
Low-Interaction Cherokee English n=13	98	76	0	27	7	15	0	7
	56.3 %		0 %		31.8 %		0 %	
High-Interaction Cherokee English n=14	170	38	6	18	14	5	6	11
	81.7 %		25.0%		73.7 %		35.3 %	
Appalachian White n=9	122	2	11	0	25	0	21	0
	98.4 %		100 %		100 %		100 %	

Table 1-continued. Incidence of /ay/ Monophthongization for Three Speaker Groups

because it was thrown out as a knockout constraint in the initial run of VARBRUL. External constraints consist of low-interaction and high-interaction Cherokee English speaker groups.

The data indicates that high-interaction speakers favor monophthongal /ay/ over low-interaction speakers. Results of ANOVA tests, given in Table 3, indicate that the correlation between group affiliation (high-interaction, low-interaction, and white) and monophthongization of /ay/ is statistically significant at the p<.001 level.

The VARBRUL weightings indicate that the following environments of voiceless and voiced obstruents most strongly favor monophthongization, followed by nasals and word boundary + consonant. Clearly, the following environments of word

Table 2. VARBRUL Probabilities

Input Probability=.60	(Chi-Square/ Cell=.334)
Social Factors:	
Low-Interaction Cherokee=.34	High-Interaction Cherokee=.66
Linguistic Factors:	
VL Obstruent=.62	VD Obstruent=.56
Nasal=.44	Word Bound. + Con.=.42
Word Bound. + Pause=.13	Word Bound. + Vowel=.07

Table 3. ANOVA tests of significance of monophthongization of /ay/ and speaker group affiliation

Source	Sum of Squares	degrees of freedom	Mean Square	F
between	1.588	2	.794	26.47*
within	1.006	35	.030	
total	2.594			

*p<.001

boundary + pause, with VARBRUL weighting of .13, and word boundary + vowel, with VARBRUL weighting of .07, disfavor monophthongization.

What, then, are possible explanations for the patterns suggested by the analysis? The fact that Cherokee English speakers, particularly low-interaction speakers, are not typically monophthongizers of /ay/ in the environment of a following word or syllable boundary followed by either another vowel or a pause is most reasonably attributed to source language interference. As noted earlier, although Cherokee has no clear-cut cases of tautosyllabic vowel-glide sequences such as [ay], combinations of vowel-glide sequences such as [aye] do occur. The constraint order for monophthongization in Cherokee English (voiceless obstruent > voiced obstruent > nasal > word boundary + consonant > word boundary + pause > word boundary + vowel) is a reversal of the traditional Southern white pattern and the pattern of pause > voiced obstruent > voiceless obstruent described for Appalachian

English by Wolfram and Christian (1976:64). The constraint order for Cherokee English suggests a disyllabic interpretation at the end of a word boundary when the next word starts with a vowel. In other words, since /y/ is being interpreted as the onset of the next syllable in the source language, it follows that upgliding in the target language is expected to occur most frequently in the environment of word boundary + vowel. Cherokee is a CV language, and this is the expected pattern of interference.

Both Cherokee English speaker groups show evidence of monophthongal [a:], although high-interaction speakers clearly favor monophthongization over low-interaction speakers. One potential explanation for monophthongal [a:] in Cherokee English is source language interference. In Cherokee, [a] is monophthongal except when /a/ is followed by vowels other than /a/ or /i/ in the underlying form (Huff 1977:23). Weinreich (1968) maintains that phonological interference is the result of bilinguals identifying a phoneme in the target language with a phoneme from the source language and then subjecting this phoneme to the phonological rules of the first language when reproducing it in its second language production. More specifically, Romaine (1995:53) notes that this type of interference may result in a process of over-differentiation, which occurs when speakers transfer phonological distinctions from the source language to sounds in the target language.

Source language interference may play an important role in both monophthongal [a:] and diphthongal [aI]. In this case, speakers show transfer in their English by ungliding, or deleting /i/ when it follows /a/, unless /a/ is followed by a vowel other than /a/ or /i/, in which case it is interpreted as the Cherokee /a/ plus a vowel-glide sequence involving epenthetic [y] and thus is upglided to match the corresponding pattern in the source language. This explanation accounts for both the Cherokee English monophthongization of /ay/ and the upgliding of /ay#/ with a following environment of word boundary + vowel.

Although source language interference can account for both realizations of the variant, monophthongal [a:] and diphthongal [aI], the process of dialect assimilation also surely must play an important role in the monophthongization of /ay/ in Cherokee English. Monophthongal [a:] is a pervasive phenomenon of the

mountain white contact community. Since reservation tracts are interspersed with private tracts of land owned by whites, Snowbird Cherokees have had white neighbors since they purchased their lands after the removal. Middle-aged to younger Cherokees attended Graham County public schools, and Cherokees involved in wage-labor industry work with whites. Monophthongization, especially for high-interaction speakers who have a high frequency of contact with whites, could be overt assimilation of the surrounding white dialect norm. The differences between speaker groups in the analysis support this explanation. High-interaction Cherokees have a VARBRUL rating of .66 for monophthongization; low-interaction Cherokees received a VARBRUL weighting at almost half the figure of their high-interaction counterparts. The ANOVA analysis also demonstrates the significance of monophthongization and group affiliation.

Tabulations for the two speakers from Qualla Boundary, a married couple both aged 83, also support the explanation that the participation in monophthongal [a:] may represent overt assimilation to the dialect norms of the white contact community. Both speakers learned Cherokee as their first language and attended the BIA-run boarding school on Qualla Boundary. The woman, categorized as a low-interaction speaker, was a homemaker and thus had little need to interact with whites. However, the man, categorized as a high-interaction speaker, fought in World War I and worked for the park service for many years. He had a much higher incidence of monophthongization than did his wife. Taking into consideration all following phonetic environments, the man realized the variant as monophthongal [a:] in 66 percent of his tokens. His wife, however, realized the variant as monophthongal [a:] in only 16.7 percent of her tokens.

The constraint hierarchies for monophthongization in Cherokee English must also be taken into account in an explanation of the analysis. The constraint hierarchies of Cherokee English do not fall in line with the typical Southern constraint pattern in which prevoiced and prenasal environments favor monophthongization over prevoiceless environments. They are, in fact, reversed in Cherokee English where monophthongization is slightly favored in prevoiceless environments. Research has shown that monophthongal [a:] in prevoiceless environments is spreading through-

out the South (Bailey et al. 1996); it is certainly prominent in the white contact community where speakers show near-categorical monophthongization regardless of following environment. Although monophthongal [a:] in Smoky Mountain English is now a general phonetic process, prevoiceless monophthongization is salient socially, particularly to non-Southerners. Perhaps the current contact model of monophthongization in all phonetic environments and the saliency of prevoiceless monophthongization have affected the variable levels of Cherokee English speakers who assimilate to the dialect norm of the contact community.

5. Conclusion

In her socio-cultural study of the Snowbird Community, anthropologist Charlotte Neely (1991) describes the Snowbird Cherokee as "persistent", and this term can also be used in a description of the community's linguistic situation. The Snowbird people have always been people of persistence. This is evident in their refusal to be removed on the Trail of Tears in 1830 and in their continued occupation of their ancestral homeland. Since Native Americans could not legally purchase land at that time, they enlisted the help of three local white men who purchased the land for the Cherokees in their own names. This situation is significant because it illustrates what seems to be the primary strategy this community uses to maintain its ancestral language and other characteristics associated with cultural autonomy. Low-frequency Cherokee English speakers' limited interaction with whites is reflected in their limited participation in the monophthongization of /ay/. High-frequency Cherokee English speakers show more assimilation to the contact norm of monophthongal [a:], but even they do not typically display monophthongal [a:] in the linguistic environment where upgliding would be expected in the source language. These patterns suggest a mixed alignment, a combination of source language interference and dialect assimilation working together to affect the variable norms of the community. The linguistic situation of this group is also indicative of Snowbird's ability both to persist in cultural tradition and to be adaptive in their dealings with the significantly larger majority of Graham County's Appalachian

white population. What appears at first glance to be an overt assimilative phenomenon, and may even be utilized as such—especially in the case of high-interaction Cherokees—does not preclude substratal effects of source language transfer. Nor does contact-induced language change necessarily reflect language change as it occurred in the contact community. This mixed alignment is one way a group can be both adaptive in regard to pervasive external dialect norms and, at the same time, maintain important cultural and social distinctions.

References

- Anderson, Bridget, Jessica Schrider, and Walt Wolfram (1996). *Cherokee English in the Great Smoky Mountains: A Continuum of Sociolinguistic Assimilation*. Paper presented at SECOL 52. College Station, TX.
- Bailey, Guy, Tom Wikle, Jan Tillery, and Lori Sand (1996). "The Consequences of Catastrophic Events: An Example from the American Southwest." *Sociolinguistic Variation: Data, Theory, and Analysis. Selected Papers from NWAV 23 at Stanford*. Ed. Jennifer Arnold, Renee Blake, Brad Davidson, Scott Schwenter, and Julie Soloman. Stanford: CSLI Publications.
- Bernstein, Cynthia and Elizabeth Gregory (1994). *The Social Distribution of Glide Shortened /ai/ in LAGS*. Paper Presented at SECOL 50. Memphis, TN.
- Churchill, Ward (1994). *Indians Are Us?* Monroe, Maine: Common Courage Press.
- Craig, Beth (1991). "American Indian English." *English World Wide* 12: 25-61.
- Hall, Joseph S. (1942). "The Phonetics of Great Smoky Mountain Speech." *American Speech Reprints and Monographs*, No. 4. New York: Columbia University Press.
- Huff, Charles (1977). *The Phonology of Qualla Cherokee*. unpublished Master's Thesis. University of North Carolina at Chapel Hill Department of Linguistics.
- King, Duane (1975). *A Grammar and Dictionary of the Cherokee Language*. Unpublished Ph.D. dissertation. University of Georgia.
- Kurath, Hans, and Raven I. McDavid, Jr. (1961). *The Pronunciation of English in the Atlantic States*. Ann Arbor: University of Michigan Press.

- Leap, William L. ed. (1977). *Studies in Southwestern Indian English*. San Antonio: Trinity University.
- Leechman, Douglas and Robert A. Hall, Jr. (1955). "American Indian Pidgin English: Attestations and Grammatical Peculiarities." *American Speech* 30: 163-171.
- Neely, Sharlotte (1991). *Snowbird Cherokees: People of Persistence*. Athens: University of Georgia.
- Pederson, Lee (1983). *East Tennessee Folk Speech*. New York: Verlag Peter Lang.
- Romaine, Suzanne (1995). *Bilingualism*. Oxford: Blackwell Publishers, Inc.
- Thomason, Sarah and Terrence Kaufman (1988). *Language Contact, Creolization, and Genetic Linguistics*. Berkeley: University of California Press.
- Weinreich, Uriel (1968). *Languages in Contact*. Mouton Press. [First edition 1953. New York: Linguistic Circle of New York Publication No. 2].
- Williams, Cratis D. (1992). *Southern Mountain Speech*. Berea: Berea College Press.
- Wolfram, Walt, Donna Christian, William L. Leap, and Lance Potter (1979). *Variability in the English of Two Indian Communities and its Effect on Reading and Writing*. Washington, DC.: Center for Applied Linguistics.
- Wolfram, Walt (1980). "Dynamic Dimensions of Language Influence: The Case of American Indian English." Howard Giles, W. Peter Robinson, and Philip M. Smith (eds.) *Language: Social Psychological Perspectives*. Oxford: Pergamon Press. 377-388.
- Wolfram, Walt (1984). "Unmarked Tense in American Indian English." *American Speech* 59: 31-50.
- Wolfram, Walt and Donna Christian (1976). *Appalachian Speech*. Arlington: the Center for Applied Linguistics.

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