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Variation Within Dialects: A Case of Cajun/Creole Influence Within Child SAAE and SWE

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Abstract

Purpose—This study examined whether child speakers of Southern African American English (SAAE) and Southern White English (SWE) who were also perceived by some listeners to present a Cajun/Creole English (CE) influence within their dialects produced elevated rates of 6 phonological and 5 morphological patterns of vernacular relative to other SAAE- and SWE-speaking children.

Method—A group comparison design was followed. The data were listener judgments, 1-min audiotaped excerpts of conversational speech, and transcribed language samples from 93 children (31 classified as specifically language impaired while the others were classified as either aged-matched or language-matched controls; 13 classified as SWE with CE, 40 classified as SWE only, 18 classified as SAAE with CE, and 22 classified as SAAE only).

Results—Results indicated that children with a CE influence produced elevated rates of vernacular phonology relative to the others, with 2 patterns (nonaspirated stops and glide reduction) showing statistically significant group differences. In contrast, the children's use of vernacular morphology was unrelated to their CE status, but was instead related to their primary dialect (SWE vs. SAAE) and language ability classification (impaired vs. normal).

Conclusions—The findings highlight the role of phonology in listeners' perceptions of dialect variation within 2 nonmainstream dialects (SWE and SAAE). The findings also demonstrate the ways phonological and morphological forms of vernacular can be independently influenced by different types of child variables.

Keywords

dialect; multicultural; ethnicity

Language use varies across individuals even when these individuals are perceived to speak the same general dialect. In some cases, this variation relates to individual differences between speakers (for more discussion of idiolects, see Mufwene, 2001). In other cases, the variation can be tied to one or more variables that systematically influence the language of a subgroup. One example of this latter type of influence can be found in Myhill's (1988) study of AAE /r/-deletion. Within this study, rates of /r/-deletion were found to vary as a function of two variables, speaker age and speaker contact with non-AAE speakers. Speakers under 25 years of age who had less contact with non-AAE speakers were more likely to delete /r/ than those who were older and had more contact. In addition, there were group differences

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in the linguistic conditioning of the deletion. For the former, /a/ disfavored deletion whereas for the latter, /a/ had the same effect on deletion as other vowels.

The current study reflects a first attempt to study some of the language variation that is present in the nonmainstream English dialects of children who live in Louisiana. Although Louisiana is well known for its linguistic diversity and Cajun/Creole French heritage, very few empirical studies have been completed on the dialects of this state. Moreover, missing from the literature is a well-developed framework and set of methods for studying speaker variation as a variable within a single dialect and/or multidialect investigation. An existing dataset of 93 child language samples provided us an opportunity to examine both of these issues. The samples were collected from children who lived in a rural area in southeastern Louisiana (for previous studies of these samples, see Oetting, Cantrell, & Horohov, 1999; Oetting & McDonald, 2001, 2002; Ross, Oetting, & Stapleton, 2004; Wynn, Eyles, & Oetting, 2000). Although our past research has shown that the dialects within these samples reflect varieties of Southern African American English (SAAE) and Southern White English (SWE), results from an earlier listener judgment study by Oetting and McDonald (2002) also indicated that some of the children sounded a little Cajun and/or Creole to some listeners. In the current study, we further examined these data to learn more about the linguistic factors that may have contributed to these results. By doing this, we also aimed to establish a set of methods that can be used by other researchers who are interested in studying childhood language acquisition and/or impairment within the context of dialect diversity. As background, we review relevant findings from the 2002 listener judgment study and previous findings from adult studies of Cajun/Creole English (CE).

2002 Listener Judgment Study

The listener judgment task asked three doctoral students in linguistics to independently classify the dialects of 93 children by listening to a 1-min excerpt from each child's language sample. Although the earlier publication of this work focused on the children's use of SAAE or SWE, other information about the excerpts was also collected. For example, the raters were asked to indicate the language features they used to make their dialect judgments, and when possible, to write down dialect-specific patterns of vernacular. To facilitate the raters' identification of relevant language features, the rating form asked them to check one or more of the following: paralinguistic behaviors including stress and intonation, phonology, morphology and syntax, and vocabulary. For dialect-specific patterns, the rating form provided them a blank area for writing.

The listeners' answers to these questions indicated that all of the children were speaking a Louisiana variety of SAAE or SWE; however, for 31 of the 93 cases, one or more of the listeners also indicated that they perceived a Cajun/Creole influence within the children's use of SAAE or SWE. Specific comments on the dialect rating forms were as follows: sounds a little bit Cajun/Creole, some Cajun/Creole flavoring in his/her speech, and some Cajun/Creole features heard. The listeners also indicated that their dialect judgments were based mostly on phonology (86%), and this was followed by morphology and syntax (61%), paralinguistics (41%), and vocabulary (24%). Finally, for the children who were perceived to sound a little bit Cajun/Creole, the raters wrote down monophthongization as the most frequent vernacular pattern that they heard. Other patterns that were listed less frequently were vowel lowering, glide weakening on vowels, vowel nasalization, /t, d/ for /θ, ð/ substitutions, /r/ weakening, and word final consonant deletions. As demonstrated next, these particular comments by the listeners, while self-generated, are consistent with what is known about CE in Louisiana.

Cajun/Creole English

Consider first the listeners' perceptions of the children's dialects as reflecting SAAE or SWE instead of CE. As mentioned earlier, very few empirical studies have been completed on the dialects of Louisiana, and this includes varieties of CE. As a consequence, what is typically known about CE comes from illustrations of the dialect from newspapers, film, books, songs, travel signs, and advertisements (for two examples, see Boudreaux, 2000; Trosclair, 1973; for an anthology of CE works, see also Scott, 1992). As discussed by Dubois and Horvath, these portrayals of CE are impressionistic and do not provide information about the language of modern-day Cajuns and Creoles. Nevertheless, a stereotypical speaker of CE is an elderly man who is bilingual in French and English and lives in the Acadian Triangle (for sociocultural history, see Brasseaux, 1987, 2004; Din, 1999; Dominguez, 1986; Hall, 1995; Henry & Bankston, 2001, 2002). Figure 1 demarcates the Acadian Triangle and lists the percentage of adult residents within and outside of this area who claimed the ability to speak French on the 1990 U.S. Census. As can be seen, the children who provided the samples studied here lived in the Acadian Triangle, but their community was on the far eastern border in an area where few residents claim the ability to speak French. The age and bilingual ability of the stereotypical CE speaker, along with the demographic information about the Acadian Triangle, helps explain why the listeners could be unanimous in their perceptions of the children's dialects as not stereotypical of CE while at the same time perceive a CE influence in some of the children's SAAE and SWE dialects.

Next, consider the listeners' use of the term *Cajun/Creole*. Current studies of self-described Cajuns generally result in participant pools that are White and of Acadian descent, and studies of self-described Creoles often result in participant pools that are of African and French descent. Nevertheless, Cajun and Creole histories also include contact and assimilation with each other as well as contact and assimilation with other French immigrants; German, Irish, Italian, and Spanish immigrants; African Americans; and Native Americans. Creole history is even more complicated, with different groups claiming Creole status at different periods and with the impact of Reconstruction, Jim Crow Laws, and the civil rights movement on Creole self-identity (for review, see earlier Cajun/ Creole references and Dubois & Melacon, 1997, 2000). Our listeners' use of the term *Cajun/Creole* to describe perceived ethnic influences within the SAAE and SWE dialects of the children demonstrates an understanding of the terms *Cajun* and *Creole* as having highly complex, imprecise, debated, and at times overlapping histories.

Finally, consider the listeners' reliance on phonology to identify the CE influence within the child samples. To date, only one quantitative study has been completed on the English that is spoken by self-identified Creoles and only six have been completed on the English of self-identified Cajuns (Cheramie, 1998; Dubois & Horvath, 1998, 1999, 2003a, 2003b; Rubrecht, 1971; Walton, 1994). Nevertheless, the emphasis of these adult CE studies parallels that of our listeners' comments, because six of the adult studies examined phonology, three examined morphology, and only one attempted to quantify (in a very limited way) some of the words, phrases, discourse features, and/or intonation characteristics of CE.

A review of the adult studies also indicates that although CE is often linked to a French or Cajun/Creole French variety, the origin and evolution of this dialect is far more complicated than a simple model of language interference or language transfer. Studies by Dubois and Horvath (1998, 1999) provide evidence for this claim. Their language samples come from a large database of participants who represent speakers from three age groups (young [20-39 years], middle-aged [40-59], and old [60+]), both males and females, speakers whose first language is either French or English, and speakers from both open and closed social networks. As illustrated in Table 1, some CE patterns (e.g., nonaspirated stops) show a

linear decrease of use from old to young speakers, a finding that is consistent with a model of language interference of French for the old speakers, with diachronic assimilation to English by the middle-aged and young speakers.

Other structures and/or other structures in particular linguistic contexts (e.g., monophthongization in voiced contexts and final contexts) show a V-shaped pattern of change, with old and young speakers producing higher rates of use than the middle-aged speakers. Finally, for some patterns and some speakers (e.g., substitutions involving /d/ for /ð/ for males from open social networks), a linear increase from old to young occurs. Dubois and Horvath interpret the V-shaped findings and linear increases of use as reflecting a Cajun renaissance or Francophone resurgence in Louisiana and argue that these higher rates of use by young speakers help set current varieties of CE apart from other English dialects.

In addition, Dubois and Horvath's research has repeatedly documented the overlapping nature of CE with other English dialects (e.g., SAAE and SWE and other varieties spoken in England, Ireland, Scotland, and elsewhere). Table 2 provides a comparative analysis of CE, SAAE, and SWE, the three dialects that are relevant to the current work. As can be seen, although some vernacular patterns appear unique to CE, those that Dubois and Horvath have found to be frequent enough to quantify are those that also occur in SAAE and SWE. To the sociolinguist, overlapping patterns across dialects are not surprising, and this overlap does little to reduce a dialect's authenticity or distinctiveness. In fact, sociolinguists often study the overlapping patterns of dialects to examine the ways in which different internal and external forces influence a speaker's rate of use and the ways in which different dialects use the same pattern(s) to express different meanings, grammatical functions, and pragmatic acts (for examples of the former, see Labov, 1994, 2001; for an example of the latter, see Rickford & Rafal, 1996).

The overlapping nature of CE with SAAE and SWE, however, has implications for the types of results one can expect to find with the child dialects studied here. In particular, if a vernacular difference does exist between our samples that do and do not have a CE influence, the overlapping nature of CE, SAAE, and SWE makes it highly improbable that we will find the difference to be categorical in nature. Instead, the more likely result will be a difference that relates to a speaker's rate of use and/or manner of use. As shown with Myhill's (1988) /r/-deletion work, a manner of use difference is often discussed as linguistic conditioning and this conditioning relates to the linguistic constraints that are placed on a speaker's use of a particular surface pattern (e.g., whether /a/ disfavors /r/-deletion). Manner of use differences can also involve the effect a pattern has on the surrounding language context (e.g., whether /r/ deletion causes a vowel merger). Of these two possibilities (rate and manner), a rate-based difference will be the easiest to detect given that our samples were not collected to systematically examine each target pattern within a wide range of linguistic contexts. Note also that Dubois and Horvath have repeatedly used rate-based information to distinguish CE from other English vernaculars. Indeed, for most cases of phonology and some cases of morphology, Dubois and Horvath have shown CE to present higher rates of use than other dialects, especially when race is controlled within the comparisons.

As a first step toward examining our data, we asked the following question: Do child speakers of SAAE and SWE who are also perceived to have a CE influence within their dialects produce higher rates of vernacular phonology and morphology than other SAAE and SWE child speakers? Although the earlier listener judgment task linked perceptions of CE to the children's use of phonology, findings from the adult studies raised the possibility that a CE influence could also be identified in the children's use of morphology.

Method

Data

The data consisted of 93 language samples that were collected, transcribed, and coded for use in Oetting and McDonald (2001) and 93 one-minute audiotaped excerpts from these same samples that were edited for use in Oetting and McDonald (2002). Forty of the samples were elicited from children who were classified as African American and speakers of SAAE and 53 were elicited from children who were classified as White and speakers of SWE. An equal number of samples were elicited from 6-year-olds with specific language impairment (SLI), age-matched 6-year-olds with typical language ability (6N), and language-matched 4-year-olds with typical language ability (4N).The samples were elicited by having an examiner and child play together with toys and pictures in a quiet room within each child's school. The average number of complete and intelligible utterances per sample was 216 (*SD* = 64); the total number in the full data set was 20,171. The mean, median, and mode number of utterances in each 1-min excerpt was 12 (range = 5–19).

Thirty-one of the 93 samples were classified as presenting an SAAE or SWE dialect with a CE influence, and the others were classified as presenting an SAAE or SWE dialect without this influence. For a sample to be classified as influenced by CE, one or more of the three listeners had to have written a CE comment on the child's dialect classification form during the 2002 study. One rater wrote this type of comment down for 31 of the excerpts and for 5 of these, a second rater also wrote a similar comment. The third rater never wrote any type of dialect comment on her rating forms. Although these numbers may seem low, recall that the rating form did not specifically ask the raters to make a judgment about CE, but instead gave them a blank area to write comments about any other dialects and/or dialect features that they heard. We also did not provide the raters any formal training about the possible dialects that were present on the tapes because we were interested in their perceptions as blind listeners.

As can be seen in Table 3, a greater proportion of SAAE speakers were represented in the samples with a CE influence as compared to those without, but relatively equal proportions of children with SLI were represented in the two groups. The bottom four rows of Table 3 provide standardized language test scores, language sample sizes, and mean lengths of utterance (MLUs) for the two groups. The samples with and without a CE influence were not statistically different from each other on these measures. Although the averages mask the heterogeneity of the participants, similar findings across the two groups help rule out potential biases in the listeners' judgments that may have been related to perceptions of language ability.

Coding of Vernacular Phonology and Morphology

There were two phases of data coding. The first phase involved the 93 one-minute audiotaped excerpts from the samples, and the second involved the electronic transcripts of the children's full language samples. The 1-min excerpts were coded for vernacular phonology and morphology. Phonological coding was completed by a doctoral student in linguistics who trained with Dubois; he also participated in the coding and analysis of Dubois and Horvath's (1998, 1999) adult data. The second author of this paper, a doctoral student in communication disorders, completed the morphological coding. Coding involved listening to each 1-min excerpt and writing down tokens of vernacular. The list of vernacular patterns came from Dubois and Horvath's studies and included nonaspirated stops, substitutions of /t, d/ for /θ, ð/, heavy vowel nasalization, monophthongization, glide weakening of vowels, *was* leveling, zero regular past, zero is, zero *are*, and zero regular third person singular. For phonology, a sixth category titled *Other* was also provided on the

coding sheet so that the children's use of any other vernacular pattern that sounded characteristic of CE could be documented. Two instances of vowel lowering were identified through the use of this category. Recall that this pattern had also been independently identified within the earlier listener judgment task. Although not studied by Dubois and Horvath, this pattern has been listed within other adult CE studies (e.g., Rubrecht, 1971; Walton, 1994).

Both coders worked independently and were encouraged to listen to the tapes multiple times until they felt comfortable with the coding of each excerpt. Also, given that the samples had been previously transcribed and coded for morphology in an electronic format, the second author examined the electronic files to check her work. At no time during coding did the coders have access to the results from the earlier listener judgment study and to the race, dialect, and language ability status of the children.

The second phase of coding involved each child's full language sample. For this analysis, the focus was on patterns of morphology only. We added this second level of inquiry because the 1-min excerpts seemed too short to fully examine this aspect of language. For this coding phase, the second author searched each child's language transcript for *was* leveling, zero regular past, zero *is*, zero *are*, and zero regular third person singular using Systematic Analysis of Language Transcript software (SALT; Miller & Chapman, 1992). Rates of use were calculated by dividing the number of vernacular patterns by the number of opportunities for the patterns within the samples. Opportunities were considered all contexts in which a Standard American English speaker would have produced *were*, regular past *–ed*, *is*, *are*, and regular third person *–s*. Reliability of the original transcriptions and morpheme codes were above 90% (for details, see Oetting & McDonald, 2001).

Results

One-Minute Excerpts

We first examined the proportion of excerpts that contained at least one of the target patterns of vernacular. For phonology, 87% of the excerpts classified as presenting CE included at least one vernacular pattern, whereas only 47% of the excerpts that were not classified as presenting CE met this criterion. These proportions were statistically different from each other, $\chi^2(93) = 10.36$, $p = .001$, $\Phi = 0.33$. For morphology, the proportions of excerpts that contained at least one vernacular pattern did not differ as a function of CE status; 52% with CE included a vernacular pattern versus 48% without ($\Phi = .03$, $p > .05$). Next, the frequencies at which the vernacular patterns were produced within the excerpts were examined. For excerpts with and without a CE influence, the average frequency of vernacular phonology was 5.13 ($SD = 4.79$) and 2.84 ($SD = 4.35$), respectively. For vernacular morphology, like averages were 1.21 ($SD = 1.74$) and 1.89 ($SD = 2.96$), respectively. Only vernacular phonology led to a significant difference for CE status, $F(1, 91) = 5.36$, $p = .02$, $\eta^2 = .06$.

To further examine the phonology data, we completed a series of three-way analyses of variance (ANOVAs) for five of the six patterns. Vowel lowering was excluded because there were not enough tokens to analyze. The independent variables were the CE influence (present vs. absent), the children's primary dialect (SAAE vs. SWE), and the children's language ability status (SLI vs. 6N vs. 4N). For two of the patterns, nonaspirated stops, $F(1, 89) = 5.67$, $p = .019$, $\eta^2 = .06$, and glide weakening, $F(1, 89) = 4.15$, $p = .045$, $\eta^2 = .05$, differences between the excerpts with and without CE were statistically significant. Also, for three of the phonological patterns, glide weakening, $F(1, 89) = 7.49$, $p = .007$, $\eta^2 = .08$, nasalization, $F(1, 89) = 4.57$, $p = .035$, $\eta^2 = .05$, and monophthongization, $F(1, 89) = 19.50$, $p < .001$, $\eta^2 = .18$, differences between the SAAE and SWE excerpts were statistically

significant. Nonsignificant effects were found for the children's language ability. Means for the significant findings from these analyses are reported in Table 4.

Rates of CE Morphology: The Full Samples

Table 5 presents the total number of opportunities for each coded pattern in the full samples and the rates at which the children produced a vernacular form within these opportunities as a function of the children's CE status, primary dialect, and language ability classification. As can be seen, effects of a CE influence on the children's rates of vernacular morphology are not as obvious as they were for phonology. Moreover, the morphology rates appear more affected by the children's primary dialect and language ability than by their CE status. To examine these data, three-way ANOVAs were again used to examine the influence of the three independent variables (i.e., CE status, dialect, and language ability). For all five patterns, CE status resulted in nonsignificant findings, but a main effect was found for dialect, with the SAAE samples presenting higher rates of use than the SWE excerpts: *was* leveling $F(1, 65) = 18.41$, $p < .001$, $\eta^2 = .22$; zero regular past $F(1, 90) = 18.17$, $p < .001$, $\eta^2 = .17$; zero is $F(1, 65) = 128.46$, $p < .001$, $\eta^2 = .59$; zero are $F(1, 86) = 48.47$, $p < .001$, $\eta^2 = .36$; zero regular third $F(1, 65) = 176.25$, $p < .001$, $\eta^2 = .66$ (see Figure 2). For two of the patterns, zero regular past, $F(2, 89) = 5.19$, $p < .007$, $\eta^2 = .10$, and zero is, $F(2, 90) = 7.13$, $p = .001$, $\eta^2 = .14$, a main effect was also found for the children's language ability. Tukey follow-up procedures indicated that for both of these patterns, rates generated by the children with SLI were higher than those generated by the 6N controls (see Figure 3).

Discussion

Results indicated that the listeners' perceptions of CE within the SAAE and SWE dialects studied here were related to the children's use of vernacular phonology. The 1-min audiotaped excerpts provided three types of evidence for this claim: (a) The listeners wrote comments on their rating sheets that tied their perceptions of CE to vernacular phonology, (b) a greater proportion of excerpts with a CE influence was found to contain one or more tokens of vernacular phonology than the others, and (c) the excerpts with a CE influence contained higher frequencies of vernacular phonology than the others, with rates of nonaspirated stops and glide reduction resulting in statistically significant group differences. In contrast, analysis of both the excerpts and the full language samples indicated that the listeners' perceptions of CE were unrelated to the children's use of vernacular morphology. Instead, this aspect of language was related to the children's primary dialect (SAAE vs. SWE) and their language ability (normal vs. impaired).

The overlapping nature of CE with SAAE and SWE helps explain why tokens of vernacular phonology were found in 47% of the excerpts that were not classified as CE. More difficult to explain are the 13% ($n = 4$) of excerpts that were classified as influenced by CE within the listener judgment task but then did not contain a single case of vernacular phonology in the current analysis. We can think of two possible explanations for these findings. One explanation relates to the reliability of the listener judgment task. Recall that this task required the raters to make a number of judgments about the children's dialects while they listened to a 1-min excerpt. Although we have argued in previous work that this type of listener judgment task provides a reliable and time efficient way to characterize the dialects of research participants, it could very well be the case that this type of data becomes less reliable when a speaker's idiolect is less prototypical than others. Given that the children's dialects were far from being stereotypical cases of CE, a 13% rate of measurement error does not seem unusually high or problematic.

Alternatively, all of the excerpts may have been correctly classified by the listeners but the scope of our coding may have limited our ability to identify the full set of patterns that

marked a speaker's dialect as influenced by CE. Only vernacular patterns of phonology and morphology were examined even though the listeners' indicated that vocabulary and paralinguistic features of the children's dialects sometimes influenced their judgments. Illustrations of CE by native residents and folklorists often include ethnic-flavored words (e.g., *cher* as a term of endearment, *paren* to refer to a grandfather, and *bayou* to refer to a slow-moving body of water) as well as a rhythmic pattern of prosody that is sometimes referred to as "flat speech." Walton (1994) described this type of speech as involving shortened words that are produced with a staccato rhythm and with rising pitch at the end of utterances. Future studies that control for utterance content are critical for examining both of these areas of language. Future studies of vocabulary and prosody may also need to use a different method than an examiner-elicited language sample with toys because CE-specific vocabulary and prosody may be tied to particular topics and/or particular speaking partners. Moreover, prototypical speakers of CE should probably be recruited for initial studies of these language areas. Although a comprehensive coding system of all aspects of CE was not the goal of the current work, this type of research would facilitate future language variation studies that are completed with children who live in areas where a stereotypical dialect of CE is more prevalent.

Additional studies of CE with children and adults would be particularly interesting to researchers who study dialect spread and other issues related to language variation and change. Take for example, rates of vernacular morphology between Dubois and Horvath's (1999) young adults who were White CE speakers to those of our SWE child speakers who presented a CE influence. Recall that in addition to age differences between their dataset and ours, the speaker groups also differed in their place of residency, Cajun ethnicity, and bilingualism status. Their speakers lived in the heart of the Acadian Triangle, self-identified as Cajun, and were bilingual; ours lived on the border, their Cajun ethnicity was unknown, and they were monolingual speakers of English. Nevertheless, both groups demonstrated relatively low rates of zero regular third (19% child vs. 16%–25% adult) and zero is (14% child vs. 11%–32% adult). In contrast, our child speakers produced higher rates of was leveling than the adults (51% child vs. 22%–30% adult) and lower rates of zero regular past (9% child vs. 29%–48% adult) and zero are (41% child vs. 72%–73% adult). Additional comparisons of these dialects and others that are spoken within and outside of the Acadian Triangle are needed to identify the factors that have led to these rate differences. This type of information may also be useful for predicting future changes in the dialects of this area.

Although the primary goal of the current work was to identify vernacular patterns of English that corresponded to listener judgments of CE, the findings also have broader implications for future child language studies. Recall that a long-term goal of the work was to identify patterns of vernacular that show systematic variation across different speaker groups so that a larger, multidialectal child study can be completed. In pursuit of this goal, we learned that children's use of phonology is an important area of language to include within this future work. Of the six patterns of phonology that were examined, glide weakening of vowels appears to be the best candidate for this type of research. Recall that this pattern was the only one that was affected by both the children's primary dialect (SAAE vs. SWE) and their use of CE. To broaden this category, the production of all vowels may be the appropriate target, especially since some describe the major phonological difference between SAAE and SWE as relating to vowel space (for data and review, see Bailey, 2001).

Although a CE influence was not found for morphology, one might also want to include this aspect of language in a future study, especially if one wants to examine differences between the surface manifestations of typical versus atypical sources of language variation. Recall that the children's use of morphology was affected by both their primary dialect (SAAE vs. SWE) and their language ability status (normal vs. impaired), but the effects of these

influences were not identical (for additional evidence and discussion of this issue, see Oetting & McDonald, 2001, Seymour & Pearson, 2004). If influences of the former reflect normal sociolinguistic processes and influences of the latter reflect atypical learning mechanisms, then comparative work that directly pits these two sources of variation against each other should lead to different types of language profiles, and the most rigorous test of this claim would involve patterns of language that are affected by both influences. The impetus driving comparative work such as this is to better understand the nature of each influence by delineating not only what each one is but also what each one is not.

Of the morphological patterns that were examined here, the two that were most affected by a childhood language impairment were zero regular past and zero is. Both of these patterns have been identified as markers of SLI in children who speak standard varieties of American English (e.g., Rice & Wexler, 1996). Recall also that surface manifestations of SLI were not found in the vernacular patterns of phonology. This finding is also predicted by at least one theoretical model of the SLI condition (e.g., Rice, 2003). Future studies are needed to test these findings, but if replicated, the current results would support models of SLI that account for a significant grammatical weakness involving tense along with a developmentally and dialect appropriate profile of phonology.

Finally, the findings of the current work should also be relevant for future language variation studies that are conducted outside of Louisiana. While the English varieties of Louisiana are interesting, multiple dialects of a language coexist in many other communities in the United States and elsewhere. What the current work offers to researchers who are interested in multidialectal studies (and speaker variation within and across multiple dialects) is the conceptualization of dialect boundaries as not so much based on mutually exclusive lists of contrasting patterns but instead dependent upon rate-based variation (and probably manner of use variation) of sets and/or subsets of patterns that cut across the dialects of interest. A focus on the shared patterns as opposed, or in addition, to those considered unique to a dialect not only broadens the number of patterns a researcher can examine, but also allows the researcher to study the dialect as a system rather than as a list of isolated surface structures.

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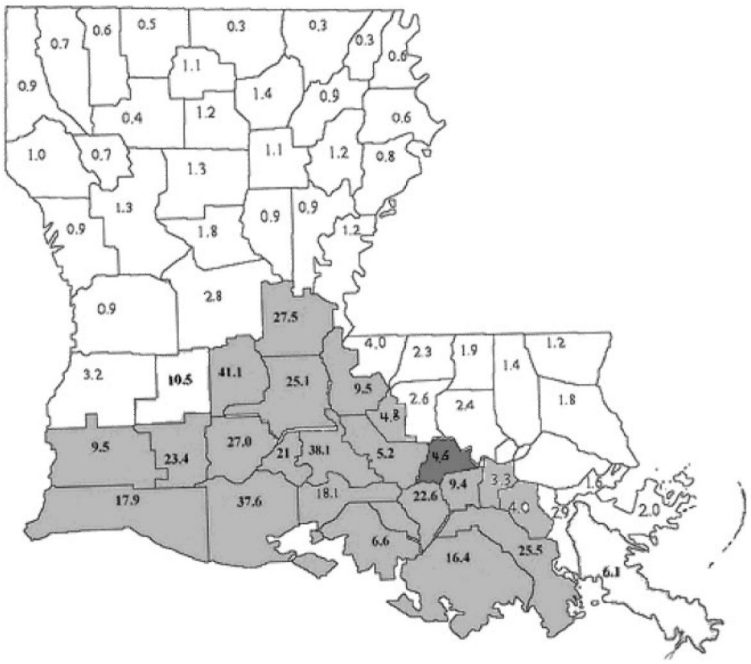

Figure 1.

Map of Louisiana. From Blue Collar Bayou: Louisiana Cajuns in the New Economy of Ethnicity (p. 4), by J. M. Henry and C. L. Bankston, 2002, Westport, CT: Praeger. Copyright 2002 by J. M. Henry and C. L. Bankston. Adapted with permission. The light gray shading indicates the Acadian Triangle, and the dark gray shading indicates the area in which the study children lived. The numbers reflect the percentage of residents from the 1990 U.S. Census who claimed the ability to speak French.

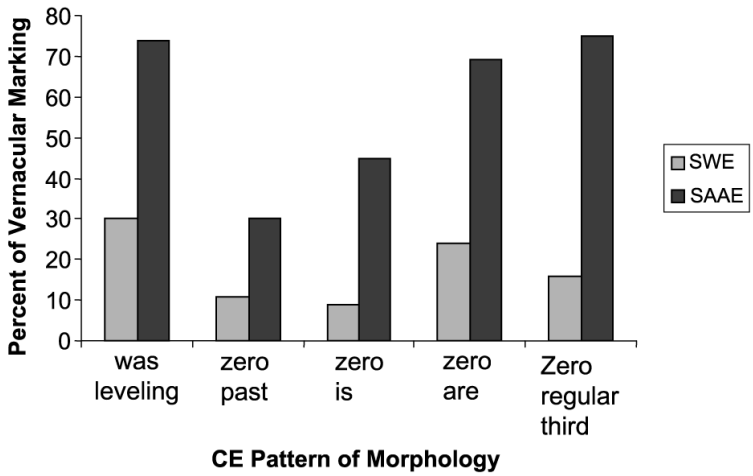

Figure 2.
Percentage of vernacular morphology by children's primary dialect.

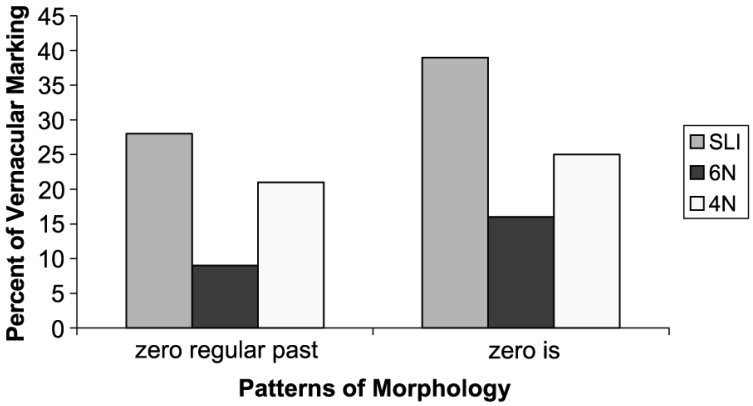

Figure 3.
Percentage of vernacular morphology by children's language ability status.

Table 1

Three vernacular patterns of phonology in Cajun/Creole English.[a]

Patterns	Rates of use
Nonaspirated stops /p, t, k/	Overall rate of use = 42%
pot → [pat]	Linear decrease with old speakers producing higher rates than middle-aged and young speakers; males also produce greater rates than females and French L1 speakers produce greater rates than English L1 speakers.
Word initial positions that preceded a vowel or /r, I, w, j/	Old males = 60%–70%; females = 50%–55% Middle French L1 males = 60%–70%; females = 20%–25%Middle English L1 males = 55%–65%; females = 0% Young males = 40%–50%; females = 0%–10%
Monophthongization f /ɑI/	Overall rate of use = 66%
tied [tɑ:d]	V-shaped change for voiced contexts and word final contexts.
	Old speakers = 55%–65% Middle-aged speakers = 35%–40% Young speakers = 45%–65%
Substitution of /t, d/ for /θ,ð/ in initial word position	Overall rate of use = 39% Linear increase of /d/ for men in open social networks; increased but minimal use for females in open social networks.
think → [tInk]	Old males = 40%; females = 0%
these → [diz]	Middle males = 64%; females = 6% Young males = 87%; females = 8%

[a]Rates were calculated from frequency counts and/or estimated from charts found in Dubois and Horvart (1998, 1999). The patterns and accompanying rates represent a small portion of the data analyzed by Dubois and Horvath.

Table 2

A comparative analysis of some vernacular patterns of Cajun/Creole English (CE), Southern African American English (SAAE), and Southern White English (SWE).

	CE	SAAE	SWE
Phonology			
Substitution of /t, d/ for / for /θ, ð/	X	X	
Nonaspirated /p, t, k/	X		
Monophthongization	X	X	X
Heavy vowel nasalization in word-final positions	X	X	X
Glide weakening on vowels	X	X	X
Trilled /r/	NS		
/h/ deletion in word-initial positions	NS		
Morphology			
Zero is ‘he taking…’	X	X	X
Zero are ‘you going…’	X	X	X
Zero regular third ‘so he say….’	X	X	X
Zero regular past ‘yesterday they walk…’	X	X	X
Was leveling ‘they was …’	X	X	X
Double pronouns ‘I me went to the store’ or ‘I went to the store me’	NS		
Prepositions ‘I’ve been married with my wife during twenty years’	NS		
Definite articles ‘I speak the French’	NS		
Other phonological and morphological patterns noted in quantitative studies of CE			
Liaison (carrying the final sound of a word to the beginning of the next): 35 cases in one of three adult CE speakers (Walton, 1994).			
Vowel lowering of /i/ to /I/ is reported to be 42% (Rubrecht, 1971). Lowering of /æ/ to /a/ is also described as occurring but not quantified (Cheramie, 1998).			
Postvocalic /r/ weakening or loss is described as occurring but not quantified (Rubrecht, 1971).			
Went + bare infinitive to indicate a complete action (e.g., I went go the show) is described but quantified as part of a set of patterns (Cheramie, 1998).			
Past auxiliary in place of present with progressive forms (e.g., My brother was working for Entergy since high school) is described, but quantified as a set of low frequency patterns (Cheramie, 1998).			
Zero regular plural is described as occurring but not quantified (Walton, 1994).			

Note. NS indicates that Dubois and Horvath were unable to find a sufficient number of tokens within their adult CE samples to analyze.

Table 3

Participant characteristics.

	Dialects with CE influence (n = 31)	Dialects without CE influence (n = 62)
SAAE	18 (58%)[a]	22 (35%)
SWE	13 (42%)	40 (65%)
SLI	11 (35%)	20 (32%)
PPVT-R TOLD	90.16 [17.32][b] 90.22 [14.32]	93.44 [17.31] 88.70 [22.10]
Number of utterances in samples	216.90 [66.95]	213.11 [60.56]
MLU	5.17 [0.91]	5.26 [1.09]

Note. SLI = specific language impairment; PPVT–R = Peabody Picture Vocabulary Test—Revised; TOLD = Test of Language Development; MLU = mean length of utterance.

[a]Represents the proportion of children in each group.

[b]Represents the standard deviations.

Table 4

Average number of phonology patterns within 1-min excerpts.

	Excerpts with a CE influence	Excerpts without a CE influence	All excerpts
Nonaspirated stops (n = 41)			
SAAE	1.06 (1.66)	.68 (1.13)	.85 (1.39)
SWE	.85 (1.21)[a]	.10 (.38)	.28 (.74)
All excerpts	.97(1.47)	.31 (.78)[b]	
/t, d/ for /θ, ð/ substitutions n = 91)			
SAAE	1.44 (1.72)	1.41 (1.99)	1.43 (1.85)
SWE	.92 (1.15)	.60 (2.10)	.68 (1.92)
All excerpts	1.23 (1.49)	.89 (2.10)	
Heavy vowel nasalization (n = 31)			
SAAE	.08 (.28)	.36 (.58)	.50 (.78)[c]
SWE	.67 (.97)	.25 (.77)	.21 (.69)
All excerpts	.42 (.80)	.29 (.71)	
Monophthongization (n = 50)			
SAAE	.15 (.38)	1.32 (1.36)	1.15 (1.55)[c]
SWE	.94 (1.79)	.05 (.22)	.08 (.27)
All excerpts	.61 (1.41)	.50 (1.0)	
Glide weakening on vowels (n = 110)			
SAAE	1.31 (1.38)	1.59 (2.67)	1.93 (2.40)[c]
SWE	2.33 (2.03)	.40 (1.08)	.62 (1.21)
All excerpts	1.90 (1.83)	.82 (1.88)[b]	
Vowel lowering (n =2)			
SAAE	—	—	—
SWE	—	—	—
All excerpts	—	—	

[a]Represents the standard deviations.

[b]Indicates a statistical difference between excerpts with and without a CE influence.

[c]Indicates a statistical difference between SAAE and SWE excerpts.

Table 5

Percentage of vernacular morphology within full samples.

	Samples with a CE influence	Samples without a CE influence	All samples
Was leveling (n = 208)			
SAAE	83 (24)[a]	74 (32)	77 (20)[b]
SWE	51 (44)	30 (47)	37 (46)
SLI	59 (34)	64 (41)	62 (38)
6N	61 (46)	31 (43)	42 (45)
4N	92 (14)	60 (50)	71 (43)
Zero regular past (*n* = 759)			
SAAE	33 (21)	30 (27)	31 (24)[b]
SWE	9 (23)	11 (22)	11 (22)
SLI	37 (28)	24 (26)	28 (27)[c]
6N	11(14)	8 (14)	9 (13)
4N	24 (25)	20 (30)	21 (28)
Zero *is (n* = 3,141)			
SAAE	55 (18)	45 (20)	49 (20)[b]
SWE	14 (17)	9 (12)	10 (14)
SLI	51 (26)	32 (25)	39 (27)[c]
6N	23 (23)	12(15)	16 (20)
4N	43 (25)	20 (23)	25 (25)
Zero are (*n* = 656)			
SAAE	76 (26)	69 (36)	72 (31)[b]
SWE	41 (36)	24 (24)	28 (28)
SLI	60 (36)	48 (41)	53 (39)
6N	57 (39)	35 (34)	44 (37)
4N	73 (27)	35 (31)	47(37)
Zero regular third (n = 1,110)			
SAAE	83 (19)	74 (19)	78 (19)[b]
SWE	19 (22)	16 (25)	17 (24)
SLI	72 (30)	47 (38)	56 (37)
6N	44 (40)	28 (34)	35 (37)
4N	55 (41)	35 (36)	39 (37)

Note. 6N = 6-year-olds with typical language ability; 4N = 4-year-olds with typical language ability.

[a] Indicates the standard deviations.

[b] Indicates a statistical difference between SAAE and SWE groups.

[c] Indicates a statistical difference between SLI and 6N groups.