

Dialect acquisition among Puerto Rican bilinguals¹

SHANA POPLACK

University of Pennsylvania

Sociolinguistic studies over the past ten years have demonstrated time and again how linguistic behavior changes as a person's social position changes, and how language is thus an excellent indicator of social status and social change.

Phonological studies are particularly useful in this respect: phonological systems are highly structured, and phonological variables are often less subject to conscious correction than are variables which are more overtly recognized. Phonological variables also yield a large body of data from a relatively small amount of speech.

In this paper I will demonstrate that detailed phonetic studies are one of the best ways of studying social life, by presenting a case where phonetic variation reveals certain aspects of speakers' value systems.

Current research on dialect acquisition and language change suggests that a child's speech patterns are affected more by peer-group interaction than by parental influence. Studies of English in Philadelphia areas into which families have moved from different dialect regions (Labov 1972; Payne 1976) have shown that although complex phonological rules are not internalized successfully by out-of-state children, low-level phonetic rules are acquired in striking percentages. (The term 'phonetic variable' here refers to a simple vowel shift in the Philadelphia dialect, while 'phonological variables' also involve change in the structure of word-class assignment.) In a study focusing on four phonetic variables and one phonological variable specific to the Philadelphia dialect,² Payne demonstrated that the pattern, or 'pronunciation' of every phonetic variable but one had been completely acquired by at least 50% of the out-of-state children in her study, and that very few had failed to acquire the patterns at all.

The objective of the present study is to investigate the nature of dialect acquisition by children with a different language background: bilingual Puerto Rican speakers of English. The work reported here originated as a group effort with Barbara Freed, Susan Lindheim, and Laurel Tanner. Four schools with

[1] This research was supported by National Science Foundation Grant SOC75-00245, 'The Quantitative Study of Linguistic Change and Variation' (LCV). I am indebted to William Labov, project director, and to my colleague Donald Hindle for helpful comments and criticisms from the earliest stages of this work. At a later stage, this paper also benefited from suggestions from Dell Hymes. An earlier version of this paper was presented at the March 1977 Conference on Culture and Communication, Temple University, Philadelphia.

[2] After four years of research, the LCV has isolated a number of variables which are sound changes in Philadelphia. Payne has exploited these data to develop the knowledge of how they are learned.

different percentages of black, Puerto Rican and non-Puerto Rican white students were to be investigated, in order to determine the various effects of each of these influences on the English spoken by second-generation Puerto Rican children.

The data for this study were collected at Saint Veronica's, a Catholic school located in the heart of the Puerto Rican community in North Philadelphia.³ The school population can be broken down ethnically into 51% Puerto Ricans, 46% non-Puerto Rican whites, and 3% blacks. Previous community studies I have carried out in this general area which were not school-based, as well as census reports and information supplied by the Archdiocese of Philadelphia, all indicate that these percentages also reflect the ethnic composition of the neighborhood.

Wolfram (1971, 1974), in a study of the speech of Puerto Rican and black teenagers in New York City, found that Puerto Ricans with extensive black contacts showed the highest degree of assimilation of Black English features in their speech; those with the least black contacts, or with the 'most socio-cultural orientation towards mainstream American values' showed the least amount of Black English features in their speech, as Black English is generally seen to be stigmatized in mainstream American society. If these findings also hold true for the Philadelphia community, we would expect the children in this sample, who attend a school and live in a neighborhood with a small proportion of blacks, to show very little Black English influence in their speech. Since, on the other hand, non-Puerto Rican whites are well represented in this area, we might expect a high percentage of Philadelphia forms.

1. METHODOLOGY

The two sixth-grade classes at Saint Veronica's were chosen as a strategic site for observation for two reasons. First, the sixth-graders, who range in age from 11 to 13, are nearing or are at the end of what has been called (Lenneberg 1967) the 'critical period' for language acquisition. Second, there is some evidence that there is a 'turning point' at which bilingual children stop speaking primarily the language of their parents and start speaking primarily the language of their peers. An analysis of information on language attitudes and language use, collected from 24 Puerto Rican sixth-graders at Saint Veronica's, revealed that 80% of the children reported that their parents speak mostly, if not only, Spanish to them, but 90% speak mostly, if not only, English to their siblings. One hundred percent of the children indicated that English was the preferred, or only,

language used with both Puerto Rican and non-Puerto Rican friends. These data, as well as prolonged observation in this and other Puerto Rican neighborhoods in Philadelphia, indicate that although there is a period during which use of Spanish dominates, by the time the children reach the sixth grade, English is clearly preferred over Spanish, at least in domains other than the home.

After several weeks of 'hanging around' at lunch hour, recess and after school, close contact was established with several self-selected peer groups, and they were interviewed on a volunteer basis. We met with no refusals. In order to minimize the formality of the interview schedule, the children were only interviewed in groups of two or three, and only after school, usually at one of their homes. At least one parent associated with each network was also interviewed.

The interview schedule⁴ was designed to elicit large quantities of casual speech by emphasizing those topics which children enjoy discussing. A number of formal elicitation devices was also included in the interview, in order to gain an approximation of the repertoire range of the children. Quite revealing in this connection was a role-playing module,⁵ in which the children were asked to pretend they were people of different social statuses in various social situations, such as a principal yelling at a student, their parents fighting, etc. Other formal elicitation devices in both Spanish and English included morphological formation tests, reading texts containing sociolinguistic variables, and a test of language dominance,⁶ in which subjects were asked to name as many things as they could think of in 60 seconds in four domains of social interaction: home and family, school, church, and neighborhood. The scores for this test provide a numerical index of language dominance and are also indicative of the relative degree of fluency in each language. Each informant was also asked detailed questions on language use, providing a measure of self-report, which could then be correlated with observed practices.

Since the prime objective of this study was to investigate the nature of the English used by the children, the interviews were conducted almost exclusively in English. In most cases, therefore, the only data available on Spanish were those elicited through these formal modules, or through sporadic family interaction in the child's home. An analysis of these data revealed that all the children were plainly dominant in English. All the children also 'knew' Spanish, as evidenced by their performance on these tests, although with varying degrees of fluency. It is on this basis that they are called 'bilingual', although no claims are made about the nature of their bilingual performance.

The linguistic interviews are three to four hours in length, and contain a good amount of both careful and casual speech. Sociometric information was collected

[3] Many thanks to Sister Leonita, the principal of Saint Veronica's, as well as to Sister Kevin and Mr Delfin, the two sixth-grade teachers, for their co-operation with this study.

[4] The interview schedule was adapted from the one developed by the LCV for the Philadelphia speech community.

[5] This module was suggested by Barbara Freed.

[6] Adapted from Fishman *et al.* (1968).

from all members of the sixth grade, and particularly detailed information elicited from the informants. The results to be discussed here are based on data analysed from a subset of three friendship networks in the sixth grade, consisting of five boys and five girls altogether, as well as one parent associated with each network. All the informants but three were born in Philadelphia, and all are children of first generation Puerto Ricans. Of these three, two were born in other American cities, two came to Philadelphia before the age of four, and only one had spent any of his school years in Puerto Rico.

2. THE VARIABLES

Six phonological variables representative of the Philadelphia speech community were coded for each informant. They are listed in Table 1. These variables seem

TABLE 1. *Phonological variables*

VARIABLES	VARIANTS		
	Philadelphia	Puerto Rican Spanish	Black English Vernacular
a. (ow) 'home'	[o ^{<} u, ε ^{>} u]	[o]	
b. (uw) 'boot'	[u ^{<} u, u ^{<} ʌ]	[u]	
c. (aw) 'house'	[æɔ, εɔ, eɔ]	[au]	
d. (r#) 'hard, car'	[ɹ]	[ɹ]	ə~ɸ
e. (ay) 'fight' 'five'	[ə ^{>} ɪ, ʌɪ]/ [əɪ]	[aɪ]	[a, a:, aʰ]
f. (æh) 'bad' 'bat'	[ε ^ɔ , e ^ɔ , i ^ɔ]/ [æ]	[a]	[æ ^ɪ , æ:]

to be relied on over others in first identifying a Philadelphia 'accent'. Each variable has a phonetic variant whose eventual occurrence can be correlated with Puerto Rican Spanish (PRS) influence, and three of the variables have phonetic variants which can be correlated with Black English Vernacular (BEV)⁷ influence.⁸ The phonetic conditions for the realizations of these variables follow.

[7] By BEV, I am referring to a certain number of features used almost exclusively by blacks in northern cities. Many of these features also exist in standard Southern White English, but they are not typically found in northern white dialects.

[8] Since what is being studied here is the degree of acquisition of the Philadelphia dialect and the relative influence of BEV, the heterogeneous collection of recognizably American English variants, unmarked for Philadelphia, PRS or BEV influence, were not included here.

2.1. (ow)

2.1.1. *Philadelphia variant.* The nucleus of this diphthong has undergone extreme fronting in Philadelphia in all environments except before /l/. Any degree of fronting was here subsumed under the Philadelphia variant.

2.1.2. *PRS variant.* As the mid upgliding diphthong does not exist in Spanish, the corresponding monophthongized vowel [o] was considered the PRS variant.

2.1.3. *BEV variant.* No BEV-specific variant exists for this variable.

2.2. (uw)

2.2.1. *Philadelphia variant.* As in the case of (ow), the nucleus of (uw) has undergone extreme fronting in all environments except before /l/. Again, any degree of fronting was subsumed under the Philadelphia variant.

2.2.2. *PRS variant.* As the high upgliding diphthong does not exist in Spanish, the corresponding monophthongized vowel [u] was considered the PRS variant.

2.2.3. *BEV variant.* No BEV-specific variant exists for this variable.

2.3. (aw)

2.3.1. *Philadelphia variant.* The nucleus of (aw) in Philadelphia has been raised and fronted at least to the level of lower mid [æ], and in younger speakers, often to the level of mid [ε], or upper mid [e]. Also among younger speakers, the glide is often directed down to [ɔ] instead of up towards [u]. Any degree of raising and fronting was subsumed under the Philadelphia variant.

2.3.2. *PRS variant.* The PRS variant [au] differs principally from the unmarked English diphthong in that it is a succession of two short nuclei rather than a nucleus and an upglide.

2.3.3. *BEV variant.* There is no BEV-specific variant for this variable.

2.4. (r)

2.4.1. *Philadelphia variant.* As Philadelphia typically pronounces /r/ in pre-consonantal and word-final positions, any degree of r-constriction was coded under the Philadelphia dialect.

2.4.2. *PRS variant.* The PRS realization of /r/ is typically a flap [ɾ].

2.4.3. *BEV variant.* R-lessness has here been correlated with BEV influence. Both Labov (1968) and Wolfram (1971) have found that BEV shows a higher

degree of r-lessness than other r-less dialects. Complete absence of constriction, including /r/ replaced by a glide, or by lengthening of the preceding vowel, was coded as r-absence.

The (ay) and (æh) variables both involve distributional patterning in the Philadelphia dialect in that it is necessary to choose among variants for different classes of words. The patterning involved in the (ay) variable can be described by a simple low-level rule of phonetic conditioning, while the (æh) pattern involves change in the structure of word-classes and can only be described by a complex rule which is also conditioned by abstract factors such as word-boundaries and grammatical categories, as well as individual lexical items.

2.5. (ay)

2.5.1. *Philadelphia variant.* The nucleus of (ay) is raised in Philadelphia before voiceless consonants. After initial labials the nucleus is often extremely centralized or backed to lower mid [ʌ]. This results in two very distinct allophones, a raised and centralized one before voiceless consonants, and a lower one before voiced consonants. (A lowered diphthong in both these environments, or a reversal of the Philadelphia pattern, i.e. centralizing before voiced consonants and lowering before voiceless consonants, were not included under this category.)

2.5.2. *PRS variant.* The PRS variant [ai] as in the case of [au] above, differs principally from the low English diphthong by the length of the nuclei, and particularly the nucleus of the upglide.

2.5.3. *BEV variant.* The (ay) variable has been shown to be an integral part of BEV by Wolfram (1971), Labov *et al.* (1968), and Ma & Herasimchuk (1968) where it is typically pronounced without the upglide. Realizations including a simple vocalic realization with no offglide [a], a diphthong where the second element was a centralized offglide [aɔ], and a simple long vowel [a:], were coded under this variant.

2.6. (æh)

2.6.1. *Philadelphia variant.* Some members of the (æh) class in Philadelphia are tensed, and the nucleus of the tensed members of the class may rise to the level of mid [e], and as high as [i]. The lax members remain at the level of lower mid [æ]. As mentioned above, the distribution of the tense and lax allophones of (æh) in Philadelphia is very complex. For the purposes of this discussion I will limit myself to describing the core of the (æh) pattern as formalized in Payne (1976: 144):

Short *a* becomes tense when it is not in a weak word, and is followed by a front nasal (such as *man, ham*), or a front voiceless fricative (such as *glass, laugh*), and this is followed by either an inflectional boundary or another consonant.

Two major exceptions to this rule are:

(1) Three lexical items which do not meet the description but are raised and tensed anyway, and those are *mad, bad, glad*.

(2) Three strong verbs which end in nasals and do meet the description but are lax: *ran, swam, began*.

Laxing in environments where Philadelphia laxes, and tensing where Philadelphia tenses, were coded as the Philadelphia variant. A lax pronunciation everywhere, as well as a reversal of the Philadelphia pattern, i.e. tensing where Philadelphia laxes and laxing where Philadelphia tenses, were excluded from this category. Environments where tense-lax assignment is variable in Philadelphia were not included in this study.

2.6.2. *PRS variant.* The PRS variant is the low front vowel [a].

2.6.3. *BEV variant.* A lengthened lower mid nucleus with an optional upglide [æ.ɪ] was considered the BEV variant.

3. THE ANALYSIS

From the tape-recorded interviews of the informants, each occurrence of these variables was coded as a realization of one of the above variants in both careful and casual styles, totalling over 6,700 tokens altogether. Careful and casual speech styles were distinguished as follows:⁹ narratives of personal experience, discussions of kids' games, tangents, where the subject goes off in a different direction from the interviewer's first push; and group interaction were classified as *casual* speech. Direct response to the interviewer's questions, discussion of language or other formal institutions, reading style, and the general body of formal speech not subsumed under any of the above were classified as *careful* speech. Percentages of occurrence of each variant were computed for each style. Only tokens occurring in syllables with at least secondary stress were included in this study. The four simple phonetic variables, (ow), (uw), (aw) and (r), were originally studied separately in open and closed syllables.¹⁰ As these two environments showed no differential effect on the realization of the variables, they were ultimately collapsed. The complex variables were computed for the environments relevant to the Philadelphia patterns in order to see to what extent these patterns have been acquired. That is, for the (ay) variable, centralizing before voiceless consonants and lowering before voiced consonants were coded under the category 'follows the Philadelphia pattern'. Similarly for (æh), tensing where Philadelphia

[9] This stylistic framework was developed by the LCV.

[10] Philadelphia speakers regularly distinguish between these two environments in their realizations of (ow) and (uw). Both are generally fronter in closed syllable.

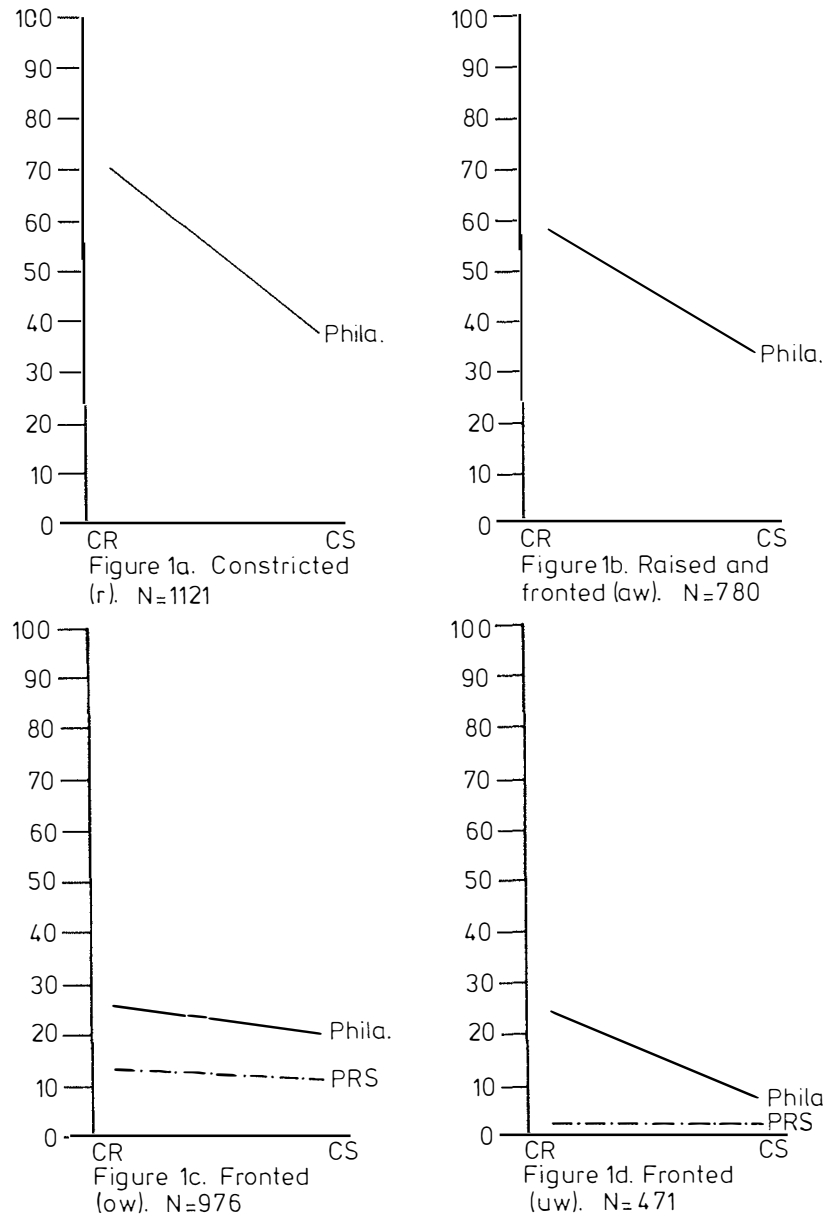


FIGURE 1. *Percentage of Philadelphia variants in careful and casual styles.*

tenses, and laxing where Philadelphia laxes, were coded as the Philadelphia pattern.

4. RESULTS

All of the variables were found to be used in a stylistically sensitive way. Figure 1 represents percentages of variants for the four simple phonetic variables in careful and casual speech styles. The left-hand side of each graph indicates careful style, and the solid line on the graph represents the Philadelphia variant. The dash-dot line on the graph represents the PRS variant. For all the variables, there is a significantly higher percentage of Philadelphia realizations in careful style than in casual style. There is, however, a significantly lower overall percentage of fronted (uw) and (ow) than of raised and fronted (aw). Since the raising of (aw) is a newer change which was found to be acquired in the lowest percentages by the out-of-state children in Payne's study, it is not immediately clear why it should be higher here.

It will also be noted that (uw) and (ow) are the only variables which show any amount, however small, of the monophthongized PRS variants [o] and [u]. It would seem that the phonetic difference between an extreme raised and fronted [eɔ] and the PRS variant [au] is greater, and hence more salient, than the difference between monophthongized [u] and [o] and the corresponding fronted Philadelphia variants. It is not unreasonable to assume that this salience accounts for its greater frequency of acquisition.

Turning next to the complex Philadelphia variables, represented in Figure 2, several striking facts emerge. The dark bar on the histogram represents the Philadelphia pattern, while the diagonally striped bar represents the BEV variant. The Philadelphia pattern for both (æh) and (ay) has been acquired to a surprising extent, particularly in formal styles. Both these variables are also subject to stylistic shifting: there is less adherence to the Philadelphia pattern in casual than in careful styles, particularly for the boys.

Figure 3, which breaks down the four simple variables for boys and girls, confirms that this is the case for all of the variables associated with the Philadelphia dialect. For all the Philadelphia variants but /r/, where the difference is slight, the girls have a sizeable lead over the boys.

Turning back to Figure 2, let us examine what happens when the children do not follow the Philadelphia pattern. The diagonally striped bar on the right-hand side of each graph portrays the BEV variant. Here the boys are in the lead. In both styles, for both variables, the boys show a higher percentage of the BEV variant than the girls, and for everyone, there is significantly more of it in casual than in careful styles. The same is true of r-lessness, which had also been correlated with BEV influence, where r-absence is just the mirror image of the dark line in Figure 1a.

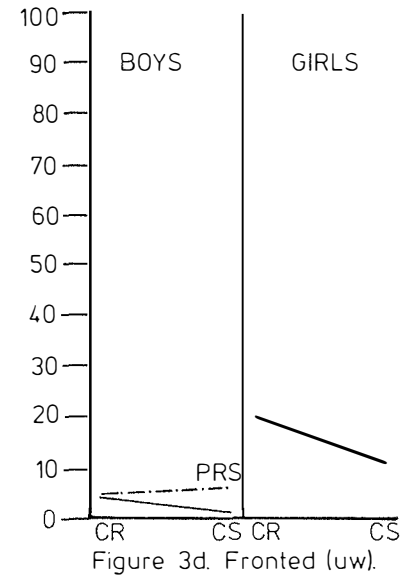
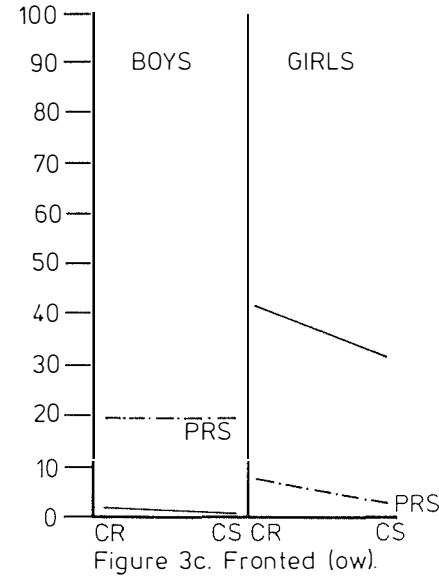
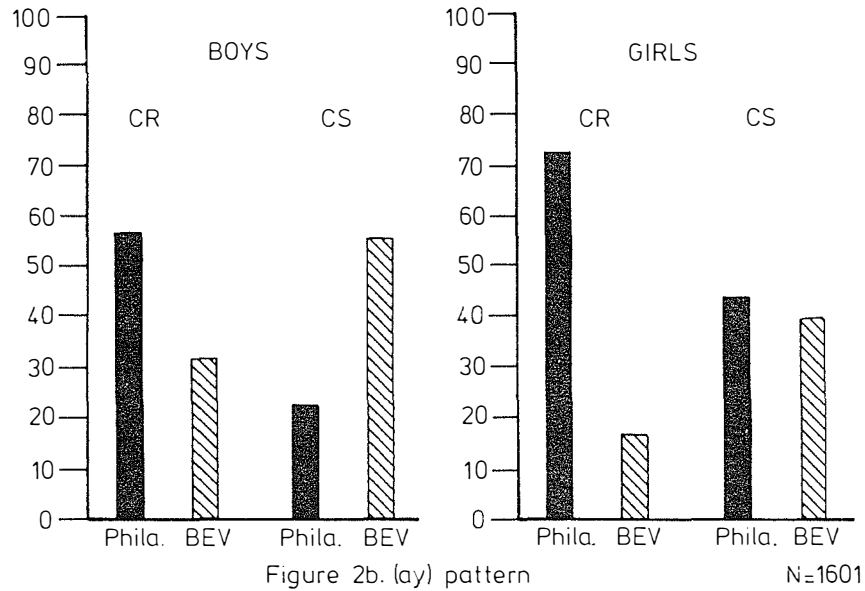
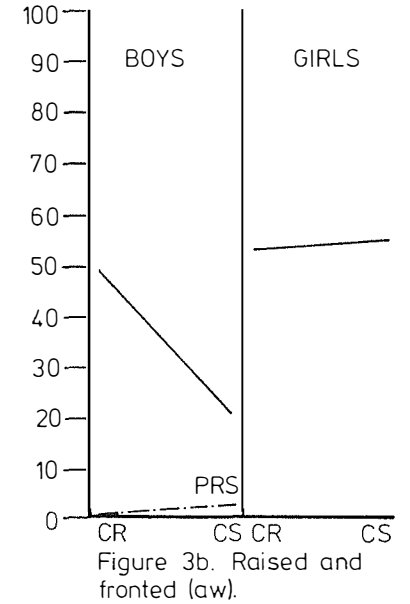
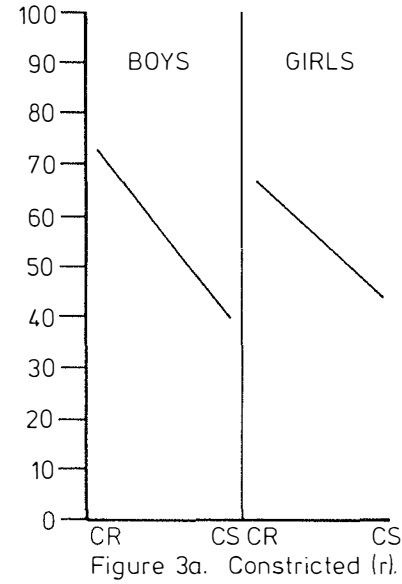
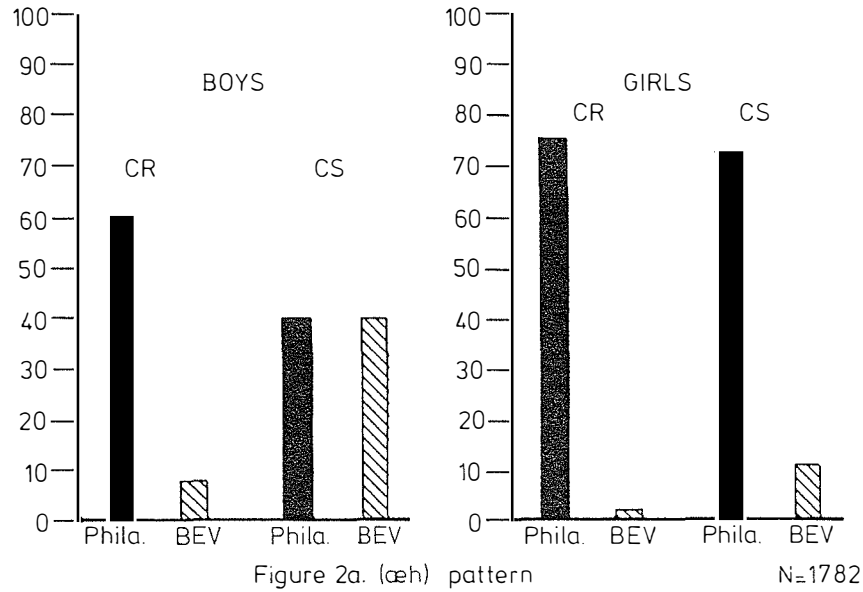


FIGURE 2. Distribution of Philadelphia patterns for boys and girls.

FIGURE 3. Percentages of four Philadelphia variants in careful and casual styles by sex.

These data present several unexpected findings. First, the influence of PRS, at least as far as these variables are concerned, is almost non-existent in the English speech of the children in this sample, differing in this respect from the findings of Ma & Herasimchuk (1968) for a bilingual Puerto Rican community in Jersey City. Secondly, although the children live in a neighborhood which is roughly half Puerto Rican and half non-Puerto Rican white, they show a significant proportion of Black English features in their speech. And lastly, the stylistic pattern they show for the Philadelphia variants is the reverse of what could be expected from non-Puerto Rican Philadelphians.

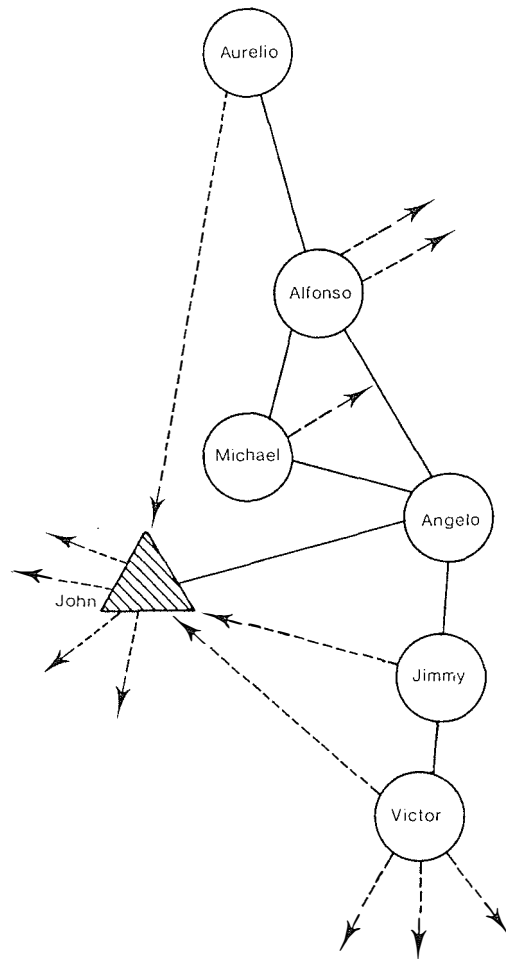


FIGURE 4. Section of sociometric diagram of sixth-graders at Saint Veronica's.

How can these phenomena be explained? As mentioned above, according to Wolfram's findings, one would expect those children who associate most with white Philadelphians to show most Philadelphia influence in their speech, and those who associate most with black Philadelphians to show most BEV influence. Yet self-reports on friendship patterns reveal that the ten children in the sample associate largely, if not exclusively with other Puerto Ricans. Demographic data on school and neighborhood ethnic composition reveal that there are very few blacks in the school or in the neighborhood. In the sixth grade at Saint Veronica's there are only two blacks. Sociometric diagrams of all members of the sixth-grade, however, show that one of the black students, John, himself a speaker of BEV, is named by several Puerto Rican boys as one of the five people they like to hang out with the most. John, in turn, names mostly people outside the school as his best friends, providing evidence of his prestigious if peripheral position in the class. This can be seen in the portion of the sociometric diagram reproduced in Figure 4. The names enclosed in circles are second-generation Puerto Rican boys. The heavy dark lines indicate reciprocal naming. The dotted line indicates that one boy named another as his best friend, but was not named in return. The arrows indicate the direction of the naming.

The features described above as representative of BEV do not typically exist in PRS or in Philadelphia English. Yet there is a considerable amount of BEV variants in the data. The data suggest that the considerable use of BEV features by the children in this sample, and particularly the boys, can be ascribed not to the extent of their black contacts, but rather to the notion of covert prestige.¹²

Labov (1968) and Trudgill (1976) have hypothesized that there are certain values associated with non-standard or working-class speech that are seen to be desirable attributes by non-group members. These favorable attitudes are covert in that they are difficult to formalize, because speakers do not readily admit to having them in formal situations, and they are only seen in inaccurate responses to self-evaluation tests. Trudgill has demonstrated that working-class speech has particularly favorable connotations for British male speakers, who incorporate linguistic patterns associated with it into their own speech. British women, on the other hand, were shown to use forms associated with the prestige standard more frequently than men.

The results of this study bring added support to his findings, as evidenced by the high percentages of Black English variants for the boys, and the greater frequency of Philadelphia variants for the girls.

One mother from each network was also analysed in the manner outlined above. Strikingly enough, one spoke only PRS, one realized the variables almost categorically by PRS variants, and the third showed almost categorical use of non-Philadelphia variants. Their results showed no correlation with either

[11] Nothing was heard during the course of the data gathering to indicate an overt prestige factor, although specific questions were asked to this effect.

those of their own children, or any other member of the respective networks. Therefore, the speech patterns of the children do not seem to be due to parental influence, confirming previous hypotheses.¹²

Yet it is undeniable that these children possess elements of two linguistic systems, and have structured this input in a socially significant way.

Subjective reaction tests¹³ in which members of the Philadelphia speech community were asked to rate various realizations of these variables indicate that the more advanced, or extreme Philadelphia variants of all of the variables but (uw) are stigmatized by Philadelphians themselves. The degree of stigmatization varies with the age of the change. The older the sound change, as in the case of tensed short (æh), the more stigmatized it is. One would therefore expect to see less of these realizations in careful styles among Philadelphia speakers.

Yet the Puerto Rican children in this sample accurately perceive the Philadelphia variants, whether stigmatized or not, as more prestigious in their society than the ones associated with BEV. Two socially meaningful sets of variants and their relative ranking have been perceived, and tend to be distributed according to their correlative social meaning. The boys use more BEV variants than the girls, the girls use more Philadelphia variants than the boys, and both boys and girls use more Philadelphia variants in careful styles than in casual styles. On the other hand, in styles where less attention is paid to speech itself, and where the speaker also wants to present himself as 'tough', 'cool', or 'with it', the percentages of BEV variants increase dramatically, testimony to the covert prestige that is associated with them.

These results provide striking sociolinguistic evidence that bilingual Puerto Rican speakers of English, who are often characterized as having less language, or a different language, in fact show a remarkable level of linguistic sophistication, in that they can socially classify linguistic variants from two competing systems, and use them appropriately within the framework of their society.

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[12] Of course, sociometric and parental relationships are not the exclusive sources of influence, nor is John presumably the only source of BEV influence. This research raises the inevitable question of what the source of BEV influence in the speech of these children and in many varieties of Puerto Rican English actually is. An in-depth study which might come closer to answering this question was, regrettably, outside the scope of the present research.

[13] The subjective reaction test was developed and administered to members of the Philadelphia speech community by the LCV. It contains randomized realizations of the five vocalic Philadelphia variables produced by Philadelphia speakers from four different social classes. Listeners were asked to rate each realization on a scale of job suitability and friendliness.