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## ABSTRACT

The question of whether the Black English dialect affects the spelling performance of children who speak Black English is explored in this paper. Evidence is cited from existing research to show that Black English speakers make significantly more dialect-related errors than do non-Black English speakers. The various Black English features which may cause dialect-related spelling errors are discussed, predicted misspellings are noted, and new homophone sets created by Black English pronunciation are described. Finally, suggestions for empirical research and questions to be explored in relation to dialect and the Southwest Regional Laboratory (SWRL) rule-based spelling program are posed. Appendixes include an outline of Mexican-American dialects and spelling and an explanation of symbols used in the paper. (JM)

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BLACK ENGLISH AND RULE-BASED SPELLING OUTPUT

Donna Schwab

ABSTRACT

The hypothesis is put forth that dialect affects rule-based spelling output and the rationale for researching this hypothesis is discussed. A brief review is made of existing research supporting such an effect. Features of Black English which may lead to dialect-related spelling errors are outlined, and predicted misspellings are noted. Some of the new homophone sets created by Black English pronunciation are also pointed out. Finally, suggestions for empirical research to test the hypothesis are made and questions to be explored in relation to dialect and SWRL's rule-based spelling program are posed.

## BLACK ENGLISH AND RULE-BASED SPELLING OUTPUT

### I. Rationale and Hypothesis

SWRL's Mod I Spelling Program (Butler, 1970) is based on the spelling-to-sound correspondences of standard American (or Anglo) English (to be referred to as SAE).<sup>1</sup> The question arises as to whether or not such a program is efficient for a child who speaks another dialect of English, specifically, the nonstandard Negro English or Black English (to be referred to as BE) described by Labov, Cohen, Robins, and Lewis, 1968; Legum, Pfaff, Tinnie, Nicholas, and Riley, 1970; Shuy, Wolfram, and Riley, 1967 and other sociolinguists. In order to answer that question, it must be determined whether dialect significantly affects rule-based spelling output.

It has been suggested by several educators and linguists (e.g., Fasold, 1969; Goodman, 1967; Hagerman & Saario, 1969; and Labov, 1967) that this dialect is a source of reading difficulties which many lower-class black children (who are, in general, speakers of the BE dialect) experience (Hess, 1950; Coleman, 1966). Kenneth Goodman (1967) has pointed out:

Phonics programs which attempt to teach a relationship between letters and sound cannot be universally applicable to all dialects...the divergent speaker cannot hear the sounds of standard speech in his nonstandard dialect because he doesn't have them or because they occur in different places...Recent attempts at producing reading materials which have regular one-to-one correspondences between letters and phonemes will not solve this problem and may actually compound it since there will be a tendency for the teacher to assume that the matched correspondence of sound and letter is to be uniform.

It is extremely difficult to prove, however, that any relationship between dialect and poor reading performance is causal. Even if lower-class white children are used for comparison, there are many variables (e.g., peer group pressure, divergent values and motivations, physical and mental alertness, parental interest in school achievement, emotional strain, school and teacher quality) which contribute to performance on tests of reading ability and these variables are difficult to control for. It is difficult to determine and measure specific reading output that is a direct result of the linguistic factor.

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<sup>1</sup>Here referring to the midwestern dialect acceptable for radio and TV. Other regional dialects such as those of the southern U.S., Texas, and the eastern seaboard states are not considered in this paper.

It is somewhat easier to determine the effects of dialect upon spelling performance. A specific linguistic output, the written word, is the end product of the spelling process and is clearly available for analysis. If the question were one of the general spelling ability of lower-class black, BE-speaking children in relation to that of lower-class white, non BE-speaking children, the variables mentioned above would have to be taken into consideration. However, through an examination of the nature rather than the number of the spelling errors made by the dialect speaker who has learned to move from spoken sounds to written letters in an SAE rule-based program, it should be possible to determine to what extent, if any, dialect pronunciation interferes with correct spelling output. It is suspected that a dialect speaking group will make significantly more errors that reflect the phonological "rules"<sup>2</sup> of BE than a non BE-speaking group. The determination of the pronunciation "rules" of BE which are divergent from SAE is a necessary preliminary step to empirical research to confirm or disprove the hypothesis that the BE dialect affects the spelling performance of those who speak it. The major portion of this paper will be devoted to a discussion of those rules.

## 11. Previous Studies

Evidence that dialect differences can intrude upon teacher-student communication and cause spelling confusion is largely anecdotal (e.g., Goodman, 1967, noted, "One child asked his teacher to spell [ræt]<sup>3</sup> 'R-a-t,' she replied. 'No, M'am,' he insisted, 'I don't mean rat mouse, I mean right now'.').

Empirical evidence has only recently appeared. Graham and Rudorf (1967) in a study of 6th grade children in three dialect areas (Ohio, Massachusetts, and Georgia) found that, while the evidence is not overwhelming, significant differences in the patterning of spelling errors do exist among the dialects and that they are "most easily explained as due to the influence of dialect upon spelling." Boiarsky (1969) gave spelling tests to 10th-12th graders in a rural high school in West Virginia in 1964 and looked for spelling errors related to the Appalachian dialect of that area. She compared their performance with that of middle-class students in Philadelphia and concluded that "Appalachian dialect as compared with standard dialect is associated with spelling performance." The dialect speakers had a greater percentage

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<sup>2</sup>"Rules" is placed in quotations as a reminder that all operate optionally and are subject to the influence of many incompletely defined linguistic and sociolinguistic environments.

<sup>3</sup>See Appendix 11 for explanation of symbols used in this paper.

of spelling errors reflecting pronunciation deviations.

There is some evidence that dialect-related spelling errors<sup>4</sup> persist heavily in the writing of 9th-11th grade black students in Alabama. Briggs (1968) has listed a total of 312 spelling errors in essays by 30 students in that group. Of those errors, 143 or 46% appear to be dialect-related. Whether the same percentage of dialect-related errors occurs in the spelling of 6-9 year old BE-speaking children remains to be explored.

### III. Features of BE Which May Lead to Dialect-Related Spelling Errors

In sound-to-spelling rule-based spelling programs children are taught that certain sounds regularly have certain spellings (e.g., [b] is usually written as b and [æ] is usually written as a). If the BE-speaking child uses such rules as presented in an SAE-based spelling program, it is suspected that he will make spelling errors which reflect the features of his own dialect pronunciation. Those features of BE<sup>5</sup> which differ significantly from SAE and are likely to be sources of spelling errors are described below. Probable spelling errors and confusing homonyms are also discussed.

#### A. The Reduction or Loss of Single Consonants at the Ends of Words

In SAE, many words are ended with a constriction of the air stream. Some sounds (i.e., [d], [t], [k], [g], [p], and [b]) close it off completely and some only partially (i.e., [s], [ʃ], [z], [ʒ], [ç], [f], [v], [r], [l], [m], [ŋ], and [n]). In BE, there is often loss or reduction of those consonants which completely constrict the air passage (stops). If the BE-speaking child pronounces these word final consonants at all, it will often simply be with a closure of his glottis (a glottal stop represented by [ʔ]). The consonant stop may be retained but the voicing (vocal cord vibration) may be dropped from the [d] or [b] (and possibly [g] although this needs further investigation) so that it

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<sup>4</sup>A dialect-related error is one which conforms to what is known of probable pronunciation of a word in BE or one which has a surface realization that could but does not correspond to the underlying form (e.g., start spelled stard).

<sup>5</sup>It should be clarified that the features of BE described herein do not occur without variation at all times for a single speaker of the dialect. For example, Labov et al. (1968) have shown that in formal situations dialect speakers may choose to use more features of SAE.

sounds like [t] or [p] (and possibly [k]) respectively (Pfaff & Tinnie, 1970). These "rules" would allow for the following pronunciations of the following words.

TABLE I

<u>Written Form</u>	<u>bed</u>	<u>cab</u>	<u>bag</u>
<u>Standard Pronunciation</u>	[bɛd]	[kæb]	[bæg]
<u>Devoiced Final Consonant</u>	[bɛd] probably perceived as [bɛt]	[kæb] probably perceived as [kæp]	[bæg] probably perceived as [bæk]
<u>Final Consonant → Glottal Stop</u>	[bɛʔ]	[kæʔ]	[bæʔ]
<u>Fully Deleted Final Consonant</u>	[bɛ]	[kæ]	[bæ]

It is understandable that a child who speaks BE might spell bed as bet (or be), cab as cap (or ca), and bag as bak (or ba) if he has learned to spell strictly by an SAE sound-to-letter rule-based system. Briggs (1968) found several examples of this type of error (e.g., hard spelled hart). Besides the confusion between voiced and voiceless stops made in the same area of the mouth (e.g., both [p] and [b] are lip closures) there may be a tendency for the BE-speaking child to be confused about which letter to write when he hears a glottal stop. He may even write bat for bag if he pronounces them both [bæʔ]. Many new homonyms such as bed--bet, bad--bat, had--hat, and tab--tap could be created.

The same loss or reduction of a final consonant often occurs when that consonant is [s] or [z]. Bass (noun), for example, might be pronounced [bæ] and spelled ba. Buzz might lose voicing at the end and become homophonous with bus.

Final r's may not be pronounced at all by the BE-speaking child especially if the following word begins with another consonant (Labov et al., 1968). Before a consonant and, less often, before a vowel it reduces to a central glide on the preceding vowel (represented by [V<sup>ə</sup>] phonetically). This may not be perceived as [r] by the BE speller. Briggs' work with Alabama high school students shows many misspellings such as mothe for mother and othe for other reflecting this phonological "rule" of BE. Examples of new homophones that the BE-speaking child might have to contend with are bee--beer, moor--moor, see--sear, tea--tear (noun), and owe--or.

Although [ɪ] may reduce to a back unrounded glide on the preceding vowel, it rarely disappears entirely except after the back rounded vowels [u] and [o] (Labov *et al.*, 1968). It is not expected, therefore, that BE-speaking children will often leave off l's at the ends of words when they are spelling.

When the air stream at the end of a word is released through the nose, the nasals [n], [m], and [ŋ] result. The BE-speaking child often deletes these consonants but retains the natural nasalization of the preceding vowel (represented by [Ṽ] phonetically). Thus, all three of the following: sum, sun, and sung could be pronounced [sũ] and there is a possibility of confusion as to whether to represent the sound [ũ] with un, um, or ung. Spelling errors could be expected. It is a rather consistent "rule" of BE that a final ing is pronounced [ɪŋ] (Labov *et al.*, 1968) and a word like picking is likely to be spelled pickin if the child has learned his SAE phonics lessons.

The final [θ] (the voiceless sound of th) has been noted by Pfaff and Tinnie (1970) and Labov *et al.* (1968) to be replaced by [f] in BE. A word such as teeth may be pronounced [tif] by a BE-speaking black child and, if he has learned to spell strictly by phonics, we could expect him to spell the word as teef. Similarly, the voiced equivalent of [θ], the [ð] sound of th may be pronounced [v] in BE (Labov *et al.*, 1968). We might expect to see a word like breathe spelled breave.

## B. Reduction or Loss of Word Final Consonant Clusters

This is a category of "rules" which will probably cause many spelling problems for the speaker of BE. Reduction of the second member of a two-consonant cluster occurs very frequently (especially before another consonant) whenever both members of the cluster are voiced (e.g., [dz], [bd], [gd]) or both members are unvoiced (e.g., [st], [ks], [pt]). For example, a word such as most will often reduce to [mos] and, if the "rule" discussed in Section III A applies,<sup>6</sup> the BE-speaking child may say [mo]. It is understandable that he could spell the word as mos or mo (more likely the former, however). Homonyms such as guess--guest, class--clasp, and bass (noun)--bask<sup>7</sup> will result from this rule and will likely cause spelling problems for him.<sup>8</sup>

<sup>6</sup>Whether one "rule" applies before the other or whether, in fact, there is more than one "rule" is not clear.

<sup>7</sup>The word ask, however, appears to be an isolated item in which metathesis (reversal of the order of sounds) occurs. Thus the spelling aks could occur.

<sup>8</sup>Legum *et al.* (1970) note one speaker's confusion about the pronunciation of box. Both [bas] and [bask] occurred beside the correct form. Whether this reduction or metathesis of the final [ks] would be reflected in spelling, whether it would hold true for an entire set of words (such as fix, fox, wax, etc.) and whether this is a dialect pronunciation or merely a child language tendency are questions yet to be answered.



Something a bit more complicated than the loss of the second consonant in a cluster occurs if the first member is a nasal, [l] or [r]. Sand may be pronounced [sænd], [sæn], or [sæ̃].<sup>9</sup> It is conceivable that a BE-speaking child would spell it to reflect any of these pronunciations. Confusion may occur as to whether to add m, n, or ng to represent the nasal sound. Homophone sets such as am--Ann--an--and are likely to be created.

In a word such as sold, when the first member of the final cluster is [l], the word may be pronounced [sold], [soɫd], or, presumably, [soɪ] (the symbol ɪ representing an l-like back unrounded glide which, as in final position, seems rarely to disappear altogether). The misspellings sol and so might be expected from a BE-speaking child and, if [l] is lost, sode could occur.

In many cases, a final cluster, the first member of which is [r], will delete completely in a BE-speaking child's pronunciation. The word herd might be pronounced [hærd], [hæd], or [hæ] (the first member of the cluster tends to reduce first if it is [l] or [r]). Expected phonetic misspellings might therefore be hud, hu, and possibly her. Hut or hert might be found if the child hears a glottal stop at the end of the word and doesn't know whether to restore [d] or [t]. The entire series, her--hurt--herd--heard could therefore become homophones for some BE speakers.

There are also three member final clusters in English but the manner in which these clusters reduce in BE is very unclear. World for example, with the final consonant cluster [rɪd] could reduce to [rɪd̥], [rɪ], [ɪ], [r], [ɪd̥], [rd], [d], or [∅]. Just which spellings might occur is rather difficult to predict until an inventory of pronunciation possibilities is clarified.

### C. Initial and Medial Consonants

Words which begin with the consonant sound [ð] (the voiced realization of th) are often pronounced as [d] by BE speakers. That and then, for example, may be pronounced [dæt] and [dɛn] (or [dæʔ] and [dɪ]) by the BE-speaking child (Labov et al., 1968) and spellings replacing th with d initially should not be unexpected.

In a word such as threw there is some possibility that the initial consonant, [θ], will be replaced by [t] and that the word will be pronounced [tru] and spelled trew. More likely, however, (Labov et al., 1968) the [r] will reduce in this medial position and the pronunciation [θu] will result. The misspelling thew seems more probable.

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<sup>9</sup>Again note that, since standard pronunciation of a vowel before a nasal is nasalized, this actually amounts only to the loss of a final consonant leaving a conspicuous nasalized vowel.



## D. Vowels

Although much research needs to be done on the vowel system of BE, it has often been noted that the vowel sounds [ɪ], as in pin and [ɛ], as in pen sound alike before nasals for the dialect speaker (Labov et al., 1968). Both are probably pronounced [ɪ] and the spelling tendency would be for a BE-speaking child to spell both members of the following pairs with the vowel i: tint--tent, tin--ten, bin--Ben. Among other examples, Briggs (1968) noted the spelling fince for fence in her work in Alabama. It should be stated, however, that SAE speakers made the same kinds of errors. The vowel contrast [ɪ] - [ɛ] before nasals is commonly lost for Southern Californian SAE speakers. Misspellings due to this pronunciation "rule" might occur in the writings of white as well as of black children where such SAE pronunciations occur. Whether the [ɪ] - [ɛ] distinction is lost in other environments, before such sounds as [t] or [s], has not been clearly determined but such words as wet may be pronounced [wɪt] and spelled accordingly by BE speakers.

Another frequently cited vowel feature of BE pronunciation is the merger of the vowels [e] and [i] before [r] (Labov et al., 1968). A lower-class black child may well pronounce all of the following words with the vowel [i] and spell them all with an ee or ea: deer--dear--dare, here--hear--hare, steer--stair--stare, and cheer--chair. If complete loss of the final [r] is present, such word groups as be--bee--beer--bare--bear will become homophonous.

The same type of merger occurs before [r] with the vowels [u] and [o] (Labov et al., 1968). However, there are few words other than sure--shore and poor--pour which might appear in primary spellers and that are affected by this rule.

The BE-speaking child may pronounce [ɪ] as [i] before [l], at least, so that such word pairs as fill--feel become homophonous. Spelling errors could be predicted.

Although most vowels affected by BE pronunciation are the short vowels (usually the first to be taught in rule-based spelling programs), a conspicuous example of a long vowel pronounced differently by many BE speakers is [ay] as in fight. It has been noted to occur as [æ] or [a:] (Pfaff & Tinnie, 1970). If this tendency exists, we could expect such phonetic misspellings as rat and rot to occur for the words right or write. Labov and Cohen (1967) note, however, that this merger is not as common before unvoiced as before voiced consonants. Thus, time--Tom would more probably become homophonous.<sup>10</sup>

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<sup>10</sup> It may be that a speaker who pronounces time as [ta:m] will shift the vowel of Tom forward to keep the words distinct. The length of the vowel may also help to keep these words distinguished for him. This needs further investigation.

[ɪ] before [ŋ] (as in think) may be pronounced as [æ] or [ɛ] in BE and spelled as a or e by BE speakers but this is largely conjecture based on personal observation and needs to be verified empirically. The same applies to medial [oi] which appears to be pronounced [aw] in many cases. If so, and if pronunciation is found to affect spelling, a spelling such as nause could be expected for the word noise.

#### E. BE Rules of Phonology Which Delete Grammatical Markers

As has been shown in the preceding pages, many phonological "rules" of BE cause information at the ends of words (as pronounced in SAE) to be reduced or deleted. Thus, it is suspected that many spelling errors will occur in that position.<sup>11</sup> Unfortunately, many grammatical markers (e.g., plural, possessive, and past tense markers) are attached to the ends of words in English. Final consonant cluster simplification in BE pronunciation neutralizes several of these grammatical markers. Whether or not the phonological differences also indicate underlying structural or grammatical differences is still being investigated by Labov and others. This paper will assume that the differences are phonological.

##### 1. Final [d] or [t]

In SAE, past tenses are formed in writing by the addition of d or ed. There are three pronunciations for this grammatical marker, however, and the determination of which of the three will be used is made automatically by the sound system of the language. Verbs ending with any consonant sound other than [d] or [t]<sup>12</sup> form consonant clusters as the past tense marker is added. Voiced consonants form a cluster the second member of which is [d] and unvoiced consonants form a cluster the second member of which is [t]. In BE, of course, those clusters tend to reduce as described in Section III B of this paper.<sup>13</sup> The

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<sup>11</sup>In Briggs' studies (1968), 92 out of 144 dialect-related spelling errors (about 64%) were located at the ends of words. The percentage would be much greater if she had classed her "grammar errors" (e.g., helps written as help) as spelling errors rather than verb problems.

<sup>12</sup>Past tense verbs ending in [d] and [t] are formed with an intervening vowel for ease of pronunciation. Thus patted is pronounced [pætɪd].

<sup>13</sup>Again, the second member of the cluster which is, in this case, a grammatical marker tends to be simplified or deleted first. Other rules may operate in isolated examples, however, to retain the grammatical marker, as in the word asked. The [k] would probably become more fronted due to the influence of the following [t] sound. The cluster [kt] may well reduce to [t] leaving the past tense of the verb to be pronounced as [æst] and to be spelled accordingly. Briggs (1968) notes asked spelled as ast which probably reflects the student's pronunciation.

final cluster [zd] in the word sneezed or the final cluster [ft] of the word puffed, for example, may reduce to [z] and [f] respectively. A BE-speaking child may well neither produce nor hear a difference between the present and past forms of the verbs. It is expected that his spelling will reflect the cluster simplification in many cases. Verbs ending in vowels will add the [d] sound in SAE as a past tense marker but the BE speaker may drop this as he may any other final stop consonant. Thus, try and tried become homophones.

Briggs' study (1968) shows many such phonetic misspellings which appear to be grammatical errors (e.g., One night my mother talk to me.) Caroline Duncan's "Dominguez Hills Dialect Study" (1970) shows several examples of the same phenomenon reflected in spelling (e.g., In 1967 it establish it's...). The same type of cluster reduction or stop deletion accounts for other "grammatical errors." Duncan finds written forms such as I had talk to... in which the reduction of [kt] to [k] neutralizes the participle marker. It is also possible that a contracted modal would be lost due to pronunciation in such forms as I'd, he'd, we'd, etc.

## 2. Final [s] or [z]

[s] (added after unvoiced sounds) and [z] (added after voiced sounds)<sup>14</sup> are grammatical markers of several categories in English. They mark plurals (e.g., nuts and rugs), 3rd person verb inflections (e.g., peeks, robs), possessives (e.g., Nat's, Bud's), and contractions (e.g., it's).<sup>15</sup> Because of final cluster reduction, the BE-speaking child may not pronounce these final sounds; he may not write them either. Legum et al. (1970) and Labov et al. (1968) note that the [s] or [z] is more frequently lost in verb inflections<sup>16</sup> and contractions so that, of all the markers, these two would probably be most often omitted in writing.

Labov et al. (1968) note the tendency for lower-class black children to pronounce the plural of desk, for example, as [dɛsɜz]. This reflects the normal pluralization of a word ending with the [s] sound rather than

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<sup>14</sup>After [s], [ʃ], [z], [ʒ], and [ʝ] the sounds [s] and [z] are added with an intervening vowel for ease of pronunciation. The plural marker is written es as in churches or s as in judges.

<sup>15</sup>[ts] may become [s] through assimilation (Labov et al., 1968) especially with contractions. Empirical evidence is needed to see how frequently a word such as it's would be spelled is. It seems possible.

<sup>16</sup>There is some reason to believe that the third person singular [s] is not deleted by a phonological rule but is simply not there grammatically.

the [sk] cluster which their dialect simplifies in the singular. The spelling deses or deskes would not be unexpected.

### 3. Final [r]

When the final [r] is lost in BE pronunciation, the distinction between some subject and possessive pronouns (they--their, you--your) is lost as well (Labov et al., 1968). The distinction between some subject pronouns and the contraction of those pronouns with the verb to be (they--they're, we--we're, you--you're) may also be lost. Both of the pronunciation differences, if reflected in writing, may lead to spelling or "grammatical" errors.

### 4. Final [l]

The loss of final [l] in BE will obliterate the contracted future marker of standard English (Labov et al., 1968). It is possible that a BE-speaking child will not hear the difference between I go and I'll go. If this is reflected in his writing, he could make what might be seen as a verb tense error.

These are, then, some of the many phonological "rules" of the BE dialect which may cause the lower-class BE-speaking child additional confusions in spelling and writing.

## IV. Implications for Research and Design of Instruction

Each of the above mentioned points of interference is still hypothetical, of course. In order to test each hypothesis, the BE "rule" responsible for the suspected interference could be the source of a test item on a multiple-choice spelling test (see Schwab, 1970, for the rationale behind multiple-choice testing for diagnostic purposes). Suspected dialect-related misspellings could be offered as distractors on such a test. If the test were administered to a group of BE-speaking children and to a group of non BE-speaking children, all of whom had learned to spell in an SAE rule-based program, analysis of the data should reveal to what extent BE-speaking children are attracted to dialect-related errors. It should also reveal just which "rules" of BE and which exemplars of those rules might cause the most confusion.

## V. Further Implications

If empirical research reveals that BE-speakers make significantly more dialect-related errors than non BE-speakers, answers to the following

questions should be explored in relation to SWRL's Mod II Spelling Program.

1. Is the interference of dialect in rule-based spelling great enough to justify modification of SWRL's Mod II Spelling Program?
2. If so, will modifications be in the form of (1) careful sequencing of rules and choice and emphasis of exemplars, (2) teacher notes, (3) supplementary work sheets or, (4) a separate spelling program?
3. Will modifications take into consideration the BE-speaking child's (1) unique homonym sets, (2) unique set of "silent letters," (3) unique sound-to-spelling correspondence rules (4) unique "sight words" or irregularly spelled words or, (5) a combination or all of the above?
4. Specifically, which modifications will result in the most efficient spelling program for BE speakers?
5. How will BE pronunciation "rules" which affect grammatical markers be handled, if at all, in the spelling program?
6. Are there other dialects, such as Local Hispanicized English (as described by Russell & Heringer, 1970) which should also be studied in relation to their effects on rule-based spelling output?<sup>17</sup>

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<sup>17</sup>See Appendix I for a discussion of the possibilities of dialect interference in spelling in relation to Mexican-American children.

## APPENDIX I

### MEXICAN-AMERICAN DIALECTS AND SPELLING

A study comparable to the one suggested in this paper might be useful to determine the effects of the speech of Mexican-American children upon their spelling output. There appear to be at least two varieties (idealized categories, of course) of English found among these children. One is English as a Second Language (to be referred to as ESL) spoken by newly immigrated or first generation Mexican-Americans who learned Spanish as a first language and English as a second. It is probably full of interference (pronunciation, sentence structure, and vocabulary) from their mother tongue. The second is what Russell and Heringer (1970) call "Local Hispanicized English" (to be referred to as LHE). This is a variety of English spoken primarily by the second or later generation of Mexican-Americans. It is, for them, a native language and has features that appear to have grown out of the interplay of Spanish and English but which belong exclusively to the LHE dialect<sup>18</sup> (e.g., speak pronounced [spɪk]. The [ɪ] sound does not occur in Spanish).

There are several features of these two dialects which appear to coincide with features of Black English. Comparable spelling errors might be expected if it can be shown that dialect does, in fact, influence the spelling output of those who speak it. Examples of divergent pronunciation "rules" which may affect the spelling of Mexican-American children as well as that of BE-speaking children are discussed below. All examples for LHE are taken from data collected by Russell and Heringer (1970) in East Los Angeles. Statements made about ESL speakers are theoretical and based on a contrastive analysis of English and Spanish.

1. The devoicing or deletion of final consonant stops occurs in the speech of LHE speakers as well as in that of BE speakers. For example, big may be pronounced [bɪk] and bed may be pronounced [bɛ?]. Not may be pronounced [nɑ]. Spellings might be expected to reflect these pronunciations.
2. The devoicing or deletion of other final consonants occurs in LHE as well as in BE. Was may be pronounced [wəs] and have may be pronounced [hæf]. This will probably also be true for the ESL-speaking child. Spanish words do not end with [z]. The allophone (phonetic alternate) [s] occurs in that position. This linguistic

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<sup>18</sup>It is a theoretical question whether the speech of Mexican-American children comprises a true dialect or not but, for the purposes of this Appendix, it will be considered to be one.

fact will probably influence the ESL speaker's pronunciation and possibly his spelling of English if spelling is learned in an SAE rule-based program.

3. Final nasals appear to drop in LHE as they do in BE (e.g., slang pronounced [slæ]). The final -ing often becomes [ɪn] or [ɪn] in LHE as well as in BE (e.g., coming pronounced [kəmin]). Spellings might be expected to be influenced.
4. Final consonant clusters appear to simplify in LHE much as they do in BE (e.g., went may be pronounced [wɛn]). Spellings may well reflect the loss. As final clusters do not occur in Spanish and are probably reduced by the native Spanish speaker pronouncing English, the same spelling problems could be expected for ESL-speaking children. While [l] and [r] may reduce before the final consonant if it is the first member of a two member consonant cluster in BE, this would probably not occur in ESL. [l] and [r] are allowable final consonants in Spanish whereas stops, in nearly all cases, are not. Therefore, a word such as heard would probably reduce to [hər] in ESL and more likely to [həd] in BE.
5. One of the most common vowel problems for ESL speakers is the [i] - [ɪ] distinction. Since no [ɪ] exists in Spanish, it is likely that all occurrences of it in English words will be pronounced [i] and spelled ee or ea if the child has learned to spell in an SAE rule-based program. [i] and [ɪ] both occur in the pronunciation of LHE speakers but not necessarily in the same words in which they occur in SAE (e.g., speak may be pronounced [spɪk] and still may be pronounced [stɪl]). This could certainly be a great source of spelling confusion for the LHE speaker.
6. [aɪ] may be pronounced [a:] in LHE as it often is in BE. (e.g., wife pronounced [wa:f]). Similar spelling problems could be expected.
7. The grammatical markers of SAE are often obliterated by final consonant reduction in LHE just as they are in BE. The same double problem of spelling errors and "grammatical" errors arises (e.g., dropped may be pronounced [drap] or [draʔ]. Things may be pronounced [θɪn] and you're may be pronounced [yu]. ESL speakers may delete grammatical markers in the same way but, unlike BE speakers, if a final cluster marking a plural consists of a stop and [s], the ESL speaker will probably retain the [s] and drop the stop. [s] is an allowable final consonant in Spanish and the stop is not. Thus, nuts would be pronounced [nəs], retaining the grammatical marker. It would clearly cause a spelling rather than a "grammar" problem.

Work continues to define and describe the dialects of Mexican-American children. As the data becomes clear, it may well be useful to do empirical research to determine how dialect affects their spelling



output. If it could be shown that not only BE-speaking children but also LHE or ESL speaking students are confused by certain SAE-based sound-to-spelling correspondence rules, the argument would be stronger for some modification in the teaching of those rules in materials (such as SWRL's Mod II Spelling Program) to be used in ghetto or barrio schools.

# APPENDIX II

## EXPLANATION OF SYMBOLS

- at the word or the spelling of the word at
- [æt] the pronunciation of the word at
- Ø zero

### Vowels Referred to

- [ə] schwa--the midcentral vowel of the word but (stressed) or sofa (unstressed)
- [ɪ] the vowel of bit
- [i] the vowel of beet
- [æ] the vowel of bat
- [ɛ] the vowel of bet
- [e] the vowel of bait
- [a] the vowel of cot
- [o] the vowel of boat
- [u] the vowel of boot
- [ay] the vowel of bite
- [ɜ] the vowel of just which occurs in rapid speech
- [V:] any vowel longer than normal in duration
- [V<sup>ə</sup>] any vowel with a central glide resulting from reduction of a following [r]
- [Ṽ] any vowel with nasalization
- [l̥] an l-like back unrounded glide resulting from the reduction of [l]

### Consonants Referred to

- [ʔ] glottal stop or closure of the glottis
- [b] the initial consonant of bat
- [p] the initial consonant of pat
- [t] the initial consonant of tap
- [n] the initial consonant of nap
- [l] the initial consonant of lap
- [r] the initial consonant of rap
- [k] the initial consonant of cap
- [g] the initial consonant of gap
- [s] the initial consonant of sap
- [ʃ] the initial consonant of ship
- [ç] the initial consonant of chip
- [z] the initial consonant of zip
- [j] the initial consonant of jet
- [f] the initial consonant of fat
- [v] the initial consonant of vat
- [m] the initial consonant of mat
- [ŋ] the final consonant of sing
- [θ] the initial consonant of thing
- [ð] the initial consonant of this
- [h] the initial consonant of hat
- [d] the initial consonant of dot
- [ɸ],[β],[ɣ] devoiced consonants probably perceived by linguistically untrained listeners as [t], [p], and [k]

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