The purposes of this study are stated to be twofold:
(1) to determine the relative effects of the native language and
black dialect influences on the oral English performance of Puerto
Rican pupils in mainland schools and (2) to assess the relationship
of these sources of linguistic interference with aural ability in
English, reading ability in English, and time in mainland schools.

The oral repetition technique is used with 80 Puerto Rican children
enrolled in grades 2-4 in a predominantly Puerto Rican bilingual
school. Findings indicate a significant positive correlation between
degrees of black dialect interference and time in mainland schools.
Significant inverse correlations are indicated between degree of
black dialect interference and reading ability in English and between
degree of Spanish interference and aural ability in English. Time in
mainland schools is said to be significantly related to aural ability
in English but not to reading ability. A relationship approaching
significance between the degree of native language interference and
reading ability in English is considered to indicate a need to
explore more systematic approaches to the teaching of English to
Spanish speaking students. (Author/AM)
Native Language and Black Dialect Interference in the Oral Reproduction of Standard English by Puerto Rican Pupils

Ann Campbell
University of Florida

Roland Axelson
Ann Street Bilingual Community School

Lorene Lugo
Perry Zirkel
University of Hartford
Several sociolinguists (Fishman, 1966, 1972; Gumperz, 1964; Hymes, 1967; Labov et al., 1968; Malkiel, 1964) have indicated the importance of social interaction on linguistic change. It has been historically demonstrated that when groups of people with different linguistic systems come into contact, forms of interference, such as borrowing and pigeonization, often result (Cooper, 1971; Hunt, 1967; Lawton, 1971; Weinrich, 1968).

It has been recognized that Puerto Ricans on the mainland often encounter a lack of social interaction with the standard English community (Dworkis, 1957; Fitzpatrick, 1971). Rather, they tend to live in predominantly Puerto Rican and/or Black communities with these housing patterns often being reflected in segregated schools (Coleman et al., 1965).

The influence of the native language of Puerto Rican pupils upon their performance in English has also been investigated (Axelson and Campbell, 1973; del Rosario, 1971; Varo, 1971). Similarly, the interference of Black dialect upon the academic achievement of Black pupils has been the subject of considerable study (Baratz and Shuy, 1969; Bradley, 1971; Dillard, 1971; Fasold and Shuy, 1970; Johnson, 1971; Stewart, 1965).

However, the relative influences of both the native language and Black dialect upon the oral English performance of Puerto Rican pupils has not been appropriately recognized and investigated. In their landmark study of Black dialect, Labov et al. (1968) grouped their relatively few Puerto Rican subjects as undifferentiated from their Black subjects. More recently, Reinstein and Hoffman (1972) studied the extent of Black dialect interference in the aural-oral English performance of Puerto Rican pupils in insulated and interacting school groupings. However, both studies neglected the relative effect of the native language background of their pupils. Moreover, neither study assessed the effects on the scholastic performance of these pupils.
The purposes of the present study were 1) to determine the relative effects of the native language and Black dialect influences on the oral English performance of Puerto Rican pupils, and 2) to assess the relationship of these sources of linguistic interference with aural ability in English, reading ability in English, and time in mainland schools.

Method

Subjects

The sample consisted of 80 Puerto Rican pupils, in grades two through four in a predominantly (95 percent) Puerto Rican bilingual school in a central Connecticut city. The subjects were approximately equally distributed with respect to sex, language dominance, and grade level.

Instrumentation

The oral repetition technique was utilized to determine the relative extent of Spanish and Black dialect interference. Oral repetition has been found to be an effective technique for measuring Black dialect interference (Baratz, 1968; Bradley, 1970, 1971; Garvey and McFarlane, 1970; Lawhon, 1973) and Spanish interference (Mazon, 1973; Natalicio and Williams, 1971; Ott, 1967; Taylor, 1969), respectively.

The oral repetition instrument consisted of ten model sentences. These ten sentences were constructed so as to each contain one identifiable point of Black dialect interference and one identifiable point of Spanish dialect interference. Special care was taken to avoid overlapping points of interference (e.g., absence of third person singular -s of standard English as attributable to tendency to aspirate final consonant in Puerto Rican Spanish as well as to structure of Black dialect). Due to this factor and the results of pilot testing, the points of interference were based on phonological
features, not morphological features. The target points of respective phonological interference were selected according to concurrence among previous studies of Black dialect (Baratz, 1968; Baratz and Povitch, 1968; Fasold and Wolfram, 1972; Hoffman, 1970; Johnson and Simons, 1973; Labov et al., 1968; Legum, 1971; Pfaff, 1971; Slobin, 1971; Sullivan, 1971) and Spanish/English contrasts (Allen, 1965; del Rosario, 1971; Davis, 1972; Natalicio and Williams, 1971; Saville and Troike, 1971; Stockwell and Bowen, 1970; Troike, 1972), respectively. The ten model sentences were recorded on tape by a female speaker of standard English. Based on the audio-visual feature of the Gloria and David Oral Language Test (Bordie, 1970), pictorial stimuli were used to direct attention to and reinforce retention of the model sentences.

The Inter-American Test of Reading, Level II, Form LE, was used to assess reading ability in English. The oral vocabulary subtest of the Inter-American Test of General Ability, Level II, Form LE, was used to assess aural ability in English. Both of these tests have been widely used with Spanish-speaking students (National Consortia, 1971).

Time in mainland schools was determined by individual interviews with the students along with an examination of their cumulative record cards.

Procedure

The oral repetition test was administered individually by three bilingual examiners. Instructions were given in English and repeated in Spanish. The students were then given two introductory practice sentences. Upon demonstrating that they understood the task of repetition, they were given the ten model sentences on tape with each sentence accompanied by a picture. The sentences were played once. If the subject was unable to repeat a
particular sentence, he was told to go on. All responses were recorded on tape.

During a pilot test of the instrument the three examiners worked together to maximize uniformity of administration and interrater reliability in scoring. On a subsequent sample of ten subjects not used in this study, the three examiners achieved a high interrater reliability among themselves and with a trained ESL linguist.

A ratio scoring system was used to correct for the limited no-response factor. If a subject failed for some reason (e.g., momentary distraction, insufficient short-term memory) to repeat the segment of a model sentence which contained the target point of interference, it left undetermined whether the subject would have fallen into the "trap" had he completed the repetition task. Consequently, the students' scores were determined for Spanish and Black dialect, respectively, by dividing the number of traps activated by the number of traps attempted. For example, if a subject repeated the sentence segments containing nine of the ten points of Black dialect interference and he transformed six of them into Black dialect, his score would be .67.

Results

The mean score for native language interference was .29, while that for Black dialect interference was .47. The difference between these two means, was significant beyond the .01 level ($t = 3.53$).

The relationship between the respective interference scores and the variables of time in mainstream schools, aural ability in English, and reading ability in English are reported in Table I.
As shown in Table I, there was a statistically significant positive correlation between degree of Black dialect interference and time in mainland schools and a statistically significant inverse correlation between degree of Black dialect interference and reading ability in English. Further, there was a statistically significant inverse correlation between degree of Spanish interference and aural ability in English. There was an inverse relationship which approached but did not attain statistical significance between degree of Spanish interference and 1) reading ability in English and 2) time in mainland schools. Finally, time in mainland schools was significantly related to aural ability in English but not to reading ability in English.

### Table I

<table>
<thead>
<tr>
<th>Black Dialect Interference</th>
<th>Native Language Interference</th>
<th>Time in Mainland Schools</th>
<th>Aural Ability in English</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Native Language Interference</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time in Mainland Schools</td>
<td>.25*</td>
<td>-.19</td>
<td></td>
</tr>
<tr>
<td>Aural Ability in English</td>
<td>-.11</td>
<td>-.32**</td>
<td>.29**</td>
</tr>
<tr>
<td>Reading Ability in English</td>
<td>-.34**</td>
<td>-.20</td>
<td>.11</td>
</tr>
</tbody>
</table>

* *p < .05
** *p < .01
Discussion

Due to the difficulties of attaining cross-cultural and inter-linguistic equivalence, statistical comparisons between the native language and Black-dialect influence on the oral reproduction of standard English by Puerto Rican pupils should be viewed with caution. However, the notable presence of both sources of interference points up the need to consider a tri-linguistic contrastive model rather than merely a bilingual or bidialectal model in the education of Puerto Rican pupils.

Although the school milieu of the subjects of the present study was what Reinstein and Hoffman (1972) termed "insulated" rather than "interacting" vis-à-vis the Black student population (95 per cent Puerto Rican, 3 per cent Black), the subjects evidenced a notable degree of Black dialect interference comparable with, if not greater than, their native language interference. This effect may be attributable to not only direct social contact with the Black population in the neighborhood, but also to indirect contact ("ripple effect") via parents and older peer models.

This conclusion is reinforced by the significant relationship between time on the mainland and extent of Black dialect interference. Although time in mainland schools is not a complete indicator of time on the mainland, especially for pupils in the lower grades, it does reflect a cumulative social effect of change not only toward English ability but also toward a non-standard dialect of English.

The low and statistically non-significant relationship between length of time spent in mainland schools and reading ability achieved in English underlines the disappointing lack of success of mainland schools in teaching Puerto Rican pupils to read English. The highly significant inverse relationship
between the degree of Black dialect interference and reading ability in English and the relationship approaching significance between the degree of native language interference and reading ability in English point up the need to explore more systematic approaches to the teaching of reading in American schools to Spanish-speaking students. In endeavoring to bridge this gap, recent efforts to explore the vernacular approach to teaching Spanish-speaking students (Thonis, 1972) and the bidialectal approach of teaching reading to Black students (Baratz and Shuy, 1969; Bradley, 1970; Dillard, 1971; Johnson and Simons, 1973; Rystrom, 1968; Sullivan, 1971; Wiggins, 1970) should both be considered.

Black dialect interference among Spanish-speaking students is a relatively unexplored area with important implications for the teaching of standard English. Such research should be extended to further factors (e.g., relationship to attitudes and identity) as well as to other settings (e.g., Spanish-speaking pupils in the Midwest and Southwest). Given the increasing segregation of minority group children in American inner-city schools, a more comprehensive, intensive, and systematic view of the linguistic, psychological, and cultural interference (Saville, 1971) these pupils encounter in trying to acquire and utilize standard English is a paramount priority.


---


Natalicio, D. S. and Williams, F. Repetition as an oral language assessment technique. Austin, Texas: Center for Communication Research, University of Texas at Austin, 1971.


