This research is an attempt to determine the relative influence of Black English and Puerto Rican Spanish in the speech of Puerto Ricans raised contiguous to the black community in Harlem. The first chapter provides a general introduction to the study of this variety of Puerto Rican English and a description of the sample on which this study is based. In Chapter Two, a general socio-cultural picture of various aspects of the Puerto Rican community is given, particularly as it relates to the surrounding black community. A number of selected variables in Puerto Rican English are examined in Chapter Three, building on the descriptive framework of variable rules in generative-transformational grammar. Chapter Four deals with the assimilation of linguistic features from Black English in three groups within the continuum of second generation Puerto Rican speakers in Harlem. The final chapter consists of a nontechnical description of the differences between Puerto Rican English and Standard English among second generation Puerto Ricans in Harlem, intended as a practical guide for educators who want to know some of the main characteristics of the dialect without the formalization or detail that is involved in the third chapter. (Author/JM)
OVERLAPPING INFLUENCE IN THE ENGLISH OF SECOND
GENERATION PUERTO RICAN TEENAGERS IN HARLEM

Office of Education Grant No. 3-70-0033(508)
Final Report
Walt Wolfram
in collaboration with
Marie Shiels and Ralph W. Facold

Center for Applied Linguistics
Washington, D.C.
1971

The research reported herein was supported by the Cooperative
Research Program of the Office of Education, U.S. Department
of Health, Education, and Welfare
The research reported here was carried out under Contract No. OEG-3-70-0033(508) with the Research Program of the Office of Education, from June 1, 1970 to August 31, 1971. The aims of the research were to describe the English of second generation Puerto Rican teenage males in Harlem. It is an attempt to determine the relative influence of Black English and Puerto Rican Spanish in the speech of Puerto Ricans raised contiguous to the black community in Harlem.

Chapter One is a general introduction to the study of this variety of "Puerto Rican English" and a description of the sample on which this study is based. In Chapter Two, a general socio-cultural picture of various aspects of the Puerto Rican community is given, particularly as it relates to the surrounding black community. A number of selected variables in Puerto Rican English are examined in Chapter Three, building on the descriptive framework of variable rules in generative-transformational grammar. Chapter Four deals with the assimilation of linguistic features from Black English in three groups within the continuum of second generation Puerto Rican speakers in Harlem. Our final chapter, Five, consists of a non-technical description of the differences between Puerto Rican English and Standard English among second generation Puerto Ricans in Harlem. This chapter is intended as a practical guide for educators who want to know some of the main characteristics of the dialect without the formalization or detail that is involved in Chapter Three.

Although I have taken the major responsibility for the final report, the research carried out here was obviously a joint effort. As in all my
previous work in sociolinguistics, Roger W. Shuy has been a source of encouragement and support, and it was he who originally encouraged me to pursue this topic through the research grant. I am immeasurably indebted to the two collaborators in this volume, Marie Shiels and Ralph W. Fasold. Miss Shiels was responsible for most of the material in Chapter Two, and the analysis of the ay variable in Chapter Three. In addition to her formal contribution to these sections, she has read and made significant comments on the entire manuscript. Ralph W. Fasold was responsible for the analysis of Z morphemes in Chapter Three, and, as always, has been a sounding board for my ideas. His careful reading of the entire manuscript at various stages of development is more appreciated than I could possibly state in an acknowledgement.

Research assistant, Marcia Whiteman has been of great help during the duration of this grant. She is responsible for much of the tabulation of the Z morphemes in Chapter Three and energetically proofread the entire manuscript. William K. Riley has also carefully read the manuscript and made important comments on the preliminary versions. I have further profited from discussions or comments on the manuscript from Albert H. Markwardt, Charles Kreidler, William Labov, and Paul Anisman. Wesley Richardson has efficiently handled the details of recording with the greatest precision.

All of my colleagues who worked with me during the course of this research will unanimously join me in applauding the work of Elaine Bowman in this project. From the very outset she has been committed to seeing this project through, and has typed relentlessly to see that it was completed. Her constant concern for the final form of this manuscript has been appreciated.
greatly, even though my inconsistencies in format have sometimes overruled her compulsion for perfection.

Without the informants, this study obviously would have been impossible. For this, we are indebted to Youth Development Incorporated and its director Jim Vause, who originally requested that we do the study and provided ongoing encouragement. Richard Crow, formerly of the staff of YDI, has been a most valuable source of information whenever it was needed. He provided much background sociological information and willingly answered our relentless questions about informants' backgrounds. This information was invaluable in making assessments about the social characteristics of our informants and understanding the community.

In all too many research reports, everyone is acknowledged but the people who willingly provided the data for research. Our informants in this study cannot be thanked sufficiently. Although they may have been puzzled greatly at the seeming inanity of our probing, they willingly tolerated the intrusion into their everyday world. Although they, for the most part, remain anonymous in this report, our warm associations remain very specific.

Walt Wolfram
Center For Applied Linguistics
August, 1971
Table of Contents

PREFACE

Chapter One: Introduction

1.1 The Study of Puerto Rican English ........................................ 1
1.2 Sample ................................................................................. 4
1.2.1 Residential Background of Informants ................................. 4
1.2.2 Socio-economic Background of Informants .......................... 9
1.2.3 The Selection of Informants ............................................... 10
1.3 The Interview ........................................................................ 12

Chapter Two: The Socio-Cultural Setting

2.0 Introduction ........................................................................... 17
2.1 Puerto Rican and Black Contact in the Neighborhood ............. 19
2.2 The Effect of Skin Color ...................................................... 23
2.3 Residential Mobility .............................................................. 28
2.4 Puerto Rican Intra-Group Contact ......................................... 29
2.5 School Contact ...................................................................... 33
2.6 Job Contacts ......................................................................... 36
2.7 Solidarity and Conflict among Blacks and Puerto Ricans ....... 36
2.8 Use of Spanish ....................................................................... 42
2.9 Black Assimilation to the Puerto Rican Culture ...................... 50
2.10 Summary ............................................................................. 53

Chapter Three: Variable Analysis of Some Selected Features of Puerto Rican English

3.0 Introduction .......................................................................... 55
3.1 The θ Variable ...................................................................... 56
3.1.1 Morpheme-Initial θ .......................................................... 57
3.1.2 Morpheme-Final θ ........................................................... 58
3.2 The @ Variable ...................................................................... 61
3.2.1 Morpheme-Initial @ .......................................................... 66
3.2.2 Morpheme-Final @ ........................................................... 67
Chapter Three: Syllable-Final d and t

3.2.1 The Variants

3.2.2 The Variants for Underlying \( 'd' \)

3.2.3 \( \emptyset \) for Underlying \( 't' \)

3.2.4 The Comparison of \( 'd' \) and \( 't' \) Deletion in Puerto Rican and Black English

3.2.5 -ed Absence

3.2.6 The Incidence of \( t \) for Underlying \( 'd' \)

3.2.7 The Comparison of Devoicing in BE and PRE

3.3 The Variable \( \text{\`AI} \)

3.3.1 Previous Studies

3.3.2 Variants of \( \text{\`AI} \)

3.3.3 Transcription Reliability

3.3.4 Selection of Data

3.3.5 Variant Frequency

3.3.6 Acoustic Samples of \( \text{\`AI} \)

3.3.7 Rules for \( \text{\`AI} \)

3.4 The \( z \) Morphemes

3.4.1 Previous Studies of \( z \) Morphemes

3.4.2 \( z \) Absence in Puerto Rican English

3.5 Negation

3.5.1 The Particle \text{not}

3.5.2 Negatives with Indeterminates

3.5.3 A Special Use of \text{hardly} in PRE

3.6 Conclusion

Chapter Four: Sociolinguistic Diversity

4.0 Introduction

4.1 The Black Group

4.1.1 Recreational Activities

4.2 Ritualistic Language
4.1.3 Peer Contact: ......................................................... 262
4.2 Puerto Ricans with Extensive Black Contacts ......................... 267
4.2.1 Physical Appearance ............................................... 268
4.2.2 Recreational Activities ......................................... 269
4.2.3 Ritualistic Language .............................................. 271
4.2.4 Peer Contacts .................................................... 276
4.2.5 The Use of Spanish ............................................... 282
4.3 Puerto Ricans with Limited Black Contact .......................... 285
4.3.1 Physical Appearance .............................................. 285
4.3.2 Recreational Activities ......................................... 286
4.3.3 Ritualistic Language .............................................. 288
4.3.4 Peer Contacts .................................................... 293
4.3.5 The Use of Spanish ............................................... 296
4.4 Puerto Rican Lames .................................................. 297
4.4.1 Physical Appearance .............................................. 297
4.4.2 Recreational Activities ......................................... 298
4.4.3 Ritualistic Language .............................................. 300
4.4.4 Peer Group Contacts ............................................. 303
4.4.5 The Use of Spanish ............................................... 309
4.5 Summary of Similarities and Differences Between Groups ........ 310
4.6 Linguistic Assimilation .............................................. 313
4.6.1 Copula Absence .................................................. 314
4.6.2 Agreement with Copula Forms .................................... 326
4.6.3 Invariant be ...................................................... 328
4.6.4 The Z Morphemes ................................................ 335
4.6.5 Multiple Negation ............................................... 346
4.6.6 θ Variable ....................................................... 350
<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.6.7</td>
<td>Word-Final Consonant Clusters</td>
<td>356</td>
</tr>
<tr>
<td>4.6.8</td>
<td>The Realization of ay</td>
<td>360</td>
</tr>
<tr>
<td>4.6.9</td>
<td>Syllable-Final d</td>
<td>365</td>
</tr>
<tr>
<td></td>
<td>Conclusion</td>
<td>370</td>
</tr>
<tr>
<td>Chapter Five: A Non-Technical Description of PRE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.0</td>
<td>Introduction</td>
<td>377</td>
</tr>
<tr>
<td>5.1</td>
<td>Pronunciation</td>
<td>381</td>
</tr>
<tr>
<td>5.1.1</td>
<td>Consonants</td>
<td>381</td>
</tr>
<tr>
<td>5.1.2</td>
<td>Vowels</td>
<td>398</td>
</tr>
<tr>
<td>5.1.3</td>
<td>Rhythm and Intonation</td>
<td>404</td>
</tr>
<tr>
<td>5.1.4</td>
<td>Stress</td>
<td>406</td>
</tr>
<tr>
<td>5.1.5</td>
<td>Other Pronunciation Features</td>
<td>407</td>
</tr>
<tr>
<td>5.2</td>
<td>Grammar</td>
<td>408</td>
</tr>
<tr>
<td>5.2.1</td>
<td>Negation</td>
<td>408</td>
</tr>
<tr>
<td>5.2.2</td>
<td>Verbs</td>
<td>413</td>
</tr>
<tr>
<td>5.2.3</td>
<td>S Suffixes</td>
<td>420</td>
</tr>
<tr>
<td>5.2.4</td>
<td>Questions</td>
<td>421</td>
</tr>
<tr>
<td>5.2.5</td>
<td>Definite and Indefinite Articles</td>
<td>424</td>
</tr>
<tr>
<td>5.2.6</td>
<td>Word Order</td>
<td>425</td>
</tr>
<tr>
<td>5.2.7</td>
<td>The Use of Prepositions</td>
<td>426</td>
</tr>
<tr>
<td>5.2.8</td>
<td>Pronominal Apposition</td>
<td>427</td>
</tr>
<tr>
<td>5.2.9</td>
<td>The Conjunctive Use of which</td>
<td>428</td>
</tr>
<tr>
<td>5.2.10</td>
<td>Other Grammatical Characteristics of PRE</td>
<td>429</td>
</tr>
<tr>
<td>5.3</td>
<td>Implications for Teaching Standard English</td>
<td>430</td>
</tr>
<tr>
<td>Appendix A: Questionnaire</td>
<td>436</td>
<td></td>
</tr>
<tr>
<td>Appendix B: Interview Oral</td>
<td>444</td>
<td></td>
</tr>
</tbody>
</table>
CHAPTER ONE
INTRODUCTION

1.1 The Study of Puerto Rican English

Although language variation among English dialects has always been of some linguistic interest, only in recent years has there been extended descriptive concern for social dialects in American society. The study of what we shall call here Puerto Rican English (abbreviated PRE) is an attempt to expand our descriptive knowledge of American social dialects by applying recent sociolinguistic methods of analysis. Specifically, when we use the term PRE, we are referring to the English spoken by second generation Puerto Rican teenage males living predominantly in East Harlem, New York. Although this may appear to be a rather restricted subset of what the varieties of PRE may include, it is expected that much of the description will have wider application (e.g., to a number of Northeastern ghetto areas) than to the specific group we are describing here. And, of course, many of the sociolinguistic principles brought forth may well have universal application for the study of social dialects.

The study of PRE as another variety of English is essential for a number of reasons. To begin with, it is important to have accurate descriptive accounts of a range of social dialects in the United States. The general value of descriptively adequate statements for both scientific and applied reasons should be apparent. Important linguistic and sociolinguistic principles come to the surface from our knowledge of various social dialects. For example, the ordered linguistic and social constraints on inherently variable linguistic forms is an essential contribution of recent sociolinguistic studies which is confirmed and
expanded in our study. From an applied viewpoint, we need to know how the various social dialects in the United States are structured if we are going to base our educational strategies on sound descriptive facts. Shibboleths about speech and vagueness concerning language diversity cannot serve as a foundation for educational decisions with respect to language. For example, in East Harlem where black and Puerto Rican children may have considerable interaction, we need to know to what extent, if any, similar language materials may be used for black and Puerto Rican school children. Ma and Herasimchuk (1969), as part of the Fishman, et al. report, Bilingualism in the Barrio, refer to the fact that there appears to be some similarity between some of the linguistic characteristics of blacks and Puerto Ricans in New York City, but their reference is only incidental, since it is outside the scope of their study of bilingualism. Labov, et al. (1968), although including the description of Puerto Rican speech in their title, focus only on those characteristics which are common to the black community. As we shall see in this study, there are some features, normally associated with Black English in Northern urban areas, which have been taken over by second generation Puerto Rican English speakers with little apparent regard to how extensive their contacts with blacks may be; other characteristics may show up only in the speech of those who have extensive black contacts; and, of course, there are features which may be derived historically from Spanish, but which must be described synchronically as an integral part of PRE.

We see, then, that the study reported here is an investigation of languages in contact. Some aspects of the structure of PRE can be understood only through a knowledge of various nonstandard dialects.
of English, while others involve an understanding of Puerto Rican Spanish. Separating the sources from which specific linguistic characteristics of PRE may be derived is, in itself, an important sociolinguistic matter which requires a thorough understanding of the dynamics of language influence.

Although we may account for the occurrence of certain structures by investigating the structure of our language sources closely, this cannot be considered a study of bilingualism, for we are concerned here with only one of the languages spoken by our informants. Nor can it be considered a study of language interference in the strict sense. In the conventional sense, interference is a condition which is dependent on bilingualism (cf. Weinreich 1953:11). But we are concerned mainly with phenomena which are not dependent on bilingualism; rather, we are concerned with patterns which have become habitualized and established. Perhaps this can be illustrated best by drawing an analogy with English varieties spoken by second and third generation German immigrants in Southeastern Pennsylvania. Our knowledge of German may help us account for the occurrence of some rather divergent dialect variations in Southeastern Pennsylvania, but these features are not dependent on the bilingualism of second and third generation immigrants; they are features which must be described synchronically as an integral part of the dialect. The distinction between interference and established dialect variations is an important sociolinguistic matter which we shall turn to later in more detail.

Up to now, we have spoken of PRE as if it were some sort of homogeneous entity, but this is, in itself, a matter of considerable sociolinguistic interest.
of English, while others involve an understanding of Puerto Rican Spanish. Separating the sources from which specific linguistic characteristics of PRE may be derived is, in itself, an important sociolinguistic matter which requires a thorough understanding of the dynamics of language influence.

Although we may account for the occurrence of certain structures by investigating the structure of our language sources closely, this cannot be considered a study of bilingualism, for we are concerned here with only one of the languages spoken by our informants. Nor can it be considered a study of language interference in the strict sense. In the conventional sense, interference is a condition which is dependent on bilingualism (cf. Weinreich 1953:11). But we are concerned mainly with phenomena which are not dependent on bilingualism; rather, we are concerned with patterns which have become habitualized and established. Perhaps this can be illustrated best by drawing an analogy with English varieties spoken by second and third generation German immigrants in Southeastern Pennsylvania. Our knowledge of German may help us account for the occurrence of some rather divergent dialect variations in Southeastern Pennsylvania, but these features are not dependent on the bilingualism of second and third generation immigrants; they are features which must be described synchronically as an integral part of the dialect. The distinction between interference and established dialect variations is an important sociolinguistic matter which we shall turn to later in more detail.

Up to now, we have spoken of PRE as if it were some sort of homogeneous entity, but this is, in itself, a matter of considerable sociolinguistic interest.
On one level, the group of lower socio-economic class, second generation, Puerto Rican teenage males from East Harlem may be considered homogeneous; for example, as compared with middle-class, non-Puerto Rican, white, teenage males from a New York suburb. But on another level, there is heterogeneity in our group of informants. Some informants, for example, show quite extensive contacts with black peers, while others have virtually no peer contacts with blacks; some show cultural values which are quite indigenous to lower socio-economic class lifestyles, while others indicate educational and occupational aspirations which indicate considerable motivation for eventually attaining middle class lifestyles. The extent to which linguistic characteristics are common to our PRE informants as a whole, to subgroups, or even uniquely to individuals is a crucial socio-linguistic consideration which will be treated in detail in Chapter Four.

1.2.1 Residential Background of Informants

The analysis reported here is based on the speech of 29 Puerto Rican and 15 black teenage males from East Harlem and the Bronx. The Puerto Rican informants include two first generation informants, but these two informants migrated to New York as infants. For all practical purposes, the first generation Puerto Ricans can be treated like the second generation informants, since they learned to speak in the United States. There are also two informants who are third generation Puerto Ricans. The black group of informants includes five informants with West Indian history: two with one parent from the West Indies, one with both parents from the West Indies, and two with both grandparents born in the West Indies. The other black informants have parents or grandparents who have migrated from the southern United States. All
the informants at the time of the fieldwork (August 1969) were residents of New York City. With the exception of six, all informants have lived all their lives in the City, and of these six, only one has not lived most of his life in New York City (One black informant had only lived in New York City one year when interviewed, having just arrived from the South). The following indicates all the informants who have lived outside New York City:

No. 6 - from North Carolina; has lived in New York City one year (black)

No. 13 - lived in Charleston, Ohio until three years of age (black)

No. 15 - born in New York City; lived three years in Charleston, South Carolina (black)

No. 21 - lived in New York City except for two months (Puerto Rican)

No. 23 - born in Puerto Rico; lived in upstate New York for a short period of time (Puerto Rican)

No. 28 - born in Puerto Rico; came to New York City when one year of age (Puerto Rican)

At the time of the original fieldwork, thirty-four of the informants lived in Manhattan; ten lived in the Bronx. Despite the reputedly high residential mobility of New York City blacks and Puerto Ricans, many of the informants indicated they had spent most of their lives in the same general neighborhood. Most residence changes indicated by the informants occurred within Harlem, or between the Bronx and Harlem. For example, three present Bronx residents lived previously in Harlem.

The informants can be grouped geographically in many ways, but the following is perhaps the most revealing. (1) Using a restricted
geographical definition of East Harlem, i.e., 110th to 116th between 2nd and 5th Avenues, ten of the forty-four informants live within these boundaries, all of them Puerto Rican. (2) South of this area, from 110th to 101st between 2nd and 5th, live thirteen informants, four Puerto Ricans and nine blacks. (3) Eight informants live east of Lenox Avenue between 125th and 112th; of these eight, two are black and live at 115th and 5th. (4) Two black informants live west of the park, and one Puerto Rican, whose brother lives in East Harlem.

In the Bronx live nine Puerto Rican informants and one black informant. (5) Six Puerto Rican informants live south of East 159th. (6) Two informants (one black, one Puerto Rican) live near Crotona Park. (7) Two Puerto Ricans live near Westchester Avenue.

Table 1 indicates the residence of each informant at the time of the original fieldwork, and Figure 1 gives the various sections of the city which they represent.
geographical definition of East Harlem, i.e., 110th to 116th between 2nd and 5th Avenues, ten of the forty-four informants live within these boundaries, all of them Puerto Rican. (2) South of this area, from 110th to 101st between 2nd and 5th, live thirteen informants, four Puerto Ricans and nine blacks. (3) Eight informants live east of Lenox Avenue between 125th and 112th; of these eight, two are black and live at 115th and 5th. (4) Two black informants live west of the park, and one Puerto Rican, whose brother lives in East Harlem.

In the Bronx live nine Puerto Rican informants and one black informant. (5) Six Puerto Rican informants live south of East 159th. (6) Two informants (one black, one Puerto Rican) live near Crotona Park. (7) Two Puerto Ricans live near Westchester Avenue.

Table 1 indicates the residence of each informant at the time of the original fieldwork, and Figure 1 gives the various sections of the city which they represent.
## HARLEM

<table>
<thead>
<tr>
<th>Section</th>
<th>Black Informants</th>
<th>Puerto Rican Informants</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>110th to 116th, 2nd to 5th Avenues</td>
<td>5, 14, 19, 20, 22, 26, 28, 29, 33, 44</td>
</tr>
<tr>
<td>2</td>
<td>110th to 101st, 2nd to 5th Avenues</td>
<td>23, 25, 6, 4, 15, 17, 41, 13, 1</td>
</tr>
<tr>
<td>3</td>
<td>125th to 113th, east of Lenox Ave.</td>
<td>8, 16</td>
</tr>
<tr>
<td>4</td>
<td>West Harlem</td>
<td>1, 40</td>
</tr>
</tbody>
</table>

## BRONX

<table>
<thead>
<tr>
<th>Section</th>
<th>Residence of Informants</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>South of 159th</td>
</tr>
<tr>
<td>6</td>
<td>Crotona Park</td>
</tr>
<tr>
<td>7</td>
<td>Westchester Ave.</td>
</tr>
</tbody>
</table>

Table 1: Residence of Informants.
Fig. 1: Geographical Distribution of Informants
1.2.2 Socio-economic Background of Informants

According to most of the current indices for objectively measuring socio-economic class, the informants would be classified as "working" or "lower working" class. The occupational roles of the heads of households are mainly restricted to operatives, service workers and laborers. The parents of only two Puerto Rican and two black informants are reported to have occupations which might be classified as professional or semi-professional.

Although we have not made evaluations of all the individual residences of the informants, a survey of the general neighborhoods and observation of a sample of the projects and tenements in which the informants live indicate that they are quite typical of working or lower-working class residences. Many of the residences would clearly be classified as "slum dwellings."

The educational picture of the informants shows somewhat more variation than the occupation of the head of household and the housing. Four of the 23 informants (three of them black) who responded to our questions about education indicated that their parents had some college. If these statements can be relied upon, the level of education represented by the household head seems to be much higher than what we would expect of Harlem and south Bronx residents. It is probable, however, that many of the informants overstated the educational levels of their parents.

The school records of the informants (some of which were available to the educational supervisor of Youth Development Incorporated) generally indicated that their educational achievement was far below the expected norms for their age level. This was true of their reading levels in
particular, a fact which was well confirmed by a small reading passage which was given as a part of the interview. Several of the informants would have to be considered functionally illiterate and were unable to read even the word lists they were given. It is quite clear that the majority of our informants have been alienated from the schools and that their values do not coincide with the middle-class values placed on educational achievement. From the background information given to us by Youth Development Inc. workers, interviews and personal observation, it appears that many of the informants can be considered integral members of indigenous peer groups, participating fully in the "street culture". There are, however, some who must be classified as cultural "lames" (i.e., a non-member in an indigenous peer group). The school performance of these informants is considerably above the other informants and their value orientation toward education is consonant with the mainstream values placed on educational achievement. The effect of this orientation on speech is discussed in Chapter Four.

1.2.3 The Selection of Informants

Our original contact with informants was made available through the cooperation of Youth Development Incorporated (abbreviated YDI), a nondenominational organization with headquarters at the time of our fieldwork at 104th Street and Madison Avenue in East Harlem. At the time of our fieldwork, the East Harlem operation of YDI was a club-like organization with recreational facilities such as table billiards, ping pong, and a basketball court. Facilities are open to the public daily during the summer and in the afternoon and evening during the school day. In addition to the recreational facilities, some remedial educa-
tional instruction and some non-denominational religious instruction were optionally offered at the club headquarters.

During the summer months, the organization has established camp facilities at Lake Champion, New York, where the same general types of activities described above are offered on a much more extensive basis. The fieldwork which serves as a basis for this analysis was conducted at the camp site during the summer of 1969. At the time of our fieldwork, there were approximately 150 males between the ages of 13 and 18, two thirds of whom were Puerto Rican and one third black. There were no non-Puerto Rican whites present at the time of our fieldwork.

The selection of informants was made in order to approximate the racial distribution of the teenagers served by the organization and, according to the directors, the distribution at the time of our fieldwork was quite typical of YDI's general racial distribution. The majority of the informants live in housing projects or tenements located near the headquarters of the city operation, although, as we have seen, some come from the Bronx. The informants were not chosen randomly. Rather, a decision was made to start interviewing with several informants who had considerable status among their peers. The decision to start interviewing with peer leaders was calculated in order to facilitate other interviews. It was anticipated that other individuals would recognize that the leaders had been chosen initially, and to be asked for an interview would then be associated with status. It was further reasoned that positive reports from informants initially would enhance our chances of obtaining interviews with other informants.

Although somewhat of a risk, this procedure proved to be generally successful in obtaining informants for interviews. The association
of the interviews with peer status apparently was understood by other members. In fact, several peer associates of our original contacts asked if we might talk with them rather than wait for us to request an interview.

Having established contacts with several of the peer leaders, we selected informants on the basis of our acquaintance with them through informant contact, reference to other individuals from our initial interviews, recommendation from workers who knew the informants through more extensive interaction on a day to day basis, or a combination of these.

1.3. The Interview

The interview was conducted following in a very general way the outline given in Appendix A. There were several main aspects. First, there was a fairly extensive free conversation section in which the choice of topic was largely determined by the interests of the informant. The general areas covered ranged from games and leisure to gang fights. Our topics for this section were largely based on previous questionnaires adapted to our population of young teenage males (cf. Labov 1966; Labov, et al. 1968; Shuy, Wolfram and Riley 1967; Fasold 1970). As a part of the first section, certain questions about group social structure were asked to get some sociological background information. The background information from informants helped us make assessments concerning social interactions and roles.

The second section involved responses to certain sentence stimuli largely adopted and developed from Fasold (forthcoming), in which we attempted to elicit specific constructions germane to our analysis.
of particular nonstandard linguistic features. Responses to some of these stimuli were crucial in arriving at descriptively adequate analyses of certain linguistic features.

The third section involved reading of several types, from a traditional passage taken from the Bible and a Black English version of the same Bible passage to word lists and minimal word pairs. The different sections of the interview were always presented in the sequence presented above in order to move from the informal to the formal aspects of the interview. The interview lasted approximately one hour.

Several measures were taken to minimize the unnaturalness of the normal interview situation. Prior familiarity with the informants was considered essential to our interviews. Certain interviewers participated in the activities of the camp program, including both scheduled and unscheduled ones. Thus, for example, the senior author became actively associated with a group of seven informants, eating all meals with them and participating competitively against other groups as a member of the group. Since some of the participation occurred before the interviewing began, it permitted the informants to become known in a more natural context. It further served as an advantage in establishing rapport related to the social structure of YDI. For example, the senior author spent considerable time playing "pick-up" basketball games with a number of informants. That this type of activity was not insignificant in establishing rapport is indicated in several comments given by informants during the course of the interview.
When I first saw you play basketball, I thought you was, you know, I thought you played for pro, I thought you was playing pro basketball cause I seen you, you know, shooting all them balls in and see how you can dribble and all, I thought you played pro basketball (1: 8)

You got a good shot man, you know, you got that shot man, one hand shot, you got it nice, see, you time the ball, chu, chu, chu (31: 1)

Interviews were generally conducted in a vacant room in an unused building on the camp grounds. Informants were introduced to the interview by saying that we wanted to know about some of the things teenagers from various parts of the country were interested in. We did not necessarily disguise our interest in language, but were nonspecific in talking about what aspects of language variety we might be concerned with. A typical statement of introduction might be something like:

We're interested in what teenagers in different parts of the country are interested in. For example, I'm from Philadelphia and we don't fly pigeons from the top of buildings there so I'm interested in how you do it. We're also kind of interested in how teenagers think about some things, because they look at things differently. For example, teenagers use different words and stuff when they're talking so that we're interested in how teenagers talk and think about some things. We're gonna tape record it because I can't remember all the things you might say... I don't have a very good memory.

All quotes from informants are referenced by the informant number and the page of the typescript on which the statement is found.
Usually, this was sufficient introduction for the informants, since we had established some familiarity prior to the interview, but any questions were answered by honest but nonspecific comments.

Since we were concerned only with the English of our informants, the interviews were conducted almost exclusively in English. Only rarely was there any occasion for the informant or interviewer to use Spanish. Usually, the Spanish occurred while referring to some verbal activity in English and its potential Puerto Rican Spanish analogue. For example, in the discussion of "sounding" (the verbal ritual of insulting a person's mother), an informant might comment on a potential analogue for this activity by giving a Spanish example. The use of Spanish in the interview was quite incidental and will not be considered in this report.

In general, we may say that the style of the interview tended to be relatively casual, but it was not necessarily in-group. On the whole the interview tended to be more casual than the type of style which was elicited in random samples like that reported in Shuy, Wolfram, and Riley (1967). But it does not compare with Labov et al.'s group style (1968) for obvious reasons. It does, however, compare with Labov's single interviews more favorably than Wolfram's (1969) and Fasold's (forthcoming) interviews since their interviews were done with informants who had no prior contact with the interviewers.

In addition to the interview described above, a second interview was conducted with 14 of the 29 Puerto Rican informants in the spring of 1971. These interviews were all conducted in New York City and were limited to those Puerto Rican informants that could be located
through various formal and informal contacts. The purpose of the second interview was to ascertain more about the informants' use of Spanish. More information about peer contacts was also desired from the follow-up interview. No information for linguistic analysis was desired from the second interview, so that the questioning was quite direct. The questionnaire used in the second interview is given in Appendix B.
CHAPTER TWO
The Socio-Cultural Setting

2.0 Introduction

From the point of view of immigration phenomena, it would seem that New York is the most studied of any city in the United States. For many generations, wave upon immigrant wave has entered the city, adapting its ethnicity to its environs until some sort of assimilation was achieved. Yet, if the newest arrivals to the city are any indication, few in-depth examinations have been done of cultural contacts between groups in the slow process of assimilation, beyond geographical studies of group living patterns and statistical studies of employment patterns. In particular, there is a paucity of research into language contacts between groups in the city and the consequent phenomenon of language assimilation.

Studying dialect contacts involves dealing with groups of people that are in some way different from each other. This difference can be predominantly geographical, e.g., Midwest Chicago English versus Southern Atlanta English; it can be socioeconomic where geography is a constant, e.g., New York City upper-middle class versus New York City working class English; and it can be both geographical and socioeconomic. Each point of view is an abstraction based on a collection of differing speech patterns which share a nameable commonality. Dialects which differ according to geography also can differ according to socioeconomic groups within each dialect; socioeconomic groups, like geographical groups, are abstractions which cover differing individuals. Here we are studying
the dialect contact between predominantly second generation Puerto Ricans and blacks in New York City. The distinction between the two groups, then, is not primarily geographical, or socioeconomic, as in other sociolinguistic investigations, but is based instead on ethnic membership.

The nomenclature "Puerto Rican" or "black" is an abstraction which in many ways is difficult to specify in terms of specific groups. That island-born Puerto Ricans and southern-born blacks represent two different cultures in New York City is obvious. But after a generation or more in the same city, even in the same neighborhood, is it still possible to speak of two different cultural groups and two different dialects? Or is it the case that assimilation has occurred in the second and third generations? These questions must first be considered in order to specify in what way the existence of two different groups and dialects can be presumed.

The culture contact between these two groups will therefore be briefly outlined, concentrating on the place of Puerto Ricans in the city, and their relation to the blacks. While much of this discussion focuses on these two groups as they co-exist in Harlem, it is presumed that the contact situation is similar in those parts of the city such as the areas of south Bronx or Brooklyn which differ little from Harlem in terms of socioeconomics or population distribution.

This background, anthropological and sociological in nature, will provide a framework for the linguistic discussion, which is the principal focus of this study. The types of sources for this background are three: anthropological and sociological works, census material, and participant/observer information provided by the fieldworkers and in the interviews proper.
There are certain questions which must be answered in order to get a clearer picture of the cultural contact between the two groups. The nature of the Puerto Rican/black contact must be determined. What is the contact/situation in the schools, in non-school situations, and in the neighborhood? If assimilation does indeed occur, in what direction does it go, Puerto Rican to black or black to Puerto Rican? In other words, what is the dominant culture and therefore dialect?

The Puerto Rican culture in New York City must also be studied on its own terms: what is the relation of generations to one another, migrants to second generation, second to third, etc.? Are there some Puerto Ricans who identify with the black culture more than others, and if so why? Can the "lames," i.e., cultural misfits, both Puerto Rican and black, be said to reflect the extremes of the assimilation continuum? Are there blacks learning Spanish and if so, why?

Considerations made here indicate answers to some of the above questions. These include: Puerto Rican and black housing and neighborhood contact; residential mobility; Puerto Rican intra-group contact in school and at work; Puerto Rican and black conflict and solidarity; the use of Spanish by Puerto Ricans; and black assimilation to Puerto Rican culture. In order to take thorough account of the sample for the present study, we must look at the wider context of the Puerto Rican in New York City.

2.1 Puerto Rican and Black Contact in the Neighborhood

Probably the most important Puerto Rican area of New York City is East Harlem, the geographical boundaries of which are variously defined by Sexton (1965) and Lewis (1968) as roughly including the area from the
East River to Central Park and 96th to 130th Street, or more precisely from East 110th to 116th between 2nd and 5th Avenues (c.f. Fig. 1 p.8). To its north and east lie the predominantly black neighborhoods, with the poorest section of Harlem, called the Triangle, immediately to the north of Spanish Harlem. Otherwise known as El Barrio, Spanish Harlem is not homogeneously Spanish, with West Indians, Irish, Russians, Hungarians, Italians, and blacks also living there. Sexton (1965: 109) characterizes it as being more an economic than a racial ghetto, in contrast to central Harlem. Other geographical concentrations of Puerto Ricans in New York City include the West Side from 60th to 90th between Columbus Avenue and West End, Brooklyn's Bedford-Stuyvesant and Flatbush sections, south Bronx, Morrisania sections of the Bronx and sections of Queens (Lewis 1968:111, Glazer and Moynihan 1963: 94, Burma 1954: 160). Despite the fact that sections of Spanish Harlem seem to form enclaves which perpetuate the Spanish language and customs, geographical homogeneity is being replaced by integration, at least on the periphery. Although there are ethnic concentrations, no neighborhood seems to be completely homogeneous.

This lack of complete homogeneity is reflected in the sample for the present study. Almost all of the Puerto Rican informants, for example, indicated the presence of some blacks in their neighborhood. How many, however, seems to depend on the geographical location, and therefore where the informant lives has a great deal of influence on his black contacts, or if he is black, on his Puerto Rican contacts. At one end of the continuum, we have Puerto Ricans with relatively restricted neighborhood contacts with blacks. For example, Informant No. 11 notes:
Well, down in my neighborhood we got more Puerto Ricans than there is Negroes and Americans cause it's American people, there's only about two or three... It's a lot of Negroes by the projects towards about two blocks from where I live, and down where I live at is, everybody there is just plain Puerto Rican. (11:10)

At the other end of the continuum are Puerto Ricans with predominantly black neighborhood contacts. Thus, Informant No. 14 observes:

My brothers, when we first moved in, the only friends we had were Negro, and they were like, they say, we acted all cool with them. They all acted cool with us. (14: 7)

That blacks and Puerto Ricans live in the same neighborhood does not necessarily mean, however, that they share extensive contacts. According to Sexton (1965: 13), in the old tenement housing these groups do not live in the same building but in adjacent buildings or at opposite ends of the block.

One Puerto Rican resident in a predominantly Puerto Rican neighborhood in the Bronx stated that his whole apartment building is inhabited by Puerto Ricans, with the exception of one black spouse of a Puerto Rican, although blacks do live on opposite sides of the street on this block. Another resident of the same building adds to the picture of the block:

No, in my building, only Puerto Ricans live. No, Puerto Ricans...more Negroes...in the city you know we're the only Spanish building in the whole block, in the block you know we live in. The rest are Negroes so we stick with them you know, they make friends with you and you have a lot of friends. (36: 7)

A third resident of the building corroborates the account of the other two informants:
The block I live is only Negroes and Puerto Ricans but there's more Negroes than Puerto Ricans, see. There's only one building actually where lot of Puerto Ricans in it. That's the building I live in.... (38: 5)

Despite the integrated nature of the block, the Puerto Ricans living there name other Puerto Ricans as their best friends.

Another informant of E. 112th in Manhattan, on the other hand, indicates that his block has about an even number of blacks and Puerto Ricans, with the Italians segregated in separate buildings, at either end of the block.

In the projects, the sharing of the same roof does not guarantee direct communication between ethnic groups. Two informants who are brothers illustrate this well. Their family lives in the projects near E. 125th St. According to one brother, most of the people in his project are Puerto Rican, with some whites, but it is difficult for him to estimate the percentage of Puerto Ricans and whites:

That's a hard question because the white people you don't see them there.... You don't see them downstairs. (9: second interview)

The Puerto Ricans studied by Oscar Lewis in New York City "formed little islands within the city" where their language and many of their customs were perpetuated (1968: 204). Most of their shopping was done in Puerto Rican bodegas and Spanish was the standard home language. However, many of these subjects were first generation Puerto Ricans, some newly arrived, and length of time in New York City seems to be one of the most important factors in analyzing homogeneity of Puerto Rican contact. Padilla (1958: 26) notes three distinct groups of Puerto Ricans
in New York City: the recent migrants, the old migrants who have been in New York for a relatively long period of time, and those Puerto Ricans born and reared in New York City. The first group tends to limit their contacts to other Puerto Ricans, preferably relatives and people from the same hometown, as well as other Puerto Ricans in the same apartment house or tenement. These contacts appear to be limited to the neighborhood, if not the immediate tenement (Mills, Senior, and Goldsen 1950: 99). As these migrants became more acculturated, their way of life and their contacts changed. For those Puerto Ricans born and raised in New York City, their contacts with non-Puerto Ricans are much more integrated (cf. Hoffman 1968: 47), although they are rarely out of touch with other Puerto Ricans. They shop at the supermarkets of the area, and have contact with non-Puerto Ricans at school, at play, and at work. Despite differences in way of life and cultural orientation of the different groups, however, most Puerto Ricans share a feeling of solidarity:

There are ideals of behavior, standards of values, and rules for living that are considered appropriate to Hispanos, rather than to others, and there are forms of social control--sanctions and standards of approval and disapproval--that emerge from the body of ideals of behavior expected from Hispanos. In fact, many cultural diversities and behavioral expectations cluster within subgroups of the larger Hispano groups, and each subgroup is geared to the others as if they were all parts of a system... (Padilla 1958: 48, 49).

2.2 The Effect of Skin Color

Puerto Ricans born and raised in New York City, although they have had more contact with non-Puerto Ricans than other groups, often consider themselves as being "both Spanish and American, as two unintegrated aspects
of themselves" (Padilla 1958: 280). The extent to which they perceive themselves as Spanish or American depends on several factors. Among these are the degrees of acculturation of their parents, the family's socioeconomic status, and perhaps most significantly, at least outside the family, the color of their skin. (The contrast between family acceptance and societal acceptance is well documented in Thomas 1967).

What the Negro American has long been aware of, that is, that he is set apart from much of middle-class American society by his color, the Puerto Rican learns upon arriving in New York City.

Discrimination against Puerto Ricans is well documented on a general and specific level. For example, Informant No. 34 in our sample relates:

IN: There's once and a while a prejudice person. Like there's a place called Parkchester and it's you know like these high class people. I rode my bike there and you know they have a real nice park there you know, and they had a fountain shooting up and everything. I just walked in and all these people started leaving. They spit on the floor in front of me you know. They looked at me and started talking loud so I could hear them you know...

FW: Did they call you names?

IN:Yeah, you know like they talking to each other calling me names you know.... Ah they call you a Spic and too many Puerto Ricans moving around here. We got to leave here you know and they this is getting all messed up over here this park and all of this. You know, makes you really feel bad. (34: 10)

In Puerto Rico discrimination is allegedly more rooted in social class than color, although it happens also that the least socioeconomically advanced group contains most dark-skinned Puerto Ricans. Padilla (1958: 73, 75) explains racial considerations in Puerto Rico as being determined more by appearance than ancestry, and race is thus reinterpretable
depending on advance in income, education, etc. (cf. also the discussion in Hoffman 1968: 37-39). In terms of physical appearance, Latin Americans "assume the legitimacy of racial identities intermediate to those of white and Negro," while Americans dichotomize into a two-color system, according to Seda Bonilla (1961: 144). Those of intermediate color are consequently left in a no-man's-land in terms of self-identification in the United States. Upon his arrival in the United States, the Puerto Rican is made extremely sensitive to color distinctions. While on the island mulattoes are considered white, and while a larger percentage of white than colored Puerto Ricans migrate to the United States, these light-colored Puerto Ricans also become the target of American discrimination. In the United States, the effect, therefore, "has been to strengthen the character of the identification of the Puerto Rican in the case of those who were colored and to weaken it in the case of those who were white" (Handlin 1965: 58, 59).

For convenience of discussion, the spectrum of skin color for Puerto Ricans can be lumped into three main categories: white, intermediate, and colored. White Puerto Ricans often seek identification with the white American community as soon as possible, moving away from their central city neighborhood and severing Puerto Rican contacts in attempts to conceal their Puerto Rican origin. Seda Bonilla (1961) reports that Puerto Ricans who lived in a white neighborhood only admitted their Puerto Rican origin hesitantly and after three or four interviews. The same author also mentions encounters with children in East Harlem who refuse to be identified as Puerto Rican and deny knowing Spanish. Two brothers (both of whom are quite light) in the present sample, are good examples of this attitude. Both deny any knowledge of Spanish, saying they never
use it, despite the fact that their parents both are island-born and they live in a predominantly Puerto Rican environment.

FW: Did you ever speak Spanish at home?
IN: Did I ever? No, ... not that I could remember.
FW: Do your parents speak Spanish?
IN: (after some pressing) Once in a while.
FW: With your friends? (i.e., do you speak Spanish)
IN: Definitely. They speak Spanish to me you know. Go yeah yeah, I don't know what they're saying.
FW: You don't understand Spanish?
IN: No.... No I won't speak Spanish.
FW: What do you speak?
IN: I speak English.....
FW: With older neighbors?
IN: What about it?.... Oh, I can't speak Spanish.
FW: You can't say anything in Spanish?
IN: Well yes, but.... (9: second interview)

In terms of assimilation, intermediates and coloreds experience the same problems in different degrees. The colored Puerto Ricans are identified often by the outside community as black, and indeed, according to Seda Bonilla (1961: 147) "find open acceptance in the American Negro society with credentials of the 'West Indian'." For those colored Puerto Ricans who choose not to be identified with the Negro community, they must counteract the outside community's appraisal of them as blacks by emphasizing their Puerto Rican origins in an effort to enhance the distance between themselves and the blacks. This emphasis on their Spanishness may be linguistic as well as cultural, so that use of the
language and Spanish customs are reinforced. Within the Puerto Rican community, therefore,

...a reaction against what is regarded as a social disadvantage has been transformed into a source of family and neighborhood group solidarity which, in turn, serves as a source of emotional strength, reinforcement, and support for the individual. (Padilla 1958: 36).

Nonetheless, although they are considered Puerto Ricans (as against blacks) in the Puerto Rican community, they report being treated as the "lowest" within the family, and researchers have found that Puerto Rican drug addicts are usually the darkest members of the family (Sexton 1965: 10).

The intermediate group faces more ambiguity, since they are not immediately categorized by outsiders as black and have more of an option in choosing their identity. They may choose to be conspicuous as members of a foreign-language-speaking group rather than be identified with blacks. Those who do accept membership in the American Negro community become completely acculturated to the black society to the point of speaking like blacks, according to Seda Bonilla (1961: 147). This acculturation is reflected in the present study in the speech of those Puerto Ricans with extensive black contacts. These have then only one battle to fight, that of discrimination against a black, rather than the double problem of identifying himself as Puerto Rican and as being distinct from the Negro. Rand (1958: 13) seems to indicate that the Puerto Rican population in Harlem consists of those who are the darker, less European looking in the New York City population, since it is they who "are the ones who find it hardest to leave the ghettos and be
assimilated." It is interesting to note that most of the Puerto Ricans in the present study are of darker color.

What emerges so far is a sketch of the Puerto Rican population of New York City confronted with assimilation alternatives. Coming from a "foreign" culture, speaking a "foreign" language, the Puerto Rican finds himself confronted with a racial discrimination reportedly unknown on the island. If he is light and can learn the language, he and his children can become submerged in mainstream America. If he is dark-skinned, however, he is threatened with the discrimination meted out to American blacks, and he can either try to escape this discrimination by emphasizing his membership in the Hispano culture, or he can identify with the blacks and become accepted in some form of American culture.

2.3 Residential Mobility

The choice in the assimilation alternatives made by the Puerto Rican emerges in his choice of residence. Padilla (1958) notes that when the Puerto Rican first comes to the city, he either resides for a short time with relatives or is aided by them in locating an apartment, usually in Spanish Harlem or the other centers of Puerto Rican concentration indicated previously. While the migrants change residence frequently (Lewis 1968: 205 mentions about four moves per family), they usually remain in the same borough, often in the same neighborhood.

In the present study there are many illustrations of a pattern of mobility. For example, Informant No. 26, a seventeen year old Puerto Rican living at 110th and 5th Ave., has always lived within three blocks of his present location, although he has moved several times within this area. A number of other informants in the present study have moved
several times within a few blocks. Examples of a change of borough are found more occasionally: brothers No. 9 and No. 43 used to live with their family in the Bronx, then moved to their present location in the projects at E. 125th. There is only one example of a family having made significant moves in the present study. (No. 23, a present resident of the Bronx, lived with his family on 127th St. in Manhattan, the projects in Brooklyn, Fulton Avenue in Brooklyn, upstate in Buffalo, New York, Prospect Ave., and now in the Bronx.) A few informants state that they have lived all their lives in the same building.

The upwardly mobile family is noted to interact little with the neighborhood (Hoffman 1968: 46 footnote) and abandons the ghetto as soon as possible for Washington Heights, areas of the Bronx and Queens (Glazer and Moynihan 1963: 111), or areas farther away from the city. They move, therefore, to nonethnic areas as they become more assimilated. However, those Puerto Ricans whose mobility is restricted, especially by skin color, are frequently marooned in their original areas of residence in the ghettos of Harlem, the Bronx, Brooklyn, etc. (Burma 1954: 161, Seda Bonilla 1961: 146, 147).

2.4 Puerto Rican Intra-Group Contact

In order to see to what extent the Puerto Rican culture in New York City is homogeneous or heterogeneous, it is important not only to examine the contact situation with blacks and non-Puerto Ricans, but also to know the amount of contact existing between residents of the island and residents of the city, and relations existing between first, second, and third generation Puerto Ricans. There is a certain continuity between the island and the city in that not only is there constant
migration depending on the United States economy, but there is frequent visiting between the two places. Relatives often shuttle back and forth to the island to be with members of the family who have remained on the island. In addition, new migrants most often settle near or with relatives who have preceded them to the United States. In this way the island and its language is constantly kept in the attention of New York residents, that is, at least to the residents of the Puerto Rican neighborhoods, even if they are second and third generation Puerto Ricans who have never been to the island. Handlin states that unlike previous immigrants, both the blacks and Puerto Ricans did not experience the decisive break experienced by the Europeans:

The movement of individuals back and forth between the old home and the new never ceased, so that communications were close and the sense of connectedness was never broken. Handlin 1965: 109)

As was indicated in the preceding discussion, many Puerto Ricans form enclaves in the ghetto. According to Lewis (1968: 212, 213), the fact that they were set apart as being identified with blacks and therefore subject to discrimination in jobs, school, and housing, increased their feelings of inferiority. The total effect was to make them withdraw from the larger society and to activate their sense of nationality and ethnic identity. Because of these factors, Mills, Senior, and Goldsen (1950: 169) perceive the Puerto Ricans, at least first generation ones in the core areas of the city, as being fairly homogeneous.
...on the whole there is a rather uniform educational achievement, standardized occupation in specific industries and in standardized areas of the city. These factors of institutional concentration which tend to make the migrants of Spanish Harlem and Morrisania homogeneous have more effect than certain other factors which tend to differentiate between them; and the overall result is a leveling of psychological and internal life. (1950: 169)

Although the above observation is generally true of first generation immigrants, it is not clear that this uniformity and Puerto Rican orientation is present in the second generation and beyond. Nahirny and Fishman (1965: 318ff) elaborate the theory that often second generation children of immigrants tend to throw off their ethnic heritage as a form of rebellion for their being "different" from their American counterparts. However, even while doing this, frequently some form of ethnicity was retained in their very consciousness of being children of immigrants. The childrens' acute sense of marginality either encouraged them to become more American than the Americans themselves, or else more ardently ethnic than their parents. At least for those who chose the first option, any continuity with the ethnic heritage for the third generation was precluded. For this reason, Nahirny and Fishman (1965: 311) hold "that the ethnic heritage, including the ethnic mother tongue, usually ceases to play any viable role in the life of the third generation." Yet at the same time they see a reaction on the part of the third generation toward reidentification.

Glazer and Moynihan (1963: v) note a disinclination of the third and fourth generations to "blend into a standard, uniform national type." These authors see the loss of the immigrant language and culture of the first and second generations as making American cultural pluralism
impossible, but at the same time that these groups were stripped of direct ethnic influences, they were still identifiable as a group even beyond the second generation.

Concretely, persons think of themselves as members of that group, with that name; most significantly, they are linked to other members of the group by new attributes that the original immigrants would never have recognized as identifying their group, but which nevertheless serve to mark them off, by more than simply name and association, in the third generation and even beyond. (Glazer and Moynihan 1968: 13)

While these observations are made more in reference to other immigrant groups, they may be applicable to Puerto Ricans in New York City as well. Padilla notes that there is a higher status assigned to those who were born and raised in New York than to those born on the island. Most of these see themselves not so much as Puerto Ricans, for very often they have never been to the island nor do they anticipate going there, but rather "They regard themselves as different from their parents and the new migrants" (1958: 38). Second generation Puerto Ricans are often reported to object to speaking Spanish anywhere but in the home with parents and, as noted above, some even deny knowing any Spanish. Those Puerto Ricans who are able to assimilate with white American culture dissolve their ties with the ethnic group and "lose themselves in the general category of whites" (Handlin 1965: 58, 59). As indicated above, some assimilate to the black culture in the ghetto, while other Puerto Ricans stress their Hispano origins.

In 1965 Handlin saw two alternatives for the future, depending on color consciousness in the general community.
If color consciousness grows more intense, the Puerto Rican may be fragmented into three parts. The continuing flow of new arrivals will struggle to maintain themselves as Puerto Ricans. The colored Puerto Ricans already settled, and particularly those of the second and third generations for whom the difference of language fades in importance, will be pressed toward an identification with the more numerous Negroes. And the white majority of the second and third generation Puerto Ricans who lose the consciousness of language will find an evergrowing incentive to drop their identification and to merge with some other surrounding ethnic community. (Handlin 1965: 59)

If, on the other hand, there is a decline in color consciousness, Handlin indicates that

The white and colored Puerto Ricans in the awareness of their common identity could develop a coherent community to which newcomers would be added and which would grow stronger through immigration". (Handlin 1965: 59)

Given the rise of national awareness generated in the black nationalist movement and seen reflected in the Young Lords, the second alternative may indeed be becoming more attractive for many Puerto Ricans in New York's core areas (cf. Hoffman's comments 1968: 39).

2.5 School Contact

The question of school contact seems relatively straight-forward. According to Glazer and Moynihan (1963: 49), even in 1960 before permissive school zoning was fully established, over half of New York City's Puerto Rican and black children attended "integrated" schools. However,
the authors note that this integration is "simply the expression of the existence of the Negro ghetto" in the sense that the population merely reflects the overall neighborhood population. "Integration" may here be taken to mean the existence of only a few minority group members. We might expect a greater concentration of Puerto Ricans in the Catholic schools, since most Puerto Ricans are nominally Catholic, but this is not necessarily the case. In 1960, there were ten times more Puerto Rican children in public schools in the city than in Catholic schools (Glazer and Moynihan 1963: 104).

The schools attended by most of the informants in the present study show predominantly black and Puerto Rican populations with Puerto Ricans in the majority. Although Puerto Ricans are in a majority, the schools are thoroughly integrated with blacks. Typically, blacks comprise at least one third of the school population. While the population attending the schools is predominantly black and Puerto Rican according to neighborhood, the school administration is dominated by whites. Table 2 indicates the ethnic composition of students in each school where the majority of our informants come from, while Table 3 indicates the ethnic composition of the faculty and administration.

At school, if nowhere else, the Puerto Rican child is exposed to heterogeneity in culture and language. And traditionally, at school, if not at home, the Puerto Rican child begins his "intensive directed training in becoming American" (Padilla 1958: 200).
### Table 2: Ethnic Composition of Students in Selected Junior and Senior High Schools

<table>
<thead>
<tr>
<th>School</th>
<th>% Black</th>
<th>% Puerto Rican</th>
<th>% White</th>
<th>Number of students</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Junior High Schools</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Margaret Knox #99</td>
<td>30</td>
<td>69</td>
<td>1</td>
<td>1400</td>
</tr>
<tr>
<td>Thomas Jefferson #117</td>
<td>38</td>
<td>58</td>
<td>4</td>
<td>1688</td>
</tr>
<tr>
<td>William Etinger #13</td>
<td>40</td>
<td>59</td>
<td>1</td>
<td>1200</td>
</tr>
<tr>
<td>William Roberts #45</td>
<td>30</td>
<td>65</td>
<td>5</td>
<td>1350</td>
</tr>
<tr>
<td><strong>Senior High Schools</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Benjamin Franklin</td>
<td>39</td>
<td>60</td>
<td>1</td>
<td>4000</td>
</tr>
<tr>
<td>Julia Richmond</td>
<td>42</td>
<td>50</td>
<td>8</td>
<td>4600</td>
</tr>
<tr>
<td>Alfred E. Smith</td>
<td>30</td>
<td>57</td>
<td>13</td>
<td>4000</td>
</tr>
</tbody>
</table>

### Table 3: Ethnic Composition of Faculty and Administration in Selected Junior and Senior High Schools

<table>
<thead>
<tr>
<th>School</th>
<th>% Black</th>
<th>% Puerto Rican</th>
<th>% White</th>
<th>Number of Administrators</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Junior High Schools</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Margaret Knox #99</td>
<td>5</td>
<td>5</td>
<td>90</td>
<td>100</td>
</tr>
<tr>
<td>Thomas Jefferson #117</td>
<td>17</td>
<td>2</td>
<td>81</td>
<td>127</td>
</tr>
<tr>
<td>William Etinger #13</td>
<td>10</td>
<td>2</td>
<td>88</td>
<td>No data</td>
</tr>
<tr>
<td>William Roberts #45</td>
<td>27</td>
<td>6</td>
<td>67</td>
<td>104</td>
</tr>
<tr>
<td><strong>Senior High Schools</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Benjamin Franklin</td>
<td>10</td>
<td>4</td>
<td>86</td>
<td>250</td>
</tr>
<tr>
<td>Julia Richmond</td>
<td>5</td>
<td>1</td>
<td>94</td>
<td>300</td>
</tr>
<tr>
<td>Alfred E. Smith</td>
<td>No data</td>
<td>No data</td>
<td>No data</td>
<td>No data</td>
</tr>
</tbody>
</table>

Table 3: Ethnic Composition of Faculty and Administration in Selected Junior and Senior High Schools
2.6 **Job Contacts**

Since the interest in this study is with adolescents, their work contacts are hardly crucial. As for their parents, it seems that their contact with non-Puerto Ricans depends on the job context. Within the community, contacts would be predominantly Puerto Rican. However, according to Hoffman (1968: 52), "Few persons are employed in situations which do not put them in contact with monolingual English speakers." Indeed, for the older Puerto Ricans, occupations may be the chief links between Puerto Ricans and New York City (Mills et al. 1950: 156). Therefore, as school is a heterogeneous environment for the children, so work is for the parents.

2.7 **Solidarity and Conflict among Blacks and Puerto Ricans**

The Puerto Ricans live in New York City as a minority surrounded by a larger minority, the blacks. The Puerto Rican differs from the black in that for the latter his isolation from white society is more nearly complete, in the opinion of Broom and Glenn (1965: 36), whereas for the former there are more possibilities for assimilation with the white culture. The Puerto Rican's conflict, however, in many respects is greater than the black's in terms of acculturation, since at least if he is dark, he has the double onus of being "foreign" and being black-like. As discussed previously, the Puerto Rican opts for different forms of assimilation depending on skin color, etc. For those who remain in the center of the city, particularly if they have little possibility of relocating in another neighborhood, the culture to be assimilated to is the black culture, again particularly if they are dark.
...he must "become like" the Negro in the metropolitan community. The world in which he is to function inconspicuously is the Negro world... He finds that he can hold only certain jobs, mix socially only with certain people. Almost always he must live in the Harlem ghetto, or in certain Negro sections of the Bronx. (Mills et al. 1950: 133)

Rand notes the comment of a social worker on the Lower East Side as indicative of this blackward assimilation:

...The Negroes were in New York first and had a head start, but now the Puerto Ricans are copying them. They are borrowing the Negroes' gang structure. Also their jive talk and bop language.... The Negroes are setting the pattern, but the Puerto Ricans are right in there contending with them. (Rand 1958: 130, 131)

Those presumably lighter-skinned and more upwardly mobile have already left the center city or are in the process of doing so. These soon become absorbed in the middle-class outer-city pattern, thereby leaving the black-assimilating and Puerto Rico-oriented groups behind.

This proximity of Puerto Rican and black is also the cause of intergroup tension. Sexton (1965: 13) notes that race and ethnicity underlie much of the open and hidden conflict in East Harlem. This tension can be seen in the statements of some informants from the present study. One informant from East 125th and 5th describes a Puerto Rican/black gang confrontation:
You see, we have half a building full of niggers, guys that really look for trouble. They all came down round about and couple of guys from our building and we have room. 8 [sic] per cent of the guys round here are Spanish. They surrounded the niggers on the outside... I went straight down and hit couple of them on the head. Now I was at the bottom and when the Spanish finished with the niggers out there, they came in. They don't fool around with the Spanish cause, what you call it, Spanish take their ass and make it inside out. (43: 13, 14)

These types of tensions are not uncommon for some informants, despite superficial statements of solidarity about relations between the groups. Suspicion of blacks is often expressed by Puerto Ricans. Thus, one informant observes:

Like some of these Negro guys, I don't hang around, most of the guys that stick around there, they always, you know, look for trouble. (35: 9)

Similar feelings of antipathy are expressed by a number of informants in our corpus. Even though they may describe various indigenous forms of behavior which would clearly be considered anti-social in terms of mainstream values with respect to their own peer group, similar types of behavior by blacks are cited pejoratively.

Generally speaking the Puerto Ricans are on the lowest rung of the socioeconomic ladder in New York City: they have less income as a group than either white non-Puerto Ricans or nonwhites (Motley 1967: 21, Kantrowitz and Pappenfort 1966: 30). At least among the migrants, the educational achievement of an adult is an average of 6.5 years lower than any other ethnic group in the city (Lewis 1968: 206). The 1960
census shows the following figures on education for nonwhites and Puerto Ricans 25 years and over in New York City (Kantrowitz and Pappenfort 1966: 30).

<table>
<thead>
<tr>
<th>Years of school completed</th>
<th>Nonwhites</th>
<th>Puerto Ricans</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>3.2</td>
<td>8.2</td>
</tr>
<tr>
<td>Elementary school: 1-4 Years</td>
<td>8.2</td>
<td>20.9</td>
</tr>
<tr>
<td>5-7 years</td>
<td>18.1</td>
<td>23.8</td>
</tr>
<tr>
<td>8 years</td>
<td>16.3</td>
<td>17.2</td>
</tr>
<tr>
<td>High school: 1-3 years</td>
<td>23.0</td>
<td>16.9</td>
</tr>
<tr>
<td>4 years</td>
<td>21.4</td>
<td>9.9</td>
</tr>
<tr>
<td>College: 1-3 years</td>
<td>5.7</td>
<td>2.2</td>
</tr>
<tr>
<td>4 years +</td>
<td>4.1</td>
<td>.9</td>
</tr>
</tbody>
</table>

Table 4: Educational Achievement of Puerto Ricans Compared to Nonwhites

The same source shows a difference in income for the two groups.

<table>
<thead>
<tr>
<th>Family income</th>
<th>Nonwhites</th>
<th>Puerto Ricans</th>
</tr>
</thead>
<tbody>
<tr>
<td>under $1,000</td>
<td>6.3</td>
<td>6.9</td>
</tr>
<tr>
<td>$1,000-1,999</td>
<td>8.2</td>
<td>9.2</td>
</tr>
<tr>
<td>$2,000-2,999</td>
<td>12.6</td>
<td>17.7</td>
</tr>
<tr>
<td>$3,000-3,999</td>
<td>16.5</td>
<td>19.9</td>
</tr>
<tr>
<td>$4,000-4,999</td>
<td>14.8</td>
<td>15.3</td>
</tr>
<tr>
<td>$5,000-5,999</td>
<td>12.5</td>
<td>11.3</td>
</tr>
<tr>
<td>$6,000-6,999</td>
<td>9.0</td>
<td>7.4</td>
</tr>
<tr>
<td>$7,000-7,999</td>
<td>6.3</td>
<td>4.7</td>
</tr>
<tr>
<td>$8,000-8,999</td>
<td>4.5</td>
<td>2.9</td>
</tr>
<tr>
<td>$9,000-9,999</td>
<td>5.0</td>
<td>1.7</td>
</tr>
<tr>
<td>$10,000+</td>
<td>6.3</td>
<td>3.1</td>
</tr>
</tbody>
</table>

Table 5: Income Level for Puerto Ricans Compared to Nonwhites
Puerto Ricans are in competition with blacks for higher status, and often indicate that they are aware of this fact (cf. Lewis 1968: 208). According to Sexton (1965: 23), the jobless rate for blacks at that time in Harlem was 50 per cent above that for whites, and for Puerto Ricans it was 100 per cent above the white norm. As we can see then, Puerto Ricans often come below blacks in the "pecking order" of New York City.

Despite the objective facts concerning educational and economic status, most Puerto Ricans do not consider the personal prejudice against Puerto Ricans to be nearly as intense as it is against blacks. Thus, one informant, after describing a discriminatory incident towards himself as a Puerto Rican in a Bronx park, was asked whether the same would have happened had there been Negroes.

**IN:** Oh, man, if Negroes go in, I think they'll shoot them.

**FW:** Are you better off than Negroes in this respect?

**IN:** Yeah. They're treated much worse. (34: 10)

We thus see that the institutional discrimination against Puerto Ricans may match or exceed that against blacks in American society, but theblings of personal prejudice are not perceived to be as intense.

Although we have observed competition and conflict existing between Puerto Ricans and blacks in New York City, it has been noted also that close relationships may be established between them (cf. Padilla 1958: 94). This is particularly true of second generation Puerto Ricans. Some of our informants with extensive black contacts reflect this good rapport, which is indicated in the following dialogue between a field-worker and informant.
FW: Are colored guys and Spanish guys in the same gang ever?
IN: Yeah. Plenty times.
FW: Do they sometimes have the colored guy against the Spanish?
IN: No. Everybody believes in fun like that...You grow up, you see a colored guy sitting next to you. (27: 13)

As will be seen in Chapter Four, these types of comments are quite common from Puerto Ricans with extensive black contacts. More important than the informants' comments, observations of their contacts indicate integral peer associations of some blacks and Puerto Ricans. This rapport is not surprising, since they may interact with one another in school, in the streets and eventually at work. There is a commonality between the two groups in that they are marked by lines of demarcation: the blacks by the color line, and the Puerto Ricans by an ethnic line that is equally real.

Much of New York life is channeled within the bounds of the ethnic group, though the rigidity of this channeling of social life varies from group to group. For the Puerto Ricans,

...a recent immigrant group with a small middle class and speaking a foreign language, the ethnic group serves as the setting for almost all social life. For Negroes too, because of discrimination and poverty, most social life is limited to the group itself. (Glazer and Moynihan 1963: 19)

And while many theories state that ethnic awareness is lost for the most part after three generations, where color is involved, and hence when discrimination operates to solidify the group, three generations is not
enough to erase the distinctive ethnicity. Even when the third generation Puerto Rican would like to avoid being designated as such, there are other forces preventing him from forgetting his origins. It is in this sense that Puerto Ricans and blacks differ from previous immigrants to the city.

2.8 Use of Spanish

The fact that blacks and Puerto Ricans are forced together geographically and socioeconomically in New York City tends to inhibit ethnic isolation on the part of the Puerto Ricans. Not only are both groups exposed to the same mass media, they attend school together, work together very often, and share the same physical neighborhood. At the same time, Puerto Ricans are never very far from other Puerto Ricans, so that it is possible to maintain a Puerto Rican-English ambiance.

Part of this ambiance is encouraged by the use of Spanish. Fishman analyzes interactions between and within groups in terms of domains. According to Hoffman (1968: 26ff) "Domains are similar to the sociologist's 'institutions,' but are understood in terms of behavior, as well as in terms of structure," and the five suggested for language analysis are: home, neighborhood, education, officialdom, and religion. The general rule enunciated by Hoffman is helpful:

The more one functions within the Puerto Rican value system, the more he would be compelled to speak the language variants required by that system. As a person moves farther away from an exclusively Puerto

---

More specific information of Spanish-English usage can be found in Fishman et al. (1968). With respect to the informants in this study, more detail is given concerning their use of Spanish in ShIELs (forthcoming).
Rican value orientation his freedom of language choice increases, subject only to the constraints imposed by new value orientations. (1968: 41)

Relying on the preceding discussion, it seems safe to generalize that for Puerto Ricans in Harlem and other centers of concentration in the city, both English and Spanish are used; that is, at least for first and second generation speakers, there is no completely monolingual Spanish domain. The one that approximates a Spanish domain most closely is the home, particularly if (1) the parents speak little English or are fairly new arrivals in the city, or (2) there is frequent contact with new arrivals from the island. Children of pre-school age apparently learn English from their siblings and companions on the street rather than from their parents, and many youngsters who are fluent in English speak Spanish to their parents and older relatives. In the neighborhood both English and Spanish are used, depending on the age of the speakers and the Puerto Rican orientation of the speaker. The very integration of the neighborhood, its stores, schools, etc., does not encourage Spanish monolingualism.

Hoffman (1968: 47) notes that groups on the street are most often Puerto Rican, but include non-Puerto Ricans when the participants are in the teens and early twenties. This apparently depends on the orientation of the family. If it is less acculturated, and has a preference for maintaining Puerto Rican contacts to the exclusion of any other kind, this would, of course, affect the children's contacts. But Padilla (1958: 195) indicates that even with these restraints the youngsters maintain their school contacts, non-Puerto Rican as well as Puerto Rican, sometimes to the dismay of their parents. For youngsters from less traditional or more assimilated Puerto Rican families, their groups tend to be
ethnically mixed with little difference between Puerto Rican and non-Puerto Rican contacts, according to Hoffman (1968: 62).

Hoffman notes as well, however, that Spanish often unites youngsters "in a common, intimate, emotional bond even while many of them spoke better English than Spanish" (1968: 67). Spanish is associated with intimacy and solidarity, hypothesize Greenfield and Fishman (1968: 433, cf. also Padilla 1958: 96, 97, and Lewis 1968: 207), and it is used with friends and family. This is borne out in the present study. Some informants may use Spanish among Puerto Ricans, but do not use it when non-Spanish-speaking people are around, unless they want to tease or anger the non-Spanish-speaking.

FW: Do any of your friends speak Spanish?
IN: Ah we made a rule if ah if we with a couple of Negroes we won't speak Spanish cause they don't understand it. If we're not with none then we're allowed to speak Spanish. Like over here, you're not allowed to speak Spanish period. (i.e., at the summer camp where there were some non-Spanish-speaking). (10: 9)

While some of the informants speak Spanish with other Puerto Ricans, even for these few, English predominates:

...all my friends speak Spanish...Yeah sometimes we speak Spanish, sometime we do. We talk English the most. (19: 20)

Typical of a certain group of Puerto Rican informants are those who speak Spanish in the home, but not on the street:
FW: Do you speak Spanish to the kids in the groups?

IN: No, we don't speak Spanish to each other... only in the house... When I go outside I talk English only. (34: 9, 10)

For many of the Puerto Rican informants, Spanish is used at home, at least with the mother.

FW: Do any of them (i.e., the guys you hang with) speak Spanish?

IN: Ah we all speak Spanish... We usually speak English. We just probably speak Spanish to our parents... They speak English and Spanish but around the house they usually speak Spanish... It's normal. I mean, nothing wrong with it, just like speaking English. (37: 8)

Other informants, however, answer their parents in English, even when the parents address them in Spanish:

FW: Do you speak to your parents in Spanish?

IN: Huh. They ask, they call, they ask questions to me in Spanish but I answer in English....

FW: Do they want you to learn Spanish?

IN: I already know, but I'm learning how to read and write in Spanish. He teaching me. (33: 6)

And, for a few informants, despite their Puerto Rican origins, English is spoken at home.

...and my mother knows a lot of English. I speak English in the house and my father too. (36: 7)
Part of this reluctance to use Spanish, perhaps even at home, is from the fear of being classified as a "jibaro," a "hick." The following account illustrates this fear and the possibility of overcoming it if the speaker is highly valued enough by his peers:

...if I stay out till 11 my mother comes and gets me and then my friends say, couple of friends over there, they say ah man, this guy's always speaking Spanish with his mother you know. Boy, he's a hick and a half, you know, and then they start to hate me and I have to get, you know, I say look, if you don't like the way I speak Spanish, don't stay with me cause the guys over there, then, they you know as soon as they leave me they leave everything you know. Like if they leave, if they leave to go someplace I bring 'em, need everything from me. (10:10)

The official domain and the work domain are most often English-speaking. The educational domain also includes a predominance of English. That is the language of instruction, and after the first school years, the language of the youngsters at school, even when the school is predominantly Puerto Rican. English-speaking is valued. People born and raised in New York City who speak English sometimes resent being addressed in Spanish, and will, on occasion, pretend not to understand when addressed in Spanish. For them,

the knowledge of Spanish conveys no particular sense of accomplishment, nor is it something to boast about. Like non-Puerto Ricans, they regard the constant use of Spanish, as well as any other form of behavior that distinguishes Puerto Ricans from Americans, as detrimental to Puerto Ricans in New York. (Padilla 1958: 100)
Are there, however, forces which reinforce the use of Spanish? To some extent, there are people who prefer to maintain their Spanish. As discussed previously, one group consists of the intermediates who seek to differentiate themselves from the blacks by emphasizing their Hispano origins and language. There also seem to be some immigrant families who simply see Puerto Ricanness as a positive value, whether or not they desire to eventually return to the island (cf. Lewis 1968: 200, 201).

This pride associated with being Spanish and speaking Spanish is seen with one of the present informants:

FW: Do you speak it (i.e., Spanish)?
IN: I speak Spanish. I AM Spanish.
FW: Huh?
IN: I am Spanish. (27: 9)

Some parents are proud of their Puerto Rican origins and demand that their children speak Spanish:

FW: Do you answer (i.e., your parents) in Spanish?
IN: Well, I have to. My father asks me a question in Spanish. He won't take it in English. I have to answer him in Spanish cause he says ah-ah I'm not an Italian and I'm not a Negro, but I'm a Puerto Rican and have to speak to me in my language.... [He says] I was born in Puerto Rico and....I'm gonna raise you like Puerto Ricans. So if we speak...English, in front of him....it's like cursing right in front of him. (10: 9)

To promote the maintenance of their Puerto Ricanness, some parents with this orientation discourage their children from being on the street unless
in the company of the family, otherwise demanding that the child spend his
off-school hours in the home. These are also the children who are seen
alone on the street and who go to school alone, according to Padilla (1958:
15). Some of these children remain "upstairs" all during their childhood,
while others, as soon as they have learned the ropes, manage to gain ac-
ceptance in some sort of youth organization, with or without their parents'
approval (Padilla 1958: 229).

While it is difficult in one or two interviews to determine the in-
formants' knowledge and use of Spanish, particularly when the interview is
in English with an English speaker in an English-speaking context, it is
nevertheless clear that all of the Puerto Ricans in our study have had a
more or less extensive contact with Spanish either in their childhood or
from childhood to the present. For a general picture of the use of Spanish
by the Puerto Rican informants, four categories of Spanish contact are
useful. They are the following:

I: Knows Spanish and speaks Spanish to
family and non-family
II: Knows Spanish and speaks Spanish to
family
III: Knows Spanish but does not speak it
IV: Claims not to know Spanish

Of the present twenty-nine\(^1\) Puerto Rican informants, information culled
from one or two interviews shows that sixteen know Spanish and speak
it to family and non-family. The non-family include neighbors and peers.
The frequency with which Spanish is used with peers varies from often to
occasionally. Seven informants know Spanish and speak it with one or
more members of the family, but claim to speak it rarely outside the family.

\(^1\)One informant must be omitted from the present discussion since no
information on his use of Spanish was available (#31).
Three know Spanish but do not speak it at present with any frequency.

Two informants deny ability to speak Spanish.

As we have already mentioned, for most of the informants, the Spanish used in the family is most frequently with the mother or grandmother, while English is used more often with the father and siblings. While the use of Spanish with family members follows a fairly uniform pattern, Spanish usage outside of the family depends on many variables such as situation, age, participants, topic, and so forth. The description of the interaction of these variables, however, is outside the scope of this study, since our primary focus is on the English used by our informants.

Fishman has suggested the bilingual situation in New York City is diglossic, with functional reinforcement of English and Spanish in differing domains. The maintenance of both languages, seen from this point of view, is hypothesized for a long time to come:

"The "doom" of Spanish in New York is not about to come to pass and perhaps we now have a bilingual group in the City which will simply not go away the way the other language groups did." Fishman (1971: 71)

On the other hand, Cooper and Greenfield hypothesize the opposite, that is, that the Puerto Ricans

...seem to be headed in the same direction as previous immigrant groups in the United States, as they appear to be undergoing displacement of the 'mother' tongue by English in all domains of life.... (1968: 496)

Since the "choice of a language may in its turn serve as a subtle behavioral index to the direction of acculturation and to the vagaries
of social adjustment" (Herman 1961: 162), it would seem that the New York City situation would enforce the hypothesis of assimilation. That is, English is used more often, by more of the younger people, in more situations; further, it will be shown to include features of assimilation to the dominant dialect surrounding them, i.e., the black dialect. It is expected, however, that a certain differentiation between blacks and Puerto Ricans will be maintained (cf. Glazer and Moynihan 1963: 313). The ethnic components are no longer molding together as they did in the early twentieth and nineteenth centuries, according to Handlin (1965). Rather, what is seen is a solidification of ethnic groups, and it is the task of present research to examine "...the extent to which a differentiation of interest and orientation is taking place within the ethnic groups themselves and social antecedents to this process" (Doob 1970: 532).

2.9 Black Assimilation to the Puerto Rican Culture

Up to this point, only the case of Puerto Rican assimilation to black culture has been discussed, and indeed this is generally the case in Harlem. That is, there is a reasonably large number of Puerto Ricans with extensive black contacts who show in one way or another black assimilation. Linguistically this will be seen in the adoption of black features of grammar and phonology; culturally this is seen in the choice of peers and peer group activities. It is also the case, but to a much lesser degree, that some blacks attempt assimilation to the Puerto Rican culture, since, according to an observation made by Mills et al. (1950: 87) "there is a curious contradiction within American society which gives higher status to the foreign-born Negro, and particularly the non-English-speaking Negro, than to the American Negro." The
desire of a few blacks to establish themselves as Puerto Ricans is seen in their acquisition of a few Spanish phrases, as a means of identification with the preferred Spanish ethnicity. This is reported by Burma (1954: 176), Rand (1958: 129) and Mills et al. (1950: 133).

In the present study the phenomenon of blacks learning Spanish is sometimes mentioned. Typically, this amounts to learning short phrases for use in the peer group:

FW: Do any of these guys (i.e., that you are tight with) speak Spanish?

IN: Yeah, mostly the colored guys.

FW: The colored guys speak Spanish? Do you Speak Spanish with one another?

IN: You know like sometime I say "tu madre es puta". That means your mother's a whore, and the guy says to me "tu abuela," you know, your grandmother, and jive, and they say "vamos a comer," let's go eat, stuff like that, they tell you...

(5: 11)

Colored dudes you know, they know Spanish too.

(18: second interview)

Some guys, colored guys around there (i.e., his neighborhood) know Spanish too... Yeah, some of them say "mira chico" and what not...

(23: 11)

In other cases Puerto Ricans are teaching blacks to speak Spanish:

Some of them (i.e., the Negroes) know a lot of Spanish you know, a lot of Spanish they learn from us, some of them know...

(36: 7)
...they want to learn our language and their language is just like our language but with the accent, so we sound more funnier talking like them, but they also sound funny talking Spanish. They don't know how to pronounce the words right...Yeah, they have a Spanish record upstairs in the unit and M.S., he's, you know, colored fellow, unit in the kitchen. We put it on all the time and he starts trying to sing that record so bad...He start singing it, man, he bangs me up in bed. Teach me that record, teach me that record.... yeah, he's learning. He got the first three sentences, ever since the first session. (28: 10, 11)

Although it may appear that some of the Puerto Ricans' accounts of blacks learning Spanish are exaggerated because of their desire to see Spanish culture as prestigious, the acquisition of Spanish phrases is also mentioned by several black informants. One black informant notes:

So, we say like, "eh mira," you know, we talk in Spanish and do actions for it, "Dame cigarillo!" (1: 17)

It is important to note, however, that when blacks learn Spanish, it is primarily restricted to the use of certain set phrases, so that they would be unable to comprehend a Spanish conversation, or construct novel Spanish sentences. It is also important to note that no influence of Puerto Rican Spanish can be traced in their English. On the other hand, Puerto Ricans with extensive black contacts will be seen to assimilate Black English features in their speech. In our present study, we have one black informant who spends most of his time with Puerto Ricans. Generally, he is the only black among Puerto Rican peers. ("I was usually the only black one hanging out with Puerto Ricans" (8:7)).
But observation and analysis of this informant reveal no elements of influence in his speech which might classify him as being Puerto Rican, other than the few Spanish phrases he has acquired.

We conclude by observing that black assimilation to Puerto Rican culture, if it exists to any extent, tends to be very limited and is restricted to a very small minority of blacks.

2.10 Summary

Although we have not given a comprehensive ethnographic description in the preceding section, our brief account of selected aspects of the Puerto Rican community in New York City has attempted to present a wider socio-cultural framework into which our present linguistic study can be placed. When compared with other reports of East Harlem and our own background information, it appears that our small sample of Puerto Rican informants represents a fairly "typical" group of second generation teenage males from the area. We see a range of black contact in the neighborhood and schools which is well documented in other studies. The conflicting strains of solidarity and conflict between blacks and Puerto Ricans present a fairly representative picture of the social dynamics between the two groups. We further observe residency patterns which characterize lower socio-economic class Puerto Ricans, both in terms of location and mobility. The concentration of Puerto Ricans with dark skin also appears to be representative of the area when compared with other segments of the Puerto Rican population in New York City, because of the various assimilation alternatives based on skin color. And, we find that the use of Spanish from our informants' reports shows
the distribution we would expect of second generation Puerto Ricans. We conclude, then, that we are describing linguistic characteristics for a group of Puerto Ricans who, in most respects, typify the second generation teenage male.
CHAPTER THREE

VARIABLE ANALYSIS OF SOME SELECTED FEATURES OF PUERTO RICAN ENGLISH

3.0 Introduction

Perhaps the most significant contribution of sociolinguistic studies in the last few years has been the discovery that various social dialects in the United States are not differentiated from each other by discrete sets of features, but by the variations in the frequency with which certain features occur. Studies of social dialects in the United States in the mid and late 1960's clearly indicated that differentiation of dialects could not be indicated by simple categorical statements but were more typically, quantitatively distinguished. Furthermore, many instances of fluctuation in the usage of socially diagnostic linguistic features were found to be "inherent variability" rather than dialect borrowing or mixture. Labov's study of the social stratification of English in New York City (1966), Shuy, Wolfram and Riley's sociolinguistic study in Detroit (1968), Labov, et al.'s treatment of Black English in New York City (1968), Wolfram's investigation of sociolinguistic differences in the Detroit black population, and Fasold's (forthcoming) account of black working class speech in Washington, D.C. all indicate the essential variable parameter in the study of social dialects in the United States and the extent of inherent variability. These studies further point out that there are both independent linguistic constraints (e.g., environment, constituent structure, etc.) and non-linguistic constraints (e.g., social class,
sex) which directly affect the variability of items, and that these constraints should be formally incorporated into the representation of a linguistic rule. In this section, we shall undertake a variable analysis following the procedures employed in other studies of social dialects. Where appropriate, the independent linguistic constraints on variability are formalized as part of our representation of PRE. It is assumed that the reader is familiar with the type of variable analysis typified in Labov (1966) or Wolfram (1969), and particularly, the formal representation of variable constraints suggested by Labov, et al. (1968), Labov (1969) and Fasold (1970). It is also assumed that the reader is familiar with generative-transformational grammar (particularly, the phonology of Chomsky and Halle's Sound Pattern of English and the grammar of Chomsky's Aspects of the Theory of Syntax), the theoretical model which serves as a basis for rule formalization.

3.1 The θ Variable

Probably the most widely recognized phonological indicators of social status in American English are the interdental fricatives, ə and θ, both of which are represented orthographically by th. Although both the voiceless and voiced interdental provide for the study of linguistic variability in PRE, we shall restrict discussion here to the voiceless fricative θ, represented in words such as think, nothing, and mouth. We are dealing here with a phonological feature which in one way or another is common to many nonstandard varieties of English in the United States. But in another way, this sociolinguistic variable has realizations which are generally considered to be unique to Black English speakers in northern urban areas. In
order to view the different dimensions of this variable and the way in which it patterns, it is necessary to discuss it in terms of the different positional occurrences of potential Ø, its Standard English correlative.

3.1.1 Morpheme-Initial Ø

Labov, in his study of the social stratification of English in New York City (1966), demonstrated that one of the stable sociolinguistic variables for the New York Community as a whole was morpheme-initial Ø. The types of variants which can be identified tend to be common to several different nonstandard types of American English. The common phonetic realizations identified in our study here include:

- [Ø] an interdental fricative
- [tØ] an interdental affricate
- [t:] an unaspirated (generally lenis) stop
- [tʰ] an aspirated stop

In addition to the variants listed above, we have also transcribed several instances where neither an interdental fricative nor stop is realized. Instead, we find either an s or Ø (i.e., no phonetic realization). It is important to note, however, that all of these examples follow a word ending in a sibilant, as in:

1. (a) [wez#ïŋkã̃n] 'was thinking' 27:9
   (b) [neks#sIŋ] 'next thing' 21:12
We may anticipate our discussion of assimilation in morpheme-final \( \emptyset \) by noting that when morpheme initial \( \emptyset \) follows a sibilant, it may be assimilated to the sibilant. In the cases we shall discuss in Section 3.1.2.2 it will be observed that all the examples occur within word boundaries. The few examples that we have here (accounting for less than 10% of all potential instances following \( s \)) would seem to indicate that this assimilation process may upon occasion be extended across word boundaries.

Of the variants listed above, the non-stigmatized variant is \( \emptyset \), but it appears that the affricate is also used to a considerable extent in Standard English. Labov, et al. (1968:92) consider the affricate to have an "intermediate value" with respect to social stigmatization. In this study, however, we shall consider \( \emptyset \) and \( t\emptyset \) to be sub-members of the same variant and not distinguish between them in our tabulations. Our decision to consider them as sub-members of the same variant is due primarily to our unreliability in transcribing the difference between the slight stop onset \( [t\emptyset] \) which is almost inevitable before interdental fricatives in certain environments (e.g., following a pause, following a consonant) and socially significant affrication.

The socially stigmatized variants in American English are the stops, both the unaspirated lenis dental stop and the aspirated stop. It is important to note that the phonetic quality of this stop is generally [-tense], distinguishing it from the other stops, which are not derived from underlying \( \emptyset \). Labov, et al. (1968) have formalized both the affrication and stop realizations of underlying interdental fricatives variably by the following low-level phonological rule.
This rule converts the non-strident apical fricatives /θ/ and /ð/ to affricates [-cont], with one input variable, and as a second option with another input variable, to the corresponding lenis [-tense] stops. The feature [+ abrupt offset] seems appropriate here, since we are dealing with mellow affricates which are not continuants, but do not have the abrupt offset characteristic of stops. It is the addition of this feature that converts an affricate into a stop, which is defined by an abrupt onset and offset (Labov et al. 1968:99).

Labov, et al. (1968) have built the feature of voicing into this rule as a variable constraint which raises the relative frequency of rule application. But they do not state whether this variable constraint is to be applied if only the first part (in actuality, the first of two rules) of the rule is chosen. According to the empirical data presented by Labov, et al. (1968) however, it is clear that this constraint can only operate when both options of the rule have been chosen. They observe:

...we find that Negro speakers use a great many affricates for (th), (th-2), but that the prevailing form for (dh) is the stop, (dh-3). (Labov, et al. 1968:96)

Without explicitly establishing the convention that a variable constraint can apply only to the last option in a coalesced rule output which involves two or more optional outputs, an adequate account of variability can only be achieved by keeping the rules separate.
One will note that in the formalization of the affricate aspect of the rule by Labov and his associates the feature [-continuant] is considered to be a sufficient specification for the derivation of the affricated interdental. Since none of the distinctive feature specifications are adequate to produce this output, the burden is placed on the non-distinctive specifications for the interdentals (i.e., [-abrupt offset]). Only the redundant feature specifications can prohibit a stop from being the output. This, of course, presumes that the redundant features are present at this point in the phonological rules, either by introduction in previous phonological rules or their previous application via the morpheme structure rules.¹

The second aspect of the rule, as has already been noted, involves the addition of the feature "abrupt offset." Labov, et al. (1968), however, do not describe what they consider to be the exact status of the feature "abrupt offset" in the phonological description. On the one hand, it may be considered generally to be a nondistinctive feature which becomes distinctive in a specific situation in order to derive the proper phonetic output for the stop realization of this rule. On the other hand, it may be considered to be a distinctive feature which must be incorporated into the distinctive

¹Labov, et al. (1968) do not say where or how the nondistinctive features have been previously introduced. Generally, they have been placed in very low level phonological rules, but Stanley (1967:394) has suggested that there is good reason for these non-distinctive predictions to be included in the morpheme structure rules.
feature matrix of some nonstandard dialects. In essence, this means that a new systematic phoneme which contrasts with other types of alveolar stops is being introduced in the lexical representations. The former alternative, the decision to allow a nondistinctive feature to become distinctive, appears to be preferable to the latter alternative because of the low level rule involved and the prevailing redundancy of the feature "abrupt offset" for other types of contrasts in English phonology.

3.1.1.1 Variant Frequency

Having described the variants and how they have been incorporated into the description of nonstandard dialects where they are found, we may now look at the actual frequency of the variants. To begin with, we may look at the incidence of two main categories: (1) the interdental fricative or affricate and (2) the stop, either the aspirated or the unaspirated lenis variant. The frequency of the stop variants (both [tʰ] and [t] being considered as submembers of the same variant) is given in the following table, comparing the Puerto Rican and black informants. Examples were taken exclusively from the spontaneous conversation sections of the interview, but no more than 25 examples were taken from any one informant.

<table>
<thead>
<tr>
<th></th>
<th>No. ʃ/Total</th>
<th>% ʃ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Puerto Rican</td>
<td>156/542</td>
<td>28.7</td>
</tr>
<tr>
<td>Black</td>
<td>49/222</td>
<td>22.0</td>
</tr>
</tbody>
</table>

Table 6: Frequency of ʃ for Morpheme-Initial ʘ; Puerto Rican and Black Informants
Table 6 indicates that for the Puerto Rican and black informants taken as a whole, the incidence of \( t \) is higher for the Puerto Rican than the black group. A further breakdown of the \( t \) variants in terms of the aspirated and unaspirated realizations of \( t \) reveals that the relative incidence of the unaspirated variant is higher for the Puerto Ricans than the blacks; 63 per cent of all \( t \) occurrences are unaspirated for the Puerto Rican informants while 49 percent of all \( t \) occurrences are unaspirated for the black group. This seems to be due to a general pattern of PRE which reflects to some extent the Spanish unaspirated stop realization in initial position.

In Table 6, we looked only at the Puerto Rican group as a whole, but it is also possible to look at the individual range of \( t \) incidence for the group. A rank frequency curve is given for the incidence of \( t \) among the Puerto Rican informants in Chart 1.

![Chart 1: Rank Frequency Curve of Morpheme-Initial \( t \) for 0 for Puerto Ricans](chart1.png)
Chart 1 indicates that there is considerable individual variance in the frequency of t occurrence, ranging from above 50% to less than 10%. For other socially stigmatized variants, we can observe that the relatively high occurrence of the stigmatized variant may correlate with those informants who have extensive contact with blacks. But an investigation of the speakers who show the highest incidence of t does not show this to be the case. On the other hand, we may anticipate our discussion of several different social categories of informants by noting that the relatively low incidence of morpheme-initial t for ə characterizes those informants who do not appear to be integrated into the vernacular culture in terms of their lifestyles, values, and aspirations (cf. chapter 4).

Two types of environmental constraints on the incidence of t were examined. First, it was hypothesized that a preceding consonant might increase the incidence of t as opposed to a preceding vowel. In Table 7, the figures are given for these two environments. Figures are given for both the Puerto Rican and black informant groups.

<table>
<thead>
<tr>
<th></th>
<th>C#</th>
<th>No. t/Total</th>
<th>% t</th>
<th>V#</th>
<th>No. t/Total</th>
<th>% t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Puerto Rican</td>
<td>66/228</td>
<td>28.9</td>
<td>28/298</td>
<td>29.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black</td>
<td>18/88</td>
<td>20.5</td>
<td>33/121</td>
<td>27.3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 7: Incidence of Morpheme-Initial t for ə Following a Consonant or Vowel.
We see that our hypothesis concerning the preceding consonant is not confirmed in Table 7, at least not for the Puerto Ricans. That is, no variable constraint is apparent based on the preceding segment.

The second type of environment was delimited on the basis of the nature of the following segment. In English, the morpheme structure sequence rules allow only one consonant to occur following /θ/, namely /r/; otherwise only vowels can occur. In Table 8, we have divided the following context on the basis of the distinction between a following /r/ and a vowel. Only those cases of /r/ were tabulated where there was actual surface realization of /r/. If the phonetic realization indicated post-consonantal /r/ absence, it was tabulated as followed by a vowel rather than /r/.

<table>
<thead>
<tr>
<th></th>
<th>R</th>
<th>No. t/Total</th>
<th>% t</th>
<th>V</th>
<th>No. t/Total</th>
<th>% t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Puerto Rican</td>
<td>59/168</td>
<td></td>
<td>35.1</td>
<td>97/374</td>
<td></td>
<td>25.9</td>
</tr>
<tr>
<td>Black</td>
<td>14/48</td>
<td></td>
<td>29.2</td>
<td>35/174</td>
<td></td>
<td>20.1</td>
</tr>
</tbody>
</table>

Table 8: Incidence of Morpheme-Initial r for θ Based on the Following Segment

Table 8 indicates that there may be a variable constraint on the incidence of r dependent on whether it is followed by r or a vowel. However, the relative difference based on the distinction of following environments does not appear to be as clear-cut as some of the other types of linguistic constraints isolated in the discussion. The application of the Chi square test of statistical
significance for the two environments among the Puerto Rican informants indicates that this distinction is significant at the .05 level of confidence. Most clear-cut constraints on variability show a higher confidence level. Nonetheless, it appears that a descriptively adequate account of variation in the interdental fricatives will incorporate this constraint. We may then incorporate this constraint along with Labov's previously stated variable constraint based on voicing. We conclude that Labov's voicing constraint is the first order constraint and the following r is the second order constraint, since an examination of d → d for several informants indicates that the incidence of d for potential d is consistently higher than r for ?, whether the following segment is a vowel or r. That is, d → d > eV→ tr > ? → tV. The constraint of the following r only applies to underlying ? since the morpheme structure rules prohibit r following underlying |d|. As will be done with other rules, we shall adopt the distinctive feature specifications from Chomsky and Halle (1968) in our restatement rather than retain the distinctive features from earlier versions of generative phonology.

\[
\begin{align*}
+\text{cons} \\
-\text{voc} \\
+\text{cor} \\
+\text{ant} \\
-\text{strid}
\end{align*}
\]

\[
\rightarrow ([-\text{cont}] ([+\text{sim. release}]))/# [\text{Avoiced}] [B\ cons]
\]
In the formalization given in 2, capital Greek letters are used for variable constraints instead of the small Greek letters used by Labov (1969) or the integers suggested by Fasold (1970). The use of capital Greek letters avoids the ambiguous usage of Greek letters pointed out by Fasold (1970:557) while maintaining the notion of variability conventionally implied by the Greek letters. (This convention change was suggested by William K. Riley in personal communication.)

In the specification of the following constraint on t, it should be noted that it is sufficient to state the environment as consonantal, since the morpheme structure sequence rules automatically eliminate any other consonant from occurring. It is also interesting to note two facts about the phonetic realization of t and r in this sequence. First, we may note that the overwhelming majority of t realizations preceding r are unaspirated (90 per cent). Second, we note that the predominant phonetic realization of r in this environment is a flap, so that the usual phonetic realization is:

(a) [t̪u] 'through' 7:4
(b) [t̪i] 'three' 10:2

The overwhelming incidence of the unaspirated variant here seems to be due to the flap realization of r, since we do not generally get examples of an aspirated variant when the flap occurs, as in 4. The aspirated variant tends to occur almost exclusively with non-flap realizations of r, as in 5.

4. *[t̪h̪u]
It seems most reasonable to attribute the overwhelming use of the unaspirated stop and flap to its identity with the common Spanish phonological sequence [tɾ] as in [tɾes] or [tɾagar]. Other non-standard varieties of English may sometimes use the same [tɾ] sequence, but one would not expect it to occur with the same relative frequency (the limited numbers of examples from our black informants show it to occur less than 50% out of all tr clusters derived from |θ|).

3.1.2 Morpheme-Final θ

The variants that can be isolated for morpheme-final potential θ show considerable divergence from the variants that we discussed in our previous section on morpheme-initial θ. This difference is manifested both in the phonetic realizations and the frequency ratios of the several variants.

In Table 9 the distribution of variants in morpheme-final position is given, excluding the item with, which will be discussed separately for reasons we shall explain later. In Table 9, the figures are given for the Puerto Rican informants as a group. Examples are taken only from the spontaneous conversation section of the interview.
Table 9: Distribution of Variants in Morpheme-Final Position for Puerto Rican Informants.

As is indicated, the most common of the variants is \( \theta \), but the incidence of both \( \theta \) and \( f \) rank considerably above the other variants, accounting for over 80% of all cases. Because of the various phonological processes which are needed to account for the variants, each variant will be discussed individually.

3.1.2.1 The incidence of \( s \)

Of the variants which we have delimited above, the one which is most predictable from Puerto Rican Spanish is \( s \). That is, a Puerto Rican Spanish speaker learning English will most often use \( s \) as a correspondent for Standard English \( \theta \), so that tooth and both may be realized as [t\( \theta \)s] and [b\( \theta \)\( s \)] respectively. It would thus appear that a few instances of \( s \) which cannot be attributed to the assimilation of \( \theta \) to a following fricative (cf. Section 3.1.2.2) may be explained as a type of "vestigial interference." We have deliberately used the term "vestigial interference" to refer to
the relative infrequency of interference phenomena which may be expected to occur with some degree of regularity at some stages in the acquisition of another language. In the case of Puerto Rican Spanish speakers learning English, final θ may commonly be realized as s because of the failure to keep the two rule systems disjunctive. But speakers who have merged systems with respect to this phonological rule may be expected to use s considerably more frequently than the 3.4% which is actually observed in our corpus. Presumably, as a speaker acquires genuine competence over the rules of two languages disjunctively, the incidence of s for θ will be reduced accordingly. At the point that it becomes infrequent enough statistically to fall into the range of chance occurrence (i.e., less than 5% out of all the potential places in which it might legitimately occur) we may say that, for all practical purposes he has a disjunctive competence.

However, when occasional lapses indicate incomplete disjunction it seems appropriate to speak of "vestigial interference." Ultimately, of course, the definition of such a concept is a statistical one, relying on the validity of our cut-off point as an indication of rule disjunction between two languages or dialects.

What is essential to note here is that our second generation Puerto Rican informants have not as a group established the incidence of s as a correspondent for Standard English θ in morpheme-final position. It is only a small minority of informants who use it at all.

With respect to those informants who show some incidence of s, however, we may raise the question of how habitualized it is in their speech. If we find that for these informants there is a substantial frequency of s occurrence, we may want to postulate that
an integral part of the dialect. But when we look at the 4 informants who account for the few examples of s, we find that it is only used 13.5% out of all potential cases for these informants. The minority of informants who use it, and the relative infrequency of its usage by those who do have it, would thus appear to justify our dismissal of the s variant as a matter of vestigial interference. Its obvious failure to be incorporated as an integral part of PRE by second generation speakers causes us to hesitate writing any sort of rule for PRE in general which might account for this variant. Thus, our designation of items as vestigial in their interference, although a statistical decision, does have important implications for the inclusion or exclusion of particular items in formulating rules for the variety(s) of PRE. In a sense, this type of procedure by which we dismissed s is related to the importance attached to distinguishing between language competence and performance. In many cases, this distinction may be more statistically based than has generally been recognized.

3.1.2.2. The Incidence of Ø

Unlike the s variant, which we dismissed as outside of the rules which we will need to account for our data in some reasonable way, Ø is realized at a frequency level which cannot be dismissed quite as readily. At least when it is followed by a consonant, it would appear that its incidence must be accounted for as a part of the phonological rules which we must posit to describe this dialect adequately. All but one instance of Ø occur when followed by a consonant across either word or morpheme boundaries. Since
Since there is only one instance of 0 (less than 5%) when potential 0 is followed by a non-consonantal environment, we will not be concerned here with this single rare case. We shall instead concentrate our attention upon the number of instances which are followed by a consonant in order to determine what it is about the nature of consonants that may cause the surface realization of \( ^0 \theta \) to be 0.

In order to understand the increased incidence of 0 realization before words which begin with a consonant, it is necessary to look more closely at the nature of assimilation in both Standard English and various nonstandard dialects of English. In casual style 0 may assimilate to the following consonant if it is a voiceless fricative, so that we get sentences like those in 6 (a-c).

6  
(a) [kip yɪr ma^U ʃət]  'Keep your mouth shut'  
(b) [hi hæzə ma^U fɪr ɪvri əke^I ʃən]  'He has a mouth for every occasion'  
(c) [hiZ tɪ sim yələ]  'His teeth seem yellow'

Although we have not done a rigorous frequency tabulation, it is quite clear that the assimilation process is more common before the sibilants [s] and [ʃ] than it is before the labio-dental fricative [ʃ]. Phonetically this might be expected because of the tongue involvement with [s] and [ʃ] and its non-involvement in [ʃ]. We shall return to this apparent variable constraint later in our discussion.
It is noted that in the above examples, only voiceless fricatives are given as the relevant context for effecting assimilation. Voiced fricatives do not effect such assimilation, so that sentences (a-d) are unacceptable.

7: (a) *[kip yih maU zIpt] 'Keep your mouth zipped'
   (b) *[kip yih maU veri stIl] 'Keep your mouth very still'
   (c) *[hi huz emaU est muvz oc de taIm] 'He has a mouth that moves all the time'
   (d) *[si huz emaU za za gebor w'd envi] 'She has a mouth Zsa Zsa Gabor would envy'

Given the fact that the assimilation does not operate when the following fricative is voiced, if we were writing the rule just for Θ, it would have to be written as:

\[
\begin{align*}
\theta &\rightarrow \left[ \begin{array}{c}
\alpha \text{strid} \\
\beta \text{cor} \\
\gamma \text{ant}
\end{array} \right] \\
&/\quad \#\quad \\
&\left[ \begin{array}{c}
-\text{voc} \\
+\text{cont} \\
-\text{vd} \\
\alpha \text{strid} \\
\beta \text{cor} \\
\gamma \text{ant}
\end{array} \right]
\end{align*}
\]

1In actuality, the same type of assimilation operates for the voiced counterpart of θ in casual speech, so that we have sentences like:

[yu bri zëst faIr laIh] 'You breathe zest for life'
[yu bri veri hevæli] 'You breathe very heavily'
[šiz ema suža gebor taIp] 'She's a smooth Zsa Zsa Gabor type'

These appear to be quite acceptable in an allegro style of Standard English. This means that the rule would specify those features common to d and θ.

8
Although $e$ cannot be assimilated before a voiced fricative, as illustrated in 7 (a-d), there is a voiceless assimilation rule which may apply to voiced fricatives following a voiceless fricative to make them voiceless. And, if this rule applies, changing the underlying voiced fricatives to their voiceless counterparts, it then can subject $e$ to the fricative assimilation rule. Thus sentences like:

9 (a) [kip yir maU sipt] 'Keep your mouth zipped'
(b) [hi hæ z ø maU ðæt goz ðl ðø ta'm] 'He has a mouth that goes all the time'
(c) [kip yir maU ðær i stIl] 'Keep your mouth very still'

seem to be quite acceptable in allegro style in Standard English.

The acceptability of sentences like 9 can be best explained in terms of a sequence of two rules, one which assimilates following voiced fricatives to voicelessness when following voiceless fricatives, and the second one, Rule 8, which we discussed earlier. The voiceless assimilation rule covering -catives may be written as:
Presumably, the rule for Standard English voiceless assimilation will have to be a more general one (e.g. accounting for assimilation of non-continuant voiceless consonants) but for our purposes here, we shall be satisfied with the less general version.

In addition to the regressive assimilation (i.e., the assimilated sound precedes the conditioning sound) which we have discussed with reference to θ above in Standard English, it is important to note one type of progressive assimilation: namely, when θ follows the sibilant s. Thus, the assimilation of θ in an item like sixth must be accounted for by the preceding s:

11  [sIKs tɑm]          'sixth time'
    [sIKs æpəl]          'sixth apple'

This assimilation must be considered as peculiar to sibilants, since a preceding f assimilates to the θ in Standard English rather than the θ to f, so that we have:

12  [fθ tɑm]             'the fifth time'
    [fθ æpəl]¹          'the fifth apple'

¹There are apparently some Standard English speakers for whom the appropriate assimilation here is [ffθ]. For these speakers, the progressive assimilation rule is stated more generally.
Therefore, we must posit a rule in Standard English to account for 11 but not 12. This is formalized as:

\[
13 \quad \theta \rightarrow ( [\text{strid}] ) / \begin{array}{c}
-\text{voc} \\
+\text{strid} \\
+\text{cor}
\end{array} #
\]

In addition to the frequent application of this rule within word boundaries we noted in examples 1 (a, b) that it occasionally operates across word boundaries.

Up to this point, it has been implicit that sentences such as 6 (a-c) are the result of two processes; first there is an assimilation process which operates to make \( \theta \) identical to certain fricatives in certain types of environments, then there is a rule which deletes one of the members in a geminate consonant cluster. That is, in order to get at the actual surface realization of sentences 6 (a-c) there is a gemination reduction rule which operates on the output of rule 8. Assuming that this is a rule which is needed elsewhere in the grammar, this might be given informally as:

\[
14 \quad C \rightarrow \emptyset / \_\_\_ \text{ an identical } C
\]

In the ordered sequence of rules, this rule must obviously follow rule 8.

What are the reasons, then, for suggesting that the phonetic realizations in 6 are a product of assimilation and subsequent deletion of geminate consonants? In justification of our interpretation here, there are several specific observations concerning
the data and some general principles of language processes which may be cited. In the first place, there are instances in which there may occur some phonetic basis for considering these as the result of assimilation. In some instances, there may be the vestige of a phonetically lengthened fricative. Thus, the sibilant in *sixth* can sometimes be perceived to be lengthened as in:

15  [sIKs: taɪm]  'sixth time'
    [sIKs: æpɔl]  'sixth apple'

This phonetic lengthening fluctuates with the non-lengthened realizations given previously in 11. Also, in the case of assimilation across word boundaries, there are cases in which a perceived onset of the word occurs during the duration of the fricative, so that a careful phonetic transcription of items like *mouth shut* and *ninth street* might be:

16  (a) [maʌs ʃət]  'mouth shut'
    (b) [nɛns 'strit]¹  'ninth street'

Although this type of phonetic vestige is admittedly present in only a small minority of cases in allegro style, an assimilation process seems to be the most reasonable way of handling this phenomenon.

¹It is interesting to note that for (b) there is a vocalic shift which is conditioned on the basis of the existence of a voiceless segment following the *n* in *ninth*. When there is a voiceless consonant forming a cluster with *n*, there is a centralizing tendency in the vowel nucleus, but when there is no voiceless consonant, it does not centralize. Thus we get:
In further defense of our interpretation of θ absence as assimilation followed by deletion rather than simply deletion, we may note the natural differences between assimilation and deletion as language processes. Assimilation tends to be restricted in terms of specific environments in which it can take place, whereas deletion tends to be affected by more general environments. When we look at the above case, we see that the θ realization is almost exclusively restricted to following fricatives. Because of the natural class relationship of θ to other fricatives, we may expect this to be assimilation within a natural class. But when we look at deletion as a process, we typically find the relevant environments for deletion to be more general. For example, studies of word-final consonant cluster reduction (e.g. tes' case for test case) we find that deletion is affected to some extent by any consonant. This is not to say that the delineation of different types of consonantal environments will not show some effect on the variability of reduction, for this is certainly the case in many instances. One does note however, that the differences in consonantal effect tend to be gradient rather than sharp. Thus, if we look at consonant cluster reduction before words beginning with consonants (cf. Wolfram 1969: 62) we note that all consonants effect reduction to some extent but that certain consonants may effect it more than others. This seems to be the way in which deletion processes generally operate. In contrast, the θ realization for θ occurs

(a) [nən storɪ] 'ninth story'
but
(b) [nən storiz] 'nine stories'

This phenomenon indicates that the assimilation and deletion rules must follow the rule for centralization.
almost exclusively before fricatives, which appear to be a natural environment for assimilation. Assimilation and subsequent deletion as language processes tend to show the mutually exclusive type of distribution that we have observed here. Therefore, even if our claim that there are sequences like 15 and 16 were to be disputed on empirical grounds, we would still be inclined to suggest that the interpretation given above is a natural solution in terms of how we can expect languages to operate.

Finally, phonetic sequences such as $\theta s$ or $\theta \theta$ appear to involve a transition which may be difficult to maintain for physiological reasons, thus resulting in a tendency toward assimilation. The fact that many non-native speakers of English have a tendency to interpret a sequence such as $\theta s$ as an assimilation to $\theta$ (producing months as [mənθ]) would seem to indicate an inclination toward assimilation of this sequence. However, the non-native speaker's tendency is to interpret the assimilation as progressive rather than regressive. Although this type of evidence, in itself, may not be the type of formal evidence on which we can base our entire solution, it does tend to reinforce our interpretation as the correct solution to the $\emptyset$ realization of $\emptyset$ for Standard English.

With our above discussion concerning the nature of $\emptyset$ assimilation in Standard English in mind, we may now return to the cases of $\emptyset$ realization we have encountered with our Puerto Rican informants. Is this exactly the same type of phenomenon as that which we observe in Standard English, or is it different? To begin with, we may note that over 70% of all occurrences of potential $\emptyset$ before the fricatives we mentioned previously (i.e., $\xi, s, \tilde{s}$) are absent (when just sibilants are considered it is over 90%). When we compare this figure with
the figures for other consonants, we find the contrast quite apparent, for the realization of \( \emptyset \) before other consonants is less than 5 percent. This plainly indicates that the assimilation process which we have observed for Standard English is very much operative for this variety of English as well.

The limited instances of \( \emptyset \) before non-fricative consonants are given below:

\[
\begin{array}{ll}
\text{17} & \text{(a) } [\text{ne}^\text{I} \text{m}^\text{U} \text{w}^\text{O} \text{z}] \\
& \text{'Namath was'} \quad 14:2 \\
& \text{(b) } [\text{cr}^\text{U} \text{d}^\text{O}] \\
& \text{truth the'} \quad 23:3 \\
& \text{(c) } [\text{cr}^\text{I} \text{m}^\text{U}] \\
& \text{truth my'} \quad 23:6 \\
& \text{(d) } [\text{m}^\text{U} \text{w}^\text{O} \text{z}] \\
& \text{mouth was'} \quad 27:12 \\
& \text{(e) } [\text{m}^\text{U} \text{y}^\text{O} \text{n}^\text{O} \text{U}] \\
& \text{mouth you know'} \quad 34:7 \\
& \text{(f) } [\text{bo}^\text{U} \text{h}^\text{O} \text{v}] \\
& \text{both have'} \quad 38:3 \\
& \text{(g) } [\text{ne}^\text{I} \text{m}^\text{U} \text{w}^\text{O} \text{z}] \\
& \text{'Namath was'} \quad 39:2
\end{array}
\]

No clear-cut conditioning for \( \emptyset \) realization is apparent in the above list. The above examples do not appear to be cases of an extended assimilation process in PRE, but seem to be relatively rare cases of the deletion of \( \emptyset \) before another consonant. With the possible exception of following labials, where 4 of 17 cases of potential \( \emptyset \) are absent, the rarity of \( \emptyset \) before another consonant does not appear to be an integral part of the phonological processes of the variety(s) of English spoken by our Puerto Rican informants. Even in the case of following labials, however, the paucity of examples does not allow us to make a strong case for a regular phonological process which deletes or assimilates underlying \( \emptyset \) before \( v \)-
Our conclusion, then, is that the nonstandard variety(s) of English spoken by our Puerto Rican informants simply share the assimilation rule for final 0 that exists for Standard and other nonstandard varieties of English. The few examples of 0 before other types of consonants do not figure prominently in our interpretation, since rare cases of deletion appear to be matters of performance rather than competence. The assimilation rule operates in Standard English on a segment when it is followed by a fricative, or when preceded by a sibilant. Furthermore, the same type of constraint appears to operate for this nonstandard dialect in that assimilation occurs with considerably greater frequency when the following morpheme begins with a sibilant as opposed to a labio-dental fricative.

If we conclude that the frequency difference between labio-dental fricatives and sibilants is to be incorporated into our variable rule, we are faced with an interesting problem concerning the conventions for stating variable rules. Instead of the statement of the rule as in 81

\[ \text{we will need to state the environment disjunctively, specifying } f \text{ as} \]

\[ \begin{align*}
\text{+-strid} & \quad \text{+strid} \\
\text{-cor} & \quad \text{cor} \\
\text{+-anter} & \quad \text{+anter}
\end{align*} \]

we are to build the variability factor into the rule. Because we must specify the environment for the rule as at least partially disjunctive, we can no longer retain our matching or -values indicated by the Greek prescripts in Rule 8. Traditionally, the Greek prescripts are used to indicate some matching variable coefficient in the rule somewhere. Now if we are to retain the generality of the assimilation rule for fricatives while incorporating
our variable constraint for the frequency difference between the labio-dentals and sibilants, we can only do so by establishing a slightly different convention for the use of the Greek prescripts under certain conditions. The convention change that we suggest here in order to retain the rule output as originally postulated may be stated as follows:

When a disjunctive environment (E) of a rule reveals $E_1$ with $+\text{Feature X}$ and $E_2$ with $-\text{Feature X}$ and the output of the rule requires an assimilation of $X$ to $+$ for $E_1$ and $-$ for $E_2$, then the Greek letter prescripts should be read as $+$ for $E_1$ and $-$ for $E_2$.\footnote{Although the convention we are suggesting here is initiated in order to incorporate a variable constraint, the same convention might allow certain types of rule collapsing presently prohibited in a more traditional interpretation of generative phonology. (i.e., a theory that does not formally admit the incorporation of variable constraints).}

Adopting this convention change, then, will allow us to state the rule, with the variable constraint for labio-dentals and sibilants as:
In the above convention, the capital Greek letter $A$ refers to the fact that $s$ and $\tilde{s}$ can be expected to undergo the assimilation process more regularly than $f$. It is noted here that the constraint refers to the entire feature matrix rather than simply one feature. In Labov's original formulation, it was only used with reference to single features. However, inasmuch as it is necessary to distinguish certain logically related units by more than one feature, this seems to be an inevitable extension of variable marking.

Before concluding our discussion of $\emptyset$ surface realizations, it is necessary to point out that the assimilation process we have been discussing must operate on underlying $\emptyset$ for those speakers who have the $\emptyset \rightarrow f$ rule (cf. Section 3.1.2.3) in certain environments. To put it another way, it must be applied before underlying $\emptyset$ has been changed to $f$. This conclusion is based on the fact that this variety, like Standard English, does not permit assimilation of $f$ to sibilants. Thus, examples like *[læ sə] 'laugh so' and *[ə sə] 'off so' are not found in our corpus just as they are not found in Standard English. An examination of 10 speakers for examples
of underlying f before sibilants indicates that there are no examples of assimilation or loss. In order to disallow the assimilation of underlying f before sibilants while permitting the assimilation of underlying θ, we must apply the assimilation rule to θ before it is changed to f. A generative phonological rule can only operate on the output of all previous rules, so that once θ → f, all subsequent rules must operate on all f's regardless of their derivational history.

3.1.2.3 The Incidence of f

Having accounted for the θ surface realizations for potential θ, let us now turn our attention to the incidence of f realization. Of the socially stigmatized variants, this is by far the most frequently occurring. In looking at the source for this variant, we must first rule out the matter of language interference from Spanish. As we have seen earlier, the expected interference variant for Standard English θ by Spanish speakers is clearly s. But this was seen to be a very infrequently occurring variant. In counting for f, therefore, it is reasonable to turn to the structure of Black English, where it is the most common correspondent for Standard English θ in morpheme-final position. The following table indicates the incidence of the variants, comparing the Black informants and the Puerto Rican informants.
<table>
<thead>
<tr>
<th>Variant</th>
<th>PR</th>
<th>Black</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>%</td>
</tr>
<tr>
<td>θ</td>
<td>56</td>
<td>38.1</td>
</tr>
<tr>
<td>f</td>
<td>64</td>
<td>43.5</td>
</tr>
<tr>
<td>t</td>
<td>4</td>
<td>2.7</td>
</tr>
<tr>
<td>Ø</td>
<td>18</td>
<td>12.2</td>
</tr>
<tr>
<td>s</td>
<td>5</td>
<td>3.4</td>
</tr>
<tr>
<td>Total</td>
<td>147</td>
<td></td>
</tr>
</tbody>
</table>

Table 10: Comparison of Variants for θ for Puerto Rican and Black Informants

The above table clearly indicates the increased incidence of the θ variant when the Puerto Rican group is compared as a whole with the black group. We may, however, look more closely at the type of distribution that is found for a number of the Puerto Rican informants. In the following rank frequency curve, the relative incidence of f and θ are shown for the 12 Puerto Rican informants who have at least five examples of potential θ in their interview (i.e., excluding the item with).

![Chart 2: Rank frequency of f for Potential θ in Morpheme-Final Position.](image-url)
The chart indicates a complete range of frequency for f among our Puerto Rican informants. At the upper end of the scale are two informants who show the categorical presence of f in morpheme-final position while at the lower end are three informants who reveal the categorical presence of θ. Because of this distribution, it is instructive to look briefly at the informants at either end who reveal categoricality.

The two informants who show the categorical use of f in morpheme-final position will be studied in more detail later because of their extensive contacts with blacks. (Of the 12 black informants for whom this variable was tabulated, three revealed the categorical presence of f; none showed categorical θ.) Consideration of the ethnic identity of their peers, our observations of their social contacts at camp, and the comments of YDI staff workers who have had more extensive contact with these informants all testify to their extensive black contacts. On the other hand, the three informants who reveal the categorical presence of θ do not show this type of social interaction. In fact, two of the informants, who are brothers, relate in their interviews little contact with blacks in terms of peer contacts. The other informant has a minority of black peers, but could not be considered to have the extensive types of contacts that are characteristic of the two informants who reveal the categoricality of f. Thus, looking at the linguistic distribution and the social characteristics of informants who represent two ends of the linguistic continuum, we are led to hypothesize that the frequency of f incidence is a function of the extent of black contacts because of the integral role of f in Black English. This hypothesis can be
tested out by comparing those informants who, according to our criteria for extensive and limited black contacts (cf. Chapter 4), fit into the two categories. These two groups are then compared with the black informants.

<table>
<thead>
<tr>
<th>No. Inf.</th>
<th>Occ. f</th>
<th>Occ. θ</th>
<th>% f</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black (10)</td>
<td>36</td>
<td>8</td>
<td>81.0</td>
</tr>
<tr>
<td>PR with Extensive Black Contacts (6)</td>
<td>20</td>
<td>3</td>
<td>87.0</td>
</tr>
<tr>
<td>PR with Limited Black Contacts (23)</td>
<td>53</td>
<td>44</td>
<td>54.6</td>
</tr>
</tbody>
</table>

Table 11: Comparison of f Realization for Blacks, Puerto Ricans with Extensive Black Contacts, and Puerto Ricans with Limited Black Contacts.

The distribution of f realization in the above table is quite straightforward, and our hypothesis is confirmed. The Puerto Ricans with extensive black contacts match (in fact, they exceed, but not to any significant degree) the extent of f realization found among the black informants, while the Puerto Ricans with limited black contacts reveal significantly less f realization than both groups.

At this point, we must turn to the descriptive account of f as a correspondent of Standard English θ in morpheme-final position for those Puerto Rican speakers who reveal this variant. Previous discussions of morpheme-final [f] as a correspondent of Standard English [θ] (for Black English) have concluded that some cases of [f] must be derived from underlying |θ| on the basis that only [f] derived from underlying |θ| may alternate with [t] in its surface realization. Fasold notes:
we see that there is indeed a contrast between the [f] which matches Standard English [θ], and the [f] which matches Standard English [f]. In certain situations, words with word-final [f] in Black English are pronounced with a [t]. Consider the two sentences:

Get off my bike!

Come back with my bike!

One possible Black English pronunciation of these sentences is:

[gıt of ma bayk]

[kəm bæk wıf ma bayk]

In rapid speech, the [f] in 'with' can be pronounced as [t], but not the [f] in 'off':

*[gıt ot ma bayk]

[kəm bæk wıt ma bayk]

It is necessary, then, before the phonological rules apply, to designate which kind of [f] is which. Given the system of English Phonology, it can be shown fairly convincingly that the appropriate segment to represent the underlying final consonant of 'with' is )θ(, even if it is never so pronounced. (Fasold 1969:78-79)
Wolfram supports the same position for the identical formal reasons, when he says:

What is clear, then, is that it is necessary to postulate two underlying sources for the surface realization of [f] in Black English; one of these can be alternately realized as [t] in certain environments, while the other cannot. (Wolfram 1970:9)

Although the alternation of [f] with [t] is part of the formal evidence for the postulation of underlying [θ] in some lexical items, that postulation is still restricted to those examples where this type of alternation actually occurs. For those forms not revealing this alternation, and this is the majority, it has been suggested that the generative phonological rule be written in such a way that only the features shared by f and θ be specified. This can be stated by the following rule:

\[
\begin{align*}
19 & \\
[-\text{voc}] & \\
+\text{cont} & \\
+\text{ant} & \\
-\text{strid} & \\
-\text{vd} & \\
\end{align*}
\rightarrow \left( [ -\text{cor} ] \right) / \underline{\text{##}}
\]

This feature specification assumes that both [θ] and [f] are [-strid] but this is a matter which is still not resolved. Chomsky and Halle (1968:177) consider [f] to be [+strid] but their description of stridency ("a rougher surface, a faster rate of flow, and an angle of incidence closer to ninety degrees will all contribute to greater stridency") seems to unite rather than distinguish [f] and [θ]. At
Fasold concludes that:

The answer to the specification problem is to specify ...the fricatives in words in which t is observed in allegro speech as θ, and to partially specify the fricatives in morpheme-final position in all other words. (Fasold 1969: 4-5)

Although the evidence from t and f alternation is correct, the restricted number of items for which this type of alternation is actually observed (e.g., the unstressed preposition with, θ following a nasal, etc.) leave the majority of items as unspecified with respect to underlying f or θ if we look at formal motivation. (Other reasons for considering them all as θ have been given, but these do not hold the same weight as the formal motivation we are talking about here.)

When we look at it more closely, we find that there is another type of alternation which extends the motivation for the full specification of θ in morpheme-final position. This alternation is related to the assimilation of θ when the following segment begins with a sibilant. We have observed that when a morpheme-final

any rate, this is not crucial to our discussion since we could simply state the rule as:

\[
\begin{align*}
-voc & \quad +cont \\
+ant & \quad -vd
\end{align*}
\]

\[
\rightarrow (\quad -cor \\
\quad +strid
\) / ###
\]

If we decided that [f] was [+strid].
θ is followed by a morpheme or word beginning with a fricative, but particularly a sibilant, the θ may assimilate, as in sentences 6 (a-c). Now when the underlying form is |f|, the assimilation process does not apply, so that we get:

20  
(a) [kip raU ‚et ep]  'Keep Ralph shut up'
(b) [t̥r̥n af ses̥mi strit]  'Turn off Sesame Street'

The following alternations appear to be unacceptable for both standard and nonstandard dialect speakers.

21  *
[kip raU ‚et ep]
*[t̥r̥n ses̥mi strit]

When we look at our speakers who use morpheme-final [f] as a correspondent for Standard English [θ], we still find that they undergo the assimilation process which operates only when |θ| is the underlying form. Since we can construct the sort of environment in which |θ| undergoes assimilation for practically any word-final instance of underlying |θ|, there is no reason to believe that any rule input should remain partially unspecified in this position. We thus conclude that Fasold's decision to leave some instances of morpheme-final [f] as the realization of a segment which is not fully specified as θ cannot be justified. The rule must have as its input fully specified θ instead of the partial specification given in Rule 19.

Up until now, we have discussed the incidence of f and θ in morpheme-final position as if the only constraint on the incidence of f is non-linguistic, as a function of peer contact with blacks.
But our investigation of a number of phonological variables has indicated that for practically all of them, there is some independent linguistic constraint on variability. One of the very common constraints indicated by previous studies is whether the following morpheme (either within or across word boundaries) begins with a vowel or non-vowel (i.e., consonant or pause). We may investigate the possible influence of this contrast in the following table. The contrast is also given for the black group.

<table>
<thead>
<tr>
<th></th>
<th>Vocalic</th>
<th></th>
<th>Non-Vocalic</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black</td>
<td>16</td>
<td>88.9</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>20</td>
<td>76.9</td>
<td>6</td>
</tr>
<tr>
<td>Puerto Rican</td>
<td>14</td>
<td>58.3</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>50</td>
<td>52.1</td>
<td>46</td>
</tr>
</tbody>
</table>

Table 12: Comparison of $\theta$ for Potential $\theta$ in Vocalic/Non-Vocalic Environments.

Although for both groups there is a slight increase of $\theta$ when the following environment is non-vocalic, the variable does not show the clear-cut conditioning on variability (no statistical significance can be demonstrated on the basis of the difference between these environments) that other variables have had on the basis of this distinction.

One environment which previous studies have indicated is significant for the variability of $\theta$ and $\theta$ realizations is the distinction between morpheme-medial and final position. Wolfram's study (1969:89) revealed that $\theta$ was used approximately twice as frequently in morpheme-final position as in morpheme-medial position.
The following table reveals the difference between \( f \) realization in morpheme-medial and final positions, again including the black informants for comparison.

<table>
<thead>
<tr>
<th></th>
<th>Morpheme-Medial</th>
<th>Morpheme-Final</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>( f/\text{Total} )</td>
<td>( f/\text{Total} )</td>
</tr>
<tr>
<td>Black</td>
<td>3/15 20.0</td>
<td>36/44 81.8</td>
</tr>
<tr>
<td>Puerto Rican</td>
<td>12/50 26.0</td>
<td>64/110 58.2</td>
</tr>
</tbody>
</table>

Table 13: Comparison of \( f \) for Potential \( \theta \) in Morpheme-Final and Medial Positions.

The difference between the two environments is quite evident, the morpheme-final position clearly favoring the incidence of \( f \).

This sort of obvious constraint on variability then can be incorporated into the rule for \( \theta \rightarrow f \), which we posited earlier. The rule can now be reformalized as:

\[
\theta \rightarrow (f) / \_\_\_A^# 
\]

In this way, we can account for the observed variability that we find in our corpus.

3.1.2.4 The Incidence of \( t \)

Apart from the incidence of \( t \) in \textit{with} and \textit{nothing}, which we shall consider in more detail below, the occurrence of \( t \) for potential \( \theta \) in morpheme-medial and final position is infrequent. Because of its low frequency, which is less than 3% when all morpheme-medial and final occurrences of potential \( \theta \) are considered, we may
ask if this is in fact a legitimate variant which must be described as an integral part of the dialect. Wolfram's study of the \( \theta \) variable for black speakers in Detroit (1969:87) revealed that \( t \) tends to be conditioned by its contiguity to a nasal segment, both in morpheme-medial and final position. Thus, in words like \textit{arithmetic} and \textit{month}, underlying \( \theta \) can be realized as \( t \). The actual occurrence of these types of environments is restricted in our spontaneous conversation section of the interview, so that our data from this style is inconclusive. However, in order to compensate for the paucity of examples with potential \( \theta \) contiguous to a nasal in this style, the items \textit{month} and \textit{arithmetic} were given as a part of the word list reading section of the interview. Although this represents a different style, it is instructive to look at the distribution of variants for these two items in the reading lists.

<table>
<thead>
<tr>
<th></th>
<th>( \theta )</th>
<th>( f )</th>
<th>( t )</th>
<th>( \theta )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black</td>
<td>11</td>
<td>6</td>
<td>5</td>
<td>---</td>
</tr>
<tr>
<td>Puerto Rican</td>
<td>26</td>
<td>4</td>
<td>13</td>
<td>1</td>
</tr>
</tbody>
</table>

\begin{table}
\textbf{Table 14: Incidence of Variants for Potential \( \theta \) Contiguous to a Nasal.}
\end{table}

The incidence of \( t \) as a legitimate variant is clearly indicated in Table 14. For the Puerto Rican group, even in a very formal style, \( t \) is realized in over 1/4 of all cases. This observation clearly attests the validity of a rule which might be represented as:
Now it is important to note here that we are positing a rule which accounts for a relatively infrequent variant when the overall incidence of $t$ is considered. When we refer to our discussion of the $s$ variant, which occurred at approximately the same frequency level as $t$ in our overall tabulation, we concluded that it was not an integral part of the dialect we were describing. The difference between the infrequency of $s$ and that of $t$ lies in the fact that the overall infrequency of $t$ was simply a function of the failure to isolate environments which would raise its incidence to a level of accountability (i.e., it must be included in our formal description of a native speaker's competence). But in the case of $s$, the delimitation of natural types of environmental differences which might raise its incidence to the level of accountability did not appreciably increase its incidence. Low overall frequency, in itself, is not a valid reason for dismissing certain types of potential variants which may have to be described as an integral part of a given dialect.

1Following the suggestion made by Bach (1966), the absence of the

2If a rule changing a preceding nasal segment to a nasal vowel has
taken place (i.e., $V[\text{nasal}] \rightarrow \bar{V}$), the frequency or rule application
is greatly reduced. In fact, it appears that the rule may be inoperative if this change has taken place, so that this rule can only apply if the nasal is characteristic of a consonantal segment.
Now while we have seen that the delimitation of a contiguous nasal may effect a rule such as $\theta \rightarrow t$, we still have several examples of $t$ for potential $\theta$ which we have not accounted for. Do we need to extend our rule to account for two examples of teeth and mouth as [tit] and [ma\textsuperscript{U}t] respectively? A close look at the natural types of environments that might account for this realization does not show an appreciable increase in its incidence—it is still realized in less than 5% of all potential occurrences. It is therefore our cautious conclusion that the $t$ variant for these items is not an integral part of the dialect (i.e., it might be a performance error of some type) and need not be accounted for by the rules of the dialect, although there is a clear-cut need for the $\theta \rightarrow t$ rule contiguous to nasals. This sort of decision may appear to be an arbitrary statistical one, but we must reiterate our belief that the distinction between competence and performance can only be determined statistically in some cases where our primary data is the actual speech of a spontaneous conversation.

Having established the effect of nasals on $t$ realization on the basis of our previous discussion, we may now turn to the incidence of $t$ in the item nothing. Of the variants which have been observed for this item (which are $t$, $\emptyset, \theta$ and $f$), $t$ is the most frequent, occurring in 47% of all cases (40 of 85) for the Puerto Rican informants and 64% of all cases (29 of 45) for the black informants. Although nothing does not have an immediately contiguous nasal in the underlying representation that will need to be posited (i.e., [n\emptyset\theta\textsuperscript{In}]) it is observed that there is a noncontiguous nasal in the following syllable. And, when we look at the phonetic realization
of this item, we observe that the actual phonetic environment is a contiguous syllabic nasal. Thus, the most frequent phonetic form for \( t \) (or the phonetic alternant [?] or [t\(^{-}\)]) is:

24  
(a) \([\text{n}\text{\-t}\text{\-n}\text{\-t}]\)
(b) \([\text{n}\text{\-g}\text{\-n}]\)

We do not get:

25  
(a) \(*[\text{n}\text{\-t}\text{\-n}]\)
(b) \(*[\text{n}\text{\-g}\text{\-n}]\)

The fact that 24 is, for the clear majority of informants, the only type of form that occurs, makes it reasonable to suggest that for most speakers, rule 23, which changes \( \emptyset \rightarrow t \), actually operates after the nasal has been placed immediately contiguous to underlying \( |\emptyset| \). This means that the vowel centralization rule, which changes underlying \( \text{I} \) to \( \emptyset \) (i.e., \([-\text{stress}\]
\[-\text{tense}\]) \rightarrow \emptyset) and the subsequent deletion rule for \( \emptyset \) in this sort of environment must precede rule 23.

Eliminating irrelevant details for our discussion here, the rule deleting schwa might be approximated as:

26 \( \emptyset \rightarrow (\emptyset) \)
\([-\text{cons}]
\[-\text{nasal}]
\[-\text{stress}]\)

The application of the rule is, of course, more general, extending to at least \( r \) and \( l \) in addition to the nasals. Within the feature specifications for English set up by Chomsky and Halle (1968:176-177), it would appear that the inclusion of \( r \) and \( l \) in this type of rule would have to be handled by setting up the environments disjunctively. But if one introduced the feature [syllabic], which Bailey and Milner suggest to Chomsky and Halle (1968:354) as a necessary feature specification, the rule could be stated in a much more general fashion.
For some reference to the sorts of environmental constraints which will have to be built into a more accurate statement of this rule, cf. Bailey (1969a). I have here simply followed William K. Riley's observation (personal communication) that syllabification for nasals can occur following practically all consonants in casual style although there is considerable variability in the syllabification depending on the type of consonant.

3.1.2.5 The Case of with

Finally, we must discuss the incidence of variants for the item with, for the realization of some of the variants in this item appears to operate differently from our previous account. The following table gives the incidence of variants for with, comparing the Puerto Rican and black groups of informants.

<table>
<thead>
<tr>
<th>Variant</th>
<th>Puerto Rican</th>
<th>Black</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>%</td>
</tr>
<tr>
<td>t</td>
<td>150</td>
<td>59.5</td>
</tr>
<tr>
<td>ø</td>
<td>64</td>
<td>25.4</td>
</tr>
<tr>
<td>θ</td>
<td>24</td>
<td>9.5</td>
</tr>
<tr>
<td>f</td>
<td>14</td>
<td>5.6</td>
</tr>
<tr>
<td></td>
<td>252</td>
<td></td>
</tr>
</tbody>
</table>

Table 15: The Incidence of Variants for Potential ø in with

For example, assuming that 1, r and the nasals have been given the feature [+syllabic] under special circumstances such as those we are talking about here, the rule might be stated more generally as:

\[ \phi \rightarrow (\emptyset) /[^{[\text{cons}]}[^{[\text{syl1}]][^{[\text{-stress}]}}][^{[\text{+syl1}]}}] \]

This sort of evidence appears to be strong support for the introduction of the feature [+syllabic].
The above table indicates that all the main variants which we delimited at the beginning of our discussion for medial and final potential θ are realized by both groups. The general incidence, furthermore, indicates that t and θ are the most frequently occurring variants.

Before discussing the conditions for the incidence of t and θ in this item, it should be noted that there is an additional sub-variant of t which we have not discussed previously, namely [č]. This is observed in contexts such as:

27    (a) [wIč#yθ] 'with you' 9:8
(b) [wIc#yθ] 'with you' 10:10

The realization [č] can be accounted for by a palatalization rule when t occurs preceding an unstressed word beginning with y, and is not necessarily restricted to the item with. We thus get:

28    (a) [boč#yIr#suz] 'bought your shoes'
(b) [bIč#yIr#hand] 'bit your hand'

The palatalization rule, which operates for both voiced (e.g., [dIč#yθ] 'did you') and voiceless alveolar stops, may be given as:

\[
\begin{array}{c}
\text{-voc} \\
\text{-cont} \\
\text{-nas} \\
\text{+cor}
\end{array}
\rightarrow \begin{array}{c}
([-\text{ant}]) / \_
\end{array}
\begin{array}{c}
\text{-voc} \\
\text{-cons} \\
\text{-back}
\end{array}
\]
This rule, then, accounts for the examples of the subvariant \[\ddot{c}\]. The affricate \[\dddot{c}\] is rightly considered as a subvariant of \[t\] because the input of the palatalization rule is necessarily an alveolar stop and not a fricative (i.e., \[*[ma \ddot{c} y\dddot{z}] 'mouth you'*).}

3.1.2.5.1 Accounting for the Incidence of \[t\] in \[with\]

In our previous discussions of \[t\] for potential \[\theta\] in morpheme-medial and final position, we have seen that the incidence of \[t\] was mainly conditioned by its contiguity to a nasal. But for \[with\], no such environmental statement can be made. It occurs preceding a vowel or any of the non-nasal consonants in addition to its occurrence when the following word begins with a nasal. How, then, do we account for the incidence of \[t\] in \[with\]? Several alternatives can be considered here. As a first alternative, we may look for some sort of phonological conditioning for the occurrence of \[t\]. Wolfram (1969:87) has suggested that one possible phonological explanation for the occurrence of \[t\] in \[with\] may be the fact that, as a preposition, it tends to occur in unstressed types of environments. For example, it is generally not assigned either 1 or 2 stress in the application of stress ranking, as:

30  (a)  3  4  2  1
    with my new bike

(b)  3  4  2  1
    with a red cross
For the majority of examples of potential θ which have been discussed previously, most of them would have to be assigned a stress ranking of 1 or 2, as in:

31  (a)  4  2  1  3
    a nice tooth brush

(b)  3  4  1  2
    in a phone booth

At first glance, then, it would appear that stress might be the relevant conditioning environment for the t realization, and that the rule might be written as:

32  θ → /t/-stress
    \v

But before we conclude that this is the clear-cut solution in accounting for t in with, we must see if there are any contexts in which with might be assigned a surface stress ranking of 1 or 2. We can notice that in several contexts, with can occur at least with a stress ranking of 2 and possibly 1. Generally these are due to emphasis on with, or the occurrence of with in clause-final position by ellipsis or the rearrangement of syntactical units. Thus, we can get:

33  (a)  2  3  1  4
    You coming with us?
This distribution is given in Table 16.

<table>
<thead>
<tr>
<th>Puerto Rican</th>
<th>Black</th>
</tr>
</thead>
<tbody>
<tr>
<td>t</td>
<td>t</td>
</tr>
<tr>
<td>f</td>
<td>f</td>
</tr>
<tr>
<td>θ</td>
<td>θ</td>
</tr>
<tr>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

Table 16: Distribution of Variants for
Potential θ when with is Stressed.

Even with the limited numbers of examples, we can see that the
data do not confirm the observational adequacy of Rule 32, for t still
occurs in approximately 1/3 of the cases. On the other hand, however,
we do see what appears to be a constraint on the variability of t, the
change from θ to t operating more frequently when with is unstressed
than when stressed (cf. chart p.104). But a careful examination of
the phonological conditioning environments does not turn up an ex-
cclusive environment for the operation of θ → t for with.

If our failure to discover a consistent phonological environment
for the realization of t in with is an accurate assessment of the
data, what are our alternate solutions? Two solutions might be
suggested. On the one hand, we might suggest that it is necessary
to posit two underlying lexical representations for the item with,
one which would be given with underlying |t| and one with underlying
|θ|. Although we would need a rule such as θ → t as a part of the
dialect we are describing, it would be necessary to specify the two
underlying representations for with because we cannot discover any
consistent phonological environment where this rule can apply to a
underlying representation of this item. Presumably, this is
the type of solution one might suggest for speakers who variably
realize an item such as either as [aydIr] and [idIr]. Even though we might have to postulate a rule which changes a high tense vowel into a diphthong or vice versa (i.e., i → ay or ay → i) to handle other phonological processes, we probably would not be able to isolate an exclusive phonological environment for this change which would allow us to incorporate it into a previously established phonological rule. Thus, we might conclude that we must posit dual underlying representations to account adequately for the speaker's competence in his use of the alternate forms. Admittedly, however, such a conclusion is not intuitively satisfactory, and might be adopted only as a last resort. Perhaps a more important reason for viewing this solution skeptically is the variability of the t and f or Θ depending on the stress assignment on with. We would not generally expect phonological conditioning of this type on the variability of items which are, in essence, entered in the lexicon as different units. The choice of lexical items would be expected to vary much more according to extra-linguistic factors, such as participants, style, setting, etc. For example, [idIr] might be expected more frequently in informal styles and [aydIr] in formal styles, but we would not expect their alternation to vary according to phonological environment if they were authentic lexical differences.

The alternate solution to dual lexical representations is to represent with with a single underlying representation, which would presumably be [wiθ], and then allow the application of the Θ → t rule to be item-specific with respect to with. In other words, one environment for the application of Θ → t is the lexical item with. This way we could still build in the constraint on variability.
depending on stress so that the change of $\theta \rightarrow t$ for this item could be represented as:

\[
\theta \rightarrow (t) / \# \left[ \frac{\text{WI}}{\text{A-stress}} \right] \#
\]

This rule, then, can be coalesced with rule 23 by describing the environmental sets disjunctively, so that rule 23 should be rewritten as:

\[
\theta \rightarrow (t) / \# \left( \frac{\left[ \text{[+nasal]} \right]}{\# \left[ \frac{\text{WI}}{\text{A-stress}} \right] \#} \right)
\]

Admittedly, the conclusion that $\theta \rightarrow t$ can be conditioned lexically is not a completely satisfying solution. But until we have further phonological data which might lend consistency to a statement dependent exclusively on phonological environment, we must settle for a less intuitively satisfying solution to account for the descriptive facts.

### 3.1.2.5.2 Accounting for the Incidence of $\emptyset$ in with

In order to consider the distribution of the $\emptyset$ variant for with, it is first necessary to observe the distribution of variants according to whether the following environment is consonantal or non-consonantal. The distribution of variants is illustrated for the Puerto Rican and black informants in the following chart.
Chart 3: Distribution of Variants for With in Consonantal and Non-Consonantal Environments.
Several observations can be made on the basis of the above chart. To begin with, we observe that it is the following consonantal environment which is almost exclusively responsible for the incidence of $\emptyset$. When followed by a vowel or pause, some segment is generally present. It is also important to note that the main difference is found in the incidence of $t$; $t$ is the variant that is reduced in an inverse proportion to the greater frequency of $\emptyset$ before consonants. That is, the sum of $t$ and $\emptyset$ is approximately the same for the two environments.

If the incidence of $\emptyset$ in with is compared with the incidence of $\emptyset$ for other types of morpheme-final potential $\emptyset$ we find that its frequency with with is much greater (57.5\% for with to 15.3\% for other morpheme-final items followed by a consonant). To understand the significance of this difference, it is necessary to recall that $\emptyset$ realization for items other than with was largely due to the assimilation process described in Rule 18. This assimilation process, it was noted, was largely restricted to certain types of fricatives. But when we look at the incidence of $\emptyset$ for with, we note that it does not show these same types of restrictions. It is observed before practically any consonant, as attested in the following examples:

1

1 Although the breakdown according to different types of consonants reveals that it can be deleted before practically any consonant, this, of course, does not exclude the possibility of constraints on variability. Variable constraints will be discussed in our treatment of $t$, $d$ deletion in section 3.2.
It is obvious, then, that \( \emptyset \) realization for with cannot be accounted for simply by the application of our assimilation rule. Rather, it appears to be a deletion of \( t \) after it has been derived from underlying \( [\text{g}] \).\(^1\) We shall see that the deletion of final \( t \) and \( d \) is a rule that will be needed anyhow, so we can simply apply the rule to account for \( \emptyset \) in with as well as other items. Obviously, the deletion rule must be ordered after the rule which changes \( \emptyset \) to \( t \) in with. It also appears that the deletion rule should be ordered after the palatalization rule (29), so that it cannot operate on items which will end in \( [\text{c}] \). If we allow the palatalization rule to be ordered before the deletion rule, we can account for the fact that \( y \) is the only non-vocalic segment before which we have no examples.

---

\(^1\)The assimilation rule may, of course, still operate on instances of with in which \( \emptyset \) is not changed to \( t \). If the assimilation rule is ordered before \( \emptyset \rightarrow t \), then it will account for instances of \( \emptyset \) before fricatives, the \( t \) deletion rule accounting for other examples of \( \emptyset \). If, on the other hand, \( \emptyset \rightarrow t \) is ordered before assimilation, the assimilation process operates only on those instances of underlying \( \emptyset \) which have not undergone the \( \emptyset \rightarrow t \) change. The former order is chosen here although our data furnishes no overwhelming argument for doing so.
of deletion. (Out of 11 potential examples before y, none show Æ realization.) We see that the change from t to c before y makes certain examples of with ineligible for the t deletion rule.

A final point that can be made concerning Æ realization relates to the comparison of Æ for the black and Puerto Rican informants. The Puerto Rican informants, as a group, tend to show more Æ realization than the black groups. Anticipating our discussion of final t and d deletion, we may note that this fits the general pattern for final t deletion, which is considerably more frequent in Puerto Rican English than in Black English.

3.1.2.6 **Summary of Rules**

Following is a list of the rules which we have formulated as necessary in order to account for the various realizations of underlying ǀθǀ, renumbered as 37 and placed in the proper order insofar as is known. Some of the rules do not relate directly to the derivations from underlying ǀθǀ but are included here because they account for certain processes necessary to understand the rules pertaining directly to θ. In most cases the reasons for particular orderings have been discussed in the preceding sections; in a few cases, however, there are no formal motivations for selecting the ordering of rules which have emerged on the basis of our discussion, so that the order may be arbitrary.
a. Voiceless Assimilation
\[\begin{array}{l}
\text{aant} \\
\text{+con} \\
\text{βcor} \\
\text{γstrid}
\end{array}\] \rightarrow \{[-\text{voice}]\} / \quad \#\#

b. Regressive Fricative Assimilation
\[\begin{array}{l}
\text{aant} \\
\text{βcor} \\
\text{γstrid}
\end{array}\] \rightarrow (\quad \#\#

c. Progressive Sibilant Assimilation
\[\begin{array}{l}
\text{aant} \\
\text{βcor} \\
\text{γstrid}
\end{array}\] \rightarrow (\text{[-strid]} \} / \quad \\
\begin{array}{l}
\text{aant} \\
\text{βcor} \\
\text{γstrid}
\end{array}\]
d. Vowel Reduction
\[\begin{array}{l}
\text{-stress} \\
\text{-tense} \\
\text{v}
\end{array}\] \rightarrow \epsilon

e. Schwa Deletion
\[\begin{array}{l}
\text{-cons} \\
\text{-syl} \\
\text{-stress}
\end{array}\] \rightarrow (\text{∅} / \quad \\
\begin{array}{l}
\text{-nasal}
\end{array}\]
f. Morpheme-final Stop
\[\begin{array}{l}
\text{wɪ} \\
\text{A} -\text{stress}
\end{array}\] \rightarrow (t) / \quad \#\#
Now it is noted in the above set of rules that some of the rules are common to both Standard English and various nonstandard dialects while others are peculiar to nonstandard dialects such as Puerto Rican English. For example, the assimilation rules (a, b, c) are common to nonstandard and standard dialects of English, but stop realizations and labio-dental fricative realizations for underlying $\Theta$ (f, g, j) are unique to certain
nonstandard varieties. In this sense, this variable seems to be quite like other nonstandard variables which show both shared and unique aspects when compared with Standard English.

It should further be noted that for rules relating directly to the derivation of phonetic realizations from underlying $|\theta|$, some independent linguistic constraints on variability have been incorporated. Although we have isolated some constraints which are to be incorporated in an adequate descriptive account, it should be observed that this variable does not reveal an extensive ordering of constraints. In fact, only one variable rule shows as many as two hierarchical orders. This cannot be attributed to our lack of detail in searching for valid linguistic constraints; rather, it appears to be an indication of the fact that there is a limited amount of hierarchical ordering in the constraints on variability. Unlike other variables (e.g., final consonant clusters) which may reveal a fairly extensive natural hierarchy of constraints, this variable only shows a limited hierarchy.
3.2 Syllable-Final \( \text{d} \) and \( \text{t} \)

In syllable-final position, when preceded by a vowel or constricted \( r \), underlying \( \text{d} \) or \( \text{t} \) may be realized in PRE in several different forms. For underlying \( \text{d} \), \( \text{t} \) and \( \varnothing \) (i.e., no phonetic realization) are the main non-\( \text{d} \) realizations in PRE; for \( \text{t} \), \( \varnothing \) is the main non-\( \text{t} \) realization. It is immediately observed that these variants have been identified for other nonstandard varieties of English, particularly Black English.

Ma and Herasimchuk (1968) tabulated the incidence of word-final \( \text{d} \) and \( \text{t} \) for PRE (primarily first generation Puerto Rican immigrants) in Jersey City, but their brief discussion cannot be compared with this analysis for several reasons. In the first place, they did not make any environmental distinctions in tabulating variability. As will be seen, an accurate assessment of variability for this feature is dependent on the distinction of several different environments. Their failure to distinguish environments such as the effect of a following consonant or vowel allows them to come to the conclusion that "PRE speakers most usually give some phonetic marker for final \( \text{t} \) or \( \text{d} \)" (Ma and Herasimchuk 1968: 740). We shall see that this statement does not necessarily hold when various environmental constraints are examined.

Ma and Herasimchuk have also combined variants of these variables in such a way that it is impossible to get a valid picture of how the various phonetic realizations operate with respect to underlying \( \text{t} \) or \( \text{d} \). For example, they consider the glottal stop \([?]\) as a variant for either \( \text{t} \) or \( \text{d} \), but do not separate the two potential underlying sources from each other. This procedure can be quite misleading, since in the case of underlying \( \text{t} \), glottal stop may be a standard variant, while in the case of underlying \( \text{d} \), it is quite clearly a nonstandard variant. To \( \text{d} \) and \( \text{t} \) in word-final consonant clusters are discussed in Chapter Four, Section 4.6.7.
consider glottals derived from either |t| or |d| as one variant does not allow for an accurate social differentiation. Glottal realizations may operate quite differently for these two underlying sources.

Furthermore, one may question the perceptual reliability of their categories of variants. They have set up three variants: (1) |t| or unreleased [คำถาม], (2) glottal stop [คำถาม], and (3) no phonetic realization at all. Previous studies have established that we can expect reliability in perceiving impressionistically the difference between |t|, |d| and |คำถาม|, but the perception of the difference between a glottal stop and unreleased [คำถาม] cannot be expected to show a high degree of reliability. To separate glottal stop and unreleased [คำถาม] into two different variants would appear to reduce the reliability of perception considerably.

Labov, et al. (1968), Wolfram (1969), and Fasold (forthcoming) have all looked at the phonological processes which operate on |d| deletion in Black English. Labov, et al. have considered post-vocalic |d| and |t| deletion to be a part of the same rule which deletes |d| and |t| following consonants. No detailed frequency study, however, is made of the deletion of post-vocalic |d|. Wolfram (1969) has restricted his study to cases of post-vocalic |d| which do not have any grammatical function (e.g., bad but not showed). His analysis has isolated several types of constraints on variability of |d| including a following vowel or non-vowel and stress. Whereas Wolfram only deals with the incidence of |d| when it is not a grammatical marker, Fasold (forthcoming) deals exclusively with |d| as a grammatical marker. He finds the same general constraints isolated by Wolfram for non-grammatical |d| to be operating on |d| when it is a grammatical marker. The various constraints isolated by Wolfram and Fasold will be
examined in some detail later, and the rules needed to handle these variable constraints will be discussed.

3.2.1 The Variants

As suggested above, we can identify three relevant variants for underlying \(|d|\) and two for underlying \(|t|\). The variants for \(|d|\), and the various submembers of those variants are given below:

<table>
<thead>
<tr>
<th>Variant</th>
<th>Phonetic Realization</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>(d)</td>
<td>([d],^1 [\ddot{d}])</td>
<td>([\text{hu:d}]) 'hood'</td>
</tr>
<tr>
<td></td>
<td></td>
<td>([\text{hu:do:n}]) 'hood on'</td>
</tr>
<tr>
<td>(t)</td>
<td>([t \ddot{\gamma}], [?], [?t \ddot{\gamma}])</td>
<td>([\text{hu:t} \ddot{\gamma}] \sim [\text{hu:}?] \sim [\text{hu:to:}]) 'hood'</td>
</tr>
<tr>
<td></td>
<td></td>
<td>([\text{hu:beak}]) 'hood back'</td>
</tr>
</tbody>
</table>

The differentiation of variants essentially follows that of Wolfram (1969:95).

It should be noted that the tabulation of \(|d|\) included both 'd' which was a morphophonemic representation of the grammatical suffix -ed (i.e., following vowels, as in prayed) and 'd' which was part of the stem of a word. The grammatical function of 'd' includes its usage as a past tense marker (e.g. He cried for a long time), a derived adjective (e.g. He's a colored kid), and a participle (He was tried for murder).

\(^1\)What is transcribed here as a voiced stop often fades into voicelessness.
The variants for underlying |t| are as follows:

<table>
<thead>
<tr>
<th>Variant</th>
<th>Phonetic Realization</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>t</td>
<td>[t]; [t̃]; [ʔ]</td>
<td>[hæt ʔ] ~ [hæʔ] 'hat'</td>
</tr>
<tr>
<td>ø</td>
<td>ø; lengthened follow-</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ing consonant</td>
<td></td>
</tr>
<tr>
<td></td>
<td>[hæ]</td>
<td></td>
</tr>
</tbody>
</table>

Unlike |d|, |t| can only be used as part of a word stem following a vowel; there is no underlying analogue to the grammatical function of post-vocalic |d| for |t|.

The tabulation of |d| and |t| was made for each informant, counting the first twenty potential occurrences of grammatical |d| followed by a non-vowel and the first 15 followed by a vowel. The same procedure was carried out for the non-grammatical function of |d| and |t|. In addition to the variants identified above for d, we also have an occasional instance of [d] for d intervocalically. This phonetic realization is obviously a matter of Puerto Rican Spanish influence because of the fricativization of voiced stops post-vocally in Spanish. This phonetic realization is not indicated in any of our tabulations of d here for two reasons. First, initial tabulation indicated that its incidence was so low that it clearly fits into the category of vestigial interference as we have defined the concept previously. Furthermore, there was considerable difficulty in impressionistically perceiving the difference between lenis [ɡ] and fricativized [d] when transcribing from a tape recorder. The failure to perceive consistently the difference between these two sounds from a tape recording thus prohibited a reliable tabulation of [d].
3.2.2 The Ø Variant for Underlying |d|

Previous studies of the Ø realization for |d| indicate that there are several different types of environments which may affect the realization of Ø. Some of these are general types of environments which have been seen to affect variability for a number of features; others appear to be more specific in their application.

One of the most commonly noted influences on variability has been the presence or absence of a vowel following a segment. Studies of variability in Black English by Wolfram (1969) and Fasold (forthcoming) have revealed that this is one of the major constraints on |d| deletion. Both have indicated that a vocalic environment inhibits the incidence of Ø. In Table 17, we present the figures for |d| deletion based on whether the following segment is vocalic or non-vocalic. The nonvocalic environment includes both a following consonant of some type and a pause. For the sake of this table, we shall combine the d and t variants for |d| under the category of presence, so that we only have a binary classification into presence and absence. Figures are given for the 29 Puerto Rican informants, based on the extracted examples we described above.

<table>
<thead>
<tr>
<th>Vowel</th>
<th>Non-Vowel</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. Del./Total</td>
<td>70/340</td>
</tr>
<tr>
<td>% Del.</td>
<td>20.6</td>
</tr>
</tbody>
</table>

Table 17: Incidence of Ø Realization in Vocalic and Non-Vocalic Environments
The difference between \( \emptyset \) realizations for the two environments is quite clear-cut; a following vowel inhibits the operation of \( |d| \) deletion. This constraint is the same as that identified by both Wolfram (1969: 99) and Fasold (forthcoming) for the deletion of \( |d| \) in Black English.

Another factor which previous studies have shown to affect the variability is stress. The general principle which has been observed is that occurrence in an unstressed syllable favors the deletion of segments, whereas occurrence in a stressed syllable inhibits deletion. This has been observed for a number of different variables, and has specifically been described for \( |d| \) deletion by both Wolfram and Fasold. The relative frequency of \( |d| \) deletion in stressed and unstressed syllables can be observed in Table 18. Since we have already noted the importance of a following vocalic or non-vocalic environment, it is appropriate to consider the effect of stress in terms of these environments. There are two main types of environments which we have classified as unstressed in our tabulations. This includes \( |d| \) which occurs in an unstressed syllable of a polysyllabic word, such as treated, stupid, or record, and \( |d| \) which is part of a modal which in turn occurs as unstressed in a verb phrase. This occurs in sentences such as I don't think he should go and John would go if he could. Stressed environment refers to any instance of potential \( \emptyset \) which occurs in a stressed syllable of a word, such as betrayed, head, or showed.

<table>
<thead>
<tr>
<th>Stressed V</th>
<th>Unstressed V</th>
<th>Stressed V</th>
<th>Unstressed V</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. Del./Tot.</td>
<td>54/293</td>
<td>16/47</td>
<td>245/481</td>
</tr>
<tr>
<td>% Del.</td>
<td>18.4</td>
<td>7.5</td>
<td>50.9</td>
</tr>
</tbody>
</table>

Table 18: Effect of Stress on Final \( |d| \) Deletion
Two observations can be made on the basis of Table 18. First, we observe that stress does affect the deletion of |d|. As we might expect, the occurrence of |d| in a stressed syllable favors deletion more than |d| in an unstressed syllable. But it is also noted that stress does not have the same effect on variability that a following vowel or non-vowel may have. When the crucial by-products are compared (i.e., Unstressed V____##V and Stressed V____##Non-V), it is apparent that the following vowel or non-vowel is the first order constraint and stress or non-stress the second order.

Up to this point, we have made no mention of the fact that some instances of |d| are grammatical markers and others are an inherent part of the lexical item. As we have mentioned previously, |d| may be realized as one of realizations of the -ed suffix in English occurring after vowels. In previous tabulations of phonological variability, it has been shown that the grammatical function of a segment tends to inhibit deletion (cf., for example, the discussion of Labov et al. 1968 or Wolfram 1969 concerning bimorphemic and monomorphemic consonant clusters) when compared with the same segment occurring as an inherent part of the word. Ma and Berasimchuk (1953) mention this difference but do not carry out any tabulations on the effect of grammatical versus non-grammatical functions of |d|. In Table 19, the deletion of grammatical |d| versus non-grammatical |d| is tabulated. Since we have already established the effect of a following vowel/non-vowel and stressed/unstressed syllable on the deletion of |d|, we shall consider grammatical/non-grammatical functions of |d| in terms of these previously distinguished environments. Only those cases of grammatical |d| following a vowel or r are considered. This means

1In our considerations here, r preceding d is considered to be a vowel. In y cases, a centralized vowel is realized instead of a retroflex r, a tern which is quite typical of white and black New York Speech.
that all morphophonemic realizations of the -ed suffix as əd (following an alveolar stop) are not included. Furthermore, instances in which underlying -ad forms have been assimilated to a d or t which is part of the stem (as in stard for 'started') are not considered here. These will be considered later in our discussion.

<table>
<thead>
<tr>
<th></th>
<th>##V</th>
<th></th>
<th>##Non-V</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Stressed</td>
<td>Unstressed</td>
<td>Stressed</td>
</tr>
<tr>
<td>No.Del./Tot.</td>
<td>6/35</td>
<td>48/258</td>
<td>5/19</td>
</tr>
<tr>
<td>%Del.</td>
<td>17.1</td>
<td>18.6</td>
<td>26.3</td>
</tr>
</tbody>
</table>

Table 19: Effect of Grammatical and Non-Grammatical |d| on Variability

Table 19 indicates that variability is affected on the basis of whether |d| is a grammatical marker or not. But it does not appear that this is a major constraint. In fact, the comparison of the cross-products indicates that it is a third order constraint, being ordered after the effect of the following vowel and stress. In only one case is there a slight discrepancy in cross-products (##Non-V unstressed, grammatical marker and ##Non-V unstressed, non-grammatical marker), We shall have more to say about the possible reason for this slight discrepancy below.

One final constraint on |d| deletion may be examined here, namely, the differentiation of grammatical |d| on the basis of its various functions. Fasold (forthcoming) suggests that the non-past functions of |d| (derived adjectives or past participle) tend to favor |d| deletion more than its
function as a past tense marker. In Table 20, the tabulations are given on the basis of this breakdown. Since the only cross-products applicable to this categorization are for grammatical |d|, it is only necessary to give the figures for this category. Figures are broken down in terms of the previously cited constraints.

<table>
<thead>
<tr>
<th></th>
<th>Stressed Non-Past</th>
<th>Past Non-Past</th>
<th>Stressed Non-Past</th>
<th>Past Non-Past</th>
<th>Past Non-Past</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. Del./Tot.</td>
<td>6/31</td>
<td>0/4</td>
<td>3/11</td>
<td>2/8</td>
<td>9/26</td>
</tr>
<tr>
<td>% Del.</td>
<td>19.4</td>
<td>0.0</td>
<td>27.3</td>
<td>25.0</td>
<td>34.6</td>
</tr>
</tbody>
</table>

Table 20: Effect of Grammatical Function of |d| on Deletion

Because of the limited numbers of examples in some categories, it is somewhat difficult to find the ordered progression of numbers that was typical of other constraints. Nonetheless, when we look at the categories in which there are sufficient examples, it appears that there is a significant difference. If we look, in particular, at the total numbers of examples combining the various categories, we do find an apparently significant difference. One word of caution, however, should be given before concluding that it is quite clear-cut. In the ##Non-Vowel, Unstressed, Non-Past environment we note that 32 out of 44 examples indicate |d| deletion. But included in this number are 23 examples of the derived adjective colored,
all of which indicate deletion. The elimination of this one item, which may be a lexical difference rather than a phonological deletion, would make the differences between the two grammatical categories much less clear-cut.

The way we have set up Table 20 indicates that we consider the constraint of grammatical category to be the fourth order constraint, ordered after following vowel/non-vowel, stressed/unstressed, and grammatical/non-grammatical. Because of the limited numbers of examples in some categories and the logical impossibility of some vital cross-products, it is difficult to arrive at a clear-cut decision concerning the ordering of constraints here. Fasold, in his analysis of constraints on |d| deletion in Black English, has suggested that the grammatical function of |d| is ordered before stress. However, his total number of grammatical examples of |d| is actually less than the total we have analyzed here, so that some of his important categories for determining the ordering of constraints are only sparsely populated.¹ On the basis of our comparison of data here, we ¹The way in which Fasold uses the evidence from his application of statistical tests to support his claims about the validity of his constraints on variability can be quite misleading. He applies the Chi square test of statistical significance (which is, in itself, a very weak statistical calculation) for each major constraint he isolates for |d| without reference to the intersection of other constraints. For example, he applies Chi square to the categories past-tense use of |d| as opposed to other grammatical functions of |d| without breakdown into other constraints he has isolated, such as the distinction between |d| in vocalic and non-vocalic environments. Therefore, when he concludes that the distinction between past and other grammatical functions of |d| is significant, we cannot be sure if this is a function of intersecting constraints which he has not isolated (e.g., the fact that one grammatical category may represent more instances in which it is followed by a vowel). Curiously, his summary of the different intersecting constraints neither gives the raw figures nor applies any statistical test of significance (there is no way of retrieving them from the other tables). It is in this summary table that the breakdown of raw figures and the application of statistical tests is most essential in assessing the validity of the conclusions he draws from the data.
may cautiously suggest that grammatical category is to be ordered as the fourth order constraint.

The hierarchical ordering of the four constraints we have isolated so far may be illustrated in Figure 2.
Following the conventions we have used for incorporating the hierarchical ordering of constraints into a grammar of PRE phonology which formally admits variability, we may summarize our conclusions concerning the effect of various constraints on |d| deletion by the following rule:

\[ d \rightarrow (\emptyset) / \begin{cases} V \\ B [-\text{stress}] \end{cases} \uparrow -\# \quad \#\#A-V \quad [D-Past] \]

This rule indicates that the first order constraint is whether the underlying |d| is followed by vowel/non-vowel, second order whether the preceding vowel is stressed/unstressed, third order whether it follows a morpheme/non-morpheme boundary, and fourth order whether it functions as a past/non-past marker. Implicit in the use of the capital Greek pre-scripts is the fluctuation of the plus or minus values. The value which is given in the formalization of the constraint favors the operation of the rule while the opposite value inhibits it. Thus, for example, if the value of the following vowel is minus as stated in the rule (#A-V), the deletion rule is favored, but if it is +, then it is inhibited. As with the other variable rules stated, the relation of variable constraints in terms of favoring and inhibiting deletion should be read following the principle of geometric ordering. That is, the relative frequency of constraints should be read as follows:

\[ \text{+} \quad \text{favor} \quad \text{of} \quad \text{rule} \quad \text{and} \quad \text{minus} \quad \text{inhibit} \quad \text{rule} \]

\[ \text{1} \quad \text{By using the symbol} \quad \uparrow \quad \text{to refer to the absence of something (e.g.,} \quad \uparrow \quad \text{V), Labov has made it possible to regularize the conventions so that plus (+) always favors and minus (−) always inhibits the incidence of rule application. Fasold (forthcoming) has suggested that the use of} \quad \uparrow \quad \text{to indicate the absence of something is preferable to simply + or − because technically it is the absence or presence of environments rather than the plus or minus values which affect variability.} \]
The incidence of deletion is greatest where all the values are identical to those given in the formalization, and least where all the opposite values obtain.

### Constraint Rank

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>-V</td>
<td>-Stress</td>
<td>-#</td>
<td>(Does not apply) &gt;</td>
</tr>
<tr>
<td>-V</td>
<td>-Stress</td>
<td>+#</td>
<td>- Past &gt;</td>
</tr>
<tr>
<td>-V</td>
<td>-Stress</td>
<td>+#</td>
<td>+ Past &gt;</td>
</tr>
<tr>
<td>-V</td>
<td>+Stress</td>
<td>-#</td>
<td>(Does not apply) &gt;</td>
</tr>
<tr>
<td>-V</td>
<td>+Stress</td>
<td>+#</td>
<td>- Past &gt;</td>
</tr>
<tr>
<td>-V</td>
<td>+Stress</td>
<td>+#</td>
<td>+ Past &gt;</td>
</tr>
<tr>
<td>+V</td>
<td>-Stress</td>
<td>-#</td>
<td>(Does not apply) &gt;</td>
</tr>
<tr>
<td>+V</td>
<td>-Stress</td>
<td>+#</td>
<td>- Past &gt;</td>
</tr>
<tr>
<td>+V</td>
<td>-Stress</td>
<td>+#</td>
<td>+ Past &gt;</td>
</tr>
<tr>
<td>+V</td>
<td>+Stress</td>
<td>-#</td>
<td>(Does not apply) &gt;</td>
</tr>
<tr>
<td>+V</td>
<td>+Stress</td>
<td>+#</td>
<td>- Past &gt;</td>
</tr>
<tr>
<td>+V</td>
<td>+Stress</td>
<td>+#</td>
<td>+ Past &gt;</td>
</tr>
</tbody>
</table>

The incidence of deletion is greatest where all the values are identical to those given in the formalization, and least where all the opposite values obtain.

#### 3.2.3 $\emptyset$ For Underlying $|t|$:

Up to this point, we have only looked at $\emptyset$ realization with respect to $|d|$. But it can also be noted that there is some deletion of underlying $|t|$ in words such as cat $[kæ]$, rabbit $[ræb]$ and right $[ra^r]$. The frequency for $|t|$ deletion is given in Table 21. The figures in this table are broken down on the basis of whether the following environment is vocalic or non-vocalic, since we previously observed the importance of this distinction for $d$ deletion.

| No. $|t|$ Del./Tot. | #$V$ | #$Non-V$ |
|-------------------|------|----------|
| 49/459            |      | 219/617  |

Table 21. Incidence of $|t|$ Deletion when Followed by Vowel or Non-Vowel
The above table plainly indicates a constraint on |t| deletion which is quite identical with that we observed for |d| deletion, namely, that a following non-vowel favors deletion greatly over a following vowel.

Since there are obvious similarities in terms of the output of phonological for |d| and |t|, we may ask what the relation of these two types of processes is, and how |t| deletion may fit into the constraints we already established for |d|. Of the four constraints we have already isolated for |d|, only the following vowel/non-vowel and stressed/unstressed syllable can be investigated for |t| since post-vocalic |t| cannot have any grammatical function. It is, however, possible that there is a constraint based on whether the underlying alveolar is |t| or |d|.

The figures for these three potential constraints are given in Table 22.

\[
\begin{array}{lcc}
|t| & \hline \\
\text{Stressed} & \text{Unstressed} & \hline \\
\text{No.De} & \text{Del./Tot.} & 46/445 & 3/15 \\
\text{% Del.} & 10.3 & 20.0 & \\
\text{|d|} & \hline \\
\text{Stressed} & \text{Unstressed} & \hline \\
\text{No.De} & \text{Del./Tot.} & 54/293 & 16/47 \\
\text{% Del.} & 18.4 & 34.0 & \\
\end{array}
\]

\[
\begin{array}{lcc}
|t| & \hline \\
\text{Stressed} & \text{Unstressed} & \hline \\
\text{No.De} & \text{Del./Tot.} & 16/44 & 204/573 \\
\text{% Del.} & 36.4 & 35.6 & \\
\text{|d|} & \hline \\
\text{Stressed} & \text{Unstressed} & \hline \\
\text{No.De} & \text{Del./Tot.} & 245/481 & 182/256 \\
\text{% Del.} & 50.9 & 71.1 & \\
\end{array}
\]

Table 22: Deletion of |d| and |t|

Several observations may be made on the basis of Table 22. First, the way we have set up the table indicates that the first order constraint for alveolar stop deletion is the following environment. An examination
of the cross-products further indicates that the second order constraint is whether the underlying form is \( \text{t} \) or \( \text{d} \). A comparison of the figures clearly indicates that \( \text{d} \) favors the operation of the deletion rule over \( \text{t} \). The influence of stress does not show up for \( \text{t} \) as clearly as it was revealed for \( \text{d} \), but this may be due to the fact that there are relatively few examples of \( \text{t} \) in unstressed environments.\(^1\) If stress is a constraint on \( \text{t} \) deletion as it is for \( \text{d} \), we would clearly expect that it is a minor one. It is obviously ordered after the constraints of the following vowel/non-vowel and after the \( \text{t}/\text{d} \) constraint.

The generalization of the deletion rule to include \( \text{t} \) as well as \( \text{d} \) means that we shall have to revise rule 38. The effect of whether the underlying source is \( \text{t} \) or \( \text{d} \) also will have to be incorporated into the variable constraints. Our rule is now stated as:

\[
\begin{array}{c}
\begin{pmatrix}
-\text{voc} \\
-\text{cont} \\
+\text{ant} \\
+\text{cor} \\
-\text{nasal}
\end{pmatrix} \\
\Rightarrow (\emptyset) / \begin{pmatrix} \text{V} \\
\text{t} - \text{stress} \end{pmatrix} \text{ D } -\# \begin{pmatrix}
\text{E} - \text{PAST} \\
\text{B} + \text{voice}
\end{pmatrix}
\end{array}
\]

\(^1\)In our tabulation of stressed and unstressed environments for \( \text{t} \), we counted only the incidence of \( \text{t} \) in unstressed syllables of polysyllabic words. It is suspected that if we had taken unstressed syllables in terms of the context of phrasal stress, our figures might be more convincing.
It should be noted that the way we have written it, rule 39 only handles the case of alveolar deletion following a vowel (or constricted r). Some treatments of alveolar deletion have incorporated it as part of a more general rule, including |d| which is a part of a consonant cluster, as well as |d| following a vowel (cf. Labov 1969: 748). Although consonant cluster reduction is an integral part of PRE (cf. Chapter 4 Section 4.6.7), we have chosen to keep the two rules separate here. This is mainly due to the fact that consonant cluster reduction can affect all final stops in which the members of the cluster share the feature of voicing (cf. Wolfram 1969: 51). This means that clusters such as sp, ld, st, sk, etc. can be accounted for in a general consonant cluster reduction rule. The way Labov has set up the rules, clusters involving |t| and |d| are accounted for in the same rule as |t| and |d| following vowels; he needs another rule to account for other clusters such as sk, sp, etc. By setting up the |t|/|d| deletion rule following vowels separately, the consonant cluster reduction rule is allowed to operate more generally. We could, of course, set up a disjunctive rule to include the various types of deletion, but since ordering of constraints appears to be different for the two types of rules, this is not a great deal more economical. Until we have additional motivation, then, we shall keep these two rules apart.

It should also be noted that we have chosen to represent the Ø realizations for |t| and |d| as deletion processes rather than as assimilation and subsequent degemination. Bailey (1969b) considers Standard English to assimilate |t| and |d| to following labials and velars on the presumption that one can perceive geminate consonants (e.g., right poor, goob bye).
The fact that we get deletion before vowels as well as consonants, and the lack of reliable perception of double consonants in the examples from our informants, cautions us against this interpretation for PRE. Furthermore, the generality of \( \emptyset \) realization before any consonant appears to be more characteristic of deletion than assimilation.

3.2.4 The Comparison of \( |d| \) and \( |t| \) Deletion in Puerto Rican and Black English

In the course of our previous discussion, we have mentioned the fact that \( |d| \) and \( |t| \) deletion have been described for Black English in several different geographical locations, including Washington, D.C., Detroit, and New York City. On this basis we may conclude that a certain amount of \( |d| \) and \( |t| \) deletion is an integral part of Black English. Since the surrounding black community is the main source of non-Puerto Rican contact, it is therefore important to compare \( |d| \) and \( |t| \) deletion for these two populations in order to see if we can attribute this process in PRE to linguistic assimilation to the surrounding community. In Table 23 we compare the tabulations of d deletion for the black and Puerto Rican informants in our corpus. In this table, we have only broken down the figures on the basis of three environmental categories: following vowel/non-vowel, stressed/unstressed syllable, and grammatical/non-grammatical function of d.

\[1\text{It is possible that there are some special cases in which an assimilation process may be operating. For example, with the item let me we get }[\text{lemmi}]\text{ in the majority of cases. If we do interpret this as assimilation, it appears that this type of assimilation is quite lexically restricted.}\]
<table>
<thead>
<tr>
<th></th>
<th>Stressed</th>
<th>Unstressed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black Inf.</td>
<td>0/14</td>
<td>10/93</td>
</tr>
<tr>
<td>No. Del./Tot.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black Informants % Del.</td>
<td>0.0</td>
<td>10.7</td>
</tr>
<tr>
<td>Puerto Rican Inf.</td>
<td>6/35</td>
<td>48/258</td>
</tr>
<tr>
<td>No. Del./Tot.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Puerto Rican Informants % Del.</td>
<td>17.1</td>
<td>18.6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Stressed</th>
<th>Unstressed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black Inf.</td>
<td>14/33</td>
<td>62/183</td>
</tr>
<tr>
<td>No. Del./Tot.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black Informants % Del.</td>
<td>42.4</td>
<td>33.9</td>
</tr>
<tr>
<td>Puerto Rican Inf.</td>
<td>14/34</td>
<td>231/347</td>
</tr>
<tr>
<td>No. Del./Tot.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Puerto Rican Informants % Del.</td>
<td>41.2</td>
<td>66.6</td>
</tr>
</tbody>
</table>

Table 23: Comparision of |d| Deletion for Black and Puerto Rican Informants

Where there are sufficient numbers of examples to allow comparison, it is obvious that |d| deletion is much more frequent in PRE than it is in Black English. If we collapse the distinction between grammatical and non-
grammatical functions of $|d|$ because of the paucity of examples of gram-
matical $|d|$ in some of the above categories, we find that there is a
clear-cut difference in the degree of $|d|$ deletion for the two groups
for all environments. This combination of categories is given in Table 24.

<table>
<thead>
<tr>
<th>Stressed</th>
<th>Black Informants</th>
<th>Puerto Rican Informants</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. Del./Tot.</td>
<td>%Del.</td>
</tr>
<tr>
<td></td>
<td>11/107</td>
<td>10.3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Unstressed</th>
<th>Black Informants</th>
<th>Puerto Rican Informants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stressed</td>
<td>76/216</td>
<td>35.2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Unstressed</th>
<th>Black Informants</th>
<th>Puerto Rican Informants</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>38/79</td>
<td>48.1</td>
</tr>
</tbody>
</table>

Table 24: Comparison of d Deletion Regardless of Function for Black and Puerto Rican Informants

Table 24 leaves little doubt that $|d|$ deletion is a process which is
considerably more frequent in the speech of Puerto Ricans than blacks. If
Puerto Ricans have the $|d|$ deletion rule much more frequently than the blacks,
we may ask whether this rule can be attributed simply to the influence of the
surrounding linguistic community. In the previous discussion of morpheme-
final $\theta$ we observed that the assimilation variant was found to a significantly
lesser degree in the Puerto Rican community. If the realization of $f$ for
underlying $|\theta|$ is a typical case of assimilation, and it appears to be so,
then $|d|$ deletion cannot be attributed simply to assimilation from the
surrounding black community.
It is at this point that we must turn to possible influence of Puerto Rican Spanish which is carried over in the speech of second generation Puerto Ricans. One of the characteristic features of Puerto Rican Spanish is the deletion of \( |d| \) in syllable-final position. Thus, in words like \textit{verdad} 'truth,' \textit{ciudad} 'city' and \textit{usted} 'you (polite),' the final \( d \) may be deleted, giving \([\text{berda}],[\text{siuda}],\) and \([u:\text{te}]\) in Puerto Rican Spanish. (As in English, this is not a categorical process, but a variable one.) There are, then, two possible sources for \( |d| \) deletion: the surrounding black community and Puerto Rican Spanish. We can hypothesize that it is the convergence of these sources, rather than one source alone, that accounts for the higher incidence of \( |d| \) deletion among Puerto Ricans than blacks.

The possible convergence of sources for \( |d| \) deletion can be examined further by isolating the Puerto Rican informants who have extensive black contacts from those who have restricted black contacts. Our criteria for distinguishing these groups shall be discussed in more detail in Chapter Four. Table 25 gives the breakdown of \( |d| \) deletion on the basis of three groups, the black group (BE), the Puerto Ricans with extensive black contacts (PR/BL), and the Puerto Ricans with restricted black contacts (PR). The figures are broken down on the basis of the following environment and stress of the preceding vowel, as we did in Table 24.
Table 25: Comparison of BE, PR/BL, and PR Informants for \( |d| \) Deletion.

The figures in Table 25 indicate that, with one exception, the incidence of \( |d| \) deletion is greatest for the PR/BL's, next greatest for the PR's, and least frequent for the BE's. The one exception (##V in an unstressed syllable) is found in the category with the smallest number of examples, which probably accounts for the discrepancy. We may hypothesize that the figures for the PR/BL group are due to the fact that these speakers are adding the process of \( |d| \) deletion which they may assimilate on the basis of their close contacts with blacks to the totals that might be attributable to Spanish influence.

In the preceding discussion, we have restricted ourselves to the comparison of \( |d| \) deletion in the Puerto Rican and black groups. But we may also look at these groups with respect to \( |t| \) deletion. The figures for \( |t| \) deletion are given in Table 26 for the black group and the two Puerto Rican groups delimited above. Due to the small number of examples of \( |t| \) in unstressed syllables, we shall break down the environments only on the basis of whether the following segment is vowel or non-vowel.
Table 26: Deletion of 't' for BE, PR/BL, and PR Informants

Several observations can be made on the basis of Table 26. We first observe that both Puerto Rican groups reveal a higher frequency of 't' deletion than the black group. Just as for 'd', there is some explanation for this higher frequency when we look at possible influence from Spanish. Word-final 't' in Spanish is a relatively rare occurrence, so that we might expect a Spanish speaker to realize $\emptyset$ for 't' in word-final or syllable-final position. However, when we compare the two Puerto Rican groups with each other, we do not find that the PR/BL group exceeds the PR group in both categories. Unlike the case of 'd', this does not seem to be due to the limited number of examples, since both groups appear to have sufficient numbers of examples for a clear-cut pattern to emerge. If it is the case that the difference between the two Puerto Rican groups in other instances is the result of the influence of Black English on the PR/BL's, then the fact that post-vocalic 't' deletion is a relatively restricted phenomenon in Black English may account for the lack of differentiation of PR and PR/BL groups in this instance.

3.2.5 -ed Absence

Up to this point, the only mention we have made of the morphophonemic realization -ed for the -ed suffix has been in connection with the rule...
which deletes the final \( d \), so that we have items like \( [r\ e\ d\ i] \) and \( [\ddot{c}i\ddot{c}] \) for **raided** and **cheated** respectively. The absence of \( d \) in these instances was tabulated along with other examples of potential \( d \) in un-stressed syllables. But it is also noted that there are instances in which the entire morphophonemic form appears to be absent. Fasold (forthcoming) has noted the same type of absence in both Black English and Standard English. These instances are accounted for by several types of phonological processes.

To state it briefly (for a comprehensive summary of the rules involved, cf. Fasold forthcoming), Fasold has suggested that instead of a simple phonological process which deletes the entire \(-\ddot{d}d\) form, there is a series of phonological processes which account for this phenomenon. Some instances of absence preceding a vowel (e.g., **precede** it and **invade** it for **preceded** it and **invaded** it respectively) can be attributed to the \( d \) deletion described previously and the subsequent assimilation of the remaining vowel \( \ddot{a} \) to the following vowel. Fasold further suggests that for cases in which base-final \( t \) or \( d \) are preceded by a consonant (e.g., **expect**, **bust**), \(-\ddot{d}d\) absence may result from the fact that these items are interpreted as ending only in the first member of the cluster. If this is the case, the \(-\ddot{d}d\) forms are absent because of the morphophonemic restriction of \(-\ddot{d}d\) to base forms ending in \( t \) or \( d \). Other cases, Fasold argues, are accounted for by a deletion of the vowel and subsequent degemination or assimilation of the remaining \( d \). ¹ When vowel deletion takes place, the base-final \( t \) or \( d \) is contiguous to the remaining \( d \). If the base ends in \( t \), an

¹In the case of words ending in \( nt \) (particularly **want**), Fasold suggests that \( \ddot{a} \) is assimilated to the preceding \( n \) rather than deleted.
assimilation of t to d may take place (giving [heɪd] for hated and [trɪd] for treated), and if d is contiguous to a d, degemination may take place (e.g., [rɛɪd] for raided). The particular rules through which Fasold eventually arrives at -ɪd absence in the surface realization will not concern us here, so that we shall make no attempt to summarize Fasold's specific rules and rule orderings. What is of interest here is the fact that through a series of phonological rules, it is possible to account for the resultant loss of a syllable in the surface realization.

The first type of process Fasold mentions, the assimilation of a vowel after d deletion which places ɪ contiguous to another vowel, is not found in our corpus. Since Fasold mentions that this is relatively infrequent, we cannot be sure if this absence is accidental or significant. The second reason for -ɪd absence, the interpretation of a base-final cluster as containing only the first member, is documented by only two examples:

(a) Like I used to be the war counselor... so it all depend on what happened in the first place. (35: 14)

(b) they could have arres' me. (31: 10)

Fasold notes that absence of this type is also to be expected quite infrequently and our data support this observation for PRE.

Although there are a number of different contexts in which the third type of process (or, more correctly, processes) occurs, (i.e., deletion of the vowel and subsequent assimilation or degemination of the remaining d), there is one context in which surface syllable reduction is quite common, namely when the verb is followed immediately by a gerundive nominal. Specifically, this involves one verb, start, in sentences such as:
(a) He star(d) talking to my mother.

(b) He star(d) coming every day.

There are actually three types of realizations which may be observed in the monosyllabic realization of this form, star (or phonetically [sta:]), start or stard. In Table 27, we have separated the frequency of syllable loss for the BE, FR/BL, and PR informants into two main categories: (1) instances where start is a monosyllable (i.e., [sta(r)], [sta(r)t] or [sta(r)d]) and (2) instances in which it is polysyllabic (i.e., [sta(r)tI] or [starI]).

<table>
<thead>
<tr>
<th></th>
<th>BE</th>
<th>FR/BL</th>
<th>FR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monosyllabic</td>
<td>20</td>
<td>4</td>
<td>17</td>
</tr>
<tr>
<td>Bisyllabic</td>
<td>11</td>
<td>4</td>
<td>46</td>
</tr>
<tr>
<td>%Monosyllabic</td>
<td>64.5</td>
<td>50.0</td>
<td>27.0</td>
</tr>
</tbody>
</table>

Table 27: Monosyllabic and Bisyllabic Realizations of started in Gerundive Nominal Constructions

There is an obvious difference in the realizations of started as monosyllabic or bisyllabic which shows up in Table 27, particularly when we compare the PR with the BE informants. The difference in realizations is quite significant between these groups (Chi square p < .001). Although there are too few examples for the FR/BL informants to come to clear-cut conclusions, the frequency of monosyllabic forms falls between the two groups, as we might expect.

We may hypothesize that the relative infrequency of the monosyllabic realizations of started is due to the difference in the tendency to reduce
syllables as observed in Spanish and English. There is a well-known tendency in English, a phrase-timed language, to reduce the vowels in unstressed syllables, and in some instances to completely elide entire syllables in unstressed environments. The same tendency is not found in Spanish, a stress-timed language. Vowels in unstressed syllables do not reduce as they do in English, and the tendency to elide complete syllables is much weaker. This tendency, then, may be the reason that there is a significant difference between the incidence of monosyllabic realizations of started when the black informants are compared with the Puerto Rican informants. To verify this hypothesis to our complete satisfaction however, we would need to compare the incidence of monosyllabic realizations for started in Standard English and other nonstandard varieties of English.

Before concluding our discussion of -\textit{\textit{ed}} here, we must mention two types of -\textit{\textit{ed}} presence where it is not normally expected in Standard English. First, we observe several instances in which -\textit{\textit{ed}} is realized as a suffix on a base ending in \textit{t} or \textit{d} when the corresponding Standard English construction does not distinguish between past and present tense forms of the verb. We thus have:

\begin{enumerate}
\item (a) \textit{...and it hurted.} (22: 2)
\item (b) \textit{I gotted a thirty-five.} (44: 3)
\end{enumerate}

This type of -\textit{\textit{ed}} form is obviously an analogical formation on unmarked past tense verbs ending in \textit{t} or \textit{d}, and is not unique to PRE. Several instances of this analogical formation are found for the BE informants as well (e.g., \textit{they betted on him} (1: 2)); it also can be observed in
various nonstandard white dialects (and, perhaps, in some standard dialects as well).

The other type of -ed formation has not to our knowledge been observed in other nonstandard dialects of English. This is the double or pleonastic marking of the -ed suffix, as in:

43
(a) ...right there it ended [endɛʔt]. (29: 3)
(b) ...to see what they wanteded [wɒntid] to do. (22: 5)
(c) ...he commanded [kəmˈændid] the seventy-three (43: 6)

This pleonastic -ed marking appears to be a type of structural hypercorrection which occurs as a compensation for the English tendency to elide syllables. On the whole, this type of hypercorrection is quite infrequent, although there is one speaker in our corpus (No. 29) who has pleonastic -ed marking on five out of seven potential instances of -ed, as illustrated in the following examples:

44
(a)...and so they starteded running and Taylor's friend got shot. (29: 2)
(b)...and they starteded running. (29: 2)
(c)...and they wanteded to attack them. (29: 3)
(d)...right there it endeded. (29: 3)
(e)...they wanteded to fight for Leemen Village territory. (29: 5)

1Although it might be suspected that these forms are cases of verb+ed and the pronoun it (which could have the same phonetic realization) the wider context of the utterances does not indicate that this is the case.
Although this type of hypercorrection may be expected infrequently for some PRE speakers, the relative frequency of usage by this informant appears to be quite unusual and may be idiosyncratic.

3.2.6 The Incidence of $t$ for Underlying $d$

Up to this point, we have only dealt with various aspects of $d$ deletion. But we observed at the outset that it is also possible to realize $d$ as $t$. Phonetically, this may be an unreleased voiceless alveolar [tʰ], a glottal stop [ʔ], or a co-articulated glottal and unreleased alveolar stop [ʔtʰ]. This feature, sometimes referred to as devoicing, should not be confused with the lack of voicing through the voiced stops in Standard English (sometimes represented as [d]). Perceptually, these two types of devoicing appear to be quite distinct.

Previous studies of devoicing, done exclusively on Black English (Wolfram 1969 and Fasold forthcoming), have indicated that it is a process which applies to many more consonants than just $d$; in fact, it is true of all voiced obstruents to some extent. The realization of $t$ for $d$ in word-final position has also been mentioned as a possible interference variant from Spanish, because of the lack of contrast between $d$ and $t$ in word-final position in Spanish (cf. Russell and Heringer 1970: 10). As an interference variant, however, it does not appear to occur very extensively for most speakers.

In Table 28, we have tabulated the frequency of $t$ (i.e., [tʰ], [ʔ] or [ʔtʰ] realization for $d$). The percentage of $t$ realization is calculated in relation to the total number of $t$ and $d$ realizations. Cases of $∅$ realization treated previously are not considered in this table. Two environments are distinguished in Table 28, vocalic and non-vocalic. It
should be noted that our definition of following vocalic environment was quite rigid, so that any slight pause between potential d and a following vowel was classified as non-vocalic. We shall see that the careful discrimination of pause following potential d is of particular importance because of the effect of the constraint of pause on the incidence of t.

<table>
<thead>
<tr>
<th></th>
<th>Non-V</th>
<th>V</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. t</td>
<td>139</td>
<td>9</td>
</tr>
<tr>
<td>No. d</td>
<td>171</td>
<td>261</td>
</tr>
<tr>
<td>% t</td>
<td>44.8</td>
<td>3.3</td>
</tr>
</tbody>
</table>

Table 28: Incidence of t for 'd' in Vocalic and Non-Vocalic Environments

Table 28 indicates quite clearly that t realization of underlying d is a phonological process which is largely confined to non-vocalic environments. In fact, the incidence of t in vocalic environments is so limited that we may ask if the few instances we have are a legitimate part of the dialect or some type of "speaker error." Typically, d is realized in intervocalic position as a flapped alveolar [ð]. The low incidence of t preceding a vowel converges with the observation of d devoicing in both Wolfram (1969: 99) and Fasold (forthcoming). Although both of these studies mention the low incidence of t in vocalic environments, both Wolfram and Fasold nonetheless consider that these rare instances should still be accounted for in the grammar of Black English. Fasold, in fact, considers
it to be important evidence for ordering the constraints on variability, as he does, as a matter which we shall return to in more detail later.

One of the variable constraints mentioned in previous studies of devoicing is stress. It has been suggested (Wolfram 1969: 102) that unstressed syllables favor the devoicing rule. In Table 29, we have presented frequency of t realizations based on the distinction between stressed and unstressed environments. Since we have already noted that t for |d| is almost categorically absent preceding a vowel, we shall only give the incidence of t for |d| in non-vocalic environments.

<table>
<thead>
<tr>
<th></th>
<th>Stressed</th>
<th>Unstressed</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. t</td>
<td>94</td>
<td>40</td>
</tr>
<tr>
<td>No. d</td>
<td>142</td>
<td>34</td>
</tr>
<tr>
<td>% t</td>
<td>39.8</td>
<td>54.1</td>
</tr>
</tbody>
</table>

Table 29: Incidence of t for Underlying |d| in Stressed and Unstressed Syllables

The observation of the influence of stress reported in previous studies of devoicing is confirmed in PRE. The realization of t for |d| is favored in unstressed environments and inhibited in stressed ones.

Another factor which has been observed to influence the relative frequency of t in non-vocalic environments is the distinction between underlying |d| which is followed by a consonant and that followed by a pause of some type. Pause was seen to favor the incidence of t (cf. Wolfram 1969: 101). In Table 30, the effect of this constraint is considered. Terminal and non-terminal pause (any hesitation following potential d) are not
distinguished in our tabulations. Tabulations are broken down into stressed and unstressed environments on the basis of our previously determined constraint.

<table>
<thead>
<tr>
<th></th>
<th>Stressed</th>
<th>Unstressed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>#WC</td>
<td>#//</td>
</tr>
<tr>
<td>No. t</td>
<td>37</td>
<td>57</td>
</tr>
<tr>
<td>No. d</td>
<td>50</td>
<td>82</td>
</tr>
<tr>
<td>% t</td>
<td>42.5</td>
<td>41.0</td>
</tr>
</tbody>
</table>

Table 30: Incidence of t in Four Environments

There is an obvious effect on t realization based on the distinction between a following pause and a following consonant, but the ordering of the constraints is somewhat unclear. The implied order in Table 30 is that stress is hierarchically ranked before the following pause, but the crucial cross-products for this decision, stressed, //, and unstressed, #WC, are so close that there is no significant difference. The difference between stressed, #WC, and unstressed, //, is significant, but since these are not the crucial by-products to compare when determining the ordering of constraints, any decision about ordering will have to be arbitrary.

In Wolfram's study of constraints on t for |d|, the possibility of following voicing was also investigated, but was not found to be of any consequence. A similar tabulation for this data in stressed syllables also revealed that it was of no significance. (In fact, t realization was slightly more frequent when followed by a voiced consonant than a voiceless one.) This, however, is contrary to Fasold's findings for devoicing in
Washington working class black speech. Our impression, then, is that if voicing is a constraint on \( t \) for \( |d| \), it is a very minor one.

At this point, we may summarize the constraints that we have already established in terms of a variable rule for devoicing. We may formalize this as:

\[
45 \quad d \rightarrow t/\left[ \begin{array}{c} v \\ A \text{-stress} \end{array} \right] -v/\left[ \begin{array}{c} \# \# \\ \text{8-segment} \end{array} \right]
\]

Several points need to be noted in our formalization of Rule 45. In the first place, we have written the rule so that it operates only in non-vocalic environments. This means that we are assuming that the phonological process is prohibited from operating before a vowel (i.e., immediately following vowel without any intermittent pause). This means that the rare cases of \( t \) before vowels are dismissed as "performance errors" of some type. This decision is a statistical one, based on the fact that \( t \) for \( |d| \) preceding a vowel occurs in less than 5% of all cases. If we were to account for these infrequent instances in our formal statement, the distinction between following vowel/non-vowel would obviously be the first order constraint. The hierarchy of constraints formalized here is quite different from the one suggested by Fasold (forthcoming) for Black English. Fasold suggests that the first order constraint is voicing/voicelessness, the second order constraint is the absence/presence of a vowel, and the third order constraint, the presence or absence of a pause. He does not mention the possible constraint of stress, presumably because there are too few examples in his data for him to make his calculations so detailed. Although his suggested hierarchy of constraints would, on the surface, appear to be
radically different from the one suggested here, much of this is due to his interpretation of the distinction between a following vowel/non-vowel as a genuine constraint on variability. Once he concludes that vowel/non-vowel is a legitimate constraint, he unites the voicing of the following vowel (since in English all vowels are voiced) and the voicing of following consonants together as the most inhibiting factor on devoicing, whereas the lack of voicing is the factor which favors it most. If Fasold were to interpret the following vowel as categorically prohibiting devoicing, his constraints would be rearranged considerably and not conflict seriously with the ones suggested here.

So far, we have not discussed the relation of the devoicing rule to the deletion rule which was outlined previously. Labov et al. (1968), in their treatment of these relations, consider output of the devoicing rule applied to \( \text{d} \) to yield a segment which merges with \( \text{t} \). The \( \text{d}, \text{t} \) deletion rule then operates on the output of the devoicing rule. If the devoicing rule did, in fact, yield output which was identical with the phonetic realizations for \( \text{t} \), this would obviously be the most economical way of handling the relations between these two rules. Fasold (forthcoming), however, raises the question of whether the phonetic output from underlying \( \text{d!} \) and \( \text{t!} \) are identical. He notes that two of the phonetic realizations of post-vocalic, syllable-final \( \text{t!} \) and \( \text{d!} \) are identical, namely the unreleased stop \( \text{[t]!} \) and the glottal \( \text{[?]!} \); the third variant, the co-articulated glottal and unreleased stop \( \text{[?t!]!} \), however, appears to be unique to the phonetic realization of underlying \( \text{d!} \). One might, of course, argue that \( \text{[?t!]!} \) is also a possible variant for underlying \( \text{t!} \), in which case it would be reasonable to assume that post-vocalic \( \text{d!} \), \( \text{t!} \) deletion operates on the
output of the devoicing rule. If we assume, however, that the variants are not identical, we are faced with two options. Either we can consider devoicing and deletion as two separate operations without any step-wise gradation from devoicing to deletion, or we can specify some special environment, unique to underlying |d| but not 't|, which might account for the distinct variant [ʔt']. Fasold, with reference to Black English, chooses the former alternative when he notes:

In spite of the reasonableness on the face of it, a step-wise gradation of devoicing from voicing through total deletion is not in accord with the facts. The conclusion to which we are led is that devoicing and deletion linguistically have little in common. (Fasold forthcoming)

What Fasold is saying, then, is that a rule resulting in |d| devoicing cannot be the input for the deletion rule which operates on both |d| and |t|. There is, however, another option due to the fact that devoicing can occur in an environment which is unique to underlying |d|. It has been pointed out in Wolfram (1970) that the lengthening of vowels which is characteristic before voiced segments in English is still retained when underlying |d| is devoiced, giving items like 46 phonetically.

46  (a) [mæː ʔ t ] 'mad'
     (b) [gaː ʔ t ] 'God'

This phonetic realization, noted for Black English, is also characteristic of the PRE phonetic realizations of [ʔt'].\(^1\) Now if this is the case, then

\(^1\) Although we have not done specific tabulations of the different phonetic realizations of the variant  t, it appears that [ʔt'] is considerably more frequent among black speakers than PRE speakers.
it may be that the co-articulated glottal and unreleased stop are a function of this length, which cannot occur before underlying \( t \). If we specify the \([?t?]\) realization as a function of preceding length, we can account for the realization of the unique variant for underlying \( d \).

Presumably, this specification would be handled in the morpheme structure rules. With this explanation, then, we can relate the processes of devoicing and deletion so that the deletion rule operates on the output of the devoicing rule which has realized underlying \( d \) as \( t \).

### 3.2.7 The Comparison of Devoicing in Black English and PRE

We have previously mentioned that devoicing is a characteristic of both PRE and Black English. In fact, the variants which were initially set forth for our analysis of devoicing in PRE are precisely the ones that both Wolfram (1969) and Fasold (forthcoming) have identified for Black English. It yet remains, then, to compare the incidence of devoicing among the Puerto Rican and black informants. In Table 31, we compare the incidence of devoicing for the two groups. Figures for the incidence of \( t \) are given for stressed and unstressed syllables and for following consonant or pause.

<table>
<thead>
<tr>
<th></th>
<th>Stressed</th>
<th>Unstressed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>( C)</td>
<td>( C)</td>
</tr>
<tr>
<td>Puerto</td>
<td>33</td>
<td>57</td>
</tr>
<tr>
<td>Rican</td>
<td>No. ( t)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>50</td>
<td>82</td>
</tr>
<tr>
<td></td>
<td>No. ( d)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>39.8</td>
<td>41.0</td>
</tr>
<tr>
<td>Black</td>
<td>No. ( t)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>26</td>
<td>41</td>
</tr>
<tr>
<td></td>
<td>No. ( d)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>39</td>
<td>34</td>
</tr>
<tr>
<td></td>
<td>% ( t)</td>
<td>40.0</td>
</tr>
</tbody>
</table>

Table 31: Comparison of Black and Puerto Rican Informants for \( t \) Realization of Underlying \( d \)
As indicated in Table 31, the same general effect of environments is observed for the two groups; the major difference between the groups is found in the frequency. The black informants generally realize \( t \) more frequently than the Puerto Ricans. Although we note that \( t \) is somewhat more frequent in Black English than it is in PRE, we may recall that \( \emptyset \) realizations were more frequent in PRE. We may then ask how the groups contrast when they are compared in terms of the total frequency of non-\( d \) (i.e., \( t \) or \( \emptyset \)) realizations. The figures for the two non-\( d \) realizations are given in Table 32. Figures are given only for stressed and unstressed environments preceding a non-vocalic environment.

\[
\begin{array}{cccccccc}
\text{Stressed} & & & & & & & \\
\emptyset & t & \text{Tot. non-}d & \emptyset & t & \text{Tot. non-}d & \emptyset & t \\
\hline
\text{Puerto Rican No.} & 245 & 90 & 335 & 481 & 182 & 40 & 222 & 256 \\
\% of & 50.9 & 18.7 & 69.7 & 71.1 & 15.6 & 86.7 \\
\text{Black No.} & 76 & 67 & 143 & 216 & 38 & 27 & 65 & 79 \\
\% of & 35.2 & 31.0 & 66.2 & 48.1 & 34.2 & 82.3 \\
\end{array}
\]

Table 32: Comparison of Black and Puerto Rican Informants for Total Non-\( d \) Realizations

Table 32 indicates that the two groups do not differ significantly in terms of the total non-\( d \) realizations, but do differ in the types of realizations: PRE shows the \( \emptyset \) realization significantly more frequently (Chi square \( p < .001 \)) than Black English, whereas Black English more frequently realizes \( t \). Finally, we may look at the incidence of \( t \) realization for the PR/BL, PR, and BE informants. We hypothesize that PR/BL informants will use
more frequently than PR informants. Table 33, which compares the three
groups, allows us to test our hypothesis. The realizations are compared in
stressed and unstressed syllables and following consonant or pause.

<table>
<thead>
<tr>
<th></th>
<th>Stressed</th>
<th>Unstressed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>/#/C</td>
<td>//</td>
</tr>
<tr>
<td>PR</td>
<td>No. $t$</td>
<td>27</td>
</tr>
<tr>
<td>No. $d$</td>
<td>42</td>
<td>73</td>
</tr>
<tr>
<td>% $t$</td>
<td>39.1</td>
<td>36.5</td>
</tr>
<tr>
<td>PR/BL</td>
<td>No. $t$</td>
<td>6</td>
</tr>
<tr>
<td>No. $d$</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>% $t$</td>
<td>42.9</td>
<td>62.5</td>
</tr>
<tr>
<td>BE</td>
<td>No. $t$</td>
<td>26</td>
</tr>
<tr>
<td>No. $d$</td>
<td>39</td>
<td>34</td>
</tr>
<tr>
<td>% $t$</td>
<td>40.0</td>
<td>54.7</td>
</tr>
</tbody>
</table>

Table 33: Comparison of $t$ Realization for PR, PR/BL on BE Informants.

Despite the few examples in some of the categories delimited in Table
33, our hypothesis is confirmed; PR/BL informants do realize $t$ more frequently
than the PR informants. In fact, the figures for the Puerto Rican group
equal or exceed (but not to any degree of statistical significance) the
frequency of $t$ realization observed in the black group. We thus conclude
that $t$ realization is a feature which shows assimilation to Black English.
One of the linguistic effects of extensive contacts with Black English
speakers for Puerto Ricans is found in the increased frequency of $t$ realiza-
tions, although Puerto Ricans with limited black contacts may also be ex-
pected to realize $t$, though to a lesser degree.
3.3 The Variable /AI/.

3.3.1 Previous Studies

One of the variations which is noticeable in some varieties of Puerto Rican English and Black English is the realization of the vocalic diphthong /ai/ . This diphthong occurs in both Spanish and English, and is therefore expected to occur in PRE and Black English, though perhaps with some variation in realization. Navarro (1948: 53-58) documents Puerto Rican Spanish [ai] as including, in some dialects, the realization [ei] or even [e], but never as [a] without the offglide. Using the lexical item raɪz, 'rice', the variants noted by Navarro are: [rai], [reɪ], [ræi], [rey], and [re]. The influence of Spanish on PRE typically would be expected to preserve the offglide following [a].

Very little sociolinguistic work has been done on this variable in nonstandard English. Fasold and Wolfram (1970: 56) briefly mention this variable, where the absence of the offglide is a "feature of some Southern standard as well as nonstandard dialects...adapted as an integral part of Negro dialect." The occurrence of the offglide reported there is more frequent when followed by a voiced sound or a pause. Since this rule is apparently operative in the speech of middle-class speakers in the South, "its social significance is limited to Northern areas, where it is associated with class and race. Even in Northern areas, however, its stigmatization is minimal." (Fasold and Wolfram 1970: 56)

/AI/ (/AY/) is one of the phonological variables occurring in the speech of black and Puerto Rican adolescents in New York City. It was chosen for "detailed quantitative study" by Labov et al. (1965: 32, 33).
The importance of this variable as "the most sensitive index of stylistic shift for the Negro population of northern cities" is underlined:

Whereas white working class New Yorkers are sensitive above all to the variable (EH) representing the height of the vowel in bad etc., and lower middle class white New Yorkers very sensitive to (OH), or the vowel in off, etc., Negro New Yorkers seem to show the greatest sensitivity to (AY). (Labov et al. 1965: 33)

The authors indicate three subvariables of (AY): (AY₀) which occurs before voiceless obstruents; (AYᵥ) before voiced consonants; and (AY₊) before morpheme or word boundaries, as well as "before the ingliding vowel derived from morphophonemic //r//, as in fire [faɪə]." Difficulties in transcription of these variants are noted:

In a number of tests, it was found that a linear index of weakening was not reliable enough, nor was an impressionistic combination of fronting, lengthening, and weakening of the glide. One of the difficulties is that the absolute length of nucleus and glide varies considerably in the three subvariables, and there are no word classes which can be used as a standard of comparison in differentiating a slight weakening of the glide or a slight lengthening of the nucleus from a moderate weakening or a moderate lengthening...

The present approach to the problem of transcription of (AY) involves a rating of each occurrence of the variable along three dimensions -- fronting of nucleus, length of nucleus, and direction of upglide, with a relatively coarse three-point scale for each. The next step is a codification of the eighteen possibilities into a much smaller set of (AY) values, derived from their actual distribution in speech. (Labov et al. 1965: 33)
Unfortunately, the authors' analysis of this variable for the final report (Labov et al. 1968) was not continued, so that no mention is made of it subsequently.

Ma and Herasimchuk (1968), in their study of the Puerto Rican community of Jersey City, studied (AY) as a PRE variable, distributed along stylistic dimensions. The variants they used were four: AY-1: [a], AY-2: [aI], AY-3: [ai], AY-4: [oI, oI], with AY-3 being the interference variant from Puerto Rican Spanish. Although the authors originally studied three linguistic environments, they state that "results are only clear" for the third (1968: 732). The three environments were: (1) syllable closed by a voiced consonant; (2) syllable closed by a voiceless consonant; (3) morpheme/word final position. Their results showed a decrease in AY-3 and AY-2 as the styles became more informal, and a subsequent increase of AY-1. The general picture is one of decreasing occurrence of an offglide as the style becomes more informal. It is unfortunate that the variant could not have been studied in terms of the first two environments, since, according to the study originally delimited by Ma and Herasimchuk the environment makes a great deal of difference, not only for PRE, but for a comparison between PRE and Black English.

One of the English conversational styles delimited by factor analysis in the Ma and Herasimchuk study is "Substandard English," a dialect "quite representative of the substandard Negro speech of New York City" (1968: 764). The authors note that it is this dialect which is most available to Puerto Ricans, since they are surrounded by it geographically, and that the influence of this dialect is seen on their PRE speakers. Since the AY-1 variant is "one of the most characteristic of urban lower-class Negro
speech", they conclude: "Its high occurrence in the speech of acculturating urban lower-class Puerto Ricans attests to the presence of a high amount of social interaction between the two ethnic groups" (Ma and Herasimchuk 1968: 732).

In the present study, it is suggested that one of the variables most sensitive to PRE/Black English speech differences is |AI|. The hypothesis adopted here is that PRE speakers will have quantitatively more realizations of |AI| with the offglide than will Black English speakers in most linguistic environments. It is not possible with the present sample, however, to determine whether this is due to Puerto Rican Spanish or Standard English influence. Those Puerto Ricans who have more black contacts, on the other hand, will tend toward the Black English part of the continuum, i.e., they will have fewer realizations of |AI| with the offglide than their counterparts with fewer black contacts.

3.3.2 Variants of |AI|

To test the stated hypothesis, the present study concentrated not so much on the variation in vowel height of either element of the diphthong (if indeed a diphthong was realized) but rather on the presence or absence of the offglide. Six variants were originally chosen, based on the spectrum of variation impressionistically perceived in BE and PRE speakers. A more precise definition of nucleus, onglide, and offglide is given in the analysis of the present data in a later section of this chapter. The variants used in transcription were:
(1) [ai] a full diphthong in which each of the two elements is realized with almost the same length, and in which the second element is realized as a high front vowel

(2) [aᵪ] a diphthong in which the second element, or offglide, is not realized with the same length as the first element or nucleus, with the second element realized as in (1)

(3) [a] a simple vocalic realization in which no offglide was present

(4) [a⟩] a diphthong where the second element is a centralized offglide

(5) [aː] a simple vowel differing from (3) in length only

(6) [œ] a simple centralized vowel

It was presumed that some of these variants would be conditioned by their linguistic environment, which will be discussed in the following section. No effort was made to distinguish, in terms of variants, the degree of height or fronting of the first element, so that [a] was not distinguished from [œ], for example.

Following first transcription, the six variants were coalesced to three, based on the difference of offglide and its presence or absence. The three variants used henceforth are:

(1) [ai] including [ai] and [aᵪ]

(2) [a] including [a], [aː], and [a⟩]

(3) [œ]

3.3.3 Transcription Reliability.

All occurrences of [AI] were transcribed for thirty-one of the forty-three tapes. For the remaining twelve tapes, the first twenty occurrences in each relevant linguistic environment delimited below were transcribed,
where that many occurred. This first transcription was done over a period of six months and the possibility was perceived for a change in transcription practices over this length of time, due perhaps to the influence of hypotheses as the work progressed. Consequently, a reliability test was constructed to test intra-transcriber reliability and this was further checked by an inter-transcriber reliability test.

Twelve tapes were selected as the most representative of four types of informants: Puerto Rican, black, Puerto Rican with extensive black contacts, lames (see Chapter Four). The three pages of typescript following page one were selected for transcription of all occurrences of \textsuperscript{1}AI\textsuperscript{1}. In the intratranscriber reliability test, all of these occurrences were transcribed for all twelve informants and matched with the original transcription done as much as six months previously. For the inter-transcriber reliability test, two linguists were selected and were requested to choose one tape from each of the four groups of informants, both linguists transcribing, at separate times, the same tape. They also were instructed to transcribe all occurrences of \textsuperscript{1}AI\textsuperscript{1} on the three pages of typescript following the first. These transcriptions were then checked against those of the original transcriber. In analyzing the reliability test results, two tabulations were used, one for occurrences of \textsuperscript{1}AI\textsuperscript{1} discounting the first person pronoun 'I'. This was done because it seemed that for reasons of stress variation the 'I' was more difficult to perceive and transcribe, particularly for very light stress, where in some cases it is barely perceptible.
For the intra-transcriber test, scores represent the agreement between the first and second transcription. The mean of the scores for all twelve tapes is 85.8% for \( |\text{AI}| \) occurrences, discounting the first person pronoun 'I', and 84% for over-all occurrence of \( |\text{AI}| \). The scores varied from 64% to 100%, with a median score of 84.6% for over-all occurrences, 87.1% for \( |\text{AI}| \) discounting 'I'. The scores for each of the twelve tapes are shown in Table 34.

<table>
<thead>
<tr>
<th>Inf. No.</th>
<th>Transcriptions</th>
<th>% Agreement</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>29/32</td>
<td>90.6</td>
</tr>
<tr>
<td>5</td>
<td>40/45</td>
<td>88.9</td>
</tr>
<tr>
<td>7</td>
<td>47/50</td>
<td>94.0</td>
</tr>
<tr>
<td>9</td>
<td>27/32</td>
<td>84.4</td>
</tr>
<tr>
<td>14</td>
<td>28/36</td>
<td>77.8</td>
</tr>
<tr>
<td>18</td>
<td>22/32</td>
<td>68.8</td>
</tr>
<tr>
<td>22</td>
<td>45/53</td>
<td>84.9</td>
</tr>
<tr>
<td>24</td>
<td>55/60</td>
<td>91.7</td>
</tr>
<tr>
<td>28</td>
<td>34/45</td>
<td>75.6</td>
</tr>
<tr>
<td>34</td>
<td>32/50</td>
<td>64.0</td>
</tr>
<tr>
<td>37</td>
<td>62/77</td>
<td>80.5</td>
</tr>
<tr>
<td>40</td>
<td>58/58</td>
<td>100.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Transcriptions</th>
<th>% Agreement</th>
</tr>
</thead>
<tbody>
<tr>
<td>21/21</td>
<td>100.0</td>
</tr>
<tr>
<td>28/30</td>
<td>93.3</td>
</tr>
<tr>
<td>33/34</td>
<td>97.1</td>
</tr>
<tr>
<td>17/19</td>
<td>89.5</td>
</tr>
<tr>
<td>24/32</td>
<td>75.0</td>
</tr>
<tr>
<td>14/20</td>
<td>70.0</td>
</tr>
<tr>
<td>33/40</td>
<td>82.5</td>
</tr>
<tr>
<td>34/38</td>
<td>89.5</td>
</tr>
<tr>
<td>28/33</td>
<td>84.8</td>
</tr>
<tr>
<td>23/35</td>
<td>65.7</td>
</tr>
<tr>
<td>41/49</td>
<td>83.7</td>
</tr>
<tr>
<td>36/36</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 34: Intra-Transcriber Reliability Scores for Twelve Tapes
Inter-transcriber reliability scores are generally lower than intra-transcriber scores, as might be expected. There is also a greater difference in scores for the tabulation of over-all \( |AI| \) occurrences discounting the first person pronoun 'I'. For the four tapes transcribed, the mean score for \( |AI| \) without 'I' is 81.9%, and for over-all \( |AI| \) occurrence 75%. The scores for each of the transcribed tapes are shown in Table 35.

<table>
<thead>
<tr>
<th>Info No.</th>
<th>F/S w'I'</th>
<th>F/S w/o'I'</th>
<th>F/W w'I'</th>
<th>F/W w/o'I'</th>
<th>W/S w'I'</th>
<th>W/S w/o'I'</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>88.7</td>
<td>100.0</td>
<td>83.6</td>
<td>95.3</td>
<td>78.3</td>
<td>95.5</td>
</tr>
<tr>
<td></td>
<td>55/62</td>
<td>44/44</td>
<td>51/61</td>
<td>41/43</td>
<td>47/60</td>
<td>42/44</td>
</tr>
<tr>
<td>14</td>
<td>68.5</td>
<td>74.1</td>
<td>71.4</td>
<td>78.8</td>
<td>71.0</td>
<td>71.2</td>
</tr>
<tr>
<td></td>
<td>50/73</td>
<td>40/54</td>
<td>40/70</td>
<td>41/52</td>
<td>49/69</td>
<td>37/52</td>
</tr>
<tr>
<td>22</td>
<td>77.9</td>
<td>83.3</td>
<td>70.5</td>
<td>77.3</td>
<td>71.4</td>
<td>82.0</td>
</tr>
<tr>
<td></td>
<td>67/86</td>
<td>55/66</td>
<td>62/88</td>
<td>51/66</td>
<td>60/84</td>
<td>50/61</td>
</tr>
<tr>
<td>37</td>
<td>69.8</td>
<td>74.6</td>
<td>81.1</td>
<td>85.5</td>
<td>72.7</td>
<td>75.0</td>
</tr>
<tr>
<td></td>
<td>60/86</td>
<td>44/59</td>
<td>73/90</td>
<td>53/62</td>
<td>64/88</td>
<td>45/60</td>
</tr>
</tbody>
</table>

Table 35: Inter-Transcriber Reliability Scores for Four Tapes.
Ma and Herasimchuk (1968) also did a reliability check on transcription of all variables between transcribers. Their agreements range from 73% to 94%, which they consider to be quite high (1968: 751). Their median agreement was 89.5%. In analyzing the scores to see which variables caused the greatest disagreement, they discovered, as would be expected, that the vowels were most responsible (Ma and Herasimchuk 1968: 753, 754). The scores of agreement in the present study approximate the acceptable Ma and Herasimchuk scores, despite the fact that the variable studied was vocalic, and hence more difficult to codify between transcribers.

Levine and Crockett (1967) also tested inter-transcriber reliability between two transcribers for seventeen words, for which the scores obtained show two categories of words: high agreement words, where the scores ranged from 79% to 95%, and low agreement words, whose scores ranged from 27% to 57% (1967: 83). The scores presented in this study fall, for the most part, in the high agreement category.

3.3.4 Selection of Data

After all of these occurrences of [AE] were transcribed, it was decided to omit from the present tabulation the first person singular pronoun 'I' for two reasons. First, 'I' is often realized with very weak stress and not given full vocalic realization, which makes accurate transcription difficult. Second, transcriber reliability tests indicated consistently lower agreement on the transcription of this item than on all of the others. This item accounted for many of the occurrences of the [e] variant, so that in omitting the pronoun, the percentage of [e] realization is reduced.
3.3.5 Variant Frequency

3.3.5.1 Frequency of Variants According to Ethnic Group

It is hypothesized here that one of the recognized features distinguishing blacks from Puerto Ricans in the Harlem speech community is their realization of |AI|. While all three variants occur in the speech of both groups, there is a large difference in frequency for two of the variants in certain environments. The variants will be discussed here as realized by three groups: blacks (BE), Puerto Ricans with restricted black contacts (PR), and Puerto Ricans with extensive black contacts (PR/BL).

The two variants most often occurring for |AI| are [a] and [ai], while [e] occurs very infrequently ([e], as is to be expected, accounts more often for the realization of the first person singular pronoun, excluded here). The frequency of each of the three variants for all informants in open and closed position in the syllable is given in Table 36.

<table>
<thead>
<tr>
<th>Within word boundary</th>
<th>Across word boundary</th>
</tr>
</thead>
<tbody>
<tr>
<td>No./Tot.</td>
<td>%</td>
</tr>
<tr>
<td>[ai]</td>
<td>2162/2980</td>
</tr>
<tr>
<td>[a]</td>
<td>816/2980</td>
</tr>
<tr>
<td>[e]</td>
<td>2/2980</td>
</tr>
</tbody>
</table>

Table 36: Total Occurrences of |AI| Variants for all Informants.

It is apparent that [ai] is the most frequent realization of |AI|. [e], on the other hand, accounts for an insignificant number of cases, (although it occurs more often in open position than in closed), and therefore will not be considered in further tabulations.
The stratification of the use of the [ai] variant, as against the [a] variant according to ethnic membership is best seen when compared with the total number of 'AI' occurrences for each group. (All succeeding percentages are of the [ai] variant.) This is seen in Table 37.

<table>
<thead>
<tr>
<th></th>
<th>Within word boundary</th>
<th>Across word boundary</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No./Tot.</td>
<td>% [ai]</td>
</tr>
<tr>
<td>PR</td>
<td>1385/1689</td>
<td>82.0</td>
</tr>
<tr>
<td>PR/BL</td>
<td>251/378</td>
<td>66.4</td>
</tr>
<tr>
<td>BE</td>
<td>461/789</td>
<td>58.4</td>
</tr>
</tbody>
</table>

Table 37: Comparison of 'AI' Realization for PR, PR/BL and BE Informants

It is apparent that within word boundary is a case of gradient stratification (Woldrem 1969). The variation between groups follows a continuum with each group clustering at a certain point. [ai] is the variant occurring most frequently for Puerto Rican speakers, while [a] is used most frequently by blacks, with Puerto Ricans with extensive black contacts falling in between. Across word boundary however, there is a greater difference in percentage of [ai] realization among the three groups and this may be considered a case of sharp stratification. Here the PR/BL informants approximate blacks in their use of [ai], and both groups differ considerably from the Puerto Ricans. There is variation within each group as well, so that not all Puerto Ricans and blacks fall at opposite ends of the spectrum with the PR/BL informant in the middle. There is no case of an informant indicating categorical realization of [a]; one Puerto Rican approximates 100% realization of [ai].
While there is variation within each group, each group tends to center in a different part of the spectrum.

3.3.5.2 Variants According to Linguistic Environments

It is not enough merely to examine the overall occurrence of the variants; rather, in order to establish the order of constraints on the variable, the linguistic environments must be examined in detail. The relevant linguistic environments following \( |AI| \) are: (1) voiced and voiceless occlusives, (2) voiced and voiceless fricatives, (3) laterals, (4) nasals. The semi-vocalic and vocalic environments will be omitted in the discussion since the number of such examples in which \( |AI| \) occurs is insignificantly small, and where it does occur, there is the added complication of distinguishing the offglide of the vocalic diphthong from the semi-vowel realized between two vowels.

3.3.5.2.1 Within Word Boundary

Table 38 shows the tabulation of \([ai]\) presence in the relevant environments within word boundary for the three groups of informants.

<table>
<thead>
<tr>
<th>Env.</th>
<th>FR No.[ai]/Tot.</th>
<th>%[ai]</th>
<th>FR/BL No.[ai]/Tot.</th>
<th>%[ai]</th>
<th>BE No.[ai]/Tot.</th>
<th>%[ai]</th>
</tr>
</thead>
<tbody>
<tr>
<td>-vls occl</td>
<td>526/570</td>
<td>92.3</td>
<td>114/132</td>
<td>86.4</td>
<td>268/301</td>
<td>89.0</td>
</tr>
<tr>
<td>-vls fric</td>
<td>120/134</td>
<td>89.6</td>
<td>20/38</td>
<td>78.9</td>
<td>43/52</td>
<td>82.7</td>
</tr>
<tr>
<td>-vcl occl</td>
<td>172/202</td>
<td>85.1</td>
<td>25/33</td>
<td>75.8</td>
<td>43/90</td>
<td>47.8</td>
</tr>
<tr>
<td>-vd fric</td>
<td>213/205</td>
<td>69.8</td>
<td>34/87</td>
<td>39.1</td>
<td>45/151</td>
<td>30.0</td>
</tr>
<tr>
<td>-nas</td>
<td>322/419</td>
<td>76.8</td>
<td>46/83</td>
<td>55.4</td>
<td>56/170</td>
<td>32.9</td>
</tr>
<tr>
<td>-lat</td>
<td>31/58</td>
<td>53.4</td>
<td>2/5</td>
<td>40.0</td>
<td>6/23</td>
<td>26.1</td>
</tr>
</tbody>
</table>

Table 38: \([ai]\) Presence in Consonantal Environments within Word Boundary
A rather clear pattern emerges from this data. Before all voiced segments, blacks have less [ai] presence than the Puerto Ricans with black contacts, who in turn have less [ai] presence than the Puerto Ricans. There is little difference between the three groups before a voiceless segment, and here the Puerto Ricans with restricted black contacts have slightly less [ai] presence than the blacks, reversing the trend seen before a voiced segment.

A geometric ordering of the cross-products for [ai] presence in the environment of these features reveals two significant variable linguistic constraints. These constraints are more important, (i.e., the frequency differences are greater), for Puerto Ricans with black contacts than for Puerto Ricans, and more important for blacks than for Puerto Ricans with black contacts. Figure 3 shows the ordering of feature constraints for each group and the difference in variable frequency for each group, in closed position.

The features used here separate the consonants in the following way:

<table>
<thead>
<tr>
<th>cns</th>
<th>voc</th>
<th>cont</th>
<th>son</th>
<th>nas</th>
<th>vd</th>
</tr>
</thead>
<tbody>
<tr>
<td>+</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>fricatives</td>
<td>+</td>
<td>-</td>
<td>+</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>laterals</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>nasals</td>
<td>+</td>
<td>-</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
</tbody>
</table>

This assignment of features differs somewhat from the feature matrix outlined in Chomsky and Halle (1968: 177, 178). There the feature [cont] distinguishes fricatives from nasals, occlusives, and laterals. The feature [son] is not used; nasals are distinguished from fricatives and laterals by the nasality feature, and laterals have already been distinguished from fricatives by the [−Con] [−voc] specification. The feature [sonorant] used to distinguish fricatives and occlusives from the other consonantal segments follows the Chomsky and Halle description:

Sonorants are sounds produced with a vocal tract cavity configuration in which spontaneous voicing is possible; obstruents are produced with a cavity configuration that makes spontaneous voicing impossible...

Hence sounds formed with more radical constrictions than the glides, i.e., stops, fricatives, and affricates, are nonsonorant, whereas vowels, glides, nasal consonants, and liquids are sonorant. (1968: 302)
Figure 3: Geometric Ordering of constraints for |AI| within word boundary.
According to Figure 3, voicing is the most important constraint in the realization of [AI]. In voiceless environment [ai] is most frequently used by all groups. In a voiced environment Puerto Ricans with restricted black contact have [ai] presence most of the time; however, blacks have [ai] presence only 34.6% of the time preceding a voiced environment, and PR/BL speakers show an assimilation to the black realization. The second constraint is [continuant] where for blacks and PR/BL's a voiced continuant favors [ai] absence more than a voiced non-continuant, but both of these favor [ai] absence more than a voiceless continuant and non-continuant. A rule must be proposed, therefore, showing this ordering of constraints for all speakers. Before this rule is proposed, however, the data must be examined for any further constraints.

3.3.5.2.2 Across Word Boundary

A separate study of [AI] across word boundary as distinct from within word boundary was made on the assumption that Puerto Ricans would show more [ai] presence than blacks in this environment. It is true that there is less [ai] presence across word boundary than within word boundary, as was seen in the preceding section (cf. Table 37). Table 39 gives the distribution of variants for each group across word boundaries. All groups have greater [ai] presence across word boundary than within word boundary.

<table>
<thead>
<tr>
<th>Ethnic Group</th>
<th>[ai] to [AI]</th>
<th>[a] to [AI]</th>
<th>[e] to [AI]</th>
</tr>
</thead>
<tbody>
<tr>
<td>PR</td>
<td>396/683</td>
<td>261/683</td>
<td>26/683</td>
</tr>
<tr>
<td>%</td>
<td>58.0</td>
<td>38.2</td>
<td>3.8</td>
</tr>
<tr>
<td>No./Tot.</td>
<td>44/153</td>
<td>104/153</td>
<td>5/153</td>
</tr>
<tr>
<td>%</td>
<td>28.8</td>
<td>68.0</td>
<td>3.3</td>
</tr>
<tr>
<td>No./Tot.</td>
<td>57/257</td>
<td>190/257</td>
<td>10/257</td>
</tr>
<tr>
<td>%</td>
<td>22.2</td>
<td>73.9</td>
<td>3.9</td>
</tr>
</tbody>
</table>

Table 39: Distribution of Variants According to Ethnic Group Across Word Boundary
Although we have examined the relative frequency of [ai] presence across word boundaries in terms of the same types of environments delimited within word boundaries (e.g., voicing, occlusives, etc.), none of the same constraints are operative. No further constraints are found other than word boundary itself. The revised geometric ordering of the constraints is shown in Figure 4. The first order constraint is the presence or absence of word boundary; within word boundary the second order constraint is voicing and the third order constraint is continuancy of the consonantal segment.  

1Although it might be hypothesized that point of articulation is a constraint on [ai] variability in addition to the manners of articulation we have specified, an examination of points of articulation in terms of three general places (front, central, and back) does not confirm this hypothesis.
Figure 4: Geometric Ordering of Constraints on |AI| Variable.
3.3.6 Acoustic Samples of |AI| variants

While identification and tabulation of the |AI| variants was done by impressionistic transcription, it is possible to identify and describe acoustically these same variants. The method of description used here is sonographic measurement. The purpose of the acoustic samples given here is to empirically establish the two principal variants discussed in the sociolinguistic analysis. The sonogram is thus being used here as a descriptive tool, and no theoretical discussion of vowel description by sonogram is intended. For detailed discussion of sonographic vowel analysis, as well as its problems and limitations, the reader is referred to Fant, (1956, 1960, 1970), Lehiste (1964), Lehiste and Peterson (1959, 1961), and Peterson and Lehiste (1960).

Sociolinguistic variants have not been previously described acoustically, and perhaps one of the reasons for this is the practical problem of recording clarity. Another problem in any analysis of the stream of speech is that it is not inherently segmentable. However, since the speaker bearer interprets the speech stream semi-categorically, it is possible to identify individual segments, even if the boundaries between them are not always clear.

Vowels can be studied by observing three elements in the formant structure: onglide, steady state, and offglide (Lehiste and Peterson (1961). The steady state (more accurately quasi-steady state in speech, since speech production is an ever-changing continuum) part of the vowel is that part of the formant which is parallel to the base line. The onglide is that part of the formant preceding the steady state which is not parallel to the base line, and offglide is the part of the formant following the steady state which is not parallel to the base line.
The above mentioned authors classify vowels (using the measurements from F2 according to long and short nuclei, with long nuclei further subdivided into simple and complex vowels with a single steady state, and complex vowels with a double steady state, of which [ai] is one. Simple long nuclei are: [i, e, a, u, and o.] Thus those segments traditionally called vocalic diphthongs, i.e., [ai, au, and oi] have a double steady state, while the traditional monophthongs have a single steady state. There is some difficulty in maintaining this distinction in analysis because there is no steady state consistently observable between the onglide and offglide of each segment; indeed, some vowels, particularly the simple vowels with short nuclei, seem to have an absence of a steady state. Nevertheless, the distinction of these differing parts of the formant is useful for discussion, particularly for [AI]. Here the variant [ai] would be expected to exhibit two visible steady states, while [a] would exhibit only one steady state. Both elements will be preceded and followed by onglide and offglide including vowel formant transitions.

In order to represent these two variants, segments of speech of the twelve informants representing four different groups discussed in Chapter Four were excerpted from the interview and copied in 2.4-second stretches, i.e., long enough for the sonograph time limit. These, recorded at 7 1/2 ips, were played from an Ampex 500 tape recorder into a Kay sonograph, where wide band tracings were made of the utterances, using the regular and expanded scale. For some of the utterances, the background noise of the original recording interfered so much as to make analysis of the segments difficult. However, there are some clear examples of the difference in variants, and some of these will be given. The vowels will be
discussed primarily in terms of the movement of the second formant, which is crucial in perceptual identification of the vowel, along with F1 for back vowels and F3 for front vowels (cf. Delattre et al. 1952). Because of the difficulties in reproducing sonographic representations, line tracings of the second formant will be made for this report, rather than including the actual sonograms. When the variable within a word boundary occurs in multisyllable words, only the relevant environment for the variable will be given. No attempt was made here to show the range of variation in the realization of this variable in each environment within a group of speakers, since the purpose here is only to give examples of the two principal variants. On the basis of these examples, we have obvious justification for the identification of these /AI/ variants.

The first order constraint on the realization of the /AI/ variable is its occurrence within or across word boundary. That is, /AI/ is realized more often for all groups as [a] in this environment, and this variant in this position occurs more frequently for blacks than for Puerto Rican speakers. Figure 5 shows the formant structure of these two variants across word boundary for black, PR, and PR/BL speakers. The first two formants are always given. Sometimes higher frequency noise from the recording or the background masks the third formant, so that it is difficult to trace it. Some of the samples are given on expanded scale, while others are given on the regular scale. The segment of interest is transcribed within [...] including some of the formant transition where possible. The rest of the environment is given outside the phonetic brackets.

What is apparent from the samples given is the difference in formant movement for the two groups of speakers. For the first group, the Puerto
Ricans with restricted black contact, the formants, particularly the second, are clearly segmentable into two parts, each consisting of a near steady state, and joined by a transition movement of the formant, indicating the diphthongal realization of [ai]. For the second group of speakers (i.e., black and Puerto Ricans with extended black contacts) however, there is visible only one steady state, indicating the monophthongal realization of [e].

The second order constraint on the variable |AI| is the presence or absence of voicing in the following consonant. Figure 6 shows the realizations of |AI| within word boundary, for Puerto Rican and black speakers, in voiced and voiceless consonantal environments. The PR speakers again illustrate the diphthongal realization of |AI| more often than the blacks and Figure 6 shows the two-part movement particularly of the second formant for the PR speakers. In the examples given, this movement occurs preceding voiced and voiceless continuants and noncontinuants. The black samples shown here again show a monophthongal realization of the variable, i.e., [a] preceding voiced and voiceless continuants and noncontinuants. The example of |AI| preceding a voiceless noncontinuant shows the [ai] realization, the most frequent environment for this realization in the speech of all groups of speakers.
PR Speakers

3000 Hz —

2500 Hz —

2000 Hz —

1500 Hz —

1000 Hz —

500 Hz —

[sp a i ] [g a i ]

(Informant No. 22) 'spy'

(Informant No. 13) 'guy'

4000 Hz —

3500 Hz —

3000 Hz —

2500 Hz —

2000 Hz —

1500 Hz —

1000 Hz —

500 Hz —

[n a i n] [c r a i t] [g a i ]

(Informant No. 23) 'nine'

(Informant No. 22) 'allright'

(Informant No. 18) 'guy'

Figure 5: [AI] Across Word Boundary.
Figure 5 Cont.'
PR/BE and BE Speakers

3500 Hz
3000 Hz
2500 Hz
2000 Hz
1500 Hz
1000 Hz
500 Hz

[b aː ]
[g aː ]
[z]
[s aː ]

(Informant No. 24) 'buy' (Informant No. 40) 'guys' (Informant No. 18) 'sides'

Figure 5 Con't. (above)

PR Speakers

3000 Hz
2500 Hz
2000 Hz
1500 Hz
1000 Hz
500 Hz

[d aː ik aː m aː n z]

(Informant No. 28) 'diamonds'

Figure 6: |AI| Within Word Boundary
Figure 6 Con't.
Figure 6 Cont'd.
BE Speakers

2000 Hz

1500 Hz

1000 Hz

500 Hz

\[ \text{[n a: s]} \quad \text{[d a v]} \quad [s a d] \]  

(Informant No. 1) 'nineteen'  (Informant No. 1) 'dive'  (Informant No. 40) 'side'

3000 Hz

2500 Hz

2000 Hz

1500 Hz

1000 Hz

500 Hz

\[ \text{[n a: s]} \quad \text{[n a i t ñi]} \]  

(Informant No. 1) 'nice'  (Informant No. 24) 'night she'

Figure 6 Cont'd.
3.3.7 Rules for [AI]

Following the English phonological rules of Chomsky and Halle (1968), the underlying representation for [ai] (or [ay]) is the tense vowel [ae], derived by the vowel shift rule from tense [i], following the diphthongization rule. The diphthongization rule first inserts a high front glide after a front vowel, and a high back glide after a back vowel.

This rule gives the alternation i-iy, e-eiy, æ-æiy. A second rule, the Vowel Shift Rule, converts underlying i to æ. A further rule then converts æ to a. The underlying forms are postulated as they are in order to account for derived forms, so that the underlying vowel [i] accounts easily for the derivational forms where lax [i] occurs, i.e., divin 'divine' - divin-i-ty 'divinity'. Lax [i] is then derived from tense [i] by the rule laxing stressed vowels when they are followed by a non-final unstressed syllable.

These same rules also account for the 'vary' - 'variety' alternation by the tensing, diphthongization and vowel shift rules. The vowel shift rule (47) is the generalization underlying this two-way conversion. It is given in the following form:
By reversing the [high] and [low] feature assignments, it converts [i] to [iy] to [ey] to [eiy]. A final phonetic rule converts nonback [ey] to back [ay], according to rule 49. Since the dialects studied here seem to have [aw] instead of [eaw], the suggested modification is made here so that [eaw] is avoided.

The Glide Vocalization Rule (Chomsky and Halle 1968: 243) making the [w] glide vocalic after [a] and [u] is not of interest here.
As shown in the data presented in the previous section, all speakers have some variation in their realization of [AI] depending on the linguistic environment. The constraints are ordered identically for all the groups, although there are frequency differences between the groups. A rule must therefore be written to account for this variation between [ai] and [a] realization showing the correct ordering of linguistic constraints. The question arises whether such a rule which will account for the conditioned deletion of the offglide for the diphthong /ay/ should be incorporated into the diphthongization rule, or whether a separate low-level phonetic rule should be written where the glide is deleted in specified environments. If the phenomenon of /ay/-reduction is incorporated into the diphthongization rule, there is the danger of missing the generalization that most vowels in most English dialects are diphthongized to some extent. It is assumed that this general diphthongization rule applies to most of the vowels in the dialects described, and therefore, in the interest of greater generality, a low-level phonetic rule deleting the offglide is here written to follow the previously mentioned rules. Should further investigation disprove the assumption that most vowels in PRE nd /or BE are diphthongized, this decision will have to be reconsidered, and perhaps a higher level phonological rule written.

As given below, the rule is written in a relatively general form, so that it can account for any monophthongization of a low vowel plus y. This means that it can apply to [ay], [ey], or [oy]. It assumes that constraints specified for ay will also apply to [ey] and [oy]. If further evidence from [ey] and [oy] shows that the rule must be made more specific than given here, it can be adjusted accordingly.
The rule indicates that low vowels plus y monophthongize most often in open position, then in closed position preceding a voiced consonant, and finally preceding a voiced continuant. Further specification of consonantal features is unnecessary since the features [voice] and [continuant] include all the relevant consonants for the rule with the exception of r. As mentioned previously, postvocalic r is considered in this study as comprising a vocalic diphthong and is therefore not a conditioning factor in reduction.
3.4 The Z Morphemes

3.4.1 Previous Studies of Z Morphemes

The Z morphemes (the plural, possessive and third person singular present tense verb concord morphemes) have been demonstrated to be socially diagnostic of language use among black speakers (Wolfram 1969:134-151, Labov et al. 1968:158-172). In general, it has been found that speakers with the lowest scores on measures of conventional social status delete the highest percentages of all three of these morphemes. When Black English is defined as a dialect spoken most typically by the lowest status blacks, absence of the three Z suffix morphemes is characteristic of Black English. In the case of the Z₃ suffix (verb concord), absence for many Black English speakers is sufficiently close to 100% that it is doubtful that this suffix is part of the grammar of their spoken dialect at all (Labov et al. 1968:164, Wolfram 1969:137, Fasold forthcoming). In the case of Z₁ (the plural marker) and Z₂ (the possessive suffix), frequency of deletion is far less for all speakers, so that it makes the most sense to postulate these suffixes as present at the deeper levels of syntax but deletable by variable rules. Wolfram's (1969:150) working class 14-17 year old adolescents, who are the speakers in his sample most comparable to the speakers in the present study, manifested plural Z deletion between 3.4% (upper working class) and 7.4% (lower working class). The various groups of speakers studied by Labov et al. (1968:161) showed plural Z deletion ranging between 4% and slightly over 12%¹ in their Style B, the style most comparable to our

¹Labov's data are presented grouped by following environment and the original figures have to be reconstituted from data given in their Table 3-10a, thereby opening the door to small errors in the figures given here.
interview style. Wolfram's two groups of working class adolescents had possessive absence at 19.2% and 36.6% while the combined data on the groups studied by Labov and his associates was somewhat higher than 50% (Wolfram 1969:150, Labov et al. 1968:161). In both studies, $Z_3$ absence was extremely high, $Z_1$ absence was fairly low, and $Z_2$ absence was observed at intermediate frequency levels.

Another conclusion found in the literature about the absence of the $Z$ morphemes is that it is due to syntactic, not phonological, processes. Evidence for this conclusion is given in Wolfram 1969 and Labov et al. 1968 and is summarized in Fasold (1971). Three kinds of evidence which we will have occasion to examine in this study can be briefly mentioned here. First, there is evidence from phonological constraints. If the $Z$ suffixes are deletable by phonological rules operating on the phonetic markers [s], [z] and [əz], we would expect that the surrounding phonological environments would be crucial. A number of studies, e.g., Labov et al. (1968), Wolfram (1969), Labov (1969), Fasold (1970) and Fasold (forthcoming) have shown further that such constraints tend to operate hierarchically. That is, some phonological constraints have greater or lesser effects than others. A typical situation for a feature like final consonant cluster simplification, for example, would be the one in Table 40:

<table>
<thead>
<tr>
<th>Phonological environment</th>
<th>% simplified</th>
</tr>
</thead>
<tbody>
<tr>
<td>C---##C</td>
<td>97.3</td>
</tr>
<tr>
<td>C#---##C</td>
<td>76.0</td>
</tr>
<tr>
<td>C---##(V)</td>
<td>72.1</td>
</tr>
<tr>
<td>C#---##(V)</td>
<td>33.9</td>
</tr>
</tbody>
</table>

Table 40: Hierarchy of constraints on final consonant cluster simplification, from Wolfram 1969:62, 68.
Table 40 shows that both the appearance of a consonant following the cluster and the absence of an intervening morpheme boundary\(^1\) favors simplification, but when one of these favoring factors is present and the other absent, it is the following consonant which promotes simplification more (76.0% to 72.1%).

Second, we would expect that the deletion rates for the bisegmental variant \([ťz]\) (which appears when the base morpheme to which Z is affixed ends in a sibilant) would be treated differently from the monosegmental variants \([z]\) and \([s]\). This is in fact the case with the variants of D, where the \([ťd]\) variant is much less frequently deleted than \([t]\) or \([d]\) (Fasold 1971, Fasold forthcoming).

Third, if deletion of Z is due to grammatical factors, we would expect that the grammatical function of Z, i.e., whether the verb concord, plural or possessive suffix is involved, would be a major factor in frequency of deletion. If Z is deleted phonologically, the phonetic representation would be paramount with the grammatical function weakly operative, if at all. These types of evidence converge, in the data on Z examined for a number of sets of speakers, on the conclusion that Z absence is a syntactic phenomenon.

3.4.2 Z Absence in Puerto Rican English

The data in the present study extracted from interviews with 33 adolescent males from New York City. Eleven of the speakers were black and 22 were Puerto Rican. Of the 22 Puerto Rican speakers, six proved to have extensive contacts with black peers, while contact with blacks for the remaining 16 were much more limited. Every potential instance

\(^1\)An intervening morpheme boundary means that the second member of the cluster is \([t]\) or \([d]\), representing the -ed suffix.
of all three Z suffixes was tabulated for each of the 33 speakers, except for those cases where a word beginning with a sibilant followed (e.g., goes so fast). These were not tabulated because in many such cases the sibilant phonation could not be satisfactorily assigned to the following word alone, or to both the following word and the putative Z suffix. Potential examples of the verb concord and plural suffixes numbered in the hundreds for all three groups (the Puerto Rican group with restricted black contacts had over 1,400 potential plural examples), but the potential examples of possessive Z were far less frequent, which made it difficult to come to firm conclusions about possessive Z.

In our analysis of the data from the black and Puerto Rican adolescents, we will have two objectives: First, we will be interested in seeing whether the conclusions reported on the basis of other studies of the Z suffixes are again confirmed for the present data. Second, we will wish to test the hypothesis that aspects of Puerto Rican English are due to assimilation to Black English for its validity with respect to the Z suffixes. The hypothesis will be considered confirmed if we find that the Puerto Rican speakers with extensive black contacts treat these suffixes more like the black speakers than the Puerto Ricans with restricted black contacts. An examination of the frequency of deletion of the three Z morphemes for the three groups of speakers will give evidence on this hypothesis as well as allow a comparison with previously studied data which show that verb concord Z is most often deleted with possessive and plural Z following in that order. Table 41 includes the relevant information. In the following table the black group is abbreviated as BE, the Puerto Ricans with extensive black contacts as PR/BL and the Puerto Ricans with restricted black contacts as PR.
Table 41: Frequency of Absence of the Three Z Morphemes in the Speech of Three Groups of Informants.

<table>
<thead>
<tr>
<th></th>
<th>Z₃</th>
<th></th>
<th>Z₂</th>
<th></th>
<th>Z₁</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. Abs./Total</td>
<td>% Abs.</td>
<td>No. Abs./Total</td>
<td>% Abs.</td>
<td>No. Abs./Total</td>
</tr>
<tr>
<td>BE</td>
<td>271/385</td>
<td>71.4</td>
<td>27/40</td>
<td>67.5</td>
<td>98/751</td>
</tr>
<tr>
<td>PR/BL</td>
<td>63/244</td>
<td>25.8</td>
<td>5/30</td>
<td>16.7</td>
<td>48/411</td>
</tr>
<tr>
<td>PR</td>
<td>159/749</td>
<td>21.2</td>
<td>5/68</td>
<td>7.4</td>
<td>91/1453</td>
</tr>
</tbody>
</table>

For all three suffixes, the PR/BL speakers have frequency of deletion rates intermediate between those of the BE and PR speakers. For the verb concord suffix Z₃, the PR/BL speakers are much closer to the PR speakers than to the BE speakers, but for Z₁, the reverse is true. Also, all three groups of speakers display the predicted order. Verb concord Z is more frequently absent than plural Z. The PR speakers, however, delete possessive and plural Z at virtually identical rates. Possessive Z absence is more frequent for the BE speakers than for the black adolescents studied by Labov et al. (1968), and far more frequent than for Wolfram's (1969) black working class adolescents. Nevertheless, the data in Table 41 tend to reinforce earlier reports on the relative deletability of the three suffixes, and to confirm the assimilation hypothesis for the PR/BL group.

3.4.2.1 Constraints on Variability of Z₃

It is noted in Fasold (forthcoming) that do with not contraction seems to favor Z₃ absence. This would lead to the more general hypothesis that irregular verbs would be more likely to manifest Z₃ absence than regular
verbs. In the Fasold study, say forms were not extracted, but the use of have where Standard English demands has, and do where Standard English demands does, was about as frequent as Z₃ absence with the regular verbs.

<table>
<thead>
<tr>
<th></th>
<th>BE</th>
<th>PR/BL</th>
<th>PR</th>
</tr>
</thead>
<tbody>
<tr>
<td>have</td>
<td>6/8</td>
<td>1/4</td>
<td>12/41</td>
</tr>
<tr>
<td>%Abs.</td>
<td>75.0</td>
<td>25.0</td>
<td>29.3</td>
</tr>
<tr>
<td>do</td>
<td>8/8</td>
<td>1/3</td>
<td>3/11</td>
</tr>
<tr>
<td>%Abs.</td>
<td>100.0</td>
<td>33.3</td>
<td>27.3</td>
</tr>
<tr>
<td>don't</td>
<td>15/17</td>
<td>7/15</td>
<td>19/33</td>
</tr>
<tr>
<td>%Abs.</td>
<td>88.2</td>
<td>46.7</td>
<td>57.6</td>
</tr>
<tr>
<td>say</td>
<td>67/71</td>
<td>13/18</td>
<td>31/72</td>
</tr>
<tr>
<td>%Abs.</td>
<td>94.4</td>
<td>72.2</td>
<td>43.1</td>
</tr>
<tr>
<td>Reg. Forms</td>
<td>175/281</td>
<td>41/204</td>
<td>94/592</td>
</tr>
<tr>
<td>%Abs.</td>
<td>62.3</td>
<td>20.1</td>
<td>15.9</td>
</tr>
</tbody>
</table>

Table 42: Comparison of Z₃ Absence with Irregular and Regular Verbs in the Speech of Three Groups of Informants.

There are three irregular verbs with respect to Z₃ suffixation in English. They are have, of which the Z₃ form is has, not *haves, say which takes says pronounced [sez] (not *[seIz]), and do which takes does (not *dos).

Fasold did not extract say forms because of possible confusion of say in he say with sai' in he sai', in which the d of said is deleted by the well-known Black English rule of final d deletion. In the present study, care was taken to avoid this error to the degree possible, although it is likely that the figures for the absence of verb concord Z with say are inflated because some instances of sai' were tabulated as say.
The conclusion in the Fasold study was that, for some unexplained reason, don't favored $Z_3$ absence, but that the other irregular verbs did not.

The frequency of $Z_3$ absence with all the irregular verbs (with do/does tabulated separately from don't/doesn't) as compared with the regular verbs was tabulated for the three groups of speakers. Table 42 displays this data. For all three groups of speakers, irregular verbs have a higher rate of $Z_3$ absence than the regular forms. The numbers of examples for have and do for all but the FR group are very small, doubtlessly too small to carry much importance. However, it does not seem possible, on the basis of these data, to state that don't/doesn't distinguishes itself from do/does as an influence favoring $Z_3$ absence, except possibly in the data on the FR group. For all three groups, the concord form has is absent at frequency levels more comparable to the regular forms than to the other irregular forms. For all three groups also, the absence of the standard concord forms for don't/doesn't and say/says compared with $Z_3$ absence for the regular verbs is significant. It may be of interest to note that the FR/BL group, like the BE group but unlike the FR speakers, has a higher rate of concord form absence with say than with do plus not contraction.

It should be pointed out that the treatment of the irregular forms supports the conclusion that $Z_3$ absence is grammatical, not phonological. If the suffix were deleted by a phonological rule, the irregular forms undergoing verb concord $Z$ deletion would be doe', doesn't, ha' and [sɛ]. But the actually observed forms are do, don't, have and say.\footnote{Admittedly, the difference between [sɛ] and say ([sɛI]) is not always phonetically clear. Nevertheless there are enough clear cases to determine that the vowel change has not been triggered before $Z$ deletion.} This means...
that the Z suffix is not present at the point in the grammar where it would provide the necessary context to trigger the appropriate vowel changes. This point is clearly at a deeper level than that at which low-level variable phonological rules, such as any putative s, Z deletion, would operate.

3.4.2.2 Constraints on Variability of Z

It is sometimes reported in the literature (e.g., Stewart 1966:64) that plural Z is absent in Black English only when the plural noun is modified by a quantifier. This claim has been tested by at least three researchers (Wolfram 1969:145, Kessler 1969 and Sobin 1971). Wolfram found that plurals were slightly more often absent when there was a quantifier present, but felt that a more important constraint was the use of a measure noun such as cent, inch or mile. However a fair number of suffixes were absent from plural nouns which were neither measure nouns nor modified by a quantifier. Kessler's data did not support the quantifier hypothesis, but she felt that her data were too scanty to be conclusive. Sobin found that plural Z was consistently absent more often when there was no quantifier than when the quantifier was present. The strong form of the hypothesis, that plural Z can only be absent when a quantifier is present, is refuted by all three studies. A weaker form, that plural Z is absent more often when a quantifier is present, can be maintained only on the basis of Wolfram's analysis, and then only very tenuously.

The quantifier hypothesis, as well as Wolfram's measure hypothesis, was tested on the three groups of speakers. The results appear in Table 43.
A quantifier was rather liberally defined to include not only numbers (two) and indefinite determiners like some, but also the plural demonstratives these and those, the item both and phrases like all kinds of. Measure nouns were not tabulated without being modified by quantifiers because they almost never occurred without a quantifier. It appears that the presence of a quantifier does favor plural Z deletion, although a measure noun only favors deletion for the black group. Even for the BE speakers, the quantifier hypothesis is more strongly confirmed by a Chi square test than is the measure hypothesis, although there is a higher percentage of absence with measure nouns. The quantifier hypothesis is supported for the BE group at the .001 level of confidence, while the measure hypothesis is significant at only p < .05. The quantifier hypothesis is supported for the two groups of Puerto Rican speakers as well. We must accept these results with some reserve, however, since such results are not apparent in the Sobin and Kessler data.

---

Table 43: Comparison of Plural Z Absence When Plural Noun is Modified by a Quantifier, is a Measure Noun, or Neither in the Speech of Three Groups of Informants.

<table>
<thead>
<tr>
<th></th>
<th>Quantifier</th>
<th></th>
<th>Quant/Meas.</th>
<th></th>
<th>Neither</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Abs/Tot.</td>
<td>%Abs.</td>
<td>Abs/Tot.</td>
<td>%Abs.</td>
<td>Abs/Tot.</td>
<td>%Abs.</td>
</tr>
<tr>
<td><strong>PE</strong></td>
<td>28/141</td>
<td>19.9</td>
<td>12/43</td>
<td>27.9</td>
<td>58/567</td>
<td>11.4</td>
</tr>
<tr>
<td><strong>PR/BL</strong></td>
<td>23/77</td>
<td>29.9</td>
<td>0/23</td>
<td>00.0</td>
<td>25/311</td>
<td>08.0</td>
</tr>
<tr>
<td><strong>PR</strong></td>
<td>24/240</td>
<td>10.0</td>
<td>3/64</td>
<td>04.7</td>
<td>64/1076</td>
<td>05.9</td>
</tr>
</tbody>
</table>

*All instances of the [iz] variant of plural Z were omitted from this tabulation since the PR group never deleted this variant of Z₁.
3.4.2.3 **Other Constraints on 2 Morphemes**

Besides the possible grammatical constraints on the absence of verb concord and plural Z, possible phonological constraints on all three morphemes were investigated. If the absence of the suffixes were due to phonological factors, it is virtually certain that the bisegmental variant [ίz] would show consistently different deletion rates from the [z] and [s] variants. To delete [ίz], a rule or rules would have to delete both the consonant [z] and the reduced vowel [i]. For a phonological rule to delete [s] or [z], only a sibilant deletion rule would be necessary.

In Table 44, the data on the absence of [ίz] as compared with [s] and [z] are presented.

<table>
<thead>
<tr>
<th></th>
<th>[ίz]</th>
<th>[s, z]</th>
<th></th>
<th>[ίz]</th>
<th>[s, z]</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BE</strong></td>
<td></td>
<td></td>
<td><strong>PR/BL</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Z3</td>
<td>9/12</td>
<td>75.0</td>
<td>166/269</td>
<td>61.7</td>
<td>5/10</td>
</tr>
<tr>
<td>Z1</td>
<td>4/39</td>
<td>10.3</td>
<td>94/712</td>
<td>13.2</td>
<td>1/19</td>
</tr>
<tr>
<td>Z2</td>
<td>3/4</td>
<td>75.0</td>
<td>24/36</td>
<td>66.7</td>
<td>1/3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>[ίz]</th>
<th>[s, z]</th>
<th></th>
<th>[ίz]</th>
<th>[s, z]</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PR</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>[ίz]</td>
<td>Abs/Tot.</td>
<td>%Abs.</td>
<td>Abs/Tot.</td>
<td>%Abs.</td>
<td></td>
</tr>
<tr>
<td>Z3</td>
<td>6/30</td>
<td>20.0</td>
<td>88/562</td>
<td>15.7</td>
<td></td>
</tr>
<tr>
<td>Z1</td>
<td>0/73</td>
<td>0.0</td>
<td>91/1380</td>
<td>6.6</td>
<td></td>
</tr>
<tr>
<td>Z2</td>
<td>0/3</td>
<td>0.0</td>
<td>3/65</td>
<td>7.7</td>
<td></td>
</tr>
</tbody>
</table>

*Irregular verbs not tabulated.

Table 44: Comparison of [ίz] and [s, z] Absence for the Three Z Morphemes in the Speech of Three Groups of Informants.
The data in Table 44 militate against the conclusion that there is a phonological rule which accounts for Z absence. The numbers of examples in some of the cells are very small, but when we compare the three groups of speakers for the three suffixes, one would expect a discernible pattern nonetheless. There is no coherent pattern in Table 44. For all three groups of speakers, [ɛz] is more often deleted than [s] and [z] for the verb concord suffix. But for the plural suffix, the reverse is true for all three groups. For the possessive suffix, the BE group has more [ɛz] absence than [s] or [z], the PR/BL speakers have the reverse and the PR group has both kinds of variants absent at about the same rate. It would be an extremely odd phonological rule sequence which would account for such discrepancies. Furthermore, note that in most of the cases for which there are substantial numbers of examples, the differences tend to be minimal; note the difference for the verb concord suffix for the PR group (4.3%) and the plural suffix for the BE and PR groups (3.2% and 6.6%, respectively). Viewed in this way, the evidence here replicates the results of earlier studies which conclude that the Z morphemes are deleted syntactically without reference to their phonological shapes.

Possible phonological constraints on the deletion of the monosegmental manifestations of the Z suffixes were also investigated. A prime candidate as a constraint would be whether the [s] or [z] was affixed to a base ending in a vowel or a consonant; that is, whether it was the second member of a consonant cluster or not. This data for the three groups is presented in Table 45.
<table>
<thead>
<tr>
<th></th>
<th>BE</th>
<th>PR/BL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Abs/Tot. %Abs.</td>
<td>Abs/Tot. %Abs.</td>
</tr>
<tr>
<td>*Z₃</td>
<td>137/212 64.6</td>
<td>29/57 50.9</td>
</tr>
<tr>
<td>Z₁</td>
<td>65/463 14.0</td>
<td>29/249 11.6</td>
</tr>
<tr>
<td>Z₂</td>
<td>17/18 94.4</td>
<td>7/18 8.6</td>
</tr>
<tr>
<td></td>
<td>*Irregular verbs not tabulated</td>
<td></td>
</tr>
</tbody>
</table>

*Irregular verbs not tabulated

Table 45: Comparison of Absence of the Three Z Morphemes When Part of a consonant Cluster and When a Single Consonant for Three Groups of Informants.

Except for the verb concord suffix for the BE group and at several points for the possessive suffix, the differences in deletion between cases in which the Z morpheme forms a consonant cluster with the base and cases in which it is a single consonant are very slight indeed. Nevertheless, absence is favored in potential clusters more often than not. In the two cases where clusters are not favored (ignoring the possessive examples), the difference is less than one percent. In all probability, this fact is not important enough to take into account, but there is a plausible explanation which we will present shortly.
Another likely constraint is whether or not a vowel follows the word to which a Z suffix is affixed. Table 46 summarizes the data on the potential constraint.

<table>
<thead>
<tr>
<th></th>
<th><strong>BE</strong></th>
<th></th>
<th><strong>PR/BL</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>#(#(C))</td>
<td>#(#V)</td>
<td>#(#(C))</td>
<td>#(#V)</td>
</tr>
<tr>
<td><strong>Z_3</strong></td>
<td>106/160</td>
<td>66.3</td>
<td>60/109</td>
<td>55.0</td>
</tr>
<tr>
<td><strong>Z_1</strong></td>
<td>67/458</td>
<td>14.6</td>
<td>27/254</td>
<td>10.6</td>
</tr>
</tbody>
</table>

*Irregular verbs not tabulated.

Table 46: Comparison of Absence of the Three Z Morphemes When Followed by a Vowel and When Followed by a Nonvowel for Three Groups of Informants.

There is no data for possessive Z in Table 46 because there was only a single example of possessive Z before a vowel in the entire data set. Table 46 shows that a following nonvowel favors deletion in every case, although in many cases by a rather narrow margin.

We have already mentioned (p. 180) that phonological constraints can be expected to be hierarchically ordered. If the two constraints we have just discussed were hierarchically ordered, we would expect a display to be possible such as that in Table 40, with one environment ranked over the other for all three groups of speakers for both the
suffixes. When an attempt is made to construct such a table, however, the rankings are contradictory, not only between the groups of speakers but between verb concord Z and plural Z within groups. The conclusion is that the two constraints, if they exist at all, are not hierarchically ordered.

Most of the data analyzed converges on the conclusion, in accordance with earlier studies of Black English, that the suffixes are syntactically deleted (or, in the case of verb concord Z for many black speakers, not present to begin with). We would like to be able to account for the fact that membership in a cluster and a following nonvowel tend to favor deletion of the monosegmental manifestations. Another fact has a bearing on this matter: there is a small rate of deletion of final [s] and [z] from single morphemes (Labov et al. 1968:160, 161). That is, there is a certain amount of absence of the [s] from words like *nuisance* and of [a] from words like *jazz*. Since there is no syntactic element in such words to be deleted by a syntactic rule, such deletions are no doubt due to a phonological rule. Furthermore, the data presented in Labov et al. (1968) indicates that a following consonant tends to favor the operation of this rule, albeit at very low frequency levels. If there is a phonological rule which operates on the pool of those Z suffixes which are not deleted by the syntactic rules, and if this rule has a low level of frequency of operation, one would expect data much like what we have presented here.

For the sake of illustration, let us suppose that there is a syntactic rule which deletes about two-thirds of all verb concord suffixes. Since this rule is not sensitive to the phonological shape of the suffix, in the long run we would expect that about an equal number of suffixes in each environment would be deleted. Suppose further that there is a phonological
[s] - [z] deletion rule which operates at about a ten percent frequency rate and favors a following nonvocalic environment at a ratio of four to one. Under these circumstances, out of 600 potential verb concord suffixes, evenly distributed between vocalic and nonvocalic following environments, the two rules would have the following effect:

<table>
<thead>
<tr>
<th></th>
<th>Deleted</th>
<th>Left</th>
</tr>
</thead>
<tbody>
<tr>
<td>Syntactic Rule</td>
<td>200</td>
<td>100</td>
</tr>
<tr>
<td>Phonological Rule</td>
<td>---</td>
<td>16</td>
</tr>
<tr>
<td>Total</td>
<td>200</td>
<td>16</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Deleted</th>
<th>Left</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deleted</td>
<td>200</td>
<td>100</td>
</tr>
<tr>
<td>Left</td>
<td>16</td>
<td>84</td>
</tr>
<tr>
<td>Total</td>
<td>216</td>
<td>96</td>
</tr>
</tbody>
</table>

Under these circumstances, there would be a 4% difference in favor of the nonvocalic following environment, even though the syntactic rule is not sensitive to phonological environment. If the phonological [s] - [z] deletion rule operates at less than 10% frequency rate, or if the ratio favoring nonvocalic environments is not quite four to one, (which is probably closer to the actual case) then the difference would be less than
four percent. Furthermore, if for a given set of data the syntactic rule happens to delete more than just half of all suffixes before a vowel due to chance factors, the slight effect of the phonological rule could be wiped out or even reversed. When a number of populations are analyzed for verb concord Z deletion under these circumstances, we would expect that the nonvocalic following environment would be favored somewhat most of the time, but occasionally that the vocalic environment would be slightly favored. However the differences would not be very great in any event. This seems to be what has been observed in the analysis of suffixal Z to date. Returning to the data at hand, we find that the nonvocalic environment favors deletion slightly for all three groups and for both suffixes. The extreme difference in the case of verb concord absence in the speech of the PR/BL group, however, cannot be accounted for by the above explanation. A similar argument holds for the constraint about clusters versus single consonants. Assuming that membership in a consonant cluster favors operation of the phonological [s] - [z] deletion rule explains the results on Table 45. The cases in which clusters do not appear to be favored can be explained by the randomly unequal operation of the syntactic deletion rule in the two environments. We might point out at this point that the differences based on phonological environment in Tables 45 and 46 are generally greater for the BE speakers than for the two groups of Puerto Rican speakers. This may mean that the phonological rule is more important to the grammar of Black English speakers than to the grammar of Puerto Ricans, even those with considerable black contacts.
The syntactic rules for the deletion of verb concord and plural Z are presented below.¹ We assume that any sensitivity to phonological conditions is to be accounted for by a low-frequency phonological rule which we do not have sufficient data to write. The rule for verb concord deletion is:

\[
\begin{align*}
X & \quad \vdash 3^{rd} \quad Y & \quad \vdash \text{VERB} \quad Z_{3} \quad W \\
\text{-PL} & \quad \text{A say} & \quad \text{A do}
\end{align*}
\]

1 2 3 4 5 6
1 2 3 4 (§) 6

Where 2 is subject - of 4

The rule assumes that \textit{have} is not a constraint and that the effects of \textit{do} and \textit{don't} are not different in any important way. If it ultimately becomes necessary to include \textit{don't} as a constraint, but not \textit{do}, there will be considerable difficulty in writing the rule. Both \textit{say} and \textit{do} are presented as item-specific first-order constraints. It is of course impossible to get the relevant cross-products since \textit{say} and \textit{do} are mutually exclusive. Both the \textit{DE} and \textit{PR/BL} groups favor concord absence with \textit{say} over \textit{do} forms, but the reverse is true for the \textit{PR} speakers. Rather than attach too much importance to these facts and claim a reversal of constraints for the \textit{PR} speakers, we take a more conservative approach, assign first-order significance to both verbs, and attach no importance to the observed differences in frequency between concord marking with \textit{say} and \textit{do}.

¹ Due to the small amount of data and the apparent lack of constraints we will not present a rule for possessive Z deletion. The only such rule which would be justified by the data would be a very trivial optional rule.
The plural suffix deletion rule takes this form:

X[[A PL] Y +N Z₁]ₙₚ

1 2 3 4

1 2 3 4 (Φ)

Where 2 and 4 are not conjoined

The rule states that Z₁ can be deleted from a noun with the presence of a quantifier as a first-order constraint. We assume that [+PLURAL] is the feature in common to numbers, the plural demonstratives these and those, indefinite quantifiers, and the other constituents which seem to have an effect on plural suffix deletion. The rule stipulates that the [+PL] constituent and the noun are not conjoined to prevent the rule from considering the occurrence of brothers in a noun phrase like his brothers and sisters as a factor favoring the deletion of plural Z from sisters.
3.5 **Negation**

Like other nonstandard varieties of English, PRE treats negation in much the same way that Standard English does. It is beyond the scope of this study to give a description of negation which would largely duplicate or summarize other descriptions of Standard English negation. For such studies, one can refer to Klima's (1964) comprehensive study of Standard English negation and the report of Stockwell, Schachter, and Partee (1969), which included negation as one of the major areas covered in the UCLA English Syntax Project. In this section, we shall deal only with those aspects of PRE which differ from Standard English; Standard English negation will only be used as a point of reference for the discussion of negation in PRE. This means that only two main areas will be covered: (1) the use of certain negative particles and (2) the use of negatives with indefinites.

### 3.5.1 The Particle *not*

In this section we shall concern ourselves with sentential negation which is realized by the particle *not* with selected aspects of *not*, which attaches itself to auxiliaries and copulas, or stands alone. Its attachment to indefinites and adverbs will be discussed in Section 3.5.2.

#### 3.5.1.1 The Use of *no*

In the overwhelming number of cases we have in our corpus, *not* and its morphophonemic alternates occur with auxiliaries and copulas in the same way that they do in Standard English.
They won't be able to win. (5:3)
The cats can't get in the coop. (10:2)
Why don't you give those pants a break. (14:5)
He's not nuts. (28:8)

But there are several cases which depart from the Standard English expectations in ways which are quite predictable from the use of the Spanish particle no. We have:

(a) He no have to pay nobody money. (27:10)
(b) You no smell no nasty air. (44:5)
(c) It no gonna get you nowhere. (11:12)
(d) I no used to it. (22:11)

The uses illustrated in 53 can of course be related to the Spanish particle no, in Spanish sentences like:

(a) No va a la casa. 'He is not going to the house.'
(b) No esta aquí. 'He is not here.'

Several aspects of this apparent influence from Spanish must be mentioned. In the first place, the use of the particle no for sentential negation in FRE is quite rare. There are only 10 examples of this type in the entire corpus; this represents less than 2% out of all potential occurrences. Furthermore, only five of the 29 informants actually use the
form, and among these informants it is used very infrequently. In fact, none of the speakers who use it do so for more than 8% of all potential occurrences.

It is further observed that six of the 10 occurrences appear where don't might be used in Standard English. This stands to reason when we observe that don't in some nonstandard dialects (e.g., BE) can be realized as [ʊn] and even [ʊ] because of the operation of phonological processes which reduce it. This makes phonetic realizations of don't and no very close. The difficulty we faced in determining a number of cases in rapid speech is perhaps the best testimony of how close these can be.

There are also three examples of no used in a negativized copula, as in 53 (c) and (d). In these cases, it is interesting to note that there is no surface realization of the copula. Also conspicuous by its absence is the change of linear order that might have been predicted from Spanish because the particle no is always pre-auxiliary. But there are no cases like:

55  
   (a) *He no can do it.  
   (b) *He no is here.

Although there are no examples of no for didn't, there are two cases of not which are used in a way which reflects this Spanish influence, as in:

56  
   He not even missed one guy. (22:8)

The low frequency of the particle no, used in a way which reveals Spanish influence, indicates that it cannot be described as a characteristic
of PRE. Even speakers who have it use it so seldom that it can hardly be considered an integral part of any of the varieties of PRE we are dealing with here. When it is used, however, the majority of its occurrences are correspondents with Standard English don't, because of the potential phonetic similarity to that form. It certainly might be used much less obtrusively as a correspondent with don't than with other forms.

3.5.1.2. Ain't

Ain't in PRE may have several different functions, and is used in a way quite similar to other nonstandard varieties of English, both white and black.

3.5.1.2.1 Ain't for am are is + not

In the first place, ain't may correspond to Standard English am are is + not. The Standard English negative construction may be alternately realized as (1) full copula and full negative: \( \{ \text{am} \} + \text{not} \); (2) contracted copula and full negative: \( \{ \text{are} \} + \text{not} \); or (3) full copula and contracted negative: \( \{ \text{aren't} \} \).

We may get:

(a) I ain't a greedy guy. (9:10)
Although one might have the initial impression that *ain't* occurs almost categorically as a correspondent for the three alternative Standard English types, its actual frequency is less than 50 percent of all potential occurrences, (i.e., where one of the three types of Standard English alternates may occur). But as we shall see, there is considerable variety in the realization of the non-stigmatized alternatives. In the first place, the full forms (*am not, are not* and *is not*) are relatively rare in Standard English, and are used mostly for negative emphasis. In our corpus, the full forms are also quite infrequent; in fact, there are only three full negative + full copula forms which occur and these seem to be used emphatically, as in:

58 The winter is not like here. (23:3)

This leaves the standard forms *'m/'re/''s + not* and *isn't/aren't* as the candidates for alternation with nonstandard *ain't*. The alternation among these three types is shown in the following table.

---

1 For those speakers who have the copula deletion rule, we can also get Ç for these contracted forms so that we have, *We not gonna do it*. 
<table>
<thead>
<tr>
<th></th>
<th>No.</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>isn't/aren't</td>
<td>5</td>
<td>4.0</td>
</tr>
<tr>
<td>'m/'re/'s + not</td>
<td>56</td>
<td>45.2</td>
</tr>
<tr>
<td>ain't</td>
<td>63</td>
<td>50.8</td>
</tr>
<tr>
<td>Total</td>
<td>124</td>
<td></td>
</tr>
</tbody>
</table>

Table 47: Frequency of ain't Usage

It should be obvious from the above table that the alternatives for our Puerto Rican informants are primarily 'm/'re/'s + not and ain't. In fact, the incidence of isn't/aren't is so small that we can hardly consider it an integral part of the dialect of most speakers. Aren't does not occur at all in the corpus, so the conclusion about its status is self-evident. Although isn't accounts for all five occurrences of this type, one speaker is responsible for three of these. Based on other criteria (e.g., the fact that he has the second lowest frequency of multiple negation of all the informants), we can suggest that the speaker is not entirely representative of the nonstandard dialect(s) present in our corpus. We conclude that the rare occurrences of isn't are due to dialect importation from Standard English. On the other hand, however, fluctuation between 'm/'re/'s + not and ain't is inherently variable in the dialect(s) of our informants.

Having established the inherent variability of 'm/'re/'s + not and ain't, we may now turn to possible constraints on the occurrence of these forms. For example, is there any constraint which might take the fluctuation between 'm/'re/'s + not and ain't in the following sentence out of the realm of 'random optionality' (i.e., the absence of constraints on the relative frequency of occurrence)?
One way in which we may break the variants down is according to the copula form to which not is attached, i.e., am, is, or are. This classification is shown in the following table.

<table>
<thead>
<tr>
<th></th>
<th>am</th>
<th>is</th>
<th>are</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. 'm/'s/'re+ not</td>
<td>23</td>
<td>14</td>
<td>24</td>
</tr>
<tr>
<td>No. ain't</td>
<td>7</td>
<td>28</td>
<td>28</td>
</tr>
<tr>
<td>% ain't</td>
<td>23.3</td>
<td>66.7</td>
<td>53.8</td>
</tr>
</tbody>
</table>

Table 48: The Use of ain't for Contracted Copula + not

The most striking difference which shows in the above table is that between am and are/is (Chi square is p <.01) although there is also a minor frequency difference between the latter two (i.e., is and are). In attempting to account for the most significant frequency difference, we must refer to our observation that ain't is used predominantly as a corresponsive of Standard English isn't and aren't. In current Standard English, am+ not does not have a parallel negative construction; that is *amn't doesn't occur. Since ain't is a form which corresponds to either of two contractions (isn't, aren't) in Standard English, we would expect less use of ain't where Standard English has no corresponding contraction.

Another possible constraint which has been investigated with reference to the relative frequency of ain't is the influence of multiple negation. That is, when the negative concord rule has applied to a sentence, does this favor the occurrence of ain't? We may hypothesize that a sentence like:
That men ain't nowhere in sight. (11:9)

where the negative concord rule has applied, is more likely to contain ain't than one in which the negative concord rule cannot apply (e.g., He's not here now). The following table summarizes the relationship between multiple negation and ain't in the data, dividing the structures on the basis of the contrast of am, is, and are, as suggested above.

<table>
<thead>
<tr>
<th></th>
<th>Multiple Negative Clauses</th>
<th></th>
<th>Non-Multiple Negative Clauses</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. ain't/Total</td>
<td>% ain't</td>
<td>No. ain't/Total</td>
</tr>
<tr>
<td><strong>am</strong></td>
<td>3/7</td>
<td>42.9</td>
<td>4/23</td>
</tr>
<tr>
<td><strong>are</strong></td>
<td>20/24</td>
<td>83.3</td>
<td>8/18</td>
</tr>
<tr>
<td><strong>is</strong></td>
<td>16/21</td>
<td>76.2</td>
<td>12/33</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>39/52</strong></td>
<td><strong>75.0</strong></td>
<td><strong>24/74</strong></td>
</tr>
</tbody>
</table>

Table 49: The Occurrence of ain't in Multiple and Non-Multiple Negative Clauses.

The effect of multiple negation is to increase the likelihood of ain't occurrence. In fact, this constraint has a stronger influence than whether the form to which the negative is attached is am\(^1\) or not. We thus conclude

\(^1\)One might argue that the difference between am, and is/are is simply a function of the fact that there are fewer potential occurrences of ain't in the context of multiple negation. Two facts militate against this, however. In the first place, the discrepancy still obtains for non-MN contexts, where there is a more representative number of potential occurrences. Secondly, the frequencies in the MN context are in the direction we would predict, despite the fact that there are only seven potential occurrences. Other studies have revealed that constraints on frequency can be established from a surprisingly small number of occurrences.
that the constraint of multiple negation is first order and \( \Downarrow \text{am} \) second order. We may suggest the following hierarchical ordering for the constraints given in Table 49:

- \( \downarrow \text{MN} (.75) \)
  - + \( \text{AM} (.80) \) \( \rightarrow + \text{ARE} (.83) \)
  - - \( \text{AM} (.39) \) \( \rightarrow - \text{ARE} (.36) \)
- - \( \text{MN} (.32) \)
  - - \( \text{AM} (.17) \)
  

Figure 7: Ordering of Constraints on ain't Occurrence

Formalizing the hierarchy of constraints into a rough approximation the rule by which we derive ain't from \( \{ \text{am} \} \rightarrow \text{not} \), we may get:

\[
\begin{align*}
\{ \text{am} \} & \rightarrow \text{ey / not} \ \\
\{ \text{are} \} & \rightarrow \text{is} \\
\{ \text{is} \} & \rightarrow \ \\
\{ \text{are} \} & \rightarrow \\
\end{align*}
\]

where +Neg and not are members of the same clause.
This rule summarizes the geometrical ordering given in Fig. 7; the first order constraint is whether ain't may occur in the context of multiple negation; the second order, whether it is plus or minus underlying ARE; and the third order constraint, whether it is plus or minus underlying IS.

3.5.1.2.2 ain't for have + not

As in other nonstandard English dialects, ain't can also be used in PRE as a correspondent for Standard English have + not.

62 I ain't been to no fight yet. (11:11)

But there also appears to be inherent fluctuation between this form and have + not; in fact 2/3 of all potential occurrences are realized by have + not.

63 I haven't met their family. (18:8)

Most of our PRE speakers must be characterized as having this sort of variation inherent in their dialect.

Although we have too few potential occurrences of have + not to do an analysis of the contextual constraints on the frequency of ain't which might parallel the analysis we did for \{ am \} + not, we might predict that the constraint + multiple negation would have a similar effect (i.e., raise the incidence of ain't). But, on the other hand, we would not expect person/number to be relevant to the variability of have + not and ain't.
since there is no structural motivation of the type we presented earlier for am on which to base such a prediction.

3.5.1.2.3 ain't with got

Ain't can also occur as a negativized auxiliary form with got as a main verb. We thus get:

(a) He ain't got no good education. (21:15)
(b) He ain't got no clothes, wear no clothes. (42:2)

As we might suspect, this form also fluctuates with a less stigmatized variant. But instead of alternating with have + not or $\{\text{am is}\} \neq \text{not},$

in this case the predominant variation is between ain't and do + not, because of the status of got as a main verb.
We get:

(a) If you don't got nothing to do in the summer you go to it. (22:11)
(b) I don't got no time to play. (14:2)

Of the Neg + got constructions, eight of them occur with don't and five with ain't.

3.5.1.2.4 ain't for didn't

In addition to the previously mentioned uses of ain't, it is also observed that there are occasional uses of ain't as a correspondent of
Standard English didn't. We thus have:

(a) I ain't do this, I ain't do that. (18:5)

(b) Taylor, he ain't jump, he was carried down (29:2)

This type of correspondence, when tabulated for the entire Puerto Rican sample, accounts for only 5% of all potential occurrences. What is more important, however, is the fact that only six informants account for all occurrences of ain't for didn't, and for these informants it is used in 33% of all potential occurrences.

Labov et al. (1968) observe that the use of ain't for Standard English didn't is one aspect of ain't usage in which Black English differs from white nonstandard speech. It is therefore instructive to note that four of the six speakers who account for all occurrences of ain't for didn't have extensive black contacts. We conclude that ain't for Standard English didn't is a correspondent which is largely restricted to those speakers who have direct contacts with blacks. It is virtually non-existent in the speech of Puerto Ricans with restricted black contacts.

3.5.1.3 Pleonastic Tense Marking with didn't

In negative sentences containing the auxiliary didn't tense may be marked pleonastically in one variety of PRE; that is, tense may be marked both in the negativized auxiliary and in the main verb.¹ We get:

¹For those speakers of PRE who use ain't for didn't (See Section 3.5.1.2.4), an ambiguity arises which is not encountered by BE speakers who use ain't for didn't: namely, whether ain't in a sentence such as He ain't called a cab is equivalent to 'He hasn't called a cab' or 'He didn't call a cab'. For the BE speaker, only the former interpretation is possible.
(a) I didn't did it. (27:8)
(b) I didn't meant to say it that way. (11:5)
(c) We didn't never called it a game. (20:2)

This type of pleonastic tense marking is found for a significant majority of the Puerto Rican informants (eight of 27 informants who have five or more potential occurrences of past tense negatives with didn't). Like other features which we have discussed, pleonastic tense marking is not categorical; it varies with the Standard English forms of tense marking, as in:

(a) I didn't even give him carfare to their home. (27:12)
(b) They didn't have what they usually have. (30:3)

The relative frequency of pleonastic tense marking for those speakers who use it ranges from 18 to 53 per cent, but generally the Standard English tense marking convention appears to be more frequent than its nonstandard counterpart. (For those speakers who have at least one instance of pleonastic tense marking, 36 per cent, or 20 of 56 potential occurrences are realized with the double marking.)

In attempting to account for the occurrence of pleonastic tense marking we cannot turn to other nonstandard English dialects, as we have done for some of our other features. In particular, there is no apparent influence from Black English to account for this phenomenon. Although it is reported by Fasold (personal conversation) that this form is occasionally used by BE speakers, there are no instances of its use by our BE informants in this
This is not to say that a BE speaker may never use such a form, but if he does, the frequency is so low that it may simply be a type of "performance error." Descriptions of BE by Labov et al. (1968), Wolfram (1969), and Fasold (forthcoming) make no mention of pleonastic tense marking of this type as an integral part of BE. Even if it were described as an integral part of BE, its occurrence in PRE is not characteristic only of speakers who have extensive black contacts.

On the other hand, there is no direct influence from Spanish which might account for this pleonastic tense marking, since tense marking of this sort does not occur in Spanish. But the lack of isomorphic correspondence does not necessarily exclude indirect influence (e.g., hypercorrection) to account for these constructions. To begin with, we must note that in English, if there are no other Aux's (i.e., modal, have, be) in the verb phrase to which not can be attached, then do must be present. But in Spanish, there is no parallel requirement, so that we have:

69

(a) No hizo nada. 'He didn't do anything.'
(b) El muchacho no vino. 'The boy didn't come.'

We see that in English, the tense is marked in the Aux in negative verb phrases, whereas in Spanish, since no Aux is required, it can be marked only in the verb.

This difference leads us to account for pleonastic tense marking by hypothesizing that there are several stages of interference which the Spanish speaker may go through in learning English. In the first stage,
the Spanish speaker attempting to speak English might simply substitute the Spanish negative for the negativized past tense Aux producing:

70  He no eat the food

for Standard English

He didn't eat the food

It is important to note that the use of no for didn't leaves the sentences unmarked for tense. This stage seems to be a pidginized stage of language learning with respect to tense and negation. Thus a second stage might be hypothesized, in which the verb might take the tense marking in compensation for the fact that it is not attached to a negativized auxiliary. Realizing that there is no tense marking, a speaker may simply place the tense marker on the verb by analogy with the Spanish tense marking scheme. This would result in:

71  He no ate the food.

Finally, with the acquisition of the Standard English didn't, the tense may still be retained on the verb, since the attachment of the negative to a tense-carrying auxiliary is not found in Spanish. This, then, gives us:

72  He didn't ate the food.
In a sense, this sort of pleonastic tense marking is simply a type of hypercorrection, in which a false analogy results in the placement of a form where it is not required by the rules of the language.¹

Although the stages described above might give a reasonable explanation for the occurrence of pleonastic tense marking in FRE, the fact remains that this formation cannot simply be dismissed as language interference, and hence outside the scope of an adequate description of FRE. This feature must be described as an integral part of the tense system for one variety of FRE. Furthermore, it must also be pointed out that this rule cannot be derived simply by reference to the rules of English and Spanish. It is a new rule. This rule, which copies the tense on the auxiliary and the verb, may be given roughly as:

<table>
<thead>
<tr>
<th>73</th>
<th>X</th>
<th>[+PAST]</th>
<th>do</th>
<th>NOT</th>
<th>[+ VERB]</th>
<th>Y</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>→</td>
</tr>
<tr>
<td>1</td>
<td>3+2</td>
<td>4</td>
<td>5+2</td>
<td>6</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

¹It is essential here to note that the term hypercorrection has been used by sociolinguists in two senses, which we may refer to here as 'structural hypercorrection' and 'frequency hypercorrection.' Structural hypercorrection has been used to refer to the extension of the use of forms, based on an unfamiliarity with the structural restrictions that cover their usage. Thus, when BE speakers use -Z on non-third person forms because of their unfamiliarity with the Standard English rule governing -Z third person singular usage, we have an instance of structural hypercorrection. In the case of frequency hypercorrection, the structural placement may be correct, but the relative frequency exceeds the expected norms due to stylistic constraints on formality. This is the type of hypercorrection Labov referred to when he described the higher frequency of r usage by lower-middle class speakers in New York City when compared with middle class speakers in the more formal styles of speech.(Labov, 1966)
As written above, the rule can only operate when not is present in the sentence. This restriction is based on the fact that we have not found any instances of pleonastic tense marking among the affirmative counterparts. We do not have:

(a) *He did came yesterday.
(b) *Did he came yesterday?

Because there is so little potential for occurrences of the above type, it is difficult at this point to determine whether or not their absence is meaningful. At any rate, if these sentences were found (the second one seeming more likely than the first), it would be a relatively simple matter to adjust the tense copying rule toward greater generality.

Before concluding our discussion of pleonastic tense marking, it is important to note that the majority of verb forms involved in this construction are "strong verbs." That is, their past tense is formed by some internal change (e.g., sing, sang; come, came), as opposed to the simple addition of the -ed suffix (e.g., work, worked; pull, pulled). The distribution of pleonastic tense marking on the basis of verb form is shown in the following table.

<table>
<thead>
<tr>
<th>Realized Pleonastic Tense/Potential Occurrences</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strong verbs</td>
<td>17/38</td>
</tr>
<tr>
<td>Weak Verbs</td>
<td>3/19</td>
</tr>
</tbody>
</table>

Table 50: Pleonastic Tense Marking in Strong and Weak Verbs

1The reason this total does not match the total potential occurrences given previously is that some verb forms involve both the addition of a suffix and an internal change, causing them to be classified in both categories. We have tabulated them here (e.g., leave, left).
The above distribution indicates that the pleonastic tense marking favors strong verbs. Does this mean, then, that the rule which accounts for pleonastic tense marking must include a constraint based on whether the verb form is strong or weak, i.e., must we specify this constraint in the previously given rule (73) by \[+ \text{VERB} \]
\[A \text{STRONG}\]

Before assuming that this is what is needed, we may look for some possible phonological explanation for this difference. Weak verbs are generally formed by the addition of some morphophonemic alternate of -ed. In the case of words ending in a consonant other than t or d, this results in clusters, as in verbs like messed [mest], called [kəld], or bumped [bəmpt]. When we have a resultant cluster, such as st, ld, pt, etc., the cluster is eligible for the phonological process of consonant cluster reduction, so that the actual phonetic forms for messed, called, and bumped are [mɛs], [kəl], and [bəmpl], respectively. This process, which has been described in detail for Black English by Labov et al. (1968), and Fasold (forthcoming), is also found in PRE, presumably as a convergent feature which might be predicted from the influence of Puerto Rican Spanish and Black English. There is formal motivation for consonant cluster reduction irrespective of our observation about verb forms. On the other hand, phonological processes such as cluster reduction do not affect strong verbs, since they are not formed by the addition of a suffix which can sometimes result in a consonant cluster. We may therefore question whether the difference between the frequency of pleonastic tense marking for strong and weak verbs is a function of the cluster reduction rule (which operates on the grammatical marker of weak verbs but not strong ones), or whether it is a constraint which must be described as a constraint inherent in the tense
copying rule. The difference of 30 per cent between the two frequencies would certainly be in range which could be accounted for by this phonological rule. We thus conclude that the tense copying rule should be written without reference to the constraint [A STRONG]. The difference in the frequencies will be accounted for when the lower level phonological rule operates on the output of this rule.

3.5.2 **Negatives with Indeterminates**

In discussing the use of negatives with indeterminates, it is necessary to start out by noting that there are some aspects of the rules needed for PRE which are shared with all dialects of English, both standard and nonstandard, some which are shared with other nonstandard varieties of English, and some which may be unique to PRE.

3.5.2.1 **Rules for Negative Sentences with Indeterminates**

The "negative attraction" rule, first formulated by Klima (1964:274), is applicable to PRE, as well as to other standard and nonstandard dialects of English. This rule can be summarized roughly by saying that the negative is obligatorily attracted to the first indefinite if it precedes the verb. This accounts for sentences of the type:

75

(a) Nobody does their work.

(b) Nobody was hit by anybody anywhere.²

---

1. *Indeterminate* is used here to cover indefinite determiners, nouns, and certain adverbs, such as *never*.

2. The rule must, of course, apply after the passive transformation has taken place.
while not permitting sentences like:

(a) *Anybody doesn't do their work.
(b) *Anybody was hit by nobody anywhere.

As Klima points out, the negative attraction rule operates not only with any of the morphophonemic alternates of not, but also with adverbs which are "inherently" negative, such as scarcely and hardly.

(a) Hardly anybody came.
(b) Scarcely anything happened.

There are two ways of specifying this type of attraction rule, depending on where NEG is originally placed in a sentence. One may choose to place the negative at the beginning of the sentence (cf. Fasold and Wolfram 1970:71, McKay 1969) and specify the conditions under which the negative must obligatorily be attached to the indefinite (i.e., the first pre-verbal indefinite). On the other hand, one may choose, as Labov (1970:66) has done, to attach the negative obligatorily to the pre-verbal indefinite by moving the negative from its pre-verbal position (determined by a prior rule) to the indefinite. Labov (1970:67) specifies this as:

<table>
<thead>
<tr>
<th>Indefinite - X - Neg</th>
</tr>
</thead>
<tbody>
<tr>
<td>1  2  3</td>
</tr>
<tr>
<td>1+3  2</td>
</tr>
</tbody>
</table>
When the indefinite occurs following the verb, the negative attraction rule may or may not apply. The negative may be realized as the negative particle with the auxiliary (or copula) as in:

79  He didn't buy anything.

or it may be attracted to the post-verbal indefinite, as in:

80  He bought nothing.

The latter is an example of a rule option more associated with literary than colloquial Standard English usage. Both Labov et al. (1968:289) and Fasold and Wolfram (1970:73) have suggested that this rule is not a part of some nonstandard dialects, particularly BE. That is, there is no rule of the type:

81  \[ \text{Neg} - X - \text{Indef} \]

\[ \begin{array}{ccc}
1 & 2 & 3 \\
2 & 1:3 \\
\end{array} \]

where \( X \) does not contain \( \text{Indef} \).

Whether or not such a rule can be found to operate for PRE, or, for that matter, BE, will be discussed in more detail later.

Whereas both of the above rules sketch how negatives operate with indefinites in Standard English, another rule is needed to account for the well-known nonstandard English phenomenon of "double" or "multiple" negation, in which one underlying negative can be realized at two or more places in the surface structure. Thus we have:
(a) He didn't do nothing to nobody.
(b) He didn't have no friends.
(c) He don't never come no more.

These types of sentences are the result of a rule which copies the pre-verbal negative on any indefinite following the verb, and has been described simply as:

\[
\begin{array}{c|c|c|c|c}
\text{Neg} & \text{X} & \text{Indef} \\
1 & 2 & 3 \\
1 & 2 & 1:3 \\
\end{array}
\]

What takes place is a copying of negative (called negative concord by Labov et al. 1968) on as many post-verbal indefinites as there are in a sentence. This rule can be extended to include all indefinites within the surface sentence limits, as in:

84
We ain't had no trouble about none of us pullin' out no knife.

As has been stressed in other discussions of multiple negation, it must be remembered that this type of negation is the result of one underlying

---

1Although there is no actual grammatical limit to the instances of multiple negation within a surface sentence, in my study of BE in Detroit (Wolfram 1969) and in this corpus, I have found no instances of more than four surface negatives for one underlying negative. McKay (1969) also finds a stylistic limitation to four negatives in her corpus.
negative, and is to be distinguished from Standard English sentences expressing propositions which contain more than one negative.¹

Thus, a Standard English sentence such as:

85

He didn't do nothing; he was always busy at one job or another.

is the realization of two underlying negatives, while a nonstandard sentence such as:

86

He didn't do nothing because he was so lazy.

is the realization of only one underlying negative.

The difference between He didn't do nothing in the two sentences can be seen in the following simplified P-markers.²

¹For a recent discussion of Standard English sentences which contain more than one negative in their underlying structure, see C.L. Baker (1970).

²One can introduce the NEG pre-sententially or in the VP, and various arguments have been advanced for choosing each alternative. I have chosen the latter alternative here, but will not go into detail about this, since it is not essential to our discussion.
Although we do not doubt the ability of nonstandard speakers to use propositions which contain more than one underlying negative,¹ when a nonstandard dialect reveals the categorical use of multiple negation with indefinites (cf. below), sentences like 85 may not be grammatical. Labov (1970:22) maintains that this type of sentence is grammatical for nonstandard dialects; a BE speaker, for example, would contrast the construction He didn't do nothing in sentences 85 and 86 by placing emphatic stress on nothing, as the Standard English speaker is apt to do. However, in their comprehensive description of BE, Labov et al. (1968) give no

¹For example, a sentence such as I couldn't not go; I hadda go, recently heard from a Black English speaker at a basketball game, reveals two underlying negatives.
evidence which would support this contention. Similarly, the Detroit study reported by Wolfram (1969) and McKay's analysis of negation (McKay 1969:73) have not revealed any evidence which would support the contention that sentence 85 is grammatical in nonstandard dialects. What we may suggest, then, is that multiple negation may be a constraint which blocks this semantically possible proposition from being grammatical.

It is interesting to note, in this regard, Rivero's (1970) discussion of surface constraints in Spanish which prohibit certain types of semantically logical negative propositions from being grammatical. For example, a sentence such as *No siempre no canta. 'He doesn't always not sing,' while semantically logical, is ungrammatical because of a surface structure constraint which limits the number of no particles to the number of S-nodes in the surface structure. In the same sense, we suggest that multiple negation may be a constraint which prohibits negative indefinites from reflecting two underlying negatives within the same clause.

3.5.2.2 The Extent of Multiple Negation

Although multiple negation is a well-known characteristic of most, if not all, nonstandard English varieties, the extent to which the negative

---

1McKay (1969:73) goes somewhat further in her generalization, stating that there is no evidence that the meaning of a sentence can be changed by negating more than one constituent, nor is there any expectation of finding such evidence. This observation, however, does not seem supportable from data of the sort mentioned in the footnote on page 220. The observation appears to be restricted to the negation of indefinites.
concord rule applies may vary. Shuy, Wolfram, and Riley (1967 III:22) and Labov et al. (1968:267) reveal it to be quite variable for white working class speakers. On the other hand, Labov et al. (1968:276) conclude that it is a categorical rule for Black English speaking pre-adolescents and teenagers. Wolfram (1969:157) indicates that it is categorical for some of the pre-adolescents and teenage blacks in Detroit.

In Figure 8, the distribution of the frequency of multiple negation is indicated for FRE informants. Only informants with five or more potential occurrences are included in the tabulation, since frequencies based on fewer examples are not useful. The tabulation includes negative sentences with a post-verbal indefinite or the adverb ever when occurring with a negativized auxiliary. Practically, this means that, for the indefinite pronouns and determiners, all negative sentences where any might be the Standard English correspondent are counted. But it excludes sentences where any is not a potential surface structure alternative. This eliminates sentences like:

87
(a) He's nothing like that.
(b) He was nothing.

since there is no negativized auxiliary in the surface structure.

For the adverb ever/never, it excludes sentences where there is no surface structure realization of negation elsewhere (e.g., on the auxiliary or in an inherent negative such as hardly), eliminating sentences like:

---

1 In the tabulation of multiple negation reported in Wolfram (1969), the generic use of the article a in negative sentences was counted as a potential multiple negative (cf. Wolfram 1969: 159-161). Although the distinction between specific and generic articles may technically be correct, there are too many ambiguous examples to make this dichotomy meaningful for a tabulation of this sort. We have therefore counted no examples of the determiner a as instances of potential multiple negation.
88  (a) He never comes.
    (b) He'll never do it.

And finally, following Labov et al. (1968:278), it excludes indefinites outside the clause, where the negative may be incorporated appositionally into either, anyhow, or anything, in such sentences as:

89  (a) Your mother ain't good looking, either. (23: 10)
    (b) He don't get a second try, or anything. (9:1)

As we shall see, these structures meet special conditions for fluctuation which skew our view of how the negative concord rule applies.

No. of Informants

<table>
<thead>
<tr>
<th>MN</th>
<th>90-100</th>
<th>80-89</th>
<th>70-79</th>
<th>60-69</th>
<th>50-59</th>
<th>40-49</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>17</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MN</td>
<td>90-100</td>
<td>80-89</td>
<td>70-79</td>
<td>60-69</td>
<td>50-59</td>
<td>40-49</td>
</tr>
</tbody>
</table>

Figure 8: Incidence of Multiple Negation for Puerto Rican Informants

---

1Labov et al. (1968:278) include anymore in this list but give no examples, so it is unclear how they define its sentence-modifying use. If their definition refers to sentence-final uses such as He doesn't come to our house anymore, our data here reveal that 31 out of 37 cases of sentence-final any/nomore are realized by multiple negation. This frequency (84% multiple negation) is much more like the indefinites discussed below.
The above figure plainly indicates that most of the speakers definitely tend toward the categorical or semi-categorical usage of multiple negation. Of the 17 speakers in the 90-100% range, 12 use multiple negation categorically. Twenty-three of the 27 speakers tabulated have more than 80% multiple negation, and only one of the speakers falls below 50%.

It is instructive to compare the extent of multiple negation among our PRE informants with figures from one of Labov et al.'s (1968:276) black peer groups (the Jets in single interview style for comparability), the white nonstandard group Labov et al. studied (Inwood), Shuy, Wolfram, and Riley's Detroit study (1967III:2), and Wolfram's (1969:157) black lower-working class group of informants from Detroit.

<table>
<thead>
<tr>
<th></th>
<th>%MN</th>
<th>No. of 100%/Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Black</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jets (NYC)</td>
<td>97.9</td>
<td>11/13</td>
</tr>
<tr>
<td>Detroit</td>
<td>77.8</td>
<td>4/12</td>
</tr>
<tr>
<td>YDI (NYC)</td>
<td>97.8</td>
<td>7/10</td>
</tr>
<tr>
<td><strong>White</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inwood (NYC)</td>
<td>81.0</td>
<td>2/8</td>
</tr>
<tr>
<td>Detroit</td>
<td>56.5</td>
<td>--</td>
</tr>
<tr>
<td><strong>Puerto Rican</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>YDI (NYC)</td>
<td>87.4</td>
<td>12/27</td>
</tr>
</tbody>
</table>

Table 51: Comparison of Multiple Negation in Detroit and New York City
In terms of both relative frequency of multiple negation and the number of speakers who use multiple negation categorically, the PRE speakers fall between the white nonstandard groups and the black groups. The frequency of multiple negation is actually higher than in the black lower class group in the Detroit study, but this group includes adults and both males and females. In terms of the most comparable group, the YDI black informants, multiple negation for the Puerto Ricans does not reveal the same extent of application.

Up to this point, we have only considered our Puerto Rican informants as one group. We may, however, hypothesize that Puerto Ricans with extensive black contacts will use multiple negation more frequently than those with restricted black contacts, because of its categorical usage in Black English. The breakdown according to these groups is indicated in Table 52. In addition to the relative frequency of multiple negation, the number of informants who use it categorically is given for each of the groups. Only informants who have at least five potential examples of multiple negatives are included in our consideration of categoricality.

<table>
<thead>
<tr>
<th>Group</th>
<th>No. MN/Total</th>
<th>% MN</th>
<th>No. of Cat. MN Users/No. Informants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black</td>
<td>131/134</td>
<td>97.8</td>
<td>7/10</td>
</tr>
<tr>
<td>PR/BL</td>
<td>63/65</td>
<td>96.9</td>
<td>5/6</td>
</tr>
<tr>
<td>PR</td>
<td>213/256</td>
<td>83.2</td>
<td>7/22</td>
</tr>
</tbody>
</table>

Table 52: Multiple Negation for Blacks, Puerto Ricans with Extensive Black Contacts, and Puerto Ricans with Restricted Black Contacts.

Table 52 confirms our hypothesis concerning Puerto Ricans with extensive black contacts. Five of the six informants in this classification use it
categorically, and there is no significant difference between the fre-
quency of multiple negation for this group and for the black group. On
the other hand, only seven of the 22 Puerto Ricans with limited black
contacts use multiple negation categorically. Furthermore, the relative
frequency for this group tends to match the frequency with which multiple
negation is found in Labov et al.'s (1968) nonstandard white group. We
conclude then, that Puerto Ricans with extensive black contacts will use
multiple negation to approximately the same extent as is found in Black
English (i.e., categorically), while Puerto Ricans with restricted black
contacts will realize multiple negation to approximately the same extent as
is found in white nonstandard dialects in New York City.

3.5.2.2.1 Sentence Modifying Indefinites

At this point, let us return to the categories which we eliminated from
our tabulation of multiple negation because they met special conditions for
variability. Previous studies by Labov et al. (1968:177) and Wolfram (1969:
157) for Black English indicated that indefinites which were appositional
to the negativized clause (see Sentences 89) showed less multiple negation
than indefinites within the negativized clause. When this distinction is
made, we find the following distribution.

<table>
<thead>
<tr>
<th></th>
<th>MN/TOTAL</th>
<th>%Realized MN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main Clause</td>
<td>266/298</td>
<td>87.4</td>
</tr>
<tr>
<td>Modifying Clause</td>
<td>14/23</td>
<td>60.9</td>
</tr>
</tbody>
</table>

Table 53: Distribution of Multiple Negation in Main Clause and Modifying Clause.
The difference in frequency confirms the constraint on multiple negation affected by the structural distinction of "clause integral" versus "clause modifying" for PRE as a nonstandard English variety. For categorical users of multiple negation, this is a variable subsection of the negative concord rule, as Labov et al. (1968:278) have suggested for BE; for variable users of multiple negation, this is a constraint on variability.

3.5.2.2.2 Multiple Negation with Copula

The second type of structure which we eliminated from our tabulation was sentences where the negative element was attached to a post-verbal indefinite instead of the auxiliary. As we mentioned earlier, Labov et al. and Fasold and Wolfram have suggested that there may be no rule in some nonstandard dialects (particularly BE) which allows for sentences like:

90

(a) He bought nothing.

(b) He picked up nothing from school.

For our PRE informants, there are only three such occurrences (less than 2%) with the main verb, and two of these three are by the one speaker who has less than 50% multiple negation. Does this mean, then, that there is no rule like 83, where the negative can optionally be transported to a postverbal indefinite from its position on an auxiliary or copula (i.e., the tense carrier)? Before concluding that there is no optionality of this type for the PRE speaker, we must look at what happens to NEG in certain types of constructions. First, we must note what happens with indefinites in negative sentences with a copula which could potentially be multiply negativized. We observe:
There's no Italians. (32:10)
They're no good. (19:2)

This type of occurrence fluctuates with multiple negatives like:

There ain't no leader. (31:7)
You ain't nothing. (28:10)

This sort of fluctuation is quite frequent, as can be seen in the following table. Because the absence of multiple negation is observed so frequently with existential there (or, for some speakers, it), the table is broken down on the basis of existential there (e.g., There's no Italians or It's no Italians) versus other subjects (e.g., They're no good).

<table>
<thead>
<tr>
<th></th>
<th>+MN/Total</th>
<th>%MN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exist. there/it</td>
<td>19/36</td>
<td>52.8</td>
</tr>
<tr>
<td>Other subjects</td>
<td>7/12</td>
<td>58.3</td>
</tr>
<tr>
<td>Total</td>
<td>26/48</td>
<td>54.2</td>
</tr>
</tbody>
</table>

Table 54: Incidence of Multiple Negatives with Copula

This sort of variation is obviously inherent within PRE, as it is in other nonstandard dialects of English. Speakers who show categorical multiple negation elsewhere, consistently reveal fluctuation in sentences like 91 and 92. In this respect, it may differ from sentences like 90, which might be considered importations from Standard English because of their very limited occurrence.
Several options may be suggested in an attempt to account for this variation. In the first place, we may suggest that rule 83 is peculiar to verb phrases containing a copula. But if we choose this option, it would mean that sentences like 93 would be grammatical

\[ *(a) \text{ It's like that no more.} \]
\[ *(b) \text{ It's almost like nothing that's ever happened.} \]

Our inclination, however, is to suggest that if 90 is ungrammatical for nonstandard speakers, then 93 is also ungrammatical. The limited evidence we have in our corpus would seem to confirm this, for we get sentences like 94, but not like 93.

\[ 94 \text{ It ain't like that no more. (5:7)} \]

Another possible alternative may be related to copula contraction. We may hypothesize that if copula contraction (or for some speakers, deletion) has taken place preceding an indefinite, then multiple negation may be variable. That is, a speaker may alternate between sentences like 95 and 96.

\[ 95 \]
\[ (a) \text{ He's not no good at all.} \]
\[ (b) \text{ He's not nothing.} \]

\[ 96 \]
\[ (a) \text{ He's no good at all.} \]
\[ (b) \text{ He's nothing.} \]
If this were the case, then the phonological process of contraction (or deletion) would be a surface constraint which allows multiple negation to be variable for speakers who may use it categorically in other types of environments. If this is the correct analysis, we would expect that in past tense, where copula does not normally contract, multiple negation would be categorical for speakers who use it variably in non-past forms. Sentence 97 would be ungrammatical, but 98 grammatical.

97 There was nothing we could do.
98 There wasn't nothing we could do.

There are only six past tense occurrences of copula in our corpus, and three of them are multiply negated, so that the evidence at this point does not confirm this solution. If this were confirmed by further evidence, it would be an attractive alternative, however, since we would expect the same principle to hold for contractable modals occurring with post-AUX adverb never, making both 99 and 100 grammatical for categorical users of multiple negation.

99 He'll never make it.
100 He won't never make it.

McKay (1969) indicates that only 100 is grammatical for Black English, but says nothing about present tense copula, so it is difficult to determine if she admits the fluctuation we have observed for both FRE and BE in the much more frequently occurring non-past forms.
A third alternative may be related to what we can call the 'contiguity condition.' Through the application of the negative concord rule and the placement of NEG on the copula, it is observed that two NEG's are immediately contiguous. When this is the case, we may suggest that there is an optional rule which may delete the first NEG, specified roughly as in 101.

\[
\begin{array}{cccccc}
101 & X & \text{Cop} & \text{NEG} & \text{NEG} + \text{Indef} & Y \\
1 & 2 & 3 & 4 & 5 & \\
1 & 2 & \emptyset & 4 & 5 & \\
\end{array}
\]

If the fluctuation is specified through an optional rule such as 101, it accounts for the ungrammaticality of 93 for some speakers while allowing fluctuation between 91 and 92, and between 95 and 96, which our data indicate to be variable. Of course, the rule operates on the output of the negative concord rule and the rule which places NEG to the right of the copula. Although at first glance, this may not appear to be the most attractive alternative, when we investigate multiple negatives with the preverb never/ever, we find that the contiguity condition may have greater applicability than just to the copula.
3.5.2.2.3 Multiple Negation With Adverbs hardly and never

In addition to the fluctuation we observed with copulas, we note that there is considerable fluctuation of multiple negatives with the negative adverbs hardly and never. Most characteristically there is variation between do+NEG+NEG and just [+NEG] adverb. For example, we get:

102 (a) We don't never go in front of them. (21:4)
(b) I don't hardly go with them. (22:10)

and:

103 (a) I never go with them no more.
(b) We hardly play with that. (35:1)

The following distribution of frequency is observed for two negative adverbs:

<table>
<thead>
<tr>
<th>Negation Pattern</th>
<th>Prev./Total</th>
<th>%MN</th>
</tr>
</thead>
<tbody>
<tr>
<td>hardly + never +</td>
<td>10/19</td>
<td>52.6</td>
</tr>
<tr>
<td>never + never +</td>
<td>13/52</td>
<td>25.0</td>
</tr>
</tbody>
</table>

Table 55: Relative Frequency of do+NEG with Negative Preverbs

This sort of variation, like that noted above, is an integral part of PRE as it is of other nonstandard dialects of English. How, then, do we account for such variation?
To begin with, we must note that when the adverb occurs post-Aux, multiple negation may not take place. Thus sentences 104 (a) and (b) are grammatical but not 105 (a) and (b).\(^1\)

104  
(a) He never did come.\(^2\)  
(b) He never won't come.

105  
(a) *He never didn’t come.  
(b) *He never won’t come.

Thus, one alternative for specifying this restriction may be related to movement of the adverb to a post-Aux position. If a permutation such as takes place, the NEG may be attached to the auxiliary.\(^3\)

106

\[
\begin{array}{cccccc}
X & \text{Adv} & \text{TENSE} & \{ & \text{have} & \} & [\text{+VERB}] & Y \\
& & & \{ & M & \} & \text{be} & \\
1 & 2 & 3 & 4 & 5 & \rightarrow \\
1 & 3 & 2 & 4 & 5
\end{array}
\]

Does multiple negation obligatorily take place when rule 106 has been applied? If this were the case, then there would be no variation between 107 and 108.

---

\(^1\)Sentences where the Aux is realized in the surface structure following the adverb appear to have an emphatic meaning. McKay attributes this to the addition of EMPHATIC to the Aux. If the EMP has been added to the Aux, then rule 106 is blocked (cf. McKay 1969:80).

\(^2\)We are, of course, referring to sentences 107 (a) and (b) as the realizations of one underlying negative (cf. pp. 218-9).

\(^3\)For more details concerning the conditions for such a rule, cf. McKay 1969:79 ff).
(a) Words won't never harm me. (22:10)
(b) You couldn't hardly compare. (32:8)

(a) He thought he would never make it. (10:4)
(b) I could hardly breathe, pain me so hard, boy. (20:7)

For speakers who use multiple negation categorically in other than the variable context described here, four out of eight examples are realized as multiple negatives. Although there is only a limited number of examples as the basis for our conclusion, the evidence we do have does not confirm the categorical operation of multiple negation for adverbs that have been moved to a post-Aux position. And, when models which contract with the preceding NP are considered, it is quite clear (for both PRE and BE) that multiple negation does not appear categorically, for there is clear evidence that sentences like 109 (a) and (b) are grammatical in both BE and PRE.1

(a) He'll never do it.
(b) He'd never if he could.

Contractability with the preceding NP definitely tends to impede multiple negation, and may have to be built into the description as a constraint on multiple negation. But as we suggested in our discussion of copula and post-verbal indefinites in negative sentences, it does not appear to be the sole reason for specifying the optionality of multiple negation for speakers who otherwise have categorical application of the negative concord rule.

1The contracted modal 'd or 'll can, of course, be deleted by a low-level phonological rule.
When the type of optionality we have here is compared with that discussed for copula sentences with post-verbal indefinites, we again note that the negatives here meet the contiguity condition that we discussed for copula. The presence of adverbs to which NEG has been attached or in which NEG is inherent, and the placement of NEG on the auxiliary, results in immediately contiguous NEG's. Thus, we can suggest the contiguity condition has more general application than was specified in 101. Excluding irrelevant details, this may be given as:

\[
110 \quad X \quad \text{Tense} \quad \begin{cases} \text{have} \\ \text{be} \end{cases} \quad \text{NEG} \quad [\rightarrow \text{NEG}] \quad [\rightarrow \text{Indeterminate}] \quad Y \quad \rightarrow
\]

\[
1 \quad 2 \quad 3 \quad 4 \quad 5
\]

This rule must, of course, operate on the output of the negative concord rule. Since the rule operates after the negative concord rule has applied and cannot remove NEG which has been attached to or is inherent in the Indeterminate, it rightly disallows sentences like 110 (a) and (b) for speakers who use multiple negation categorically in other contexts:

\[
111 \quad *(a) \quad \text{You don't ever do it.}
\]

\[
*(b) \quad \text{He wouldn't ever do it.}
\]

Furthermore, the rule must be ordered so as to apply only after the adverb has been moved to a post-Aux position, since the NEG's cannot be contiguous.
otherwise. And finally, the contiguity condition accounts for the grammaticality of sentences like 91 and 103, while prohibiting sentences like 90.

The grammars of speakers who have multiple negation, but for whom 90 may be grammatical, might be characterized by inserting X between the two NEG's: if X is null we may expect the frequency of NEG deletion to be increased. One will note that such a formulation for nonstandard speakers differs from its formulation for Standard English speakers, i.e., a negative transportation rule. But since we need the negative concord rule and the rule for the contiguity condition anyhow, it is more economical to expand the latter rule than to introduce a "negative transportation" rule like 81.

3.5.2.3 Pre-verbal Indefinites

Although the frequency of multiple negation for some PRE speakers may more closely match its usage in Black English than other nonstandard dialects, there are other aspects of multiple negation in PRE which differ from BE. One of the characteristics of BE is multiple negation involving an auxiliary and pre-verbal indefinite. Thus, we may get:

112

(a) Nobody didn't do it.
(b) Nobody couldn't come.

which are equivalent to Standard English:

113

(a) Nobody did it.
(b) Nobody could come.
This type of multiple negation is found in studies of BE as reported by Labov et al. (1968), Wolfram (1969) and McKay (1969). Its occurrence is quite variable in BE, the frequency among preadolescents being in the 25–50% range. It is also reported that this sort of multiple negation is found in one variety of white nonstandard speech (Labov et al. 1968:273), but it is apparently not found in the speech of the nonstandard white groups that Labov studied in New York (1968:277) and is not characteristic of most northern white nonstandard speech.\(^1\)

In the entire corpus, there are only two occurrences of multiple negation involving a pre-verbal indefinite and a negativized auxiliary (representing less than 7% of the total occurrences), and both of these are used by the same speaker:

\[\begin{align*}
\text{(a) } & \text{Nothing couldn't hurt him, nothing. (19:14)} \\
\text{(b) } & \text{Nothing couldn't hurt him. (19:16)}
\end{align*}\]

Surprisingly, this speaker does not have extensive contacts with blacks, judging either on the basis of our objective data or subjective impressions. His speech on the whole tends to show more Spanish traits than most of the other Puerto Ricans in the corpus, but this particular construction does not appear to be attributable to Spanish influence, since sentences like:

\[\begin{align*}
\text{* (a) } & \text{Nadie no lo hace. 'Nobody doesn't do it.'} \\
\text{* (b) } & \text{Nadie no puede venir. 'Nobody can't come.'}
\end{align*}\]

\(^1\)The only instances of this type of multiple negation found among the white community in Detroit (Shuy, Wolfram, and Riley 1967) came from Appalachian in-migrants.
are generally also ungrammatical in Spanish. Whatever may be the explanation for the uses by this one speaker (cf. Kiparsky, 1968:192 ff. for a possible explanation in terms of rule simplification related to acquisition), it is clear that this type of structure cannot be described as an integral part of multiple negation in PRE for most speakers.

Related to the negation of a pre-verbal indefinite and negativized auxiliary is what Labov et al. (1968:283) have called "negative inversion," in which the auxiliary and negativized indefinite are reversed in declarative sentences, producing:

116
(a) Didn't nobody do it.
(b) Couldn't nobody come.

This feature, quite typical of Black English and some white southern varieties, is totally absent in our corpus. Although more potential examples than the 37 we have might produce the occasional use of such a structure among some of our informants with extensive black contacts, it is plain that it is not a feature which has become an integral part of PRE.

In part, the conclusion that there are no instances of negative inversion in our corpus is due to the interpretation of copula with indefinites as the result of a process other than negative inversion for PRE speakers. We do have some examples of ain't or isn't preceding the indefinite as in:

117
(a) Ain't no leaders, ain't nobodies gonna take after us. (31:7)
(b) Isn't none of 'em where I live. (26:3)
(c) When you die, you die, ain't no way to come back. (18:10)
Labov et al. (1968:285ff) suggest that for BE there are two alternative analyses for 117. One can interpret it as either a matter of deletion of existential there or it, or a case of negative inversion, as in sentences like 116. Labov's choice of the latter option is largely due to the fact that other structures are not limited to copula, but occur with modals and do auxiliary (Labov et al. 1968: 285-286). Without this evidence, there is weak motivation for considering it a matter of negative inversion. Furthermore, speakers who have this structure show its variation with it or there. For example, quite close to sentence 117 (a), Informant 31 produced:

118 There ain't no leader. (31:7)

Similarly, Informant 18 produces the following sentence:

119 He kept saying, ain't no gold, ain't no gold, everytime he said there ain't no gold the guy used to smack him. (18:4)

We thus conclude that there is a simple rule, like 120, which operates to delete it/there after prior rules have combined clauses and inserted a dummy subject.¹

¹Both it and there are listed here as dummy subjects since the informants fluctuate between their usage, as in It ain't no games around here (31:1), and There ain't no leader. (31:7).
Finally, it has been observed that BE may transfer a negativized pre-verbal auxiliary across clauses, so that sentences like:

121:  

(a) It wasn't no girls couldn't go with us.  
(b) It ain't no cat can't get in no coop.

are equivalent to Standard English:

122  

(a) There weren't any girls who could go with us.  
(b) There are no cats that can get in a coop.

As might be expected from our previous observation about auxiliaries and pre-verbal indefinites in negative sentences, this is not found among our PRE speakers.

3.5.3 A Special Use of hardly in PRE

Although most instances of hardly and never follow the patterns observed in other nonstandard dialects, both white and black, there are several instances of hardly which depart rather radically from its use in other nonstandard dialects. Observe the following examples:
In attempting to account for these examples, we must first look at more context, particularly for the first two examples. Just on the basis of the above sentences we do not know whether hardly everything means that only a few or that the majority of the speaker's acquaintances are Puerto Rican. If the former is the case, it might mean that the negative attraction rule with pre-verbal indefinites might have to be modified in order to accommodate this construction. But more context plainly indicates that the latter meaning is intended.

FW: Are there mostly Puerto Ricans where you live?

IN: Yep, hardly everything Puerto Rican, only a couple Italian people, that's all. (22:10)

When wider context is examined for the second example, we find that 'many' rather than 'few' is the intended meaning.

Hardly everybody was in prison and Coop ran almost freed us; everybody was caught. (20:4)

In attempting to account for the uses of hardly we have encountered above, it is informative to look at several Spanish sentences.
(a) Casi ninguna vino. 'Hardly anyone came.'
(b) Casi nada esta terminado. 'Hardly anything is finished.'
(c) Casi todo el mundo vino. 'Almost everyone came.'
(d) Casi todo esta terminado. 'Almost everything is finished.'

It is important to observe that casi may occur in both affirmative and negative sentences in Spanish; in negative sentences it is translated as hardly and in affirmative sentences as almost. Casi is inherently neither affirmative nor negative in Spanish. What we may predict from this pattern is a use of hardly which might be semantically analogous to its use in Spanish. This means that the inherent negativity of hardly may not necessarily characterize some speakers' use of it. If [+NEG] is removed from the lexical characterization of hardly, it functions much like the adverb almost, which is inherently unmarked either affirmatively or negatively. By the simple removal of [+Neg] in the lexical representation of one variety of PRE (spoken by a minority of speakers) we can account for what appear to be some rather radical departures from other nonstandard English varieties.
3.6 Conclusion

In the preceding sections, we have examined several different aspects of PRE phonology and grammar. Our formal representation of the inherent variability in PRE has utilized the notion of the variable rule in a generative-transformational grammar. The variable rule, originally introduced by Labov (1969), is a relatively new concept in formal language description, and it therefore seems appropriate to conclude our discussion here with several brief observations about our use of variable rules, and the various types of constraints which we have isolated.

We have seen that variable rules may be applied to both grammatical and phonological rules, and that a number of different types of environmental constraints may have an effect on variability. Particularly with respect to phonology, however, we may ask to what extent there are common types of constraints and whether these constraints operate in similar ways. If there are, in fact, common constraints on variability and they operate in similar ways, then we may be dealing with a universal rather than a language-specific grammar of constraints. Our initial inspection of constraints here as they compare with constraints on variability isolated in other studies (particularly Labov et al. 1968, Wolfram 1969, Fasold forthcoming) reveals that there are, in fact, many similarities in the types of constraints. For example, whether a segment functions as a grammatical marker or an inherent part of a lexical item has some effect on variability. And, in all cases, the effect is similar: a grammatical marker tends to inhibit the deletion or reduction of a segment. Similarly, unstressed syllables invariably tend to favor reduction or deletion over stressed syllables. And, we have seen that deletion of consonants is invariably greater when they are followed by another consonant. It is difficult to
conceive of any situation in which the opposite effect might take place
(e.g., grammatical marker would favor deletion, stress would favor reduction,
following consonants would favor the retention of consonantal segments).
If, then, we are dealing with universal effects on variability, we may ask
why these constraints are not simply built into our metatheory as it relates
to optional rules. That is, the metatheory could incorporate some sort of
representation of universal effects on optional rules. If we did this,
there would be no need to specify the constraints for each language or
dialect. This might be a very acceptable alternative if we did not regard
the hierarchical effect of these constraints as part of a speaker's compe-
tence. But if we accept the fact that the hierarchical effect of these
constraints is a matter of competence, then we must specify the constraints
for each language or dialect, because the order of the constraints may vary
considerably. In one case, the effect of stress may be geometrically
ordered before the effect of grammatical/nongrammatical markers, whereas
in another case the order may be reversed. We conclude, then, that there
are probably universal constraints on variability which need to be built into
our metatheory of language, but the ordering of these constraints is lan-
guage or dialect specific, and therefore must be incorporated into a specific
grammar of a language. At this point, the actual listing of constraints is
of course not complete, but we may suggest that some of the constraints
that we have isolated in our present studies will certainly have to be part
of our universal inventory of constraints.

In our discussion of variable rules for the aspects of PRE we have
discussed in this chapter, we have operated under the assumption that there
is regularity in the ordering of constraints for individual speakers, (i.e.,
ideolects), which is represented in the formal representation of the dialect(s). For the most part, this observation is borne out in our comparison of the constraints formulated for the individual speakers with those formulated for the group. That is, if we take the constraints we have formalized for PRE and compare them for individual speakers, we will find the constraints to be quite regular. There are, however, two exceptions to this regularity, which make the characterization of the speech represented for the social group as a whole appear to be more systematic than the speech of an individual. In some cases, there are not sufficient numbers of examples in some of the sub-categories of the constraints to reproduce the clear-cut effect of the constraint order as it is represented for the group as a whole. This type of inconsistency arises simply from the limited number of examples available for a given informant, and would be remedied by a more adequate population of examples. There are, however, also instances where there appear to be sufficient examples in order to find the regularity for individual speakers that we have represented for the group. These cases are somewhat more difficult to dismiss. It is important to note, however, that these instances are restricted to cases where the ratio of effect on the various constraints is relatively close. For example, suppose we have a case where the ratio of the geometrically ordered constraints on variability is as follows:
In the above ordering, we would certainly not expect individual deviation in terms of the first and second order constraint. But the second and third order constraints might reveal some individual deviation, since the ratio of the effect is much less than with the first and second order constraints. It would appear that the closer two constraints are in terms of the ratio of their effect, the more likelihood there is that we can find individual discrepancy in the ordering of constraints. For example, if the effect ratio of one constraint is 4 to 1 and another constraint 5 to 4 we would not expect reordering of constraints. But if the effect of one constraint is 4 to 3 (i.e., when the rule will be effected 4 times in the environment to every 3 times it is not) and another constraint is 5 to 4, then we may expect some individual reordering of constraints, even within a relatively homo-
geneous group of speakers. By the same token, we would expect that close effect ratios might be reordered from social group to social group.

For the most part, of course, we are impressed with the amazing consistency with which constraints are ordered identically across different social groups, with only relative frequency differences. The actual comparative ratios which might make two constraints reorderable is, of course, arbitrary at this point. We would certainly not expect two constraints with effect ratios of 4 to 1 and 9 to 8 reverse order, while we might expect constraints with effect ratios of 9 to 8 and 8 to 7 to be more susceptible to reordering. But the actual cut-off point for constraint reordering within groups is, at this point, quite arbitrary and can only be determined through empirical investigation.

From a theoretical standpoint, it might certainly be possible to isolate more constraints than we have formally represented in our variable rules. From a practical standpoint, however, there are difficulties in dealing with a great number of constraints, since the number of subdivisions in the geometric ordering is doubled every time another constraint is introduced. This means that if we isolate seven constraints, it is possible to get 128 branchings in the hierarchy (i.e., 2, 2x2, 2x4, 2x8, 2x16, 2x32, 2x64 = 128). The expectation of getting sufficient examples to adequately determine the ordering of constraints naturally diminishes as the number of branchings proliferates. In most instances, we find that the clear-cut effect on variability is quite high in the first several orders of constraints, but that it tends to diminish rather rapidly after that.

A problem of more theoretical consequence arises when all the branchings necessary to establish hierarchical orderings are not logically possible, either because of features of the specific language variety, or
because of metatheoretical constraints on human language, such as the fact that there can be no voiced pause. The logical impossibility of some categories may disallow observing cross-products crucial for establishing the rank orders. For example, when we look at post-vocalic syllable-final t and d, we find that the distinction between grammatical and non-grammatical marking segments is only relevant to d. The absence of this contrast for t means that we cannot actually observe the cross-products for voicing (i.e., whether it is |t| or |d|) and grammatical marking to determine the order. In many cases, however, the examination of cross-products for the available side of the branching may lead us to infer a rank order. Fasold (forthcoming) also illustrates that there are possible arrangements of features in a hierarchy which may be theoretically impossible in linguistic metatheory. Thus, in one of the possible environments in a hierarchy which Fasold must examine for d deletion, he is forced to look at "the absence of a vowel, the presence of a pause, and the presence of voice" (Fasold forthcoming). This would be a voiced pause, which is impossible. By the same procedure suggested above (i.e., looking at the percentages available in different hierarchical orders) it may be possible to infer the ordering without actual figures for some of the cross-products. In cases where a number of the crucial cross-products are unavailable, however, it may be impossible to arrive at the correct hierarchy.\footnote{Fasold notes one possible hierarchical arrangement of syllable final d constraints in which four of the possible eight constraints are unavailable, so that "it will be forever impossible to select the correct hierarchy by the use of cross-products." (Fasold forthcoming)}

If one compares the formalization of variable rules which has been given in the preceding sections with the original formulation of Labov (1969),
some differences will be noted. Some of these are simply matters of convention, such as the use of upper case Greek prescripts rather than the lower case ones Labov originally suggested. These differences are of little import for variable rule theory, and seem to be matters of preference rather than substantive issues.

There are other matters, however, which involve more than mere convention changes. For example, Labov essentially conceived of the variable constraints in terms of single features, so that the value of a particular feature either favored or inhibited variability. It seems, however, that this must be extended to include clusters of features, since it is the actual presence or absence of segments which appears to be basic in favoring and inhibiting variability. Some segments can be characterized in terms of a particular feature which unites in a natural way the members of a class of segments affecting variability. But other types of segments may have to be characterized by a cluster of features. Therefore, it appears appropriate to allow clusters of features as well as single features to affect variability.

It may also be noted that there are certain instances in which variable constraints may operate over disjunctive environments. For example, as we specified the environmental constraints for the monophthongization of ay, the environmental constraint was specified as:

\[
\begin{align*}
\text{Ahf} & \\
\{ & \\
B & \text{-voiced} \\
& \text{cont} \\
& \text{-cons} \\
\} \\
\end{align*}
\]

The use of the cover symbol V by Labov is, in fact, a case where a constraint may have to be characterized by a cluster rather than a single feature (e.g., it may have to be \text{[-vowel]} to eliminate semi-vowels).
This rule specifies that the first order constraint is word boundary; the second and third order constraints only operate within word boundary. That is, voicing (the second order constraint) and continuancy (the third order constraint) only operate within a word. In order to specify this, the environments must be given disjunctively, as we have done. Does this mean, then, that variable rules may be applied to any disjunctively ordered environments? Before adopting this general principle, we must note that the disjunctive environment specified for any reduction is only a function of the formalization of variable constraints. Were we to write the rule as a non-variable one, there would probably be no need to specify the disjunctive environment. It appears then, that there is a natural unity of these environments. We might establish a principle that variable constraints can apply in disjunctively stated rules when the disjunction is a function of formalization of variable constraints. On the other hand, we might simply extend the notion of variable rules to apply to all types of disjunctive environments, even though there may be little natural unity of the environments. If we do this, we are faced with another motivation for coalescing or separating certain types of rules, since variable constraints can only apply within a single rule. The consequences of this procedure for the overall grammar must be examined carefully before we can arrive at a definitive solution.

The preceding discussion obviously points to the fact that there are still a number of issues to be dealt with concerning variable rule analysis. Some of these appear to be relatively minor extensions or emendations, while others may be of more theoretical consequence. Although there are still a number of unanswered questions, our conclusion here is that variable rule formulation has allowed us to capture many of the independent linguistic
constraints on variability which are highly regular and ordered. These seem to be an integral part of a person's knowledge of his language.

\[1\] It has sometimes been suggested that social constraints on variability (e.g., social class, age, sex) may also need to be incorporated into a formal representation of a variable rule, but we are much less certain of the integration of these constraints in the grammar of a language than we are of the independent linguistic constraints.
4.0 Introduction

We have mentioned previously that in some ways the informants we have in our sample cannot be considered homogeneous. Apart from the self-evident heterogeneity built into our sample by the inclusion of both Puerto Ricans and blacks there is social diversity found among our Puerto Rican informants. In this chapter, we shall examine four different groups of three informants each in some detail. These groups are chosen to allow us to look at several distinct points in the speech continuum of English used by Puerto Ricans. For the sake of comparison, informants who might be considered at marginal points along the scale are not dealt with here, although their behavior must certainly be taken into account in a realistic assessment of the sociolinguistic situation. The groups delimited for treatment here are: (1) black informants, (2) Puerto Rican informants with extensive lower socio-economic class black contacts, (3) Puerto Rican informants with cultural values indicative of lower socio-economic class lifestyles but with limited black contacts, and (4) Puerto Rican informants with values and lifestyles atypical of the indigenous lower socioeconomic class (these shall be referred to here as "lamers," a term which is used by some of the informants in our sample to refer to this group¹). A brief sketch of the four groups is given below.

¹The term lame is obviously borrowed from its use in black inner-city culture. Labov, et al. (1968 Vol. II:22) define lamers as "isolated individuals who are detached from the group by either their participation in a separate value system or by their lack of participation in the vernacular culture."
4.1 The Black Group

The black group was chosen in order to give us some control group with which to compare the linguistic assimilation of the three different Puerto Rican groups with reference to Black English. The choice of this control group, as we have mentioned previously, is based on the fact that second generation Puerto Ricans in East Harlem and the Bronx will have the majority of their non-Puerto Rican peer contacts with blacks. The three informants were chosen to represent lower socio-economic class black teenagers in terms of their social and linguistic characteristics, since what we want for this comparison are speakers who represent typical Black English in Harlem. All three black informants discussed here have lived in Harlem all their lives. Our linguistic evaluation was made on the basis of an informal study conducted by Ralph Fasold, in which he assessed the degree of nonstandardness of the black informants in this corpus. Since peer group involvement is the most crucial indicator of the indigenous lower-class black lifestyle, our social characterization was dependent on several aspects of the interview dealing with peer interaction, including recreational activities, certain types of ritualistic verbal behavior which are highly developed in the black community and peer group structures. Data from our interview were supported by our observations of informants in a more natural context outside of the interview. Although our data are not complete, the social and linguistic information available indicate that the informants in this group are representative of the indigenous lower socioeconomic class black teenage males in Harlem.
4.1.1 Recreational Activities

The narration of leisure time activities and games by our informants is quite typical of inner-city New York. We thus have descriptions of games and other recreational activities such as lodies or skelsies, ring-o-levio, stickball, Johnny on the Pony, flying pigeons, etc. Informant 1, who will be referred to here as Robert S., gives the following account of lodies.

Oh yeah, we play "lodie" you know that game? It's like, it's like 13 numbers you got one to 13 now you put one box over there, like you put one, number one box over here, number two box over here, number three box over there, number four box over there, and you got two boxes right here, five and seven, wait, five and seven, six and eight then, you got a big, a big, a real big box in the center of it and you draw a line across it like this. Then you put another small box in there, and, and each part of the box should be like, five we have five, four, three or, you know nine or two or one number in it and if you make it in there by mistake, you know, you got to stand there through the whole game, you lose your turn through the whole game, but if somebody knocks your top in there, then, you get, like if he have nine boxes, it say, it says nine right there and a guy knock your top in there, you will get nine, boxes, and you know like they got, you go, and you go forward. As you go forward you get higher and higher then they call it, like you go backwards, you go, you go backwards so if you get nine, you will go backwards, you know, after cause, you see, you will have one more to go so you will have eight boxes left out of that. Then you go backwards and you be backwards, and then after that if he knock you in again, you know, you, how you say it? Like, you like a master, you know, like a master of all the tops that you put in.1

1 Rather than attempt a quasi-phonetic transcription of quotes, we represented informants' statements in standard orthography.
Another game quite common to inner city New York adolescent males (from approximately age 10 through the early 20's) is stickball, which Robert S. again describes.

You see like um, you get a long stick with they got tape around it and a guy get around and he step back far so you know the ball won't hit him and he stand back, he stand up against, you know, something hard like a wall or something and he stand next to it and he draw a box on it, you know, and the pitcher have to make that ball hit the box, so he can swing at it. And then when the ball takes off like it goes over his head or something if it goes over and say keep on going, you know, its like a homerun and a base hit. If he hit it, you know, sometimes it hit cause he hit, you know, the pitcher so he get a extra run for that and then so on and so on....

I usually use a stick bat. You can buy them in the store for 39 cent. They round this big and this long, got green tape on them cost at least 39 cent but you can make your own. I rather make mines than buy em cause you know I can't afford 39 cent everyday. (1:3)

There are, of course, different varieties of stickball, so that Informant 40, whom we will refer to here as Phillip W., describes how stickball may be played with a group rather than individuals.

Stickball, you same thing, choose up a bunch of guys then you get a pitcher and a back catcher just like baseball only what they use a stick a long stick and you don't use no softball with the game, use a spalding, you know, one them little balls, like, you play handball with play one of them. And they bounce it once and you 'pose to try your best to hit it and you--you know, just throw it like that. It got to bounce, it could bounce...
many time it want, long as you could hit
the ball and you run the base, you know,
bases and stuff. (40:1)

Another game which appears to be quite typical of some inner city
areas is what is referred to as Johnny on the Pony, in which players
from teams jump on the back of a person leaning against a wall in order
to see how many individuals can stay on his back at the same time. Phillip
W. relates how this is played.

Johnny on the pony it's same you know get
a group of guys against another group and
you choose up who goes up first and you get
a pillar a man that stands right here, another
guy's head be like this and so on and so on.
And you jump on they back then after every-
body gets on the back now if a person jump
and hit the ground they all out and the other
group that's you know got the people on they
back they go up or either if the people, if
all the pec 'e on the other guy's back and
they don't fall off or nothing you say
"Johnny on the Pony, one, two, three," you
be wiggling to get him off and after you
get him off the group the other group goes
up and you say it three time "Johnny on the
pony one, two, three; Johnny on the Pony one,
two, three; Johnny on the Pony one, two,
three." If you don't get 'em off, the other
group is on they back, on the guy back, they
go again that's way you play the game 'cause
we played it yesterday.... (40:3)

Most of the above activities, although going by different names, seem
to have a distribution beyond Harlem or the Bronx; in fact, variations of
these are quite common to a number of northern urban areas. One activity
which appears to be widespread in Harlem and parts of the Bronx is that
of flying pigeons from the rooftops of tenements. The term pigeon here does
not refer to the ordinary street pigeon, but to various types of homing pigeons which are commercially bred. The activity referred to as "flying pigeons" requires specialized knowledge in caring for and training the pigeons. These pigeons are generally kept in coops constructed on the roof tops. Robert S. gives a specific account of how this activity is carried out.

Oh Yeah, I got a birdcage. You go like, you go up on the roof, you know, and you get like some boxes or some wood and some nail on stuff and you start building a bird coop. And then you go to the store and you buy round two birds and keep them in the bird coop for a long time so they can get use to it and make like a certain whistle, you know, make a certain whistle for them, and then, you know, you keep on whistling that and they get use to it and you let them fly out one day and they start flying around in circles over the roof; and you whistle to them and they come right back in, and then after that, you let them go one day and they come back with some more birds and you lock those up in there. Yeah, you lock those birds up in there and they will find some more like that, you know, 'cause most of the kind of bird they got is one kind of bird, you know, nobody like to pick him because he is called the "Clinker," that's the disease bird, you know he be flying around, eating this, eating that, putting him nose in this drink and that, they got like a, a "Baldie" and a "Clinker" and a "Homer" and a "Black Bird".... I got a "Homer" and a "Black Bird".... I got a "Homer" and a "Black Bird," those are the only kinds I got, I got round three of those.... Yeah, and then, I let, I tried, you know, I tried to train those, but, you know, I let them out and they ain't come back, the only thing come back was my two birds, I believe they were black ones.... Yeah, you get them at a pet shop mostly a whole lot of, see, one thing about it, you got to be careful what you doing because, you know, it's like,
I say right now it's round thousands of people in Harlem, they got a lot of bird cages and they go up on they's roofs and they take they bird, they take, you know, other people birds and put them on they arms and they pockets and stuff and walk out and take them to they coop and you know, they get use to it.... No, yeah, cats get up there, but, you know, we build them high off the ground real high off the roof so you know the cat wont, you know, you can't reach them we put barb wire around the entrance. (1: 5-6)

As indicated in Robert S.'s narrative, he is quite familiar with the activity and the specialized knowledge it requires. An outsider would be unable to give the details involved in this indigenous activity.

4.1.2 Ritualistic Language

One of the characteristic aspects of lower socio-economic class black adolescent vernacular culture is the use of language in a prescribed and ceremonial fashion; that is, there are ritualistic patterns for certain types of verbal interactions. The ritualistic use of language has been described for black adolescent males in Harlem in detail by Labov, et al. (Vol. II 1968); it has also been described in other urban contexts by Kochman (1968) and Kernan (1969). Our interview attempted to ascertain our informant's familiarity with certain ritualistic uses of language, in particular the activity of sounding (also referred to sometimes as "the dozens" by our informants). To describe it briefly (for more detail see Labov, et al. Vol. II 1968: 76-129), the activity involves insulting some one's mother, although other relatives might also be mentioned (e.g., grandmother, father, uncle). The presuppositions under which the activity is conducted are shared by the participants, namely,
that the insult is not literally true. The proper cultural response to a ritualistic insult is another ritualistic insult. Typically, sounding takes place between two participants, but others are spectators and become judges of the quality (by laughter, jeering, or comments). The informal judging of such events should not be underestimated; it becomes clear who has the upper hand. The first participant initially insults someone's mother, and the respondent attempts to "outdo" him by responding with an insult that evokes a more effective response with the audience. Trading insults may stop at any stage, but effective sounders can trade verbal quips at some length. This verbal ritual may involve a number of topics, but probably the most prominent ones deal with the mother's sexual activity. Other topics include poverty, age, physical attributes (skin color, weight, age, etc.).

Each of the three black informants clearly indicates familiarity with sounding, and its significance as a ritualistic verbal activity in the indigenous culture. Informant 24, referred to here as Shawn H., indicates his familiarity with the activity.

**FW:** What makes a good sounder?

**Shawn H.**: You know, it's the way, you know, you talk to them.

**FW:** Do you sound on each other?

**Shawn H.**: Yeah, we be sounding much, you know, each other.

**FW:** What if somebody said, "Your mother stink?"

**Shawn H.**: You can say, "Your mother look like a dog, you know."

**FW:** What if they say your mother drink pee?
Shawn H.: Say, ah, your mother, you know, the town's bum, you know, the wino, to different things, you know.

FW: How about if they say, your mother like a railroad track, she been laid all over the country?

Shawn H.: You got to, you know, think of something right quick. If you don’t think of nothing quick, you know, they got us beat.... (24: 10-11)

When Robert S. is asked about sounding on somebody’s mother he comments:

Robert S.: One in a while, not mostly.... if one of them say something about the other one done like it he say, "Oh man, be quiet, Black, you know, instead of calling him Black he call him Dark Skin, 'cause, you know, he don't like nobody call him Black, so he call him Dark Skin. "Be quiet, Dark Skin and he say, "Tell your mother that," you know, and he say, "All right, don't say that your mother is my mother you know, yourself" once in a while 'cause you know, they brothers and stuff.

FW: When you talk about someone's mother, what kind of things do you say like, if I said to you, "Your mother stink," what would you say?

Robert S.: I say, "How would you know?" and, you know, you don't have nothing else to say after that. He say, "I been next to her or something," I say, "If my mother stink and you been next to her, you stink too, 'cause she spread her odor wherever she go, and, you know, you ain't got nothing else to say about that, man." (1:16)
Phillip W. responds to the inquiry about sounding in the following way.

Phillip W.: When we sound on somebody's mother or father or something like that, we don't really mean it, you know, we just be playing or something....

FW: What do you sound on when you sound?

Phillip W.: You mean, how do you sound?

FW: What if I say your mother wear combat boots?

Phillip W.: I say your mother wear sneakers to church.

FW: What if I say your mother drink pee.

Phillip W.: Oh, I would say, least my mother don't play dice with the midnight mice, say something like that.

FW: How do you know who wins?

Phillip W.: It don't mean nuttin', see, whoever score, you can tell by whoever laugh

FW: What's a weak one? Give me a very bad sound.

Phillip W.: One that don't score? Like I say your mother tap dance on a needle or something like that

FW: What's the best one you ever heard?

Phillip W.: Best one I ever heard, let's see? I can't really say 'cause all of 'em sound funny. (40:9)

Without going into detail concerning their knowledge of sounding or their ability in this verbal ritual, we can say that the informants do indicate familiarity with it and the informal rules for the activity.
They further indicate that they understand its ritualistic rather than literal intent. In fact, Phillip W. anticipates possible misinterpretation by the fieldworker so that he explicitly states that the insult is not to be taken literally. This interpretation is crucial to comprehending its indigenous function.

4.1.3 Peer Contacts

The most crucial aspect of the indigenous culture is obviously to be found in the types of peer contacts that characterize informants. All three of the black informants claim to be involved with peers from the area, and to adopt many of the indigenous peer values which they interpret to be important, but their actual interpretation of values seems to be realized differently. For Phillip W., there is apparent value placed in the peer gang structure, one of the aspects of vernacular behavior which is in direct opposition to values maintained in mainstream American society (other areas include stealing, cursing, drinking, drugs, and sex).

Phillip W.: We got gangs called the Sharks and the Cobras and I was in the Bell Blacks...stuff like that and I did a few things that happen in the story, I shot somebody before, stuff like that....I talk about it, I shot this guy in the arm and we had a gang fight and my brother hit the guy with a pair of brass knuckles and broke his jaw and everything.... I had my own gun. (40: 7)
When asked about the leadership structure of his peer group, he again interprets it in terms of gang structure, and says:

Phillip W.: President of our club is, I don't want to give his real name.... Let's see, the guys that I hang out with, we vote among ourselves, and we say, "Dragon, we want you for our leader, that's our leader, Dragon, and this right here stands for Flame, and this my name Falcon, so he pick a vice president, a president and a war lord and a boy counselor. Now a war lord job is, they can tell the president what to do by doing they say, "Mr. War Lord, do you think we should have this rumble?" and the War Lord say, "Yeah," and its up to me to say "I don't think so,"...now see, what I say don't really mean too much, but if they agree with me, they ain't got nothing to say....(40: 8-9)

He further elaborates the structure of peer contacts when he comments on how a new teenager moves into the neighborhood.

Phillip W.: Got to test him out first....Now most gangs, they take the kid and punch him in the chest, go through a whole lot of punch 'em in the chest, if he can't take it, can't get in or either make him tight rope walk the roof or make him jump the roof, other words, jump to the roof to roof. (40: 9-10)

Although it is uncertain to what extent the above narration accurately reflects Phillip W.'s authentic types of peer contacts, it seems to be clear that he has adopted many of the values for peer
interaction which are characteristic of the indigenous culture. The apparent value placed on fighting is not found in mainstream society, where such an account would be considered as "anti-social" behavior. But Phillip W. clearly perceives it as a positive value in terms of his peer associations.

Robert S. does not indicate the same sort of value attached to gang structure, but interprets his contacts with peers and the leadership structure of peers in a quite different way. Peer leadership is interpreted in terms of determining activities rather than the structure of a peer gang.

Robert S.: Yeah, this guy name Robin, you know, he think he a leader, you know, see its ah you know he like he not he like my best friend and he, everybody see him with me so many time and he think that I'm his cousin see its Robin and Charles both of those are brothers and I be in the middle of them so like um one of them say "Come with me shopping so I can buy me some clothes"; other one say, "Come me the fruit market so I can buy me something eat," and then, you know, and "I want to go someplace now" so anyhow I can't make up my mind so he say, "Look at here," he say, "I'm the leader, right,"he say, and"you come with me 'cause I'm the leader'....

FW: What do you think makes a leader in a group of guys?

Robert S.: A lot of people think fighting, but I...

FW: What do you think it is? Is he tough if he is a hit with the girls?

Robert S.: Let me put it this way, like if a person come along, you know, you know he real hip and he know, he tell everybody, "Look here man, I'm cool," so you know, step aside or something like that, you
know he say it in some nice words
you know he got like they call it
rap, you know.... Yeah, he rapping,
so you know, you might as well let
him, if your rap ain't strong as his,
you might as well let him be the
leader so we let him, you know, let
him slide through (1: 14-15)

Consonant with his lack of reference to gang peers, his interpretation
of fighting is related to individual antagonisms rather than group fights,
for he notes:

Robert S.: Fights usually come up, like, if you
be talking about something, and some-
body else come and jump in and they
start talking real loud and they say,
why you talking; like, if you be cool,
you know, if you sit down and have a
argument with somebody, the other guy,
he come up, man, he be yelling at you
or something, that's what usually start
a fight, cause guy say, "Eey man, don't
be louding on me," he say, "I ain't loud-
ing you man you know," bamm, hit him in
the face or something. (1: 17)

As might be expected, Robert S. has predominantly black peers with the
exception of one Puerto Rican. Robert has picked up several Spanish phrases
himself. He comments about his peers and their relation to the Puerto Ricans
in the following quote.

Robert S.: It's just three of us that mainly hang
out together, its me, Rubin, Charles, and
Ronnie, us four, we mainly hang out to-
gether 'cause you know, we go to the same
high school and we in the same class, and
we say, "Eh mira," you know, we talking
Spanish and you ask him for a cigarette,
he say, "Dame cigarillo," and he say "I
don't have none" and he say, 'look here, man'.... Like he make his speech like, if we having a party or something and the guys say, "Look at that Spanish guy over there," he walk over to him and say, He make his little speech, he say, "Listen, now listen to me real good," he talk kinda funny. He say, 'Listen to me real good; I may be Spanyoles on the outside, but inside I have a Negro heart." Everybody look at him, they say, you know, they start clapping, 'Yeah, Rubin, say some more," and he be telling them that, and then, most of the time, they say, "what's happening" he consider hisself as a nigger, I wouldn't blame him. (1: 17)

Shawn H. does not give much direct data concerning his peer group structure in the interview, but the few comments we have would seem to indicate that his peer contacts are largely restricted to members of the vernacular culture. He comments on leadership roles among peers.

Shawn H.: Nobody listen to nobody, but, you know, we all stick together. Nearly all of 'em could rap, but I'm the best. Yeah, they gets mad sometime, you know, when we be going out to these parties, you know, I see these girls go by.

FW: Who are some of the guys you're tight with?

Shawn H.: Most of 'em is bigger than me...., Randolph, Roosevelt, Rob, Earl, Randolph, Julie, Tommy, Popo, you know, its a whole lot of us. (24: 10, 11)

Like the other black informants described, the predominant peer contacts are with other blacks.
Shawn H.: All of 'em is Negro except for one, he's Spanish, but you can't tell if he's Spanish 'cause he look like, you know, a Negro, but he don't speak no, he don't hardly understand Spanish too much. (24: 11)

Like other black informants, Shawn H. considers the Puerto Ricans who associate with black peers to be adapting to the black vernacular culture rather than blacks adapting to Puerto Rican cultural patterns.

Our brief anecdotal account of the three black informants used in our comparison indicates that in several important ways, our informants appear to be representative of the black indigenous culture in Harlem. In the light of the preliminary linguistic assessment of their speech by Fasold in terms of its relative nonstandardness, we can proceed with the assumption that we have black informants characteristic of the lower-class black teenage male in Harlem or the Bronx.

4.2 Puerto Ricans with Extensive Black Contacts

Our choice of three informants to represent Puerto Ricans with extensive black contacts is based on the social information provided by the informants in the initial interview, information from the follow-up interview, observations of interaction during our fieldwork, and background information provided by other contacts with YDI staff who have known the informants over a period of years. Ultimately, of course, our judgement turns out to be relative and subjective, but we shall see that there appears to be adequate reason to justify our classification. Our Puerto Rican informants here will be characterized in terms of physical appearance, recreational activities, ritualistic language, peer contacts, and their use of Spanish.
4.2.1 Physical Appearance

As was pointed out in Chapter Two the physical appearance of Puerto Ricans in Harlem may be an important aspect of assimilation into the black community, and, on the whole, there appears to be some evidence to support this conclusion. However, the three informants whom we have chosen to represent a group with extensive black contacts represent three quite different physical types. Informant 18, who will be referred to as Flaco M. here, is quite dark in skin color compared to most Puerto Ricans and has facial characteristics (lips, nose, and quite kinky hair) which might easily be interpreted as Negroid. To an outsider, Flaco may be considered black. It is interesting to note, in this regard, that Flaco himself maintains that it is sometimes difficult to distinguish between blacks and Puerto Ricans. When talking about the racial composition of his school, he notes:

"It's really hard to tell between a Puerto Rican and a Negro; it's really hard, you know." (Second Interview)

In actuality however, there is considerable evidence that Flaco can distinguish between blacks and Puerto Ricans in practically all instances.

The tendency to minimize differences between blacks and Puerto Ricans, however, seems to be one of the characteristics that typifies many Puerto Ricans with extensive black contacts. This will be noted in other contexts.

Whereas Flaco M. represents the end of the physical spectrum that most nearly approximates blacks, Informant 5, who will be referred to here as Rollie S., represents an intermediate point on the spectrum. He appears
to be an intermediate skin color but does not have facial features characteristically considered Negroid. He does, however, have kinky hair, and possibly might be identified by an outsider as a "light skinned Negro." He would, however, never be identified as black by a member of the Puerto Rican or black community in East Harlem where he lives.

Our third informant in this category represents a relatively light Puerto Rican. Informant 14, who will be referred to here as Danny D., has no features that might be identified as being black, is relatively light in skin color, and has hair that is dark and slightly wavy. Impressionistically, we would say that he would be identified as a light Puerto Rican, but he would not be classified as white.

4.2.2 Recreational Activities

The recreational activities which are reported by our informants in this category appear to match those described by the black informants. Activities such as Johnny-on-the-pony, stickball, lodies, flying pigeons, etc. are all referred to by our informants. For example, Rollie S. gives the following account of flying pigeons (Rollie S. does not, however, fly pigeons himself).

Rollie S.: When they see a stray they want like a blue Tiplet or something. Like, they get a bamboo stick and they put a rag at the end. They just fling it up and all the birds go up after it and then he keeps throwing it and he goes Yeow, Yeow, and whistles and they, you know, surround the bird, they keep flying with it. Then you know, he starts whistling, Whee, Whee. They start coming down, then he starts throwing feed and, you know, then they watch the stray and then, like when the stray's coming at them, you know, they
put feed closer to them and they put some of they hand in, get close to they grab it, you know, easier. But if its on the ground, they have net they just throw it over.

FW: And they put it in the coop?

Rollie S.: Yeah, for 'bout three weeks

FW: Three weeks and let it out?

Rollie C.: NO, they put a rope on it, then they throw it up, you know, this long, and he just keeps on winding and they fly. Then the whistle to see if it comes down and when it comes down, then they take it off and they let it fly by itself (5:2)

Similar descriptions could be given for the other activities but we will not do so here, since they match in close detail the activities also reported by the black informants.

One sport which might be mentioned in connection with this group of informants is basketball. Silverman (1971: 52) has pointed out that basketball is the dominant sport for black adolescents in the city, while baseball is more typically of interest to Puerto Ricans. He further notes that Puerto Ricans with black friends are often interested in basketball. In this regard, it is interesting to note that both Flaco M. and Rollie S. spend considerable time playing basketball. In fact, during the fieldwork, the senior author, a former college basketball player, spent considerable time participating in choose-up basketball games with Rollie S. in which the majority of players were consistently black.
4.2.3 Ritualistic Language

We have seen in our previous discussion of the black group, that the verbal ritual of sounding is an integral part of the indigenous culture of most black male adolescents in the inner city. We would therefore expect that Puerto Ricans with black contacts would be familiar with some of the verbal rituals characteristic of black culture such as sounding. All three informants in this group indicate their familiarity with this verbal activity. In response to the question, "Do the guys sound on each other?" Flaco M. replies:

Flaco M.: Yeah, like yesterday we went over there and this guy name Rollie, me and him was sounding 'bout mothers, you know, say "Hey man, your mother's a cab driver, no, your mother this and that"...

FW: Nobody takes it seriously?

Flaco M.: No, me and him takes it—we have been sounding ever since we came up here and we never took it serious, like my grandfather is dead, you know, ah man, your grandfather's a bum, this and that, you know, like words don't harm you....

FW: Do you ever say anything that's true about their mothers?

Flaco M.: No, No, I don't say nothing about they mothers, in the city I do a lot... there was this guy up in the city that wears blue pants that he wore about three weeks, he didn't take 'em off, and my nephew just sounds on him and he sounds on him serious, I tell him "When you gonna take off them pants, what do you think this is?"
We joke with him like that and he came back with it, ah man, "Your mother this and how's your mother," and I say, "Oh yeah, your father too," we just keep it up, and then we stop and we shake hands, see that's the way I like people, don't take things so serious.

FW: What would you say if Rollie said, "Your mother's a cab driver"?

Flaco M.: I'll say your mother's a bus driver.

FW: What if he says your mother stink?

Flaco M.: And your mother's a box, we gotta lot of ways to it.

FW: Your mother drink pee.

Flaco M.: ... I said that I got to your mother and then he say, "Your mother's a hole," and I tell him, "Your father's a faggot" and we kept on, but we never took it serious. (18: 6-7)

Rollie S. also indicates that he is very familiar with the ritual of sounding. In fact, of the informants we interviewed during the fieldwork, including both blacks and Puerto Ricans, he was clearly one of the top sounders, judging from the informal rules for effective and ineffective sounds discussed by Labov, et al. (1968). Several informants mentioned his ability in sounding when talking about effective sounders. The following interchange took place between the fieldworker and Rollie S.

FW: What do you think makes a leader of a group?

Rollie S.: A leader? Well, that's hard for me, maybe --

FW: Does he have to be tough?
Rollie S.: Now man, a leader just got to know how to use his head, you know, try to-- 'cause I have to be too smart, just don't try to be too bad.

FW: Does he have to be a good sounder?

Rollie S.: Not really, 'cause it's a lot of guys that could sound.

FW: You a pretty good sounder, I hear. What if I said to you your mother drink pee.

Rollie S.: Your mother's a wino, tell you like that.

FW: Your mother's name Annie Oakley.


FW: Your mother so old she fart dust.

Rollie S.: Say your mother so old everytime she snap her fingers she crack her knuckles.

FW: What if I said your mother wear combat shoes to Sunday School?

Rollie S.: Say your mother wear high-heel sneakers to church.

FW: What if I said your mother's like a railroad track, she been laid all over the country.

Rollie S.: Say your mother got more tracks than canal 47.

FW: What if I said your mother got legs coming out her nose?

Rollie S.: Your mother got laid so many time she look like hopeless hoe.

FW: I'll bet you're a pretty good sounder.

Rollie S.: Pretty good but there's guys better than me 'cause a guy made me cry once.

FW: What happened?
Rollie S.: He got on me too much, man, man
we could take it but he made me
cry once, you know, you know, what
it is, somebody getting on you all
the time, you feel cheap, man.

FW: What do you usually sound about,
mothers?

Rollie S.: Yeah, we always cut on each other
mother. (5: 8-9)

Rollie S. clearly understands the social function of sounding and
has acquired a good deal of personal skill in it. He further indicates
his familiarity with some of the other verbal rituals characteristic of
black culture with his ability to recite a version of "Signifying monkey,"
a well-known folktale in black culture.

Signifying monkey
Stay up in your tree
You are always lyin, signifying, but you better
not monkey with me

Said the monkey to the lion one day
There's a great big elephant down your way
He talk about your mother and your grandma too
He don't show much respect for you

Signifying monkey
Stay up in your tree
You are always lyin, signifying, but you better
not monkey with me

So the lion roared from jungle to jungle
He took a leap at the elephant and
The elephant stomped him down
So the lion ran back to the monkey and he said

Signifying monkey
Stay up in your tree
You are always lyin, signifying, but you better
not monkey with me
So the monkey was swingin from limb to limb
He was tryin for this high limb and he miss
And the lion grabbed him and
The lion said 'I should cut your head off''
Then the monkey said "Please Mr. Lion, please
Don't cut my head off
I'll tell you bout someone who's talking bout
your grandma."

And then, the monkey jumped up in the tree
And the lion ran and he said

Signifying monkey
Stay up in your tree
You are always lyin, signifying, but you better
not monkey with me. (5: 10)

Danny D. obviously does not have the same sort of skill that
Rollie S. has in verbal rituals, but he also demonstrates his under-
standing of the social significance of sounding.

FW: Do the guys that you know sound on each other?

Danny D.: They sound, but it's just for fun, you know.

FW: How does that work?

Danny D.: First guy starts with his clothes, then it work up to they mother but they know they ain't taking they mother seriously until one of them starts swinging.

FW: Does that happen frequently?

Danny D.: No, not around our block, 'cause they know that we're only fooling...

FW: Could they ever say anything true about someone's mother?

Danny D.: Nah, they don't know too much.

FW: How would you sound on somebody's clothes?
Danny D.: Man, why don't you give those pants a break, and if a guy got 'em real highed up, real high up, you say, 'When your shoes have a party, invite the pants down' and things like that.

FW: Do you know any others, say about somebody's mother? Like if somebody say 'Your momma stink.'

Danny D.: When this guy's getting wise with you, you say, 'What's your mother, a truck driver or wise guy?' and thing like that.

FW: What if they say your mother's name is Annie Oakley.

Danny D.: That ain't nothing, boy, I say she could ride, boy she could shoot, probably shoot your father in the head. (14: 5-6)

These informants' comments about sounding plainly indicate their familiarity with the informal rules for participation as well as its social function. They understand it as a ritualistic activity which is not to be taken literally. They further indicate knowledge of the format for sounding and the themes which are appropriate to sound on. And, by illustration, they reveal their awareness of the evaluation measures for sounding. In this sense, we can decipher no real difference between what our black informants said about it and what our Puerto Rican informants in their group said about it.

4.2.4 Peer Contacts

No doubt the most important aspect of our three Puerto Rican informants in this category is the types of peer contacts that they have. All three informants clearly have predominantly black or mixed peers.
Because of the importance of peer contacts we shall discuss in some detail our data about peer contacts for each informant.

Flaco M.'s peers are predominantly black. In fact, after he lists a number of his friends, he responds to the inquiry about whether or not the list included any blacks by saying:

Flaco M.: Yeah, all of 'em Negroes.

FW: Any of them Puerto Rican?

Flaco M.: Yeah, like Gabriel, Mito, they Puerto Rican. (18: 8)

In the follow-up interviews, he lists his five best friends; the first two are black. And, of the Puerto Ricans, he mentions both Rollie S. and Denny D., both of whom we are considering here as having extensive black contacts. When asked to discuss the leader of his peer group, Flaco first cites one of his black peers. And his present girlfriend is black. It is interesting to note his statement on the qualifications for potential peers. He notes:

Flaco M.: I check how cool he is, this is the first thing I start off with; whenever I say, "Man, you a bum, this and that." And I joke, you know, say, "Man, you a bum, you know that?" Then he come to me, say, "Man you too, man." Then we keep going, then I know the dude nice and then I know he's alright, a soul brother. (18: 7)

The terms and particular reference to "soul brother," an exclusively black term, obviously indicate that he is adopting standards from black
peers. His comments about peer contacts were clearly substantiated by our observations during our fieldwork. He was consistently observed interacting with a majority of black peers.

The peer contacts of Rollie S. appear to be quite mixed among Puerto Ricans and blacks. After naming a list of peer names in the initial interview, he notes that some of these are Puerto Rican and some Negro. In the follow-up interview, however, he lists five friends, and only one of them is black. However, among his Puerto Rican peers are Flaco M. and Danny D., both of whom are included in this section of Puerto Ricans with extensive black contacts. We would expect that this type of Puerto Rican peer is probably typical of other Puerto Rican friends he listed. In commenting further on his friends, it is interesting to note how he interprets race relations in East Harlem.

You know, like before, it was a lot of race problem in East Harlem, like the community works together, you know, none of this bullshit about now, you black, get away from me, you're white, you better go to Hell or something like that. Ain't like that no more, you know, like some of my best friends are colored and white, you know, don't make no difference to me. (5:7)

We observe here a tendency to minimize race differences between blacks and Puerto Ricans in their interactions. His stereotyped statement about white friends is regarded with suspicion because none of our background information indicates that he has white peers. In our observation of Rollie S. during our fieldwork, it was our general impression that he
has some leadership status among his peers, including both his Puerto Rican and black peers. On two separate occasions, we observed him challenge another teenager to fight in front of a large group of peers, and in both cases it was the other antagonist that backed off. He reports the incidents we observed in his interview, saying:

Rollie S.: Like today I had two fights...
   Yeah, fought two guys by the same name, fought ARC, you ever heard of them guys, Addict Rehabilitation Center. Well, them, both of 'em name is Sam Jones, you know. This is my first time sitting at the old folks' table, you know, three sessions so they come telling me, "Clean up the table," you know, and they didn't ask me in a nice way, so I said, "Look, I'm not cleaning up nobody's table, I take my own stuff up; you want your stuff clean, take it up yourself."
   So, you know, the guy came, he put his hands on me, he say, "Clean the damn table," I say, "Yeah, if you don't get your hands off me, you gonna get damned, 'cause I'ma punch you right in your mouth." And he thought 'cause I was small, you know, you know, I was scared of him and when I got up off the chair I told him "You gonna get, take your hands off me." He didn't want to, so I swung at him. (5: 13)

At various times, he has also been involved in gang activity in the area with his peers. He reports:

Rollie S.: Like we had a fight against this gang call the Glory Stompers you know, like they wear you know chains and dungaree jackets you know like and they said they was going to take us out of our own %.
   Amos says, that's not our bag
to fight, just to play ball. So you know like they, they came one night by surprise then they grab my boy, he's like one of my main aces but they grab him and they stabbed him in his leg and they, they stabbed me about a month after him in my back, so that everybody, you know, got all rallied up, a lot of clubs got together and they started fighting over it and then the cops came and they busted as some you know the one of them got kilt you know, so they stop fighting.

FW: One of the kids got killed?

Rollie S.: Yeah, one of the Glory Stompers.

FW: How do gang fights usually start?

Rollie S.: No, you see like most of the time a fight start like this say, I'm in a gang right, and like I walk to somebody block like they might just you know, I might have my jacket on or something and you don't turn it over you know that's showing disrespect for the block you know like say your gang is in my block and I have my jacket on and I know y'all have a gang, and y'all don't like nobody to walk through there who's in a gang right, I turn over my jacket, at least I show you some kind of respect you know, I'm not trying you know just mess'n around with you, you know, I turn my jacket over so let um know and you know the guys see you when they take they jackets and they burn them, then other, the guys come and try to fight us, stuff like that.... (5: 14)

There is considerable evidence from our background information which indicates that the events he has described with respect to fighting are quite authentic. He has also adopted many of the other values ascribed to
lower class teenage behavior in East Harlem, including at times various types of delinquency and drugs. On the basis of our data about peer contacts, we conclude that Rollie S. is clearly an integral, member of an indigenous peer group with both black and Puerto Rican peers.

Danny D. does not appear to have the extensive involvement with some of the indigenous peer activities reported by Rollie S.. In his initial interview, after listing some of his friends, he notes:

A lot of 'em are Negroes. My brothers, when we first moved in the only friends we had were Negro and they were all--like they say we acted cool with them, they all acted cool with us. We went to their dances. Once, we was--only me and my brother was the only white people in there on a wedding, boy, and they treated us like we were just they kind of people, they serve us food, and say "Take all you could, this is a party and that." (14: 7)

In our follow-up interview, he names five intimate peers and four of them are black. One he classifies as white, but it is unclear whether the one classified as white is Puerto Rican or not because we note in the above quote that he considers himself white. Rollie S., on the other hand, makes a three-way classification between black, white, and Puerto Rican. In talking about Puerto Rican peers during his initial interview, Danny D. mentions two peers who are well known to us. One, Flaco M., is discussed here as a Puerto Rican with extensive black contacts and the other one, while not considered here, would also qualify for this category. Thus, we again see that Puerto Rican peers of Puerto Ricans with extensive black contacts also have predominantly black peers.
We may conclude our profile of the three informants with extensive black peer contacts by noting that the informants themselves have, to some extent, peer contacts with each other. Flaco M. is referred to by both Rollie S. and Danny D., Danny D. is mentioned by Flaco M., and Rollie S. is referred to by Flaco M. in talking about peers. To further substantiate our conclusion about extensive black contacts, it should be noted that both Danny D. and Flaco M. live in tenements which are predominantly black. Rollie S., on the other hand, lives in a mixed tenement with a probable majority of Puerto Ricans. Rollie S. and Flaco M. attend the same school, which has a majority of black students. It also appears that Danny D.'s school has a majority of black students. This evidence, then, gives us further confidence in our classification of the informants as representatives of Puerto Ricans with extensive black contacts.

4.2.5 The Use of Spanish

Finally, we should mention to what extent the informants claim to use Spanish. Our profile here is not intended to give an extensive description of the conditions under which Spanish and English are used; this has been done in other studies (c.f. Fishman et al. 1968). Rather, we are interested in a brief and general account of Spanish/English usage as related to our description of the three informants in this group.

To begin with, all three informants, who have lived in East Harlem all their lives, learned Spanish as their first language, and all three report their acquisition of English to have taken place when they entered school. The parents of all three speak Spanish but apparently can understand enough English so that the informants do not have to speak Spanish exclusively to them. Rollie S. and Flaco M., however, speak Spanish almost
exclusively to their mothers. English is used with siblings, and for the most part with peers. Rollie S., however, notes that he sometimes uses Spanish with some of his Puerto Rican peers and with younger Puerto Rican children. Of the three informants, Rollie S. uses Spanish the most, whereas Danny D. knows and uses the least amount of Spanish.

Only Rollie S. claims to joke with peers in Spanish. He comments:

You know, like sometime I say, "Tu madre es puta," that means your mother's a whore, and the guy says to me, "tu abuela," you know your grandmother and jive, and they say, "Vamos a comer," let's go eat, stuff like that, they tell you.(5: 11)

The reference here by Rollie S. seems to be a ritualistic insult which is analogous to "sounding" as described earlier, but it appears that this type of verbal ritual in Spanish among peers is not nearly as extensive nor ritualized. In fact, it appears to be an assimilated activity from black culture which may be translated into Spanish. It is interesting to note Danny D.'s reasons for not "joking" in Spanish.

So the guy could know that I'm boss, I don't want to hide nothing (Second interview)

---

1 Although ritualistic insults may exist in Spanish, their social function and format apparently differ considerably from the type of ritualistic insult described here. Mothers and grandmothers are typical taboo areas for insults.
Particularly with Puerto Ricans having extensive black contacts, it appears that the use of Spanish among peers can be stigmatized. For Puerto Ricans to use Spanish around black peers is socially inappropriate for two reasons. For one, it may be associated with ineptness in cultural adaptation. In this sense, it may carry a connotation similar to the use of the term "country" as it is used in black culture (cf. Kernan 1969)—the lack of assimilation to inner-city lifestyle by rural immigrants. In New York City Puerto Rican Spanish, the term "jíbaro" is used with this sort of connotation. Furthermore, the use of Spanish may be viewed suspiciously by black peers who do not understand it and therefore it could be disruptive to the social group. Informants sometimes mentioned that Puerto Ricans who talk Spanish around black peers may be suspected of criticizing or attempting to conceal information from their black peers.

On the other hand, the use of short Spanish phrases may be learned by some of the black peers with whom Puerto Rican teenagers associate. It is interesting to note that both Rollie S. and Flaco M. refer to the fact that some of their black friends speak Spanish. Thus, when Rollie S. is asked if he has friends who speak Spanish he replies, "Yeah, mostly the colored guys." Similarly, Flaco M. remarks, "Colored dudes, you know, they know Spanish too." In actuality, there is evidence to indicate that the Spanish used by black peers is limited to a few "learned phrases." Although the actual use of Spanish by blacks is inconsequential, it is important to note here that this is another case in which differences between blacks and Puerto Ricans are minimized by Puerto Ricans with extensive black contacts, even though the perception of behavior does not match real behavior.
4.3 **Puerto Ricans with Limited Black Contact**

Our choice of informants to represent a Puerto Rican group with limited black contacts is based on social information provided by the informants in the interviews, information provided by YDI staff, and observations during our fieldwork. We must note here that the categorization of informants in this category is quite relative; because of the nature of social interaction in Harlem and the Bronx, it is virtually impossible to isolate teenagers who have no contact with blacks. For example, although there are schools that are predominantly Puerto Rican, there are no schools which might be considered exclusively Puerto Rican. Similarly, there are tenements which are almost exclusively Puerto Rican, but the blocks of tenements tend to show integration between black and Puerto Rican tenements so that there are contacts among teenagers in the streets. Our most important basis for classification is the peer group, where the influence on speech may be presumed to be the greatest. Unlike schools and housing, almost exclusively Puerto Rican peer groups can be found. Like our previous description of a Puerto Rican group, the informants will be characterized in terms of physical appearance, recreational activities, ritualistic language, peer contacts, and their use of Spanish.

4.3.1 **Physical Appearance**

The three informants who are chosen for this category all appear to be intermediate with respect to the physical characteristics found among Puerto Ricans in Harlem. None would probably be classified as black by an outsider; on the other hand, they would not be mistaken
as non-Puerto Rican white. Their skin complexion is intermediate, and their hair color Latin black. Two of them have wavy or curly hair, but it would not be classified as kinky.

4.3.2 Recreational Activities

The indigenous recreational activities reported by our informants in this category tend to match those described by the other two groups of informants. We thus have references to activities like skelsies or lodies, stickball, ring-o-levio, handball, and flying pigeons. The descriptions of these activities approximate the descriptions that we have received from the other two groups of informants. Thus, Informant 7, whom we will refer to as Willie E., describes Skelsies as a game played with bottle caps.

Yeah, Skelsies you got to get in into, see we have thirteen boxes, you know, and then you start off at the starting line. Then you go with number one, then if you get in number one, you got to number two, then, so on and so 'till you get number -- 'till I have to get number thirteen. If you get in one of the empty spaces, well, you stuck there. (7: 1)

Similarly, we have descriptions of flying pigeons which match the descriptions we have from our black informants and Puerto Ricans with extensive black contacts. Informant 22, referred to here as Roberto S., describes how his brother used to fly pigeons.
Roberto S.: They build up a little house around there, a little bigger than this, and then they put it up on the roof, top of anything, and there they put a table on top of that. Then, they buy birds and the birdhouse at pet shop, and then they put it inside, inside a cage. And then, after that you feed them and everything. Then you let out a couple of them out, and you hit 'em with a stick and they fly up all around the sky, and then some other birds, I mean, another coop, a man, he let his out. Now if they catch one of our birds, they are to keep it, and then they set it to us back again.

FW: How do you train them to start with?

Roberto S.: Just buy 'em, leave 'em inside the coop and you feed 'em.

FW: For how long do you have to do that?

Roberto S.: Three day or four days and then they get used to it, you know. Then you leave 'em out for a little while and then you put them back in. In around four days or three days you let 'em out. Put up the stick they go out, then they come back on top of the roof and then go in.

Although these recreational activities tend to match the descriptions given by the other groups of informants discussed so far, we can note that for these informants, the emphasis on "mainstream" sports does not match the emphasis described for the previous group of Puerto Rican informants. Although all three informants mention that they do, on occasion, play some basketball, it is clearly not given the emphasis that it is accorded among our black informants and the Puerto Ricans with extensive black contacts. Baseball, on the other hand, seems to be given considerably more
emphasis, both in terms of interest and in terms of participation. For example, Willie E. was observed usually playing softball during recreational periods when there was an option between basketball and baseball. And he comments:

Sometimes we play softball and if you take a basket, we play basketball. (7: 1)

Likewise, Roberto S. showed little interest in basketball and did not participate in half-court games as did some of the other informants. Informant 28, referred to here as Joseph D., did, however, participate in some basketball, but did not reveal the interest and ability that the black informants and the Puerto Ricans with extensive black contacts did.

4.3.3 Ritualistic Language

The previous two groups we have described clearly indicate a familiarity with the verbal ritual of sounding and the informal rules for the ritual. The three informants in this group all show some familiarity with the ritual but do not always attach to it the same sort of social significance that the other groups did. In fact, several of the comments indicate that conflicts have arisen over their failure to understand its function as a ritualistic rather than a personal insult. Although there is a potential for conflict in sounding as was observed and described by black informants and Puerto Ricans with extensive black contacts, their conflict does not arise from a basic cultural confusion of the significance of sounding. In the case of blacks and Puerto Ricans with extensive black
contacts, conflicts arise when an informant is embarrassed by his inability to sound or the failure to make a sound sufficiently hyperbolic. But in the case of Puerto Ricans with restricted black contacts, there is sometimes confusion over the basic interpretation as a personal or ritualistic insult. Thus, when they encounter sounding, they may respond in terms of personal insult. Roberto S. indicates confusion in understanding its function when he responds to the question "Do they sound on one another?" with the following reply.

Roberto S.: Yeah, you bet, like Rollie.

FW: Is he a pretty good sounder?

Roberto S.: He had a fight yesterday... 'cause of the guy, because he was talking to me in Spanish and the guy wanted to fight, so he start fighting, 'cause everything that Rollie said to me in Spanish, I go, I do it to the guy, then the guy got pissed off and started fighting with Rollie.

FW: Well, how about if somebody said to you, like they're sounding on your mother and they say, "Your mother stinks," what would you say?

Roberto S.: All I'm gonna say is sticks and stones will words (sic), but words will never harm me. I don't care what they all say. Now if you tell all that to my brother, he get pissed off and he do something about it.

To Roberto S. sounding seems to be interpreted as a personal rather than a ritualistic insult, indicating an ignorance of its cultural function.
The other informants reveal some understanding of this use of ritualistic language but not apparently to the same extent that it is understood by the other groups we have described.

Willie E. engages in the following discussion of sounding:

FW: What about sounding?

Willie E.: ...Oh yeah, sounding, you mean, Oh, like, you know, your mother eats ....

FW: What did you think I meant?

Willie E.: I thought you meant cursing.

FW: Well there are some sounds that have cursing in them.

Willie E.: Yeah, up here we sound, but we never knew no bad words, like your mother, your mother eats hunch back beans and cripple rice, all that kind of stuff. I went to your mother for a loaf of bread and your mother came at me twelve different ways, you know, all that sort of stuff.

FW: What if I said your mother smelled like twenty pounds of yesterday?

Willie E.: Your father.

FW: What would be an example of one with a curse in it?

Willie E.: Well, your mother has hair on her chest, your father has a pussy, and, you know, all that silly stuff.

FW: What all can you sound on?

Willie E.: What do you mean?

FW: You can sound on somebody's mother, right?
Willie E.: Yeah, you know, when you say it, a guy 'll know when you really mean it, and he'll know when you are only fooling around.

FW: What is it most of the time, do you really mean it?

Willie E.: No! Fooling around.

FW: Does sounding ever start fights?

Willie E.: Sometimes... Well, you could say always they will start a argument; then, after the argument, you know, punch in the nose.

FW: When you say something about somebody's mother, can it be true?

Willie E.: Well, no, because you don't if you don't know the guy's mother, you know.

FW: What if you do know him, do you say something true or do you make it up?

Willie E.: Well, sometimes I say something that's true and the guy come after me but I'll start running and laughing and he'll think I'm joking, you know, 'cause I don't want to get punched in the eye.

FW: Did that ever happen?

Willie E.: Oh yeah, ....one time I told this guy, you know, I walked in you house and stepped on cigarette and your mother said who put off the lights, then he came after me with a bat and I was running.

FW: How about somebody's clothes?

Willie E.: Clothes, Oh, he say, you hit the number or the welfare check came?
It is obvious that Willie E. is aware of how to sound and some of the social functions that it has, but he is also aware of the sorts of conflicts that can arise if others are ignorant of its significance.

It is interesting to note that our third informant in this category, Joseph D., also immediately mentions the potential conflicts that can arise from misunderstanding its social function.

FW: What about sounding?

Joseph D.: Yeah, but they only do it joking around, 'cause see, our block is, like, together, you know, and even though there are a couple of fights everybody likes each other a lot, so if they when they sound, you know, they sound at you, you sound at them, you know, just like playing around.

FW: Do fights ever start over it?

Joseph D.: No, sometimes they in a bad mood, they take it serious, they go and pick up a bottle and this you know, threaten you to do something, it's a lot of bull.

FW: What can you sound about?

Joseph D.: Oh, we sound how skinny your mother is, how fat she is, how ugly she is, how funny your father is, how many teeth your sister has, the body all...

FW: Can it be true?

Joseph D.: Sometimes it isn't, that what offends them, like, if, you know, you got a mother with a blue eye and a green eye kid had, they said this a bunch of .... Your father got bad breath from drinking all that liquor, you know, they get offended 'cause other people hear about it, and then, you know, since they know its
true but maybe they change it from a big nose to a gigantic nose, you know, and that's how they get mad.

FW: Do you ever get in on it?

Joseph D.: Yeah, it's fun sometime.

Joseph is, as the above passage indicates, familiar with sounding to some extent. If, then, these informants are representative of the larger group of Puerto Rican informants with limited black contacts, we may conclude that it is a verbal ritual which is familiar to some extent to this group through direct or indirect sources. However, it is not as widespread or elaborate among this group vis-a-vis the previously described groups. And, the frequent reference to conflicts which result over the activity suggests that the understanding of its social function is not always clear. In Spanish, the insult of a mother can be considered to be a very serious offense and can readily start a fight. Whereas its role in black indigenous adolescent teenage culture is quite pervasive, the incomplete assimilation of this activity among Puerto Ricans in Harlem and the Bronx would therefore make it much more susceptible to potential conflicts among Puerto Ricans. These conflicts appeared to be a much more frequent theme among Puerto Ricans in our corpus than among blacks.

4.3.4 Peer Contacts

As mentioned previously, the most crucial aspect of our classification into the category of Puerto Ricans with limited black contacts was the information available on peer group contacts. Of the three informants represented here, none of them listed any black acquaintances when asked
to list the names of their close friends. Willie E., after commenting that all the close friends he named are Puerto Rican, is asked if he ever hangs out with any Negroes:

Sometimes, over here, but you know like you might know a friend, you know, that's you know, good and next thing you know he's stealing and everything, so I don't stick around with those kind of guys: 'cause I could get into trouble. (7: 10)

From other statements the informant makes during the course of the interview, we do not get the impression that stealing is, in itself, an activity to be avoided; it is only given as a reason for avoiding black acquaintances. In fact, when he is talking about his own peer contacts, he mentions the function of stealing in terms of the vernacular values.

Nobody there has a best friend unless they both do the same thing, you know, so over there in order for you to have a good friend, you have to do the same thing he does, you know, like if he robs a store, you know, you have a record of robbing a store too. (7: 7)

Further in the interview, when talking about peer acceptance, he notes:

Like, sometimes when a new kid comes in the block and he wants to get into a gang, they'll make you steal something. Like, there's a gang around where I live, you have to steal five dollar worth, you know, of stuff, not more or less, five dollars exactly. If you steal five dollars exactly, you're in the group and they give you your jacket. (7: 9)
Roberto S. also mentions no black peers, and comments concerning black friends.

Roberto S.: No, I don't hardly go with them, I only go with Puerto Rican and that's it. Colored guys? They all right.

FW: Are they mostly Puerto Ricans where you live?

Roberto S.: Yep, hardly everything Puerto Rican, only a couple Italian people, that's all I see. (22:10)

Joseph D. does not mention any black peers in his list of peers, but when asked if there are any Negroes he hangs out with, he notes:

Joseph D.: Yeah, there about two colored guys sticking with us, we treat them cool, we teach 'em Spanish.

FW: Are the rest of them Spanish?

Joseph D.: Yeah, rest of them Spanish and there's one Irish. (28:10)

Quite frequently, when asked specifically if there are any Negroes among peers, informants will mention some black acquaintances. However, based on other comments in the interview, the specific list of peers, and the observation of peer contacts, it is quite clear that these acquaintances are not really an integral part of their peer contacts. (That is, the way the question was asked evoked the particular response.)
4.3.5 The Use of Spanish

All three of the informants in this group have learned Spanish as their first language. Their parents speak Spanish to them predominantly, and they speak to them in Spanish. Their peers are also capable of speaking Spanish, but the informants maintain that English is used with considerably more frequency among peers than Spanish. We may say that these informants probably use Spanish outside of the home to a greater extent than our previously described group of Puerto Rican informants. Joseph D. reports that he talks Spanish with his girl friend, and Roberto S. uses it to some extent with his peers. It is interesting to note, however, that this variety of Spanish is often perceived to be different from Puerto Rican Spanish spoken on the island or by recent immigrants. Thus, Willie E. comments:

...the teenagers that are born in Harlem or in New York City, you know, and their parents are Puerto Rican, they would pronounce the Spanish words in a different sort of way. But if you go to Puerto Rico, you know, and talk like that, they wouldn't understand you too well, they be correcting you every word you would say. (7: 11)

The reference to different varieties of Spanish is mentioned by several informants, particularly those who have been to Puerto Rico or been around recent arrivals from the island.

We conclude that we have, in the three informants chosen for this category, fairly typical uses of Spanish and English by second generation teenagers of immigrant parents. Spanish is dominant in the home, but
is still used to some degree. As a group, they may be expected to use considerably more Spanish with peers than the Puerto Ricans with extensive black contacts.

4.4 Puerto Rican Lames

In the previous sections, we have described informants who represent different types of groups in our data. Their participation in various types of activities found in the community, their types of peer contacts, and their alienation from the educational system (most of them are several grades behind their expected grade or have dropped out of school) seem to indicate that they have not adapted to many of the values expected of "mainstream" teenagers. Rather, their orientation appears to be directed toward various indigenous subcultures found in Harlem and the Bronx. But sociological data from our sample of informants do not indicate that all the informants can be categorized in the three groups we have discussed so far. There are some informants who do not participate in the indigenous value system to the extent that other informants do. In some cases, these informants may be social isolates, who do not have extensive peer contacts. In other cases, they may have contacts with a restricted group of peers whose values tend to conflict with the values of the indigenous culture. In this section, we shall describe three Puerto Rican informants who do not appear to fit the value orientation of the previously described groups in East Harlem and the Bronx.

4.4.1 Physical Appearance

Two of the three informants in this category would probably be classified as light with respect to their skin color. None of them
would be classified as dark and would not be misclassified as black by an outsider. It is possible that the two light informants may be identified as non-Puerto Rican white by an outsider. Both have a light skin color and straight hair. The third informant appears to be more intermediate in his physical appearance and would probably be identified as Latin by outsiders.

4.4.2 Recreational Activities

In some respects the recreational activities for this group match the other groups, but in other respects there are differences. For example, Informant 9, who will be referred to here as Dennis S., can give descriptions of how stickball, skelsies or lodies are played, but he claims not to participate in many of the recreational activities of the street and there is ample evidence from our observations that this is in fact the case. He notes:

Well, games, the only thing I play when I do have time, I just play a little two-hand touch football or play catch with my brother, that's all. (9: 1)

Although not participating in some of the street games, he does participate in some of the mainstream sports; he is an outstanding swimmer and adequate in baseball and track.

The other two informants in this category, Informant 34 and 37, who will be referred to here as David M. and John R. respectively, are
able to give more elaborate descriptions of games like stickball, Johnny-on-the-pony, and ring-o-levio, but still do not appear to participate fully in the games of the street.

Thus, it is interesting to note John R.’s comment:

John R.: I just like to play ball.
FW: What else do you play?
John R.: Usually none, just playing ball or else I just walk around. (37: 1)

When the topic of street games is pursued by the fieldworker, however, he does give adequate descriptions of stickball, ring-o-levio, and skelsies.

Although David M. also gives quite adequate descriptions of various indigenous games, it is interesting to note his initial interpretation of our attempt to elicit games.

FW: What other games do you play?
David M.: You mean at school? At school I play some soccer, I was on the track team, I use to broad jump.... (34: 1)

He was one of the few informants in our corpus to interpret this question with reference to recreational activities at school. Other informants generally had no trouble interpreting this to mean indigenous games or mainstream sports in the neighborhood. It is also interesting to note his response to the question about flying pigeons (an activity in which all three of the informants in this category failed to indicate any of the generalized knowledge revealed by informants in the other groups).
David M.: Pigeons...I got fish, but I ain't got no pigeons.

FW: You got an aquarium?

David M.: Yeah, I got a little aquarium, have a ten gallon tank with a dynaflow in and fluorescent light; I have shore tails, angel fish, zebras, grommies. (34: 3)

Of all the informants we interviewed, he is the only one who described this particular type of hobby.

Our brief survey of the three informants in this category indicates that, although they can quite adequately describe some of the indigenous games, they do not fully participate in them.

4.4.3 Ritualistic Language

The responses of our three lame informants to questions about sounding tend to be very revealing. The following conversation about sounding took place with Dennis R.

FW: What about a good sounder?

Dennis R.: A good sounder? I don't know.

FW: Do the guys sound on one another?

Dennis R.: No sir, they curse too much, that all on the block.

FW: Do they talk about one another's mothers?

Dennis R.: They just curse and call each other's mother whores and prostitutes and what not.

FW: What if I said to you your mother drinks pee, what would you say?
Dennis R.: Well, I don't say nothing. I think you are very dumb. But around the block if somebody say that I probably punch them. See, I'm very quiet, but nobody round the block messes with me. (9: 4)

Dennis R. obviously does not know what the social significance of sounding is and fails to understand its ritualistic function. He does not even indicate that he is familiar with the term sounding, a fact which was corroborated from our observation of his interactions outside the interview. He assumes it is intended as a personal insult, indicating his ignorance of its usage in black culture and various sub-groups of Puerto Ricans. John R.'s initial reaction to our discussion of sounding also is quite negative, although he admits that it is engaged in periodically.

FW: What about sounding?

John R.: Oh no, sounding is trying to put somebody down, discriminate is an educated word for it.

FW: I hear what I think must be sounding, kids sounding on each other, they're doing it in fun as near as I can figure out, but it looks like its a kind of routine, you know, that they kinda enjoy. In a way they seem to be insulting each other, but they don't take it that way.

John R.: No, we don't sound in our group.

FW: I don't think it's necessarily bad.

John R.: No, its not necessarily bad up to an extent, like we would sound and be joking on each other, we would say, you mother looks like sad sack.
FW: How about your mother wear combat boots?

John R.: Your mother wear combat boots or your mother's a waterboy for the New York Mets or something like that.

FW: What's the funniest one you ever heard?

John R.: Oh, I don't know, there's many funny ones, but right now I'm not much of a joker, plus, when it gets out of hand, as I said, Elliot says, "That's enough, knock it off, you know, the guy's getting mad." You know, we know when to stop, and if we don't know, we'll get reminded by one of the fellows. And we never—we usually never fight against each other. (37: 7-8)

From John R.'s statement, we observe that sounding does not appear to have the significance that it does for the other indigenous groups. In fact, he is unclear about the meaning of the term sounding, although he shows familiarity with the activity to some extent.

The response that we get from David M. tends to show considerable parallel with the response of John R.

FW: I hear a lot of sounding. Is sounding ---?

David M.: Like the way you talk?

FW: No, you know, sounding on each other.

David M.: Or like we're cursing at each other or something?

FW: Like if somebody said your mother has B0 or something like that.

David M.: Oh yeah, body odor.

FW: What if they said your mother wears combat boots or your mother drinks pee.
David M.: No, that don't have nothing to do with it. That's like for little kids.

FW: Do you ever do any of it? Like, I hear a lot of it around here.

David M.: Like we do it, but they don't do it, you know.... Like if you want to crack a little bit of jokes, you know, if you want to laugh, you know, my friend Izzie comes out with some good jokes. (34: 11)

David M. shows very little familiarity with the activity and obviously does not really participate in it to any extent. He further reveals little or no understanding of its social function. The various remarks by our three "lames" lead us to the conclusion that this group does not really have a significant understanding or participation in the verbal ritual of sounding. Of the three groups of Puerto Rican informants, this one clearly shows the least familiarity and most misunderstanding of its function.

4.4.4 Peer Group Contacts

There are several aspects of the peer contacts of the informants in this group that are of interest to us here. To begin with, like the group previously discussed, these informants have limited contacts with blacks. Dennis R. maintains:

I don't stick around with the Negroes around my block, they look for trouble... I don't mind, I mean, I don't mind having a Negro friend, I mean, if he's cool with me, I'm cool with him, but not a guy that looks for trouble. (9: 7)
In the case of the other two informants, no elaboration is given, but the listing of friends does not include blacks.

Of the three peers, Dennis R. clearly has the least amount of peer contact; he appears to be a social isolate. Thus, the following dialogue takes place concerning friends.

Dennis R.: I don't stick with a bunch of guys. I never did.

FW: How about in the city?

Dennis R.: Well, maybe now, I don't know I don't stick with the guys around my block.

FW: Who do you go around with?

Dennis R.: Nobody. (9: 5)

He further goes on to comment on the time he spends in the streets.

I don't like to go down, my father gave me permission to stay down, you know, 'till ten, stuff like that, but I'm always ---sometimes I never go down. When I do its only for around half hour or something like that. (9: 5)

The information Dennis R. gives in his interview appears to be largely accurate, as confirmed by observation and further conversation outside the initial interview. Furthermore, his brother and some of his acquaintances submitted information which largely matched his own assessment of his peer contacts. His alienation from the indigenous subcultural groups is quite apparent in the following comment:
Dennis R.: ...all the cool guys are up here.
All the guys that go down to the
city and they get high and they're
the leader of the pack sometimes and
they come up here and sort of -- like
the way I was brought up I kinda feel
bad.

FW: Why?

Dennis R.: Well, I was kind of brought up
goodie-goodie all the time...
I don't know, I feel funny in a
camp like this. (9: 6)

Dennis R. indicates an ambivalent attitude concerning his status in
the community. On the one hand, he shows some awareness of the indigenous
values indicated by some of the informants discussed in our previous
sections. On the other hand, however, he is aware of his own role as a
social isolate and the mainstream values to which he has been oriented.

Unlike Dennis R., the other two informants in this category have
teenage peers, but the value orientation of these peers does not match
those of the other groups we have discussed. For example, John R. remarks
about his group of peers.

We're all athletes, we all go to school, we
all enjoy basketball, swimming, all sports,
we're all fairly good and we're all right
now working on, you know, body building,
gymnastics and defense karate. We all do
that around the block and we don't smoke
and we hang around with each other and we
respect each other, you know. And this is
a group that we don't go out looking for
trouble and all of us plan to go to college.
We all plan to go to college... we might go
to the dance and dance with the girls, laugh
around with the girls, do this and do that,
and if we're gonna get drunk at all, its
gonna be with beer. We don't fool around
with drugs, none of that. We're healthy, 
I'm telling you, we're healthier than the 
board of health. (37: 6-7)

The type of activities characteristic of this peer group are much more 
oriented toward the mainstream American value system than they are toward 
some of the activities valued in the indigenous groups.

The orientation toward mainstream values is even more clearly indi-
cated in John R.'s description of the characteristics of the leader of the
group. When questioned concerning the attributes of the leaders, he 
remarks:

Well, we look up to them because when we 
do something wrong, he reminds us, "Hey, 
Johnny, man, don't do that, I mean blah 
blah, what would you do if this and that 
and that and this." He would remind us, 
his would help us out and this is a guy that 
would come up to us, and in other words, he 
would preach, he would talk to us for an 
hour. This is Elliot now. He's in a school 
which they call Harlem Prep, Harlem Prepara-
tory School, you know, and he wants to major 
in psychology or sociology, something like 
that, so, you know, this guy, when he talks, 
he'll have you there for at least an hour. 
So one day he started talking to me about 
Negro people and black people, and what do 
I think about them, and this and that, and 
he would throw these words at me and I don't 
know what they mean, you know, so I says, 
"Man, like you pretty smart, I wish I knew 
all them big words that you know." He says, 
"Well, if you want I'll go up your house and 
help you and teach you." And he taught me 
some words, wow, big words, but I forgot them. 
(37: 6-7)

Rather than some of the indigenous themes of physical prowess and 
manipulative skill in certain types of "anti-social" behavior, we see
leadership attributes quite consonant with mainstream values. Thus, educational success is a virtue of this group, and appropriate behavior is defined from a mainstream perspective.

The description of peer group association by David M., who is a peer of John R.'s, parallels that of David M. He mentions the same leader of the peer group as John R. and for approximately the same reasons.

Well, first of all, Elliot is a real smart guy, he's going to be a psychologist and, you know, really turns you on with some psychology, you know, he's over there listening. Like one he went over my house and we stayed there 'till two o'clock in the morning just talking, him and my brother talking all night, you know. But, you know, like you talk to him, like you like to listen to him, you know, 'cause he makes it, you know, he puts something in your head, you know, he makes you feel good, you know, like if you learning something and we all go to the beach together, we play basketball together, we go swimming together. (34: 9)

He further elaborates the attributes of a leader when he says:

Well, like these guys, they have belts in Gung Fo or Karate you know, and you got to respect them for that, you know, not only because they good, but, you know, they're not bullies, neither, you know. They try to, like, know their stuff, you know, like you go to the park and they start an argument and this guy comes, around ten other guys, and, you know, they know that just one of them, you know, for what they know, you know, and Karate and all that, they could take 'em, you know, but they still, they try to avoid the fight and everybody respects them for that. (34: 11)
In addition to the values of peer members and the attributes of leadership, the way in which new peer associations are made does not match many of the interactions reported by some of the indigenous informants.

FW: What happens if a new kid moves in?

David M.: ...We don't like no people that are prejudiced, and, like, we don't like no people that like to get into trouble you know, like rcb and all this, you know, 'cause we don't want to get in no trouble, you know, can really mess you up. If he's good he'll stay with us because if the person's bad, he wants to do bad things and he sees that we don't like to do those things, he won't hang around with us, or, if he does, he'll change, you know what I mean? (34:11)

The entrance into peer groups expressed by David M. matches the report given by John R., who says:

He doesn't have to be, do nothing. Like, when I first came around the block, I used to run errands for my mother and I used to see them. They used to look at me and I use to almost know what ran through their mind. They use to say, "Oh, that's a new guy 'round the block, he looks like a nice guy, or he looks like a mean guy, look at him diddy bop, look at him jitterbug," you know. But I didn't jitterbug, but I used to walk my normal self and they introduced themselves to me and I introduced myself to them and I started walking 'round with them, playing basketball with them, indulging with their sports, and they seen I was fairly nice guy, I didn't try to act tough or anything like that, and just be a nice guy, you could be in any group. (37:8)
The ability to establish peer contacts as reflected by John R. and David M. do not reflect any of the characteristics which may be cited as typical of some of the indigenous groups. No mention is made of initiation into groups in the area; there is no reflection of virtues in toughness; no specification of certain "anti-social" behavior such as stealing, drugs, fighting, etc. In fact, the above passages clearly indicate that these are explicitly being rejected by those informants. There is little doubt that the peer contacts and values expressed here are in many ways opposed to the vernacular values expressed by many other informants. Furthermore, the interview information is supported by our personal observation of their interactions during the fieldwork.

4.4.5 The Use of Spanish

Of the three informants in this category, two of them appear to use Spanish in the same types of situations. Both John R. and David R. maintain that they generally do not speak Spanish to the members of their peer group, but use Spanish in their homes with their parents. The pattern for Spanish/English usage among peers and parents thus appears to match that described for many of our other Puerto Rican informants. But the case of Dennis R. appears to be somewhat different. He is quite adamant in his insistence that he never uses Spanish and does not know it, and insists that English is his first language. He admits, however, that his parents sometimes use Spanish at home. From our background information of the family, we know that there is a very strong mainland assimilation tendency expressed by the parents, who explicitly reject Puerto Rican culture in their desire to be considered American. This type
of attitude has obviously been ingrained in Dennis R. and is manifested in his comments about the use of language as well as his remarks about other aspects of Puerto Rican culture.

4.5 Summary of Similarities and Differences Between Groups

We have, in the preceding sections, given descriptions of selected aspects of the socio-cultural behavior of four groups, three Puerto Rican and one black. On the basis of this material we may arrive at several conclusions concerning the similarities and differences between these groups.

In our socio-cultural background given in Chapter Two, it was reported that physical appearance was a crucial factor in terms of assimilation options open to Puerto Ricans. Dark and intermediate Puerto Ricans are much more likely to be assimilated into the black community than light Puerto Ricans. Although this may be true of the overall population, there is only slight evidence that this is the case in our small sample. Most of the informants in the three Puerto Rican groups would be classified as intermediate. One dark Puerto Rican is classified as having extensive black contacts, and we have two light informants, one classified as a lame and one as a Puerto Rican with extensive black contacts. The fact that a clear-cut differentiation in physical appearance does not emerge is probably due to the restricted number of informants we used in this sample.

The recreational activities reported by our informants reveal a considerable amount of homogeneity for the blacks and two of the Puerto Rican groups. The Puerto Rican lames, although familiar with most of the street games indigenous to the area, do not participate to the same extent that of the other groups do. In terms of mainstream athletic activities,
the black informants and the Puerto Ricans with extensive black contacts tend to participate in basketball more than the two other Puerto Rican groups, who show greater interest in baseball.

The informants' responses to the verbal ritual of sounding shows a very interesting differentiation. For the blacks and Puerto Ricans with extensive black contacts, there is no question about their familiarity with the activity and their clear understanding of its social significance. It is understood as a ritualistic insult in which a person can develop a high degree of verbal skill. On the other hand, the Puerto Ricans with restricted black contacts and the Puerto Rican lames do not indicate a consistent understanding of its function. Rather, they tend to see the potential conflict that can arise because of subcultural differences in its significance. The Puerto Rican lames, in particular, tend to interpret it as a personal insult and therefore are inclined to interpret it as inappropriate behavior. The indigenous Puerto Rican group with restricted black contacts has assimilated the ritualistic function of sounding to some extent, but not nearly to the extent that it is found in black culture.

As is to be expected, the most crucial aspect of our comparison of groups is their peer contacts. The three informants whom we have classified as Puerto Ricans with extensive black contacts all name blacks as integral parts of their peer associations. On the other hand, the other two groups of Puerto Ricans show a minimal amount of integral peer associations with blacks.

The value orientation of the different groups intersects with our classification of informants on the basis of peer contacts. Two of the Puerto Rican groups, one with extensive and one with restricted black contacts, indicate value orientations which we have termed here "indigenous."
Values placed on fighting, drugs, alienation from schools, etc. are in obvious conflict with mainstream values placed on "good" behavior and educational achievement.

Because we have differentiated between two types of Puerto Rican groups with respect to black contacts and two types of Puerto Rican groups with respect to value orientations, we logically should have four groups of Puerto Rican informants. But instead, we only have the following categories of Puerto Ricans represented:

<table>
<thead>
<tr>
<th>Indigenous values</th>
<th>Extensive black contacts</th>
<th>X</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mainstream values</td>
<td>Restricted black contacts</td>
<td>X</td>
</tr>
</tbody>
</table>

Although we certainly may find individual cases of Puerto Ricans with extensive black contacts who have mainstream value orientations, (and, in fact, one of the informants with extensive black contacts appears to be somewhat marginal in this respect), this does not appear to be a predominant type of assimilation. At any rate, we do not have significant representation of such a category in our corpus.

Finally, we may mention that the pattern of Spanish usage shows many similarities between the three groups of Puerto Rican informants. Only one informant, a lame, claims not to speak or understand Spanish; all other informants learned it as their first language and started learning English extensively when they entered school. Furthermore, the pattern of parents who speak Spanish to the informants is characteristic of all
but the previously mentioned. Spanish among peers is used mostly by indigenous Puerto Ricans with restricted black contacts. Puerto Ricans with extensive black contacts may use Spanish to Puerto Rican peers, but are careful about using it in the presence of blacks who do not understand it. Consequently, they can be expected to use it less with peers.

The above socio-cultural factors summarize our reasons for dividing the groups as we have. We have three different groups of Puerto Ricans defined on purely socio-cultural bases and one group of black informants who are defined on the basis of socio-cultural characteristics and a preliminary linguistic assessment. We can now turn our attention to the linguistic characteristics of the Puerto Rican group as they compare to the black group.

4.6 Linguistic Assimilation

In this section, we shall look at the social groups defined above in terms of a number of different features of Black English. The question we are asking is: to what extent, if any, are these features found among the Puerto Rican groups? Thus, we are looking at the question of linguistic assimilation as it relates to the various types of contact situations and value orientations of the three Puerto Rican groups. We have included both grammatical and phonological features in our description. The grammatical features are copula concord, invariant be, suffixal -z and multiple negation; the phonological ones are copula absence, morpheme initial and final ə, consonant clusters, diphthongal ay and syllable-final d. Although all the features discussed here are well-established as integral items of Black English on the basis of previous studies (e.g., Labov, et al. 1968, Wolfram 1969, Fasold forthcoming), it must be noted
that some of these are not unique to Black English in a northern urban context. That is, they are also common to northern white nonstandard dialects. Each of these common features will be pointed out in our discussion, and the general significance of these will be discussed in our conclusion. Since our primary focus here is on linguistic assimilation, we shall not formalize the various linguistic rules which are involved as we did in Chapter Three. We are primarily concerned here with the qualitative and quantitative evidence concerning the linguistic assimilation of Black English features in the speech of three groups of Puerto Ricans. Each of these features is discussed individually, and on this basis we shall come to some general conclusions concerning the nature of this linguistic assimilation.

4.6.1 Copula Absence

One of the characteristic features of Black English is the deletion of the copula verb forms IS or ARE. This process has been described in detail by Labov (1969) for New York City and for the black population in Detroit by Wolfram (1969). Copula deletion is found in a number of different syntactic constructions, including predicate adjectives, predicate nominals, predicate locatives or temporals, Verb -ing constructions, and the intentional future gonna. These environments are illustrated for the black informants in our corpus as follows:

127

(a) He around fifteen years old. (1:14)
(b) She the teacher in charge. (24:9)
(c) We in the same class. (1:17)
(d) He working up here now. (1:13)
(e) He gonna be nurt. (40:11)
Although there are a number of syntactic environments where copula absence is found, there are other environments in which copula presence consistently occurs in Black English, including copula with past tense forms, first person singular forms, nonfinite constructions, clause-final position, tag questions, existential emphasis, and with the lexical items what's, that's and it's. Thus, copula presence is obligatory in the following constructions.

128

(a) Yesterday he was busy.
(b) I'm a good man.
(c) He want to be good.
(d) I know that's what they are.
(e) He is God.
(f) I know that's true.

The delimitation of syntactic environments where copula deletion is variable and those where it is ungrammatical is crucial for both quantitative and qualitative reasons. From a quantitative standpoint, it is essential to separate environments where there is no variability from those where there is legitimate variation in order not to skew the figures of systematic variation. From a qualitative standpoint, the distinguishing of environments is essential in order for us to see the relation of copula deletion to copula contraction (e.g., the relationship of He's nice to He nice). Labov has concluded that the general principle holds: "wherever SE [Standard English] can contract, NNE [Negro Nonstandard English] can delete is and are, and vice versa; wherever SE cannot contract, NNE cannot delete is and are, and vice versa"
The environments listed in 128 (a-e), where no deletion is permitted in Black English, are precisely the environments where contraction is not permissible in Standard English. 1 Labov concludes that copula deletion is therefore a process which operates on the output of copula contraction (e.g., He is nice \( \rightarrow \) He's nice \( \rightarrow \) He nice). Because of the relation of contraction to deletion, the sum of contraction plus deletion in Black English can be expected to equal the percentage of contraction in Standard English. Both Labov's (1969) and Wolfram's (1969) tabulations show this to be the case.

With this brief introduction to the nature of copula deletion in Black English in mind, let us now turn to our comparison of the four groups of speakers for this feature. To begin with, we find that the same general environments in which copula presence is obligatory for Black English speakers also require copula presence for the three groups of Puerto Rican informants. Thus, copula absence is not typically found in the past tense, in first person singular forms, in clause-final position, etc. This means that our quantitative measurement of variability will include IS and ARE only in the types of environments illustrated in 127(a-e). In Table 56, we have tabulated the incidence of deletion and contraction for the four groups of speakers in these environments. In this, as in following tables, BE refers to the Black Informants, PR/BL to Puerto Ricans with extensive black contacts, PR to indigenous Puerto Rican informants with limited black contacts, and PR/Lame to Puerto Rican Lames.

1The case of 128(f) is interpreted by Labov (1969:750-751) as a special case of assimilation which will not be discussed in detail here.
Several observations should be made on the basis of the above table. We must first observe that the same general relationship between contraction and deletion is found in these four groups of speakers. That is, the extent of deletion varies for the four groups, but the sum of contraction plus deletion is quite similar. And, if we broke down preceding environments into those items which end in consonants as opposed to vowels, we would find that the figures are even closer, for the relatively lower figure for PR/Lame can be attributed to the higher incidence of preceding noun phrases ending in a consonant, a condition which inhibits contraction. Following a pronoun ending in a vowel, contraction is found in over 95% out of all potential cases for all of the groups. With respect to the incidence of deletion, we find that the black group is considerably higher than any of

### Table 56: Copula Deletion and Contraction for Four Groups of Informants

<table>
<thead>
<tr>
<th></th>
<th>No. Del.</th>
<th>% Del.</th>
<th>No. Contr.</th>
<th>% Contr.</th>
<th>( \div ) Contr./Total</th>
<th>% D ( \div ) C</th>
</tr>
</thead>
<tbody>
<tr>
<td>BE</td>
<td>56</td>
<td>61.5</td>
<td>20</td>
<td>22.0</td>
<td>76/91</td>
<td>83.5</td>
</tr>
<tr>
<td>PR/BL</td>
<td>38</td>
<td>29.9</td>
<td>68</td>
<td>53.5</td>
<td>106/127</td>
<td>83.4</td>
</tr>
<tr>
<td>PR</td>
<td>30</td>
<td>31.3</td>
<td>53</td>
<td>55.2</td>
<td>83/96</td>
<td>86.5</td>
</tr>
<tr>
<td>PR/Lame</td>
<td>11</td>
<td>8.7</td>
<td>81</td>
<td>69.2</td>
<td>92/117</td>
<td>77.9</td>
</tr>
</tbody>
</table>
the Puerto Rican groups, including the PR/BL group. Somewhat surprising is the fact that the percentage of copula deletion is approximately equivalent for the PR/BL group and the PR group. Before arriving at any premature conclusions about the lack of linguistic difference between these two groups, however, we should note that previous studies have indicated that there are a number of environmental effects on variability. We must therefore ask if this is an accurate reflection of the actual linguistic situation or if this figure is a product of one of the environmental constraints which were not isolated in the gross figures for copula deletion.

One of the main environmental influences on copula deletion suggested both by Labov et al. (1968: 218) and Wolfram (1969: 173-174) is the distinction between underlying IS and ARE. It was shown that ARE increases the extent of copula deletion considerably when compared to underlying IS. In fact, it appears that this is the first order constraint on deletion. In Table 57, the effect of underlying ARE and IS are examined for the four groups of speakers.

1 The way the various constraints were isolated in Wolfram did not allow for the comparison of the various cross-products necessary to establish the orders of constraints. Unfortunately, our figures for some of the crucial cross-products in this study are not adequately represented in our black informants to establish the clear-cut order of constraints with reference to IS/ARE and PRO /NP, but it appears that the former would probably be the first order constraint if adequate representation were available.
The effect of underlying IS and ARE is quite consistent for all groups of speakers; ARE is deleted considerably more frequently than IS. We also note that there is a steady decline from the black group to the PR/Lame. We also note that the lack of observed differences between PR/BL and PR in Table 57 is not maintained when IS and ARE are differentiated. We conclude then, that the apparent lack of difference between these two groups was due to the fact that, for some reason, there was a disproportionate number of potential IS's for the PR informants. The incidence of ARE deletion is obviously an integral part of all four groups of speakers, although, of course, the extent of deletion varies from group
to group. On the other hand, the incidence of IS deletion for PR's and PR/Lames as an integral part of these varieties is questionable. Both of these groups indicate copula deletion with IS at such a low frequency (6.4 and 3.7) that it appears that deletion may operate differently for these two groups, affecting ARE but not IS. As has been pointed out elsewhere (Wolfram 1971: 38-39), there are dialects in the United States (e.g., some Southern white varieties) that apparently have ARE deletion but not IS deletion. This is not to say that some dialects of PRE assimilated the forms from these dialects of English since there is no reasonable contact situation to account for this. Rather, it appears that there is a selective process going on in which one aspect of a rule is integrated while another aspect is rejected. This appears to be what is taking place for IS and ARE copula deletion for PR's and PR/Lames.

In attempting to account for copula deletion with respect to ARE but not IS, we may note that there is a general New York speech pattern in which post-vocalic r-lessness is a widespread phenomenon. This means that the phonetic difference between some of the contracted and deleted forms of ARE is dependent on vocalic quality (e.g., [5e̞] as opposed to [5e̞]). Because of this minimal difference we may hypothesize that it gives impetus to interpreting contracted and deleted forms as identical (i.e., we and we're, you and you're, they and they're). If this were the case, however, we would suspect that whether the word-initial segment of the following word is a consonant or vowel would affect r absence, since post-vocalic r is reduced in New York City English mainly when the following word begins with a consonant. The incidence of deletion based on the following segment is given in Table 58. Only nouns or pronouns ending in a vowel are tabulated.
Table 58: Incidence of ARE Copula Deletion when Following Word begins with Consonant or Vowel for Four Groups of Speakers

<table>
<thead>
<tr>
<th></th>
<th>V___##C</th>
<th></th>
<th>V___##V</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. Del./Tot. % Del.</td>
<td>No. Del./Tot. % Del.</td>
<td></td>
</tr>
<tr>
<td>BE</td>
<td>17/17 100</td>
<td>4/4 100</td>
<td></td>
</tr>
<tr>
<td>PR/BL</td>
<td>20/27 74.1</td>
<td>5/6 83.3</td>
<td></td>
</tr>
<tr>
<td>PR</td>
<td>21/32 65.6</td>
<td>4/8 50.0</td>
<td></td>
</tr>
<tr>
<td>PR/Lame</td>
<td>7/28 25.0</td>
<td>1/19 5.3</td>
<td></td>
</tr>
</tbody>
</table>

Although the numbers are relatively limited, it is still quite instructive to note that only the PR/Lame category appears to have a non-trivial difference between the two following environments, and for this group we have sufficient numbers of examples to justify analysis. It appears that for this group we may have a phonological process which is in some way related to the r-lessness of New York City, because deletion is almost exclusively restricted to items followed by a consonant. We may recall that it is the Lames who are the least indigenous in their behavioral orientation, and thus are the group that we would expect to be most conscious about the social stigmatization of their speech. We may infer that ARE copula deletion before a following vowel is most stigmatized because it is less in line with the general New York City r-lessness and considerably more obtrusive than ARE copula absence before a consonant. If this is the case, then, we have a quite different source accounting for copula absence for PR/Lames than for other groups.
With respect to IS deletion, it is important to note that IS deletion is extremely limited for PR and PR/Lame groups despite the fact that syllable-final [s] absence is a well-known characteristic of Puerto Rican Spanish (e.g., [ɛ:ta:] 'čstas' cf. Ma and Herasimchuk 1968). Although we might expect this pattern of Puerto Rican Spanish to reinforce the absence of copula |Z|, we do not find this to be the case.

Another constraint which has been cited as accountable for systematic variability of copula deletion is that of a preceding noun phrase as opposed to a pronoun. For the most part, this syntactic distinction is a reflection of the canonical shape of these phrases; the personal pronouns almost exclusively end in vowels, while noun phrases end in both vowels and consonants. Having suggested the effect of underlying IS and ARE as the first order constraint on variability, we postulate the preceding phrase type as the second order constraint. Figures for the groups are given in Table 59.

<table>
<thead>
<tr>
<th></th>
<th>ARE Pro</th>
<th>NP</th>
<th>IS Pro</th>
<th>NP</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N/Total</td>
<td>% Ab</td>
<td>N/Total</td>
<td>%Ab</td>
</tr>
<tr>
<td>BE</td>
<td>22/23</td>
<td>95.7</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>PR/B</td>
<td>24/31</td>
<td>77.4</td>
<td>1/6</td>
<td>16.7</td>
</tr>
<tr>
<td>PR</td>
<td>27/48</td>
<td>56.3</td>
<td>0/1</td>
<td>--</td>
</tr>
<tr>
<td>PR/Lame</td>
<td>8/30</td>
<td>26.7</td>
<td>0/6</td>
<td>0.0</td>
</tr>
</tbody>
</table>

Table 59: Copula Absence with Underlying IS or ARE and Preceding NP or Pro
The relative effect of a preceding pronoun on the incidence of copula deletion is quite clear despite the fact that there are limited numbers of examples for some categories; for all groups, a preceding pronoun favors deletion. In fact, there is a categorical presence of the copula for PR’s and PR/Lames when the preceding phrase is an NP. Whereas the potential examples for underlying ARE when preceded by an NP are relatively rare, and therefore somewhat suspect, the potential examples with underlying IS appear to be sufficient to conclude that copula presence is categorical with underlying IS when preceded by an NP.

There is one final constraint on variability which has been brought out in other studies of variability in copula deletion, namely, that of the following phrase. Labov (1968) has indicated that there is a progressive increase in copula deletion going from predicate locative/temporal, to Verb -ing forms, to the intentional future gonna. Although we do not have sufficient data for each of the groups in these five categories of following environments, we do have data to make a binary division into all those environments followed by non-ing forms (i.e., predicate nominatives, predicate adjectives, locatives and temporal phrases) and those followed by Verb -ing and gonna forms. This seems to be the major break in the forms based on the constraints indicated by both Labov’s and Wolfram’s figures. The breakdown for these two environments is given in Table 60. Because of the limited number of preceding NP’s found in our corpus, only preceding Pro environments are tabulated in Table 60.
Table 60: Copula Absence for Pro __ IS or Pro __ ARE when Followed by non-ing or -ing Forms for Four Groups of Speakers.

<table>
<thead>
<tr>
<th></th>
<th>N/Total</th>
<th>%</th>
<th>N/Total</th>
<th>%</th>
<th>N/Total</th>
<th>%</th>
<th>N/Total</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BE</strong></td>
<td>16/16</td>
<td>100.0</td>
<td>6/7</td>
<td>85.7</td>
<td>13/16</td>
<td>81.3</td>
<td>16/34</td>
<td>47.1</td>
</tr>
<tr>
<td><strong>PR/BL</strong></td>
<td>10/14</td>
<td>71.4</td>
<td>14/17</td>
<td>82.4</td>
<td>4/12</td>
<td>33.3</td>
<td>7/37</td>
<td>18.9</td>
</tr>
<tr>
<td><strong>PR</strong></td>
<td>15/21</td>
<td>71.4</td>
<td>12/27</td>
<td>44.4</td>
<td>3/8</td>
<td>37.5</td>
<td>0/31</td>
<td>0.0</td>
</tr>
<tr>
<td><strong>PR/Lame</strong></td>
<td>5/10</td>
<td>50.0</td>
<td>3/20</td>
<td>15.0</td>
<td>3/12</td>
<td>25.0</td>
<td>0/37</td>
<td>0.0</td>
</tr>
</tbody>
</table>

Table 60 indicates that the constraints based on the following environment match those revealed by previous studies, in that -ing forms consistently increase the frequency of deletion. It is interesting to note that for non-ing forms, both the PR and PR/Lame groups reveal the categorical presence of IS. And of the -ing forms which do undergo deletion, its deletion with gonna accounts for 4 of the 6 examples of deletion. It thus appears that copula deletion for the PR and PR/Lame groups is limited to ARE and IS with a preceding pronoun plus gonna.

To sum up, we have found several important aspects of copula deletion as it relates to the three groups of Puerto Rican informants when compared to copula deletion in Black English. In the first place, the same ordered constraints on variability operative on deletion in Black English are found to operate on deletion in the three groups of Puerto Rican informants. That is, ARE favors deletion over IS, preceding Pro favors deletion over preceding NP, and following V-ing forms favor deletion over non-V-ing forms. The PR/BL group consistently shows
higher frequencies of deletion than the FR group, although it does not
match the percentages of deletion indicated by BE speakers. The FR
group also consistently shows more deletion than the PR/Lames. In the
case of FR and PR/Lames, however, deletion is largely restricted to
underlying ARE and IS when occurring with gonna. We thus observe a
selective process in which some of the more frequent types of copula
deletion are apparently assimilated while other types of copula deletion
are only assimilated (and to a lesser extent) by Puerto Ricans with
extensive black contacts. This selective process results in a dif-
ferentiation of dialects with respect to copula usage. It is interesting
to note that the FR dialect actually shows more similarities to some
varieties of southern white speech with respect to copula usage than it
does to New York City BE. This, of course, cannot be attributed to in-
fluence from southern white speakers, with whom they have had no contact,
but to a selective process in which some of the more frequently occurring
elements are assimilated (but to a lesser quantitative extent), while
some of the less frequently occurring items are categorically rejected.
In addition, PR/Lames may have a slightly different phonological process
accounting for ARE absence because of the extremely low frequency of its
occurrence when the following word begins with a vowel. This process
may be related to general New York City post vocalic -reduction and a
subsequent vowel reduction so that there is no phonetic vestige of
contraction remaining. All other groups, however, appear to have a
process which appears to be more directly related to copula deletion.
4.6.2 Agreement with Copula Forms

Like a number of nonstandard varieties of English, Black English does not show the type of concord revealed in Standard English. In the past tense, *was* may be used with *all* forms, so that we have:

129

(a) They *was* there.

(b) You *was* there.

When the full or contracted forms of the copula are used in the present tense, *is* may be used for second person singular and all plural forms, giving:

130

(a) The boys *is* there.

(b) You *is* 'here (or) You's there.

In Table 61, we give the concord figures for the four groups of speakers in our corpus. In this table, the instances of *is* or *'s where are or 're are expected in present tense in Standard English, and *was* where *were* is expected in past tense in Standard English, are tabulated. The use of existential *it* or *there* with plurals is eliminated from the tabulation since both *it's* and *there's* appear to be fixed lexical constructions which occur with all plurals (e.g., *There's* four boys, *It's* four boys).

---

1 Although *is* and *was* are used with non-third person forms, *are* and *were* are not typically used with third person singular forms, so that *He are here* and *He were here* are ungrammatical (for several exceptions, see Fasold and Wolfram 1970:69).
The number of deleted present tense forms is included here to show how deletion greatly reduces the number of potential examples in the present tense for the groups with considerable deletion.

<table>
<thead>
<tr>
<th></th>
<th>Occ./Tot</th>
<th>% is</th>
<th>No. Del. Forms</th>
<th>Occ./Tot</th>
<th>% was</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>is for are</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>BE</strong></td>
<td>4/6</td>
<td>66.7</td>
<td>22</td>
<td>24/28</td>
<td>85.7</td>
</tr>
<tr>
<td><strong>PR/BL</strong></td>
<td>3/12</td>
<td>25.0</td>
<td>25</td>
<td>14/20</td>
<td>70.0</td>
</tr>
<tr>
<td><strong>PR</strong></td>
<td>2/19</td>
<td>10.5</td>
<td>27</td>
<td>10/33</td>
<td>30.3</td>
</tr>
<tr>
<td><strong>PR/Lame</strong></td>
<td>2/35</td>
<td>5.7</td>
<td>8</td>
<td>1/11</td>
<td>9.1</td>
</tr>
</tbody>
</table>

Table 51: The Use of *is* for SE *are* and *was* for SE *were* for Four Groups of Speakers

Even though there are few potential occurrences of *is* for some groups (viz. the groups that show considerable deletion), several points seem to be quite clear. In the first place, there is a constraint on the frequency of the third singular forms for Standard English *are* and *were* based on whether it is past or non-past; past clearly favors the lack of concord. Secondly, there is a decline in the percentages from the BE group to the PR/Lame group. The PR/BL group comes relatively close to matching the BE frequency for this agreement pattern, whereas the PR
and PR/Lame groups tend to show a pattern probably more characteristic of most nonstandard white dialects in its frequency.\(^1\)

4.6.3 Invariant be

In addition to copula deletion which we discussed previously, the copula in Black English may occur in the "unconjugated" or "invariant" form of be where the present tense, conjugated forms of the verb be (i.e., am, are, is) are expected in Standard English. Invariant be has received considerable descriptive attention from linguists because some uses of it appear to have a grammatical function which is distinct to the Black English verbal system. Following the analysis of Fasold (1969), we must first note that there are several uses of this verb. Some uses of be involve

\(^1\)If the few examples of is for are are, in fact, indicative of the general pattern observed in Black English, then our classification into underlying ARE and IS may be spurious for at least the Black group, since IS may be the underlying form for a number of our examples classified on the basis of the Standard English pattern as underlying ARE. Labov, et al. (1968:221) maintain that concord disagreement of is where SE are is expected is very low, but their conclusion is not necessarily warranted because of the misleading way in which they tabulated this variable. They classified the total number of is forms regardless of person and number as the potential number of examples, and then computed the percentage of disagreeing forms as the number of is with non-third person singular forms. This means that all instances of third person singular is forms are counted as potential examples, when, in fact, only second person singular and all plural forms should be tabulated. (If our figures were arranged this way, the same low figures which obtain for Labov's tabulation would emerge.) The conclusion that "there is only 5% disagreement--that is, cases where is is used in contexts which would demand are in SE" (Labov, et al. 1968) cannot be justified from the computation done by Labov and his colleagues because of their inclusion of so many irrelevant potential examples. (Other conclusions might be made on this basis, such as the non-use of are for SE is in Black English, but not the conclusion he has made concerning the use of is where Standard English are is expected.)
the deletion of the present or past form of the auxiliary will by a phonological process. This process apparently operates on the contracted form of the auxiliaries, 'll and 'd. Thus, in sentences like:

(a) He be here in a few minutes.
(b) He be happy if he could come.

the form be is apparently derived from underlying will and would respectively. As evidence of this derivation, one can point to responses in negatives and certain types of elliptical constructions, which are realized as:

(a) He won't be here in a few minutes.
(b) He wouldn't be happy if he could come.
(c) He be here in a few minutes; I know he will.
(d) He be happy if he could come; I know he would.

Fasold maintains that be which is derived from underlying will be or would be is not only found in Black English, but can be found in rapid speech in Standard English as well, so that "it is not difficult to catch Standard English speakers uttering be forms when they are sure that they have said will be or would be." (Fasold 1969:769).

It is clear, however, that some forms of be in Black English cannot be derived from underlying will or would, because the negative and elliptical constructions for these forms take the pro-verb do, as in
(a) He don't usually be home.

(b) Sometimes he be at home; I know he do.

For these forms, Fasold suggests that the meaning of be may be defined as follows:

The meaning of Black English be... involves repeated but not continuous occurrence. At any given moment the predication may be valid, but there are gaps between instances of the event described. (1969:764)

Although other descriptive accounts of "distributive be" have differed slightly in their analysis, most accounts generally recognize the uniqueness of this grammatical function of be in Black English.

The evidence of distributive be, as well as be from underlying will be or would be is quite clear in our BE informants in this corpus, so that we have utterances such as:

134

(a) I mostly be, sometimes I don't be around here, I be on the trampoline. (1:1)

(b) We don't really mean it, you know, we just be playing or something. (40:9)

(c) Sometime, you know, when we be going out to these parties, you know, I see girls come by. (24:10)
The use of distributive be by our black informants in this corpus is quite identical to its use as described in other accounts of this form in Washington (Fasold forthcoming) and in Detroit (Wolfram 1969).

The question relevant to this study is if, (and if so, to what extent) the distributive function of be has been assimilated from Black English into the speech of the three groups of Puerto Rican informants. Figures for the various uses of be by the four groups of speakers are given in Table 62. The potential instances of distributive be include all those instances of conjugated or deleted present-tense copula forms in which a grammatically permissible alternant form in Black English is be.\textsuperscript{1} This means that present-tense, conjugated copula forms which refer to single occurrences of an event or permanent relationships are eliminated. Thus, sentences like:

135

(a) He here right now.
(b) He's here right now.
(c) He my father.
(d) He's my father.

would be excluded because it is ungrammatical in Black English to use distributive be in these contexts (Wolfram 1969: 187). But sentences like:

\begin{itemize}
\item [\textsuperscript{1}]The inclusion of deleted forms as potential occurrences presumes that deleted forms are unmarked with respect to distributive function, so that some of these forms might be alternately realized as be. This contradicts some analyses of the relationship of invariant be to zero copula, but is consonant with Fasold's (1969) and Wolfram's (1969) analyses.
would be included since distributive be might be used in this context.
Although this procedure is not completely fool-proof, it does allow us to
get a representative picture of be usage in terms of potential occurrences
without skewing the figures too seriously by including inappropriate
occurrences as potential instances.¹

The occurrences of distributive be as well as be derived from under-
lying will be or would be are tabulated in Table 62. In addition, however,
another category includes the cases which are ambiguous. Despite con-
siderable contextual clues which often clarify the derivation of be, there
still remain some cases where it is impossible to determine the underlying
source of be. This is due mainly to the fact that will be can often be
used to refer to habitual activity of some type, a meaning which is quite
close to the use of distributive be (e.g., Whenever he's around his friends
he'll be good).

<table>
<thead>
<tr>
<th></th>
<th>Dist.</th>
<th>%be</th>
<th>Ambiguous</th>
<th>will or would</th>
</tr>
</thead>
<tbody>
<tr>
<td>be/Pot.</td>
<td>20/53</td>
<td>37.7</td>
<td>6</td>
<td>2/4</td>
</tr>
<tr>
<td>FR/BL</td>
<td>7/46</td>
<td>15.2</td>
<td>2</td>
<td>2/9</td>
</tr>
<tr>
<td>FR</td>
<td>0/33</td>
<td>0.0</td>
<td>1</td>
<td>2/5</td>
</tr>
<tr>
<td>PR/Lame</td>
<td>0/44</td>
<td>0.0</td>
<td>0</td>
<td>2/4</td>
</tr>
</tbody>
</table>

Table 62: Occurrences of Invariant be for Four Groups of Speakers

¹For more detail on some of the inadequacies of previous attempts to count
be with respect to potential and actual occurrences, and some of the
limitations still inherent in the procedure adopted here, see Wolfram
The figures in Table 62 clearly indicate the contrast between the groups. Although all groups indicate several examples of be derived from underlying will be or would be, only the BE and PR/BL group reveal distributive be. The BE group, however, uses distributive be to a greater extent than the PR/BL group. The categorical absence of invariant be for PR and PR/Lame groups plainly indicates that it is a feature which may not be expected to be assimilated by Puerto Ricans unless they have extensive contacts with blacks.

In addition to our tabulation of the uses of be in the spontaneous conversation section of the interview, we used an elicitation procedure originally reported by Fasold (1969) to determine the informants' sensitivity to the uses of be. In this elicitation technique, the informant was asked to respond to a stimulus sentence with an elliptical sentence in which the auxiliary was clause-final. A sample stimulus and response follows:

FW: He can drive a motorcycle.

IN: I know he can.

FW: Can what?

IN: Drive a motorcycle.

On the basis of this general pattern sentences were constructed to elicit the auxiliaries relevant to the different uses of be. The three stimulus sentences were:

137

(a) Sometime Joseph be up there.
(b) He be in in a few minutes.
(c) If he had a walkie-talkie he be happy.
Given the various underlying sources for these occurrences of be, the appropriate auxiliaries based on the sample response should be do for 137 (a), will for (b), and would for (c). In looking at the four groups of speakers in terms of the responses to (b) and (c) we observe that the present or past form of the auxiliary will is generally elicited for all groups. The few non-will responses show no pattern and seem to be mainly attributable to the informant's failure to understand the elicitation task. The elicitation task tends to support our conclusion that be derived from will be or would be is to be expected for the Puerto Rican groups of informants as a part of their dialect. But it is interesting to note that the PR and PR/Lame groups also tended to interpret (a), in which the appropriate response is do, as derived from either will be or would be. Four of the six informants in these two groups responded with will or would; of the other two, one responded with was and one with the Standard English translation is. If we can assume that our informants understood the task properly, we can conclude that they do not exhibit sensitivity to the different underlying source for (a). On the other hand, only one black informant interpreted (a) as being derived from underlying will, and there is some evidence that he did not completely understand the task since he responded with the negative won't. The other informants in the BE and PR/BL groups generally gave is, a Standard English translation. Although these informants did not respond consistently with do as we might have expected, the fact that BE and PR/BL informants gave an auxiliary for (a) different from (b) and (c) indicates that they may recognize a different source for this sentence. Together with the observed occurrences of distributive be in their spontaneous conversation, the evidence is quite clear that distributive be is only used by the BE and PR/BL groups.
Assuming that we have representative persons from the four groups of speakers, we conclude, then, that invariant be from underlying will be and would be is characteristic of all four groups of speakers, but the distributive function of be is limited to Black English speakers and Puerto Ricans with extensive black contacts.

4.6.4 The Z Morphemes

Another well-known feature of Black English is the possible absence of the Z morphemes (Labov et al. 1968, Wolfram 1969, Fasold forthcoming). The Z morphemes are suffixes with identically distributed regular phonetic shapes ([z] after vowels and voiced nonsibilant consonants, [s] after voiceless nonsibilant consonants and [iz] after sibilant consonants), but three distinct syntactic functions. One such function is verb concord with present tense verbs whose subjects are in the third person singular, as in He comes to work every day. Another is the possessive function, spelled 's, as in The man's hat. The third function is as a plural marker, as in two books. It is possible to omit Z in any of these three functions in Black English, so the above utterances may be pronounced as He come to work every day, The man hat, and two book. The studies of Black English cited above have shown that the absence of the three Z morphemes is grammatical rather than phonological, that Z in the verb concord function is far more likely to be absent than in either of the other functions and that Z in the possessive function is somewhat more likely to be absent.
than Z in the plural function. The social stigmatization of the absence of all three kinds of Z is also well established.  

In discussing the analysis of the absence of Z for the three groups of speakers, some mention needs to be made about the data extraction procedures employed. Every instance of every potential plural, verb concord or possessive Z was noted for most speakers by Marcia Whiteman, a research assistant. The data for a few speakers was extracted by Ralph W. Fasold. The presence or absence of the suffix was noted, as well as a small segment of the surrounding context. The context was important for two reasons. First, in the case of the absence of the suffix, enough context to establish the fact that plurality, possession, or present tense with a third person singular subject was intended. More importantly, the phonological context immediately surrounding the potential suffix was needed for the effort to determine whether or not phonological factors had a significant influence on suffix absence. The mere presence or absence of a spirant suffix was believed to be phonetically clear enough so that there would be no problem of inaccurate tabulation. Nevertheless, to establish this, a reliability check was performed in which the judgements of Fasold and Whiteman are compared. Fasold reviewed four tapes, one from each of the social categories. A total of 160 suffixes for the four tapes were judged by both researchers of which only five (3.1%) were judged oppositely. Put differently, there was 96.9% agreement on the presence or absence of Z. Four of those were judged as present by Fasold and absent by Whiteman, and the two researchers disagreed in the opposite direction once. There were somewhat more major disagreements between Fasold and Whiteman on which items should or should not be tabulated as a potential Z occurrence. In a real sense, such differences are less serious, because they would not lead to opposite classifications, but rather to one listener tabulating an item as present or absent and the other not including it at all. For example, if out of twenty potential occurrences in a given interview, one listener judged one as absent and 19 as present, that speaker would have a percent absent figure of 5%. If the other listener heard two of the twenty as absent, that listener would give the speaker a rate of 10% absent. On the other hand, if the second listener agreed as to presence and absence completely, but only included nineteen of the twenty occurrences, that listener would give the same speaker a score of 1/19 absent or 5.3%. This would result in a possible error of only .3% instead of a full 5%.

Disagreements on what counted as a potential example could arise in several ways. Frequently, one listener simply overlooked an item which the other included. Other disagreements were more substantive. Some involved possible past tense or infinitive constructions in sections of the tape where the tape fidelity was so poor that one listener judged the item too unclear to tabulate and the other tabulated it as present tense. Others were rejected by one listener because the next word began with a sibilant (as in John's side) and the other listener judged it impossible to tell if sibilant sound belonged to the suffix or to the first segment of
Table 63 shows the rates of Z absence of verb concord, plural and possessive for the four groups of speakers.

<table>
<thead>
<tr>
<th></th>
<th>Plural</th>
<th></th>
<th>Plural</th>
<th></th>
<th>Possessive</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>BE</td>
<td>139/171</td>
<td>81.3</td>
<td>29/316</td>
<td>9.2</td>
<td>5/17</td>
<td>29.4</td>
</tr>
<tr>
<td>PR/BL</td>
<td>41/128</td>
<td>32.0</td>
<td>24/219</td>
<td>11.0</td>
<td>1/15</td>
<td>6.7</td>
</tr>
<tr>
<td>PR</td>
<td>16/96</td>
<td>16.7</td>
<td>26/306</td>
<td>8.5</td>
<td>0/14</td>
<td>0.0</td>
</tr>
<tr>
<td>PR/Lame</td>
<td>23/157</td>
<td>14.6</td>
<td>2/330</td>
<td>0.6</td>
<td>0/13</td>
<td>0.0</td>
</tr>
</tbody>
</table>

Table 63: Percent Absence of the Various Z Suffixes for Four Groups of Informants.

The rate of Z absence for the black group approximates the pattern of Z absence which Wolfram (1969) found in Detroit and Labov et al. (1968) found in New York City.

The following word. Many of this kind of disagreement involved the verb to say for which one listener tabulated an utterance as He say when it appeared to the other that the interpretation should be He said with the final d of said deleted. There were ten items tabulated by Whiteman which were not tabulated by Fasold and eight which Fasold included but Whiteman did not. If these eighteen items are added to the original 160, there is a total of 178 with 89.9% agreement as to which items constituted a bona fide example of a potential Z suffix. If we add the disagreements of both types, whether or not a suffix is present and whether or not an item is a bona fide potential occurrence, the rate of complete agreement is 87.1%, a creditable level for total agreement.
In Black English, verb concord absence is by far the most frequent, plural absence is least frequent and possessive absence is intermediate. Among the Puerto Rican groups, the PR and PR/Lame speakers contrast with the PR/BL speakers for verb concord and possessive Z absence. Our data indicate that PR and PR/Lame speakers do not delete possessive Z, while it is possible for the PR/BL speakers to delete it. Both the PR's and PR/Lames have verb concord deletion at close to 15% while the PR/BL's, again apparently approximating black speech, manifest verbal Z deletion at about twice that rate. These data conform to the pattern we have come to expect for the presence of Black English speech features in the various Puerto Rican groups, based on the analysis of the other features presented in this section. The figures for plural Z absence, however, do not fit the pattern. The PR speakers have virtually as much suffixal absence in their speech as the black speakers do, and the PR/BL speakers actually exceed the black speakers in absence of the suffix. How can this deviation in the expected pattern be accounted for? A plausible answer lies in the phenomenon of linguistic convergence, described elsewhere in this section, in which interference factors from Spanish tend in the same direction as assimilation to Black English. For PR/BL speakers the influences from both Spanish and Black English converge to produce a higher level of operation of a linguistic rule than for a Black English speaker who does not know speakers. The plural is marked in Spanish nouns, and by concord in associated articles and adjectives, by an s suffix. The Spanish suffix differs from the English suffix in not having anything analogous to the [z] and [åz] variants. In Puerto Rican Spanish, as Ma and Herasimchuk (1968) have documented, the plural s can be deleted at frequency rates in their style B (closest to the interview style of our data) ranging from 47% to 60%, depending on phono-
logical environment. If we ascribe the 8.5% rate of plural deletion in
the speech of the PR group largely to interference from Puerto Rican
Spanish, and the 11.0% deletion rate for the PR/BL group to the con-
vergence of Puerto Rican Spanish interference and Black English assimila-
tion, the apparent deviation from the pattern in these groups becomes
explicable. A problem remains, however, with the PR/Lame speakers
who have virtually no plural deletion. We may recall that the Lame speakers
are those whose orientation is away from both black culture and from
the indigenous New York City Puerto Rican milieu and in the direction of
the American mainstream values. This group orientation among the Lames
is probably sufficient motivation for them to overcome the Spanish
interference tendencies for this feature. Their lack of black contacts,
and lack of inclination to be acculturated in that direction, naturally
explains why there should be no influence from Black English.

In the course of the analysis of the data for verb concord Z absence,
it became apparent that the verbs say and do with negative contraction
seemed to favor Z absence much more frequently than other verbs do.¹

<table>
<thead>
<tr>
<th></th>
<th>Don't/doesn't</th>
<th>Say/says</th>
<th>Other verbs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>Abs/Total</td>
<td>%</td>
</tr>
<tr>
<td>BE</td>
<td>9/9</td>
<td>100.0</td>
<td></td>
</tr>
<tr>
<td>PR/BL</td>
<td>6/7</td>
<td>85.7</td>
<td></td>
</tr>
<tr>
<td>PR</td>
<td>0/3</td>
<td>0.0</td>
<td></td>
</tr>
<tr>
<td>PR/Lame</td>
<td>6/9</td>
<td>66.7</td>
<td></td>
</tr>
</tbody>
</table>

Table 64: Percent Absence of Verbal Concord Z with do plus not Contraction
and say Compared with other Verbs for Four Groups of Informants.

¹It is probable that the tendency in the case of say is inflated slightly
by the tabulation of some instances of said to which the final d deletion
rule has applied as if they were instances of say (cf. p.337). The constraint
in the case of don't/doesn't has no analogous source of error. Verbal
concord Z absence in the case of do with negative contraction is also
reported for Washington, D.C. speakers in Pasold (forthcoming.)
Table 65 shows this tendency. The tendency for Z to be absent from these two particular verbs is most striking in the speech of the blacks, for whom Z is virtually impossible with don't and say and in the speech of the Puerto Rican-black group which has a marked tendency for greater Z absence in the case of don't and say. The figures for the FR and PR/Lame groups are not as clear, largely due to the paucity of examples of don't and say in these interviews. When the data for the BE and PR/BL groups are subjected to the Chi square test, the tendency for Z to be absent with don't and say is significant at the .001 level of confidence. Notice that excluding the instances of don't/doesn't and say/says from the tabulations has no effect on the pattern, which shows more Z absence in the speech of the PR/BL group than any of the other Puerto Ricans, but less than in the speech of the blacks.

The effect of the major kinds of phonological environments was tabulated for the four groups. One such possible constraint is whether or not the Z suffix in question is part of a consonant cluster. If the base to which the suffix is added ends in a nonsibilant consonant, the Z suffix takes the phonetic form [z] or [s] and forms a consonant cluster with the final consonant of the base, as in stands or seats. If the base word ends in a vowel, no cluster is formed by Z suffixation, as in clues or sees. If the base word ends in a sibilant consonant, no cluster is formed because the bisegmental variant [iz] is required, as in reaches or pleases. Examples like these last two, in which the base ends in a sibilant, were not tabulated. Another possible constraint is whether or not the following word begins with a vowel. None of these constraints had a very convincing effect on Z deletion, however. Table 65 shows the results separately for verb concord Z and plural and possessive Z (plural and
possessive are combined because of the paucity of examples of possessive Z). A plus (+) in Table 65 means that the environment favors deletion, a minus (-) means the environment does not favor deletion and a zero means that there is no substantial difference based on the environment. It is clear that there is no consistent pattern of phonological influence on deletion, although there are four places at which a following consonant favors deletion and two where Z is more often deleted when it is part of a cluster. The most reasonable conclusion, which is in accord with the literature on Z absence, is that there are no major phonological environmental constraints on Z absence.

<table>
<thead>
<tr>
<th></th>
<th>3rd Cluster</th>
<th>F C Cluster</th>
<th>Pl/Poss Cluster</th>
<th>F C Conservation</th>
</tr>
</thead>
<tbody>
<tr>
<td>BE</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>PR/BL</td>
<td>0</td>
<td>+</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>PR</td>
<td>+</td>
<td>+</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>PR/Lame</td>
<td>-</td>
<td>+</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Table 65: Effect of Two Phonological Environments on Z Deletion for Four Groups of Informants

1Because of the lack of patterning, the use of the actual figures would tend to obscure the data rather than clarify them.

2Wolfram (1969) found that neither of the constraints examined here had a noticeable effect on Z deletion in Detroit. Fasold (forthcoming) came to the same conclusion regarding verb concord Z in Washington, D.C. Labov et al. (1968) found that these environments had no appreciable effect on verbal concord Z, but that a following vowel had a weakly inhibiting effect on plural Z deletion. Two student papers on plural Z deletion (Kessler 1969 and Sobin 1971) report partially contradictory results on the effect of these environments on plural Z deletion.
In addition to the tabulations based on the spontaneous conversation section of the interview, there are two tasks which have to do with Z suffixes in the word games section of the interview. One was an attempt to elicit possessive Z and the other dealt with plurals. The possessive word game was designed to elicit the forms girl's bike, dog's bone, mouse's cheese, Jack Johnson's car and Derrick Black's toy. The five items for each of the 12 speakers were tabulated for the presence or absence of possessive Z. In addition, the two proper name constructions were included to test whether the speakers' competence in the use of the possessive suffix was sufficient so they would suffix the surname only. Black English speakers are sometimes observed to suffix both the given name and the surname in proper name possessive constructions (Jack's Johnson's car) or the given name and not the surname (Jack's Johnson car). This is taken to be a hypercorrection based on the optionality of the use of the possessive suffix in Black English. Besides the presence and absence of the suffix in this elicitation task, we observed the number of hyperforms of the two proper name constructions. These data are presented in Table 66. The number of deleted suffixes in the item mouse's cheese is presented separately from the other four items because of the substantially different results which are obtained for that item.

<table>
<thead>
<tr>
<th>Suffix present</th>
<th>Suffix absent (excl. mouse's cheese)</th>
<th>Suffix absent (mouse's cheese)</th>
<th>Hyperform</th>
</tr>
</thead>
<tbody>
<tr>
<td>BE</td>
<td>7</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>PR/BL</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>*PR</td>
<td>9</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>PR/Lame</td>
<td>11</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

*One PR speaker failed to complete the task for mouse's cheese

Table 66: Numbers of Various Responses in the Possessive Elicitation Task in Four Groups of Harlem Adolescents.
Although we are working with very few items, a look at the numbers of suffixes absent, when mouse's cheese is excluded, shows that the BE and PR/BL groups are distinguished from the PR and PR/Lame speakers in the higher rate of suffix deletion which they manifest, with the PR/BL group slightly behind the BE group. One speaker in each group gave a hyperform for one of the proper name constructions (but used the Standard English rule on the other one). It is difficult to attribute this usage to difficulty with suffix formation since, as we have seen from the interview as well as from the data in the second column of Table 66, the PR and PR/Lame speakers have very little trouble controlling possessives. They are most likely a product of the artificiality of the task and the relatively low frequency of the possessive construction with proper names in English.

There was much more difficulty with the construction mouse's cheese than with the remaining four items. Only one speaker, a Lame, was able to supply the correct response. The rest all gave mouse cheese except for two of the PR subjects, one of whom gave mice cheese while the other was not able to complete the task at all. Mouse is the only word of the five which ends in a sibilant consonant and therefore would require the bisegmental variant [iz]. The hypothesis must be entertained that the [iz] form is more difficult to control than the [s] or [z] forms.

In another word game, the plural forms of nine items, six of them real words and three of them nonsense words, were elicited. One of the real words was the irregular plural form foot (pl. feet). Since this plural is not formed with the Z suffix, this item is ignored in the tabulations presented here. Two other items, the real word desk and the nonsense word lust end in a cluster of s plus a stop consonant. Under these conditions, four kinds of responses were observed: desk, desks, dess,
and desses. So many responses distributed among so few speakers gave too few responses in each category to reveal a coherent pattern, so these two items are also ignored.

The first tabulation was made to discover whether or not the twelve speakers were better at suffixing the real words with the plural Z suffix than they were the nonsense words. The difference turned out to be very slight. Of the real words, 14.3% appeared without Z while 16.7% of the nonsense plurals were not suffixed.

When the items were examined to determine if there were any factors shared by those items from which the Z suffix was deleted compared to those items from which Z was never deleted, it emerged that Z was deleted from only two classes of words: (1) those bases ending in a sibilant, so that [iz] was expected, and (2) the two nouns of measure, dollar and cent.

Table 67 summarizes these facts.

<table>
<thead>
<tr>
<th></th>
<th>Present</th>
<th>Absent</th>
</tr>
</thead>
<tbody>
<tr>
<td>[s], [z]</td>
<td>24</td>
<td>0</td>
</tr>
<tr>
<td>expected</td>
<td></td>
<td></td>
</tr>
<tr>
<td>[iz]</td>
<td>17</td>
<td>7</td>
</tr>
<tr>
<td>expected</td>
<td></td>
<td></td>
</tr>
<tr>
<td>measure nouns</td>
<td>20</td>
<td>4</td>
</tr>
</tbody>
</table>

Table 67: Presence and Absence of Plural Z in Three Categories of Nouns in the Speech of Twelve Harlem Adolescents
These facts are interesting since Wolfram (1969) found that measure nouns tended to favor plural Z absence in Detroit Black English and we have already seen that the [İz] variant was much more likely to be absent in the possessive elicitation task. At this point, however, the four groups of speakers are not discriminated by the data. Of the seven speakers who delete Z from words ending in a sibilant, two each are from the BE, PR/BL and PR groups and one is from the PR/Lame group. Of the four who leave measure nouns unsuffixed, one is black, one is PR and two are PR/BL.

Because both the elicitation tasks suggested that Z is more likely to be absent where the expected variant is [İz], the frequency of absence of [İz] was compared to the frequency of absence of [s] and [z] in the narrative section of the interview. The hypothesis was not very convincingly supported: the absence of [İz] is almost exactly as frequent as the absence of all Z for all the speakers. The frequency of absence for [İz] is 19.0%, while all Z suffixes in the aggregate are absent, in the speech of the twelve subjects, 17.7% of the time. When the data on [İz] absence is examined by groups, no rational pattern emerges; the blacks and PR/Lames have [İz] absent at slightly more than the general rate for Z absence, while the other two Puerto Rican groups have [İz] absent at slightly less than the general rate. No simple explanation for the apparent difference between the elicitation and narrative data on [İz] comes to mind.

The data on Z absence, on the one hand, fits the pattern for the other linguistic features discussed in this section. The PR/BL group is appreciably more similar to the BE speakers for this feature than are the PR and PR/Lame speakers. On the other hand, the data presented here
is in harmony with data on Black English which exists in the literature. It supports earlier conclusions that Z absence is primarily a grammatical deletion and that verb concord Z is most frequently absent, followed in order by possessive Z and plural Z.

4.6.5 Multiple Negation

As has been pointed out previously in this study, multiple negation is a well-known characteristic of a number of nonstandard dialects in the United States. However, in Black English, it appears to be categorical for most speakers in that multiple negatives are realized whenever a post-verbal indefinite occurs in a sentence where a negativized auxiliary is present in the surface structure. That is, we have sentences like:

138

(a) He didn't do nothing.
(b) He didn't never go nowhere.

In Black English, but not:

139

(a) *He didn't do anything.
(b) *He didn't ever go anywhere.

In Table 68, we have tabulated the incidence of multiple negation for our four groups of speakers. Following our procedure in our more detailed discussion of this feature (cf. Chapter Three, Section Five), we have only included certain types of constructions in our tabulation. For indefinite determiners and pronouns, only negative sentences where any is a potential surface structure alternative are included; for the adverb ever/never only sentences where there is some other surface
realization of negation are included; indefinites appositional to the main clause are also eliminated from tabulation because they operate differently with respect to multiple negation. Table 68 also includes how many of the informants in each group reveal categorical multiple negation, given our procedure for tabulation.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PR/BL</td>
<td>41/41</td>
<td>100.0</td>
<td>3</td>
</tr>
<tr>
<td>PR</td>
<td>22/25</td>
<td>88.0</td>
<td>1</td>
</tr>
<tr>
<td>PR/Lame</td>
<td>27/33</td>
<td>81.8</td>
<td>0</td>
</tr>
</tbody>
</table>

Table 68: Multiple Negation for Four Groups of Speakers

Several facts emerge from Table 68. In the first place, we see that the figures for the PR/BL and BE groups do not show any real contrast. Five out of the six informants in these two categories reveal the categorical realization of multiple negation. Both groups obviously reveal the categorical operation of the multiple negative concord rule. On the other hand, both the PR and PR/Lame groups also show a very high, but not wholly categorical, realization of multiple negation. It is somewhat surprising that the incidence of multiple negation is so high for the PR/Lame group because multiple negation is so stereotyped as a stigmatized grammatical feature. One might expect a much lower incidence of multiple negation from a group which shows the middle class value orientation in the ways we described in our sociological characterization of this group.
But this is not the case. Instead, we see a clear predominance of multiple negation. One might cite the possible effect of Spanish interference (the Spanish patterns clearly favoring multiple negation) as a factor to account for extent of multiple negation for this group, but we do not find interference to this extent in any other features we have looked at for this group, so that it is difficult to account for it here. Rather, it appears that multiple negation is quite pervasive in this group despite the fact that many mainstream cultural values have been adopted by the group. This would tend to confirm Labov, et al.'s (1968) finding that multiple negation for lower-class black informants does not differ greatly when Lames are compared to indigenous peer group members (Labov, et al. 1968). It is interesting to note further that the extent of multiple negation in the PR/Lame group matches the figures for multiple negation for working class white teenagers in New York City cited in Labov, et al. (1968: 277). On the basis of this comparison, we may say that the PR/Lame group tends to realize multiple negation to the same extent as it is realized in white nonstandard dialects in New York City; the PR/BL group matches the categorical realization typical of Black English; and the PR group falls in between these extremes, exceeding working class white dialects but not quite matching the categorical usage found in Black English.

In addition to the general type of multiple negation described above, there are other types of negative patterns which are peculiar to Black English in a Northern urban area such as New York City. For example, it has sometimes been mentioned that in Black English, a pre-verbal auxiliary may be negated in addition to negative realization on an indefinite preceding the verb, producing:
(a) Nobody didn't like her.
(b) Nobody can't step on her foot.

Although there are a number of potential examples of this type, we do not find any realized with a pre-verbalized negative for any of our informants, including the black group. If it occurs, its frequency is probably quite limited for any of the groups. Apparently related to the above pattern is an inversion of negativized auxiliary and negative indefinite in declarative sentences, producing

(a) Didn't nobody do it.
(b) Can't nobody do it.

There are too few potential examples of this type of construction to do any type of quantitative analysis; though Flaco M., a PR/BL informant, does reveal this type of construction, other Puerto Rican informants in the three groups do not. The extent of assimilation to Black English features for Flaco M. is consistently greater than any of the other Puerto Rican informants, including the other two informants in the PR/BL group, so that if any of the PR/BL informants were to reveal this type of negation, it would be Flaco M.

Finally, we observe a negative pattern in which Black English may use ain't as a correspondent for Standard English didn't, producing sentences like:

(a) He ain't see the dude.
(b) He ain't do nothing.
Although practically all nonstandard varieties of English use ain't for either the present tense conjugated negative forms of to be or the negativized form of auxiliary have, ain't as a correspondent of Standard English didn't would only be expected by Black English speakers in New York City. Although all the Puerto Rican informants in this study gave evidence of some potential instances of this construction, only two of them used it at all (and in less than 25% of the potential examples), and both of these are in the PR/BL group. We therefore conclude that ain't as a correspondence for Standard English didn't is characteristic only of those informants with extensive black contacts.

To sum up, we observe that the general type of multiple negation found in both white and black nonstandard varieties in New York City is pervasive for all groups of Puerto Rican speakers, but features of negation unique to Black English are only found in the BE and PR/BL groups.

4.6.6 \[\theta\] Variable

4.6.6.1 Morpheme-Initial \[\theta\]

As we pointed out in our more extensive discussion of the \[\theta\] variable, there are several different realizations of underlying \[\theta\] dependent on the position of \[\theta\] in a morpheme. In initial position, Black English is like some other nonstandard dialects in that \[\theta\] can be realized as a lenis, typically unaspirated stop, so that think and three may be realized as [\textipa{t̪ink}] and [\textipa{tr̪i}] respectively. It should be noted, however, that the
realization of [t] for [θ] is relatively infrequent in Black English. In Table 69, the figures of [t] for underlying morpheme-initial [θ] are given. The phonetic variants included under the category t include a lenis, unaspirated stop and an aspirated stop.

<table>
<thead>
<tr>
<th></th>
<th>t Occ./Pot. [θ]</th>
<th>% t</th>
</tr>
</thead>
<tbody>
<tr>
<td>BE</td>
<td>11/69</td>
<td>15.9</td>
</tr>
<tr>
<td>PR/BL</td>
<td>18/49</td>
<td>36.7</td>
</tr>
<tr>
<td>PR</td>
<td>20/61</td>
<td>32.8</td>
</tr>
<tr>
<td>PR/Lame</td>
<td>3/55</td>
<td>5.5</td>
</tr>
</tbody>
</table>

Table 69: Occurrence of t for Potential [θ] Realization in Morpheme-Initial Position for Four Groups of Speakers.

Compared to the assimilation of Black English features we have observed for other variables, this pattern shows a quite distinct distribution. For one thing, we observe that both the PR/BL and the PR groups clearly exceed the BE group in t realization. A more typical pattern for Black English assimilation would be to find the PR/BL group approximating but not equaling the BE group. But the PR/BL group exceeds BE group in a non-trivial manner (P > .01 in a Chi square comparison of the two groups). Furthermore it is completely atypical for the PR group to exceed the BE group when we are dealing with features assimilated from Black English, but we find that the incidence of t for this group is twice that for the BE group. This atypical pattern, then, causes us to question whether this realization is due to Black English influence at all. Based on the distribution for the BE, PR/BL, and PR groups it appears that its incidence
realization of [t] for /θ/ is relatively infrequent in Black English. In Table 69, the figures of [t] for underlying morpheme-initial /θ/ are given. The phonetic variants included under the category t include a lenis, unaspirated stop and an aspirated stop.

<table>
<thead>
<tr>
<th></th>
<th>t Occ./ Pot./θ</th>
<th>% t</th>
</tr>
</thead>
<tbody>
<tr>
<td>BE</td>
<td>11/69</td>
<td>15.9</td>
</tr>
<tr>
<td>PR/BL</td>
<td>18/49</td>
<td>36.7</td>
</tr>
<tr>
<td>PR</td>
<td>20/61</td>
<td>32.8</td>
</tr>
<tr>
<td>PR/Lame</td>
<td>3/55</td>
<td>5.5</td>
</tr>
</tbody>
</table>

Table 69: Occurrence of t for Potential /θ/ Realization in Morpheme-Initial Position for Four Groups of Speakers.

Compared to the assimilation of Black English features we have observed for other variables, this pattern shows a quite distinct distribution. For one thing, we observe that both the PR/BL and the PR groups clearly exceed the BE group in t realization. A more typical pattern for Black English assimilation would be to find the PR/BL group approximating but not equaling the BE group. But the PR/BL group exceeds BE group in a non-trivial manner (P > .01 in a Chi square comparison of the two groups). Furthermore it is completely atypical for the PR group to exceed the BE group when we are dealing with features assimilated from Black English, but we find that the incidence of t for this group is twice that for the BE group. This atypical pattern, then, causes us to question whether this realization is due to Black English influence at all. Based on the distribution for the BE, PR/BL, and PR groups it appears that its incidence
derives from a different source, presumably from some type of stabilized language pattern which might be quite predictable from the lack of consistent |θ| usage in Puerto Rican Spanish. It is important to note here that although both [s] and [t] might be used as interference correspondents for morpheme-initial position by Puerto Rican Spanish speakers learning English, it is the [t] variant which has become stabilized as a feature in the dialect of second generation Puerto Ricans. This variant is the one which can find a correlate in surrounding nonstandard dialects and will not obtrusively be identified as an interference variant. Given options of interference variants which become stabilized as integral parts of a new language system, we would certainly expect those variants which have some correlate in the target language to be chosen over variants not having a correlate.

We may also note that the PR/Lame group shows a sharp contrast with the other Puerto Rican and BE groups. The low incidence of this realization clearly separates this group from the other groups. The usage observed here seems to be much more typical of working class speech in the general New York population as opposed to its relatively high frequency in the other Puerto Rican groups.

4.6.6.2 Morpheme-Final θ

In morpheme-final position, the predominant realization for underlying |θ| in Black English is [f]. In Table 70, the incidence of [f] for underlying |θ| is indicated for our four groups of speakers. Excluded from this tabulation are all instances of underlying |θ| with the item with, since the realizations for this item reveal a quite different distribution.
The distribution in the above table clearly indicates the assimilation of morpheme-final [f] in all three Puerto Rican groups of informants. In the BE and PR/BL groups, its incidence is quite high; one BE and one PR/BL having non-trivial numbers of potential occurrence, in fact, reveal the categorical presence of [f]. The PR and PR/Lame group, while indicating the incidence of [f], do not use it nearly to the same extent as the BE and PR/BL groups. Only one informant in these two groups, a PR/Lame, reveals the categorical absence of this realization. We therefore conclude that [f] is a feature which has been assimilated by all three Puerto Rican groups of informants, but its incidence is lower for groups with less immediate contact with blacks.

4.6.6.3 The Item with

As mentioned previously, the item with tends to reveal quite different realization patterns from other cases of underlying [ŋ] for reasons we discussed in Chapter Three. When the following word begins with a
vowel we typically find [k], so that the relevant categories for tabulation are t and non-t (i.e., [f] or [θ]). When followed by a consonant, we find [t], [f] or [θ], and no phonetic realization at all as the three relevant categories for tabulation. The different realizations for underlying [θ] in with are given in Table 71, delimiting the following environment on the basis of a consonant or vowel.

<table>
<thead>
<tr>
<th>## Vowel ##</th>
<th>Occ. t/Pot. θ</th>
<th>% t</th>
<th>Occ. θ</th>
<th>Occ. t</th>
<th>Pot θ</th>
<th>% θ</th>
<th>% t</th>
</tr>
</thead>
<tbody>
<tr>
<td>BE</td>
<td>16/17</td>
<td>94.1</td>
<td>8</td>
<td>9</td>
<td>18</td>
<td>44.4</td>
<td>50.0</td>
</tr>
<tr>
<td>PR/BL</td>
<td>10/12</td>
<td>83.3</td>
<td>4</td>
<td>4</td>
<td>9</td>
<td>44.4</td>
<td>44.4</td>
</tr>
<tr>
<td>PR</td>
<td>20/21</td>
<td>95.2</td>
<td>8</td>
<td>6</td>
<td>16</td>
<td>50.0</td>
<td>37.5</td>
</tr>
<tr>
<td>PR/Lame</td>
<td>10/15</td>
<td>66.7</td>
<td>11</td>
<td>2</td>
<td>15</td>
<td>73.3</td>
<td>13.3</td>
</tr>
</tbody>
</table>

Table 71: Distribution of Realizations for [θ] in with for Four Groups of Speakers.

We first note that there is no real difference in the realization of t in with when followed by a vowel for BE, PR/BL, and PR groups. This nonstandard variant is quite pervasive. The PR/Lame group also reveals a predominance of t, but not quite as extensively as in the other groups. When followed by a consonant, we also find very little difference in the incidence of θ and t for potential [θ] for all groups except the PR/Lame group. In this case, the incidence of θ is somewhat higher for the PR/Lames. Because of the limited number of examples, however, it is questionable whether there is any significance in this difference. On
the basis of our limited number of examples, we conclude that at least for the BE, PR/BL, and PR groups, there is no real contrast in the types of realizations observed. The pervasiveness of t before vowels is quite typical of all groups, and the realizations of t and ə are evenly distributed before consonants for the three groups.

In summarizing our brief description of underlying /θ/, we find three different patterns of distribution based on the context of /θ/. In initial position, the occurrence of t exceeds the BE frequency distributions for PR and PR/BL groups to such an extent that it appears likely that the simple matter of assimilation from Black English alone does not adequately account for the initial t in some varieties of Puerto Rican English. In final position, the distribution of f for the groups is indicative of a typical pattern of assimilation from Black English. For this phonological feature, f reveals both direct and indirect assimilation (i.e., speakers do not have to have extensive black contacts in order to reveal a feature—it is apparently pervasive enough in the community to be assimilated from other Puerto Ricans or from limited black contacts). The third context, the occurrence of different realizations in the item with, reveals a pattern of distribution which is approximately even for all the groups with the exception of the PR/Lames. The occurrence of t in this item is a generalized nonstandard pattern of New York City speech in that the t variant is quite typical of a number of nonstandard varieties in the area, both white and black. We therefore might expect the differences between the BE, PR/BL, and PR groups to be somewhat minimized because of the pervasiveness of this variant for the general working-class population.
4.6.7 Word-Final Consonant Clusters

In word-final position, consonant clusters which share the feature of voicing or voicelessness are frequently reduced in Black English. This pattern affects a number of different clusters, including stop plus stop, fricative plus stop, and sonorant plus stop clusters. The types of clusters typically affected in Black English can be summarized in Table 72, which is taken from Wolfram (1969:50).

<table>
<thead>
<tr>
<th>Cluster</th>
<th>Examples</th>
<th>Monomorphemic</th>
<th>Bimorphemic</th>
</tr>
</thead>
<tbody>
<tr>
<td>[st]</td>
<td>test, post, list</td>
<td>test, post, list</td>
<td>missed, messed, dressed</td>
</tr>
<tr>
<td>[sp]</td>
<td>wasp, clasp, grasp</td>
<td>wasp, clasp, grasp</td>
<td>finished, lashed, cashed</td>
</tr>
<tr>
<td>[sk]</td>
<td>desk, risk, mask</td>
<td>desk, risk, mask</td>
<td>raised, composed, amazed</td>
</tr>
<tr>
<td>[st]</td>
<td>[st]</td>
<td>[st]</td>
<td>finished, lashed, cashed</td>
</tr>
<tr>
<td>[zd]</td>
<td>left, craft, cleft</td>
<td>left, craft, cleft</td>
<td>judged, charged, forged</td>
</tr>
<tr>
<td>[jc]</td>
<td>[jc]</td>
<td>[jc]</td>
<td>judged, charged, forged</td>
</tr>
<tr>
<td>[ft]</td>
<td>[ft]</td>
<td>[ft]</td>
<td>laughed, stuffed, roughed</td>
</tr>
<tr>
<td>[vd]</td>
<td>[vd]</td>
<td>[vd]</td>
<td>loved, lived, moved</td>
</tr>
<tr>
<td>[nd]</td>
<td>mind, find, mound</td>
<td>mind, find, mound</td>
<td>rained, fanned, canned</td>
</tr>
<tr>
<td>[md]</td>
<td>[md]</td>
<td>[md]</td>
<td>named, foamed, rammed</td>
</tr>
<tr>
<td>[ld]</td>
<td>cold, wild, old</td>
<td>cold, wild, old</td>
<td>called, smelled, killed</td>
</tr>
<tr>
<td>[pt]</td>
<td>apt, adept, inept</td>
<td>apt, adept, inept</td>
<td>mapped, stopped, clapped</td>
</tr>
<tr>
<td>[kt]</td>
<td>act, contact, expect</td>
<td>act, contact, expect</td>
<td>looked, cooked, cracked</td>
</tr>
</tbody>
</table>

Table 72: Black English Clusters Undergoing Consonant Cluster Reduction
4.6.7 **Word-Final Consonant Clusters**

In word-final position, consonant clusters which share the feature of voicing or voicelessness are frequently reduced in Black English. This pattern affects a number of different clusters, including stop plus stop, fricative plus stop, and sonorant plus stop clusters. The types of clusters typically affected in Black English can be summarized in Table 72, which is taken from Wolfram (1969:50).

<table>
<thead>
<tr>
<th>Cluster</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monomorphemic</td>
<td>Bimorphemic</td>
</tr>
<tr>
<td>[st]</td>
<td>test, post, list</td>
</tr>
<tr>
<td>[sp]</td>
<td>wasp, clasp, grasp</td>
</tr>
<tr>
<td>[sk]</td>
<td>desk, risk, mask</td>
</tr>
<tr>
<td>[st]</td>
<td>desk, risk, mask</td>
</tr>
<tr>
<td>[zd]</td>
<td>raised, composed, amazed</td>
</tr>
<tr>
<td>[jd]</td>
<td>judged, charged, forged</td>
</tr>
<tr>
<td>[ft]</td>
<td>left, craft, cleft</td>
</tr>
<tr>
<td>[vd]</td>
<td></td>
</tr>
<tr>
<td>[nd]</td>
<td>mind, find, mound</td>
</tr>
<tr>
<td>[md]</td>
<td></td>
</tr>
<tr>
<td>[ld]</td>
<td>cold, wild, old</td>
</tr>
<tr>
<td>[pt]</td>
<td>apt, adept, inept</td>
</tr>
<tr>
<td>[kt]</td>
<td>act, contact, expect</td>
</tr>
</tbody>
</table>

Table 72: Black English Clusters Undergoing Consonant Cluster Reduction
Any of the above clusters presented in Table 72 may be reduced in Black English, whether the cluster is monomorphemic or bimorphemic. This means test may be realized as [tɛs], missed as [mɪs] act as [ək] cooked as [kʊk], etc.

In Table 73, we present the totals for consonant cluster reduction. Environmental delimitation is made on the basis of whether the following segment is consonantal or non-consonantal, since it is well established that this is an essential linguistic constraint on reduction.

<table>
<thead>
<tr>
<th></th>
<th>#Non-Cons.</th>
<th># Cons.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Del./Total Cl.</td>
<td>%Del.</td>
</tr>
<tr>
<td>BE</td>
<td>57/103</td>
<td>55.3</td>
</tr>
<tr>
<td>PR/BL</td>
<td>53/90</td>
<td>58.9</td>
</tr>
<tr>
<td>PR</td>
<td>48/112</td>
<td>42.9</td>
</tr>
<tr>
<td>PR/Lame</td>
<td>45/111</td>
<td>40.5</td>
</tr>
</tbody>
</table>

Table 73: Consonant Cluster Reduction in Non-Consonantal and Consonantal Environments for Four Groups of Speakers.

Several observations can be made on the basis of the above table. As expected, all groups clearly favor deletion of the final member of the cluster when followed by a consonant and there is no significant difference in the incidence of deletion between the groups in this environment. On the other hand, there is a difference between the groups when followed by a non-consonantal environment. The BE and PR/BL groups contrast with the PR and PR/Lames (at the .05 level of confidence in a Chi square calculation), but there is no significant difference between the BE and PR/BL, and PR and PR/Lame groups.
The second order constraint on variability for cluster reduction is whether the cluster is monomorphemic or bimorphemic. The following non-consonantal and consonantal environments are broken down further on the basis of whether the cluster is monomorphemic or bimorphemic in Table 74.

<table>
<thead>
<tr>
<th></th>
<th>Monomorphemic</th>
<th>Bimorphemic</th>
<th>Monomorphemic</th>
<th>Bimorphemic</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Del./Total</td>
<td>%Del.</td>
<td>Del./Total</td>
<td>%Del.</td>
</tr>
<tr>
<td>BE</td>
<td>44/61</td>
<td>72.1</td>
<td>13/42</td>
<td>31.0</td>
</tr>
<tr>
<td>PR/BL</td>
<td>38/52</td>
<td>73.1</td>
<td>15/39</td>
<td>39.5</td>
</tr>
<tr>
<td>PR</td>
<td>36/57</td>
<td>63.2</td>
<td>13/55</td>
<td>23.6</td>
</tr>
<tr>
<td>PR/Lame</td>
<td>37/64</td>
<td>57.8</td>
<td>8/45</td>
<td>17.8</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Del./Total</th>
<th>%Del.</th>
<th>Del./Total</th>
<th>%Del.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 74: Consonant Cluster Reduction in Bimorphemic/Monomorphemic and Non-Consonantal/Consonantal Environments for Four Groups of Speakers.

The same type of tendency noted in Table 73 is also noted in Table 74. That is, the constraints on variability are quite constant for all groups, the most favored environment for deletion being a monomorphemic cluster followed by a consonant, and the least favored being the bimorphemic cluster followed by a vowel. Furthermore, the BE and PR/BL groups cluster together in their frequency as opposed to the PR and PR/Lame groups who also cluster together. It is noted that the frequency of the PR/BL group actually exceeds that of the BE group, although there is no significance in the difference. We further find that the incidence of
deletion is relatively high for all groups of PR speakers, including PR/Lames. This relatively high frequency seems most attributable to the fact that the Black English pattern of cluster reduction converges with the Puerto Rican Spanish interference pattern, in which clusters do not occur. The effect of these converging patterns is the maintenance of relatively high percentages of reduction for all the groups.

Finally, we may divide the cluster further on the basis of the types of segments involved in reduction. One of the crucial distinctions is that between clusters in which both members of the cluster are stops and those where the first member of the cluster is a continuant (e.g., act vs. west). In Table 75, we have tabulated the extent of cluster reduction for these two categories for bimorphemic clusters followed by a non-consonantal environment, since this is the only category in which there are sufficient numbers for accountable variation analysis.

<table>
<thead>
<tr>
<th></th>
<th>Stop</th>
<th>Continuant</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. Del./Total</td>
<td>% Del.</td>
</tr>
<tr>
<td>BE</td>
<td>5/27</td>
<td>18.5</td>
</tr>
<tr>
<td>PR/BL</td>
<td>3/17</td>
<td>17.6</td>
</tr>
<tr>
<td>PR</td>
<td>2/20</td>
<td>10.0</td>
</tr>
<tr>
<td>PR/Lame</td>
<td>1/12</td>
<td>8.3</td>
</tr>
</tbody>
</table>

Table 75: Word-Final Cluster Reduction for Bimorphemic Clusters Preceding a Non-Consonantal Environment in Stop + Stop Clusters versus Continuant + Stop Clusters for Four Groups of Speakers

The pattern which we observed in Table 75 is repeated again, both in terms of the constraint and the differences between groups. Continuant
Stop clusters are reduced between two and three times as frequently for all groups of speakers. When the groups are compared, we again find that it is the BE and PR/BL groups which contrast with the PR and PR/Lame groups.

We conclude, then, that cluster reduction is a pattern which is to be found to some extent in all groups. Although we may not ascribe this pattern completely to the pattern found in Black English because of a parallel phenomenon which may result from the Spanish phonological system, it is quite obvious that for second generation Puerto Ricans, extensive contacts with blacks will result in an increased frequency in the incidence of reduction. On the other hand, PR/Lames do not show a significantly smaller incidence of reduction with respect to this phonological variable when compared to PR informants with limited black contacts. Cluster reduction is a variable which tends to show considerable homogeneity for the various Puerto Rican groups. When we find a Black English rule which results in an output which is also predictable from Spanish interference, as in this instance, we can reasonably expect more homogeneity in the distribution of this feature for the various groups of Puerto Rican speakers.

4.6.8 The Realization of ay

In Black English, underlying diphthong ay is sometimes realized as a monophthongal variant of a (either [a], [α] or [æ]) or a centralized glide ([a̯], [α̯] or [æ̯]) instead of a diphthong with the high front off glide that is usually realized in Standard English. Although these phonological realizations are also characteristic of certain parts of standard and nonstandard dialects, the monophthong and
centralized diphthong realizations have been transformed into ethnic and social class patterns in a northern context. That is, in a northern context such as New York City, these realizations are unique to Black English speakers.

Because of the problems involved in transcription reliability already discussed in Chapter Three, we only distinguish here between two categories for tabulation, namely: (1) a high front off-glide (either [a^i] or [a^I]) and (2) a non-high front off-glide ([a], [a^], [a^2], [a^3], [a^E]). For the sake of convenience we shall refer to these simply as the ay and a categories respectively. In Table 76, the relative frequency of these two types of realizations is given for the four groups of speakers.

<table>
<thead>
<tr>
<th></th>
<th>No. a/Total</th>
<th>% a</th>
</tr>
</thead>
<tbody>
<tr>
<td>BE</td>
<td>191/277</td>
<td>69.0</td>
</tr>
<tr>
<td>FR/BL</td>
<td>122/262</td>
<td>46.6</td>
</tr>
<tr>
<td>FR</td>
<td>59/318</td>
<td>18.6</td>
</tr>
<tr>
<td>PR/Lame</td>
<td>42/236</td>
<td>17.8</td>
</tr>
</tbody>
</table>

Table 76: Realization of a for ay for Four Groups of Speakers

Table 76 indicates that the BE group shows the highest incidence of a to a considerable extent, the FR/BL group approximates the BE group and the FR and PR/Lame groups reveal a realization to a much lesser extent. There is no significant difference between the realization of a for the FR and PR/Lame groups.

In Table 76, we have not distinguished the vowels on the basis of surrounding environment. However, it has been demonstrated that the
following environment may have an important influence on the variability of \( a \) and \( ay \). Our discussion in Chapter Three indicated that the first order constraint on variability is whether underlying \( ay \) is found in an open or closed syllable. In Table 77, therefore, we distinguish between the incidence of \( a \) based on whether the following syllable is open or closed.

<table>
<thead>
<tr>
<th></th>
<th>Closed Syllable</th>
<th>Open Syllable</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. ( a/\text{Total} )</td>
<td>% ( a )</td>
</tr>
<tr>
<td>BE</td>
<td>121/198</td>
<td>61.1</td>
</tr>
<tr>
<td>PR/BL</td>
<td>64/185</td>
<td>34.6</td>
</tr>
<tr>
<td>PR</td>
<td>31/229</td>
<td>13.5</td>
</tr>
<tr>
<td>PR/Lame</td>
<td>25/171</td>
<td>14.6</td>
</tr>
</tbody>
</table>

Table 77: Incidence of \( a \) for \( ay \) in Four Groups of Speakers

The figures in Table 77 show a three-way division in the context of a closed syllable and a two-way division in the context of an open syllable. In closed syllables, there is a significant difference (a calculation of the Chi square test shows it to be significant at the .001 level of confidence) between the BE, PR/BL, and PR groups, but not between the PR and PR/Lame groups. In open syllables, where \( a \) realization is more frequent for all groups, there is a significant difference between the BE and PR/BL groups and the PR and PR/Lame groups (at the .001 level of confidence), but not between the BE and PR/BL or PR and PR/Lame groups. We thus see that the differentiation of the groups is dependent on the environment in which potential \( ay \) occurs. The effect of the constraint
is regular for all groups (i.e., \(a\) is always more frequent in open syllables) but the ratios of \(a\) realization are different.

In our previous discussion of \(ax\) we have discussed two other constraints with respect to the frequency of \(a\) realization in closed syllables, namely the differentiation of following segments on the basis of voicing and continuancy. The differentiation of voicing was considered to be the second order constraint and continuancy the third order in Chapter Three. Figures for these environments are given in Table 78. Since this tabulation is only applicable to closed syllables, the figures for open syllables given in Table 78 are not repeated.

<table>
<thead>
<tr>
<th></th>
<th>Voiced</th>
<th>Voiceless</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Continuant</td>
<td>Non-Continuant</td>
</tr>
<tr>
<td></td>
<td>(a/\text{Total})</td>
<td>(% \ a)</td>
</tr>
<tr>
<td>BE</td>
<td>92/99</td>
<td>92.9</td>
</tr>
<tr>
<td>PR/BL</td>
<td>50/86</td>
<td>58.1</td>
</tr>
<tr>
<td>PR</td>
<td>21/100</td>
<td>21.0</td>
</tr>
<tr>
<td>PR/Lame</td>
<td>22/84</td>
<td>26.2</td>
</tr>
</tbody>
</table>

Table 78: Incidence of \(a\) for \(ax\) Realization Followed by Voicing/Voicelessness and Continuant/Non-Continuant in Closed Syllables for Four Groups of Speakers.

In attempting to explain why there is a significant difference between the PR/BL and BE groups in open syllables and not in closed ones, we may hypothesize that the relative awareness of appropriate Black English realizations may vary. A PR/BL speaker attempting to imitate black
speech might be expected to be more aware of the a realization in an open syllable and thus more likely to approximate Black English in this environment.  

Table 78 shows several different types of distribution based on the following environments. When the following segment is voiceless (continuant or non-continuant), there is very little differentiation between the four groups. All groups show a very low incidence of a realization. But when the following segment is voiced, there are significant contrasts between several of the groups. In the context of a voiced continuant, there is a significant (at the .001 level of confidence) difference between the BE, PR/BL and PR groups, but no difference between the PR and PR/Lame groups. In a voiced non-continuant environment, there is only a significant difference between the BE group and the three Puerto Rican groups; no contrast is observed between the three Puerto Rican groups, however. The effect of syllable type and voicing are quite constant for all groups. We may conclude by noting that there is a fairly regular ordering of constraints for the four groups of speakers. The effect of continuancy, particularly when the following segment is voiceless, is not as constant, but this may be expected because of the infrequency with which a occurs for all groups. When dealing with a realization which occurs so infrequently we cannot expect the regularity of a constraint to be as constant. The regularity of constraint effect is also directly relatable to its order in the hierarchy of constraints, so that this relatively low order constraint cannot be expected to be as constant as higher order constraints.

---

1In this respect it is interesting to note that white northerners attempting to imitate southern whites or blacks who have this feature will often use an a realization in an open syllable, but not in a closed one. That is, they are much more likely to say [ra’d on ba] than [ro’d on ba] for "Ride on by."
With respect to the quantitative differentiation of the four groups of informants, we observed that the PR and PR/Lame groups do not reveal any significant frequency differences in any environments. On this basis, we may suggest that a realization has no real social status significance for these informants. On the other hand, we find that the PR/BL group consistently differentiates itself quantitatively from the other two Puerto Rican groups in the most relevant environments. However, its differentiation from the BE group is not as consistent. In one environment (viz. open syllables), the frequency of a realization approximates the relative frequency for the BE group, but in other environments it is considerably less frequent than it is for the BE group.

4.6.9 Syllable-Final d

In syllable-final position, when preceded by a vowel or constricted r, the Standard English voiced stops, b, d, and g (and, to a lesser extent, all voiced obstruents) have several correspondents in Black English. These correspondents are the result of two basic rules: (1) a devoicing rule,¹ which results in the realization of underlying voiced stops as voiceless ones, so that d is realized phonetically as a glottal stop [ʔ], an unreleased stop, [t 潟], or a co-articulated glottal and unreleased stop [ʔt 潟], and (2) a deletion rule, which results in the loss of the stop (Ø).

In Table 79, the frequency of the t and Ø realizations are given for the four groups of speakers. The figures are divided on the basis

---

¹The use of the term devoicing is used to refer to a phonological process in which a voiced segment is changed to a voiceless one, and is not to be confused with the phonetic devoicing of a segment which is initiated as a voiced segment (e.g. [d]).
of whether potential \( d \) is followed by a vocalic or non-vocalic environment. Only the incidence of \( \emptyset \) is given for the following vocalic environment, since \( t \) does not typically occur in this environment.

![Graph showing deletion and devoicing of syllable-final \( d \) for four groups of speakers.]

<table>
<thead>
<tr>
<th></th>
<th>No. ( \emptyset )</th>
<th>Total</th>
<th>% ( \emptyset )</th>
<th>No. ( \emptyset )</th>
<th>% ( \emptyset )</th>
<th>No. ( t )</th>
<th>% ( t )</th>
<th>( t+\emptyset )/Tot</th>
<th>% ( t ) or ( \emptyset )</th>
</tr>
</thead>
<tbody>
<tr>
<td>BE</td>
<td>4</td>
<td>43</td>
<td>9.3</td>
<td>31</td>
<td>41.9</td>
<td>29</td>
<td>39.2</td>
<td>60/74</td>
<td>81.1</td>
</tr>
<tr>
<td>PR/BL</td>
<td>11</td>
<td>37</td>
<td>29.7</td>
<td>41</td>
<td>54.7</td>
<td>23</td>
<td>30.7</td>
<td>64/75</td>
<td>85.3</td>
</tr>
<tr>
<td>PR</td>
<td>5</td>
<td>46</td>
<td>10.9</td>
<td>47</td>
<td>56.6</td>
<td>14</td>
<td>16.9</td>
<td>61/83</td>
<td>73.5</td>
</tr>
<tr>
<td>PR/Lame</td>
<td>7</td>
<td>42</td>
<td>16.7</td>
<td>24</td>
<td>31.6</td>
<td>11</td>
<td>14.5</td>
<td>35/76</td>
<td>46.1</td>
</tr>
</tbody>
</table>

Table 79: Deletion and Devoicing of Syllable-Final \( d \) for Four Groups of Speakers.

To begin with, Table 79 reveals the sharp contrast between the vocalic and non-vocalic environments for all groups. But it should be further noted that all three Puerto Rican groups exceed the BE group in the frequency of zero realization before a vowel. Preceding a non-vocalic environment, we also find the frequency of \( \emptyset \) greater for the PR/BL and PR
groups than it is for the BE group. Zero realization of $d$, as we have mentioned previously, is a phonological process for which we can find a clear-cut parallel in interference from Puerto Rican Spanish. The convergence of phonological processes, then, seems to be the most reasonable explanation for the fact that both the PR/BL and PR groups exceed the BE group in frequency. This type of frequency distribution seems substantiated by other converging phonological processes which we have looked at in this study, where the frequency of variants for PR/BL and PR groups tends to match or exceed the frequency of variants for the BE group.

With respect to $t$ realization, we find a quite different pattern emerging. The BE group exceeds all the other groups. The PR/BL group comes closest to matching the BE group, but the PR and PR/Lame groups show less than half as much $t$ realization. This pattern tends to match patterns of assimilation which do not have converging phonological processes from Puerto Rican Spanish interference. Although it has sometimes been mentioned that $t$ for $d$ may be expected from Spanish speakers, apparently this process is sufficiently infrequent to influence the figures substantially like other converging phonological processes.

In comparing the totals for non-$d$ (i.e., either $t$ or $\emptyset$) realizations, we find that the PR/BL group slightly exceeds the BE group. The PR/BL group, as we noted above, exceeds the BE frequencies of $d$ deletion because of converging phonological processes. For the $d$ forms which have not undergone deletion, the assimilated Black English devoicing rule is applied to a majority of cases. The combination of these two processes, then, results in more nonstandard English realizations for the PR/BL groups than in any of the other groups. The other Puerto Rican groups, who show considerable deletion
in non-vocalic environments, do not match the totals of non-\( d \) deletion shown by the BE and PR/BL groups because of the reduction in the devoicing rule for the instances of \( d \) not reduced by the operation of the deletion rule.

In addition to the distinction between following vocalic and non-vocalic environments, stress has also been isolated as a relevant variable environment for the incidence of both \( \emptyset \) and \( t \). In Table 80, this conditioning factor is tabulated for both following vocalic and non-vocalic environments. Unlike Table 79, where the percentage of \( t \) realization was calculated on the basis of all potential instances of \( d \), the percentage of \( t \) realization in Table 80 is only calculated on the basis of those instances of \( d \) which did not undergo deletion, since potential \( t \) realization is only relevant to those cases which have not undergone deletion.

<table>
<thead>
<tr>
<th>Vowel</th>
<th>Stressed</th>
<th>Unstressed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. ( \emptyset )/Total</td>
<td>% ( \emptyset )</td>
</tr>
<tr>
<td>BE</td>
<td>2/33</td>
<td>6.1</td>
</tr>
<tr>
<td>PR/BL</td>
<td>8/29</td>
<td>27.6</td>
</tr>
<tr>
<td>PR</td>
<td>2/32</td>
<td>6.3</td>
</tr>
<tr>
<td>PR/Lame</td>
<td>4/36</td>
<td>11.1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Non-Vowel</th>
<th>Stressed</th>
<th>Unstressed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. ( \emptyset )/Total</td>
<td>% ( \emptyset )</td>
</tr>
<tr>
<td>BE</td>
<td>22/52</td>
<td>42.3</td>
</tr>
<tr>
<td>PR/BL</td>
<td>25/49</td>
<td>51.0</td>
</tr>
<tr>
<td>PR</td>
<td>28/53</td>
<td>52.8</td>
</tr>
<tr>
<td>PR/Lame</td>
<td>11/46</td>
<td>23.9</td>
</tr>
</tbody>
</table>

Table 80: Incidence of \( t \) and \( \emptyset \) for Syllable-Final \( d \)
As might be expected, the effect of unstressed environments tends to raise the incidence of both devoicing and deletion. It is particularly noteworthy that the PR and PR/Lame groups more than double the incidence of \( t \) in the unstressed environment, the environment in which devoicing is appropriate for nonstandard dialects other than Black English.

One final effect on the incidence of \( t \) for \( d \) may be investigated in terms of the operative constraints on the variability of \( t \): namely, the distinction between potential \( d \) followed by a pause as opposed to \( d \) followed by a consonant. In Table 81, the distinction between these two environments is tabulated.

<table>
<thead>
<tr>
<th></th>
<th>Pause Occ. ( t )/Tot.</th>
<th>% ( t )</th>
<th>Con Occ. ( t )/Tot.</th>
<th>% ( t )</th>
</tr>
</thead>
<tbody>
<tr>
<td>BE</td>
<td>23/27</td>
<td>85.2</td>
<td>6/15</td>
<td>40.0</td>
</tr>
<tr>
<td>PR/BL</td>
<td>13/16</td>
<td>81.3</td>
<td>10/18</td>
<td>55.6</td>
</tr>
<tr>
<td>PR</td>
<td>11/16</td>
<td>68.8</td>
<td>3/17</td>
<td>17.6</td>
</tr>
<tr>
<td>PR/Lame</td>
<td>7/21</td>
<td>33.3</td>
<td>4/17</td>
<td>23.5</td>
</tr>
</tbody>
</table>

Table 81: Realization of \( t \) for Syllable-Final \( d \) for Four Groups of Speakers.

The increase of devoicing in the context of a following pause for all the groups appears to be quite sharp, thus indicating the applicability of this constraint for the varieties of English spoken by Puerto Ricans as well as for Black English. We thus see that devoicing, to the extent that it is operative in the Puerto Rican groups, follows the same general phonological constraints on variability as is observed in Black English.
In conclusion, we see that our brief description of the variants for syllable-final d shows two different tendencies in the Puerto Rican groups. With respect to the $\emptyset$ variant, we find that the PR/BL and PR groups exceed the frequencies of BE. This is probably due to the convergent phonological processes in Black English and Puerto Rican Spanish. On the other hand, the t realization shows frequency distributions more typical of features attributed solely to assimilation from Black English. That is, the BE group shows the highest incidence of the variant; the PR/BL group shows a relatively high incidence of the feature, but does not match the BE group in frequency; and the PR and PR/Lame groups show a considerably reduced frequency of occurrence.

4.6.10 Conclusion

Although we have taken only a limited number of Black English features for a restricted group of speakers, there are several different kinds of important observations which can be made on the basis of the preceding description.

To begin with, we note that there is a general continuum in which the Puerto Ricans with extensive black contacts consistently show the most amount of linguistic assimilation, the Puerto Ricans with limited black contacts the next most, and the Puerto Rican Lames the least. This general pattern, of course, is to be expected, given the socio-cultural factors which served as a basis for the differentiation of groups. We would certainly expect those Puerto Ricans with extensive black peer contacts to reveal considerably more Black English influence in their speech than Puerto Ricans with limited black contacts. It is further
expected that Puerto Ricans in East Harlem and the Bronx with the most sociocultural orientation toward mainstream values will reveal the least amount of Black English influence in their speech, given the stigmatized status of Black English in mainstream American society. We can thus conclude that the cultural orientation of the various groups of second generation Puerto Rican teenagers is directly realized in their linguistic behavior. The three groups of speakers represent three different points in the continuum of what we have previously labeled Puerto Rican English. In actuality, however, we see that there are at least two distinct varieties of Puerto Rican English, and possibly three, with respect to the amount of Black English which has become an integral part of the system. There are significant qualitative and quantitative differences between Puerto Ricans with extensive black contacts and those with limited black contacts, and there are quantitative differences between what we have labeled indigenous Puerto Ricans with limited black contacts and Puerto Rican Lames. It is essential to note that there are no real qualitative differences between the latter two groups, a fact which makes their differentiation somewhat less clear-cut than that between the former two groups. However, inasmuch as variable studies of different social classes have revealed that quantitative differences may be solely responsible for the differentiation of various social class dialects, it seems reasonable to speak of different varieties of Puerto Rican English which differ only in the frequency with which certain variants occur. The question of how great the quantitative differences between varieties must be in order to classify them as different dialects, and how many varieties of Puerto Rican English one ultimately may identify are matters which ultimately depend upon our definition of dialect. And, at this point, we can only
cited the numerous vain attempts to arrive at some empirically justifiable
definition and conclude that we have identified points in the continuum
of Puerto Rican English with respect to the influence of Black English.

In addition to the general conclusion concerning the overall pattern-
ing of Black English, there are some important principles which emerge with
respect to the various types of Black English features which we chose for
this study. In addition to the nonlinguistic constraints on variability
illustrated in the differentiation of four social groups, we have isolated
a number of independent linguistic constraints in tabulating these variables.

We find that the general effect of these constraints on variability is
quite regular across social groups. That is, if the IS form of the copula
is more frequently deleted than the ARE form in Black English, then we can
expect the same constraint on variability to be operative for the other
groups. This means that constraints on variability are assimilated along
with the actual forms. Actual frequencies will vary from group to group,
but the extent to which the ratios of constraints on variability match
is quite impressive. Furthermore, the ordering of these constraints
also tends to match, so that if a preceding phrase (Pro/NP) is ordered
before the following type of phrase (-ing/non -ing) in the hierarchy of
constraints in Black English, this hierarchy can also be expected for the
other groups. This type of replication from social group to social group
has been documented in other studies of linguistic constraints on
variability (e.g., Labov, et al. 1968; Wolfram, 1969; Fasold forthcoming)
so that the evidence for this type of consistency in constraints is
quite impressive. In fact, it appears to be so regular that we may be
dealing with a sociolinguistic universal. Even if our claim cannot be made
with complete confidence, irregularities only appear to occur under special types of circumstances (e.g., as a type of hypercorrection as one attempt to approximate a normative dialect).

The Black English features which we have chosen for this study represent both grammatical and phonological features. The agreement of copula forms, invariant be, multiple negation, and suffixal -Z all represent grammatical features, whereas word-final consonant clusters, diphthongal ay, copula absence ¹, syllable-final d and t, and th all represent phonological features. The inclusion of both grammatical and phonological features allows us to arrive at several conclusions about the assimilation of grammatical versus phonological features in the varieties of PRE represented by the three Puerto Rican groups. We conclude that Black English grammatical processes are assimilated as grammatical and Black English phonological processes as phonological in the varieties of Puerto Rican English investigated here. At first glance, this might appear to be a trivial observation, but a closer examination of some of the features which might be interpreted to result from either a grammatical or phonological process indicates that this is a significant observation. Fasold (1971) clearly demonstrates the potential ambiguity of various surface realizations and the formal reasons for determining whether these realizations are the result of phonological or grammatical processes. For example, deletion and suffixal -ed deletion may result from either phonological or grammatical processes. But the types of formal constraints on variability clearly indicate that when the surface realization for a form of Black English is grammatical, it can also be expected to be grammatical in the

¹There is some controversy over whether copula deletion is actually a phonological or grammatical process, but we shall follow Febov's analysis (1969), which argues that it is a phonological process.
varieties of PRE, and when it is phonological, it can be expected to result from a phonological process in the varieties of PRE. Thus, we see that suffixal -Z deletion in the varieties of PRE discussed is the result of a grammatical operation and suffixal -ed deletion in the varieties of PRE is the result of a phonological process. This observation is particularly significant when we realize that -Z deletion in Puerto Rican Spanish may be the result of a phonological process deleting syllable-final s (Ma and Herasimchuk 1968). In some instances of Spanish interference in English it is also apparent that a grammatical factor may be involved in the absence of -ed suffixes (Woodward and Zambrano 1971). But it is quite clear that suffixal -Z and -ed deletion are the result of grammatical and phonological processes respectively in the varieties of PRE investigated here. This is not to say that the same general phonological or grammatical process may necessarily be involved, but it is evident that the same general level of the language system is responsible for the derivation of surface forms. For example, we have hypothesized that copula ARE deletion may be the result of a different type of phonological process in the variety of PRE spoken by PR and PR/Lame groups, but in both Black English and these varieties of Puerto Rican English the process is still basically phonological.

We also see that there is a basic difference in the assimilation of features when they are separated as to phonology and grammar. To some extent, the influence of Black English phonological features is common to all the groups, the differences between the groups being quantitative. We thus see that phonological processes such as the f realization for word-final \( f \), consonant cluster reduction, and syllable-final d deletion are an integral part of all the varieties of PRE, but suffixal -Z deletion,
multiple negative forms unique to Black English in New York City (e.g., He ain't go), and the "distributive" function of invariant be are only characteristic of Black English speakers and Puerto Ricans with extensive black contacts. With respect to invariant be, it is interesting to note that the phonological derivation of be (i.e., from would be or will be) is common to all groups, but the grammatical derivation is only common to the BE and PR/BL groups.

In the above paragraph we have alluded to the fact that some of the features or at least certain aspects of these features are shared by other nonstandard varieties of English. For example, certain types of multiple negation are characteristic of all nonstandard speaking populations in New York City. This particular feature thus shows a somewhat different distribution among the three different groups of Puerto Ricans than other grammatical features. Multiple negation of the general nonstandard type (e.g., He don't like nobody) is thus found to be quite common for all PR groups, whereas multiple negation unique to Black English (e.g., He ain't go) is only common to BE and PR/BL groups. If this is indicative of how general nonstandard grammatical features are used in the varieties of PRE, we may predict that when a grammatical feature is common to both Black English and other nonstandard varieties of English in New York City, we can expect its occurrence in the three varieties of PRE; when, on the other hand, it is unique to Black English, it will only be found to any degree among PR/BL speakers. In terms of frequency, we would expect the occurrence of general nonstandard features for the PR/BL group to match the frequency in BE much more closely than the other PR groups, a fact which tends to be confirmed in our evidence from multiple negation and copula agreement.
Finally, we have pointed out in the discussion of several of the features that there are clear-cut convergent patterns from the influence which may be expected from Puerto Rican Spanish and that from Black English. That is, Spanish interference and the assimilation of Black English may give identical results. This is particularly true for consonant cluster reduction, syllable-final $\text{d}$ deletion, and plural $-z$ deletion. When this is the case, the incidence of the convergent variant for the various PR groups may be expected to increase significantly. In fact, we have seen that in the case of the Puerto Ricans with extensive black contacts, the frequency of occurrence may exceed that of Black English. The influence from both Spanish and Black English converges to produce greater regularity in the operation of a linguistic rule. The reinforcement of these two convergent norms may result in a frequency distribution which is somewhat similar to frequency hypercorrection, in which speakers use a form more frequently than the norm group in their effort to imitate the norm group's linguistic behavior. Puerto Ricans with extensive black contacts may add an approximate frequency of variation from Black English to the frequency distribution they have to begin with because of the historical influence of Spanish, resulting in a higher frequency of rule operation than the language variety to which they are assimilating, namely, Black English.
5.0 Introduction

In this chapter, our purpose is to summarize in non-technical language some of the linguistic characteristics of Puerto Rican English spoken by second generation teenagers in East Harlem and the Bronx. These features are only presented in sufficient detail to familiarize the reader with the main characteristics of the dialect; no attempt is made to formalize the description as we have done for the features discussed in Chapter Three. In part, this section is included in order to provide a brief overview of the linguistic characteristics of PRE for which we did not undertake the type of detailed analysis provided for the variables in Chapter Three. But this section is mainly included as a potential reference source for educators who desire a relatively non-technical descriptive article on the linguistic characteristics of PRE, either for those educators who write teaching materials or for those who desire to understand the main linguistic characteristics of their students. The description is patterned after the format utilized by Fasold and Wolfram (1970), a format which some educators found to be useful as a semi-technical reference source for the features of Black English.

Before actually discussing the features, it is necessary to clarify several facts about the nature of PRE as it is used in Harlem and the Bronx. We are dealing with a continuum of speech characteristics, so that the features presented here do not typify all second generation Puerto Rican teenagers in East Harlem or the Bronx. There are a number of different social factors which vary the occurrence of the features we are describing.
here. In the first place, the relative use of Puerto Rican Spanish vis-à-vis English has some effect on the occurrence of certain features. The types of social contacts and reference groups which serve as a model for language learning also influence the occurrence of features. Since in many parts of New York City, the main group of social contacts outside of the Puerto Rican community is the black community, the features which are characteristically a part of Black English usually will evidence a greater degree of assimilation in the speech of those Puerto Ricans with extensive black contacts than in the speech of those Puerto Ricans with restricted black contacts. Furthermore, Puerto Rican teenagers who have adopted mainstream values will avoid the use of certain socially stigmatized linguistic features as a linguistic manifestation of their cultural orientation. So we see that the features described here will not typify all second generation Puerto Rican English speakers. However, the features described here have been observed in the speech of various subsets of second generation speakers that may be found in the Puerto Rican community in New York City.

Although we use the term Puerto Rican English to refer to the English of second generation Puerto Rican teenagers, the variety that we are describing actually shares many features which are found in other varieties of English. Some of the features are common to a number of nonstandard varieties of English spoken in the United States, including both white and black nonstandard dialects. Other features, however, have obviously been assimilated from Black English either through direct or indirect contacts with the black community. And, of course, other characteristics are to be attributed to the influence of Puerto Rican Spanish which has persisted in this English variety. Finally, there may be other features
which are unique to this variety which cannot be attributed to influence from Black English or Puerto Rican Spanish. The various types of influences may be diagrammatically represented roughly in the following figure.

Figure 9: Influences on PRE

1 = Standard English
2 = Nonstandard English (White and Black)
3 = Black English
4 = Puerto Rican Spanish-Influenced English
5 = Unique Puerto Rican English

The distinctiveness of PRE as a language system lies in the fact that it combines features from several different sources in such a way that it is unlike other varieties of English.

Central to our entire discussion of the features of PRE is the fact that we are dealing with systematic and patterned rules. It should be clear from our approach to the features discussed here that we are not using the terms "grammar rule" and "pronunciation rule" in the traditional sense. As in the physical sciences, in which laws are discovered by observing natural phenomena rather than being imposed on nature by scientists, so grammar rules and pronunciation rules are discovered by observing actual usage rather than taking them as given and imposing them on people's speech. For this reason, we can speak meaningfully of the grammar and pronunciation rules of nonstandard dialects. For this reason also, some of the rules cited for Standard American English will appear startling. In both cases, the rules are discovered from careful observation of usage. It
is proper to refer to "rules" because in no speech (except possibly in the speech of the mentally ill or brain-damaged) are words randomly put together. PRE and other non-standard linguistic systems operate under rules just as do socially favored dialects. But the rules are different.

As has been stressed in Chapters Three and Four, it is important to understand that almost all the features associated with PRE alternate with Standard English forms in actual speech. This variation must be kept in mind to avoid forming a distorted picture of how English is actually used in the Puerto Rican community. Furthermore, there are some instances of influence from Puerto Rican Spanish that occur so infrequently that we have, in previous discussions, referred to their occurrence as matters of vestigial interference. This term refers to the fact that a feature which may be attributed to Puerto Rican Spanish influence occurs so sporadically that it has not been incorporated as an integral part of their English. The concept of vestigial interference is quite essential to our understanding of second generation Puerto Ricans who are quite fluent in English but who also use Spanish to some extent. Technically speaking, we might have eliminated these features because of their sporadic incidence, but we have chosen to include them here so that the educator may be able to identify them when they do occur (parenthetically, this also gives some reference for understanding various aspects of the English of some of the parents and younger children who have had less contact with English than second generation teenagers). It is important, however, to recognize the relative insignificance of these features when compared

---

1 In terms of frequency, these features generally occur in less than 5% of all potential cases in which they might occur.
to other aspects of PRE. Certainly, no priority should be given to these features by educators who are teaching Standard English.

5.1 Pronunciation

It is important to keep separate two kinds of differences between Standard English and PRE. Some of these features, like the pronunciation of *then* as *den*, are the result of differences in the pronunciation systems in different kinds of English. Other differences, like the use of the so-called "double" or multiple negatives as in *He didn't do nothing*, are grammatical in nature. Although it is not always obvious which kind of rule is operating with respect to a given feature, an adequate understanding of the rules of this dialect will always involve recognizing the distinction between these two types of rules.

5.1.1 Consonants

5.1.1.1 Word-Final Consonant Clusters

Standard English words ending in a consonant cluster, or a blend, often have the final member of the cluster absent in PRE. This pattern is quite predictable for Puerto Ricans with or without extensive black contacts but is more pervasive for Puerto Ricans with extensive black contacts. In PRE, words such as *test*, *desk*, *hand*, and *build* are pronounced as *tes'*, *des'*, *han'*, and *buil'*, respectively. Because of this, we find that pairs of words such as *build* and *bill*, *coal* and *cold*, and *guess* and *guest* have identical pronunciations in PRE.

It is important to distinguish two basic types of clusters which are affected by this sort of reduction. First of all, clusters in which
both members of the cluster belong to the same "base word" can be reduced, as in *tes', des', han', and buil'. But reduction also affects final t or d which results when the suffix -ed is added to the "base word." In all varieties of English, the -ed suffix has several different phonetic forms, depending on how the base word ends. If it ends in d or t, the -ed suffix is pronounced something like id (e.g., wantid, countid); otherwise it is pronounced as t or d. When the word ends in a voiced sound, it is pronounced as d, so that words with -ed like rubbed or rained are actually pronounced as rubd and raind respectively. (Consonants like b, p, and g are pronounced with vocal chords vibrating, that is, they are voiced.) If the base word ends in a voiceless consonant, the cluster ends in t, so that messed and looked are actually pronounced as mest and lookt, respectively. (Consonants such as s, k, and f are pronounced without the vibration of the vocal chords, that is, they are voiceless.) In PRE, when the addition of the -ed suffix results in either a voiceless or voiced cluster, the cluster may be reduced by removing the final member of the cluster. This affects -ed when it functions as a past tense marker (e.g., *Yesterday he move' away), a participle (e.g., The boy was mess'up) or an adjective (e.g., He had a scratch' arm), although its association with the past tense is the most frequent. The list of clusters affected by this process and the examples of the two types of consonant cluster reduction are given in the following table: Type I represents clusters which do not involve -ed and Type II represents clusters which result from the addition of the -ed suffix.
TABLE 82
Consonant Clusters in which the Final Member of the Cluster May Be Absent

<table>
<thead>
<tr>
<th>Phonetic Cluster</th>
<th>Type I</th>
<th>Type II</th>
</tr>
</thead>
<tbody>
<tr>
<td>[st]</td>
<td>test, post, list</td>
<td>missed, messed, dressed</td>
</tr>
<tr>
<td>[sp]</td>
<td>wasp, clasp, grasp</td>
<td></td>
</tr>
<tr>
<td>[sk]</td>
<td>desk, risk, mask</td>
<td></td>
</tr>
<tr>
<td>[ʃt]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>[zd]</td>
<td></td>
<td>finished, lasıed, cashed</td>
</tr>
<tr>
<td>[ʃd]</td>
<td></td>
<td>raised, composed, amazed</td>
</tr>
<tr>
<td>[ft]</td>
<td>left, craft, cleft</td>
<td>laughed, stuffed, roughed</td>
</tr>
<tr>
<td>[vd]</td>
<td></td>
<td>loved, lived, moved</td>
</tr>
<tr>
<td>[nd]</td>
<td>mind, find, mound</td>
<td>rained, fanned, canned</td>
</tr>
<tr>
<td>[md]</td>
<td></td>
<td>named, foamed, rammed</td>
</tr>
<tr>
<td>[ld]</td>
<td>cold, wild, old</td>
<td>called, smelled, killed</td>
</tr>
<tr>
<td>[pt]</td>
<td>apt, adept, inept</td>
<td>mapped, stopped, clapped</td>
</tr>
<tr>
<td>[kt]</td>
<td>act, contact, expect</td>
<td>looked, cooked, cracked</td>
</tr>
<tr>
<td>[nt]</td>
<td>count, bunt, stunt</td>
<td></td>
</tr>
</tbody>
</table>
It should be noted that in the table, clusters such as lt (e.g., colt, belt), mp (jump, ramp), and lp (e.g., gulp, help) are generally not "reduced." These isolated cases of consonants which do not undergo this reduction process have certain qualities which prohibit the operation of the reduction rule on them.

In some ways, the absence of the final member of the consonant cluster in PRE is like a process which can also be observed in Standard English; in other ways, however, it is quite different. In Standard English, the final member of the cluster may be absent if the following word begins with a consonant, so that bes'kind, col'cuts, and wes'side are common and acceptable in spoken Standard English. In Standard English, however, this reduction can take place only when the following word begins with a consonant. While col'cuts does not violate the pronunciation rules of Standard English, col'egg does. In PRE this reduction not only takes place when the following word begins with a consonant, but it may also take place when it is followed by a vowel or pause of some type. Thus wes'en', bes'apple, or col'egg are all acceptable according to PRE rules of pronunciation. Items such as Yesterday he was mess'up occur because of this pronunciation rule. In Standard English it is not at all unusual to hear a sentence such as Yesterday I burn' my hand, since the potential cluster in burned is followed by a word beginning with a consonant. But a sentence such as It was burn'up, acceptable in PRE, would not be acceptable in Standard English since the potential cluster is followed by a word beginning with a vowel.

5.1.1.1.1 Plural Formation

Related to the reduction of final consonant clusters in PRE is a particular pattern of pluralization involving the -s and -es plural
forms. In all varieties of English, there are several different phonetic forms of the plural. If the word ends in an s-like sound (i.e., a sibilant such as s, sh, z, ch), the plural suffix is formed by adding -es; phonetically, this is pronounced something like -iz. Thus bus, bush, and buzz are pluralized as buses, bushes, and buzzes respectively.

If the word does not end in an s-like sound, then -s is added; phonetically this is z after voiced sounds and s after voiceless sounds. Thus, the plural of pot, coat, bud, and pan is pots, coats, buds, and pans (phonetically panz) respectively. In Puerto Rican English, words ending in s plus p, t or k may add the -es plural instead of the -s plural. Thus, words like desk, ghost, wasp, and test are pluralized as desses, ghoses, wasses, and tesses. Because the p, t, and k are so often removed by the rule discussed above, these plurals are formed as if desk, test, and wasp ended in s, instead of sk, st, or sp. This regular pluralization rule, due to the status of final consonant clusters in PRE, is more common to PRE speakers with extensive black contacts because of its prevalence in Black English, but it can also be found to some extent among PRE speakers with more limited black contacts.

5.1.1.1.2 The Status of Word-Final Consonant Clusters

Because consonant clusters occur so infrequently at the end of words in PRE, one might ask whether these word-final consonant clusters can be considered an integral part of PRE. That is, are PRE speakers at all familiar with what words may and what words may not end in clusters? This is a crucial question for teaching, since clusters must be taught as completely new items if PRE speakers are completely unfamiliar with them. On the other hand, if clusters are a part of the dialect and simply dif-
ferent from Standard English because they can undergo reduction in certain contexts where reduction is not possible in Standard English (e.g., when the following word begins with a vowel), the teaching problem is of a different nature. What must be taught in the latter case is the contexts in which cluster reduction is not possible in Standard English but is possible in PRE, while the lists of Standard English words ending in clusters must be taught as completely new items if clusters are not an integral part of the dialect.

This question can be answered most clearly by observing what happens when suffixes beginning with a vowel are added to a base word ending in a cluster in Standard English. This includes -ing as in testing or scolding, -er as in tester or scolder and -est as in coldest or oldest. If a consonant cluster is present in such constructions (e.g., testing, tester), we may assume that the speaker is fully acquainted with the cluster, but that it can be reduced in places where it is not possible in Standard English. For the vast majority of PRE speakers, this is exactly how the rule concerning consonant clusters operates. These speakers may reduce the cluster in the context of tes' program or tes' idea, but retain the cluster in tester. At least by the time PRE speakers are teenagers, the absence of the final member of the cluster in test as well as tes' idea or tes' program is so infrequent, if occurring at all, that we conclude that PRE speakers do not generally have to be taught which words end in clusters and which do not.

5.1.1.2 The th-Sounds

In Standard English, the letters th actually represent two different types of sounds. First, they represent the voiced sound in
words such as the, they, and that (i.e., a voiced interdental fricative). Second, they represent the voiceless sound in words like thought, thin, and think (i.e., a voiceless interdental fricative). In PRE, the regular pronunciation rules for the sounds represented by th are quite different from the rules of Standard English. The particular sounds which th represents are mainly dependent on the context in which th occurs. That is, the sounds for th are dependent on where th might occur or what occurs next to it.

5.1.1.2.1 Word-Initial

At the beginning of a word, the th in the or that is frequently pronounced as d in PRE, so that words such as the, they, and that are pronounced as de, dey, and dat respectively. In this regard, PRE is much like other nonstandard varieties of English, both black and white. It has been pointed out that a limited amount of d for th is also characteristic of Standard English in the most casual or informal speech style. In PRE, however, it is considerably more frequent, so that the pronunciation de for the is a more regular pronunciation.

In the case of the th in words such as thought, think, or thin (the voiceless interdental fricative), th is sometimes pronounced as t, so that thought, think, or thin are pronounced as tought, tink, and tin respectively. However, both the th and t pronunciations for thought are quite appropriate for PRE. Although both pronunciations are quite appropriate for PRE, it may be noted that the incidence of t tends to be somewhat higher for PRE speakers than for speakers of some other nonstandard dialects of English, including Black English.
5.1.1.2.2 Within a Word

In the middle of a word, there are several different pronunciations for the th in PRE. For some speakers, who have extensive contacts with blacks, the voiceless th sound in nothing, author, or ether may be pronounced as f. More frequently, however, it is pronounced as the Standard English pronunciation of th in ether and author. For the voiced th sound, as in brother, rather, or bathing, the Standard English pronunciation is typically produced.

When th is followed by a nasal sound such as m or n, th may be pronounced as t. Thus arithmetic for arithmetic, nut'n for nothing or montly for monthly are patterns often found in PRE. Also in such cases, there may be no consonant at all in PRE. Thus, arithmetic may be pronounced as ari'metic. This pattern, on the whole, is relatively rare, and appears to take place only when th in the middle of a word precedes another consonant.

5.1.1.2.3 Word-Final

At the end of a word, several different pronunciations are found in PRE. For many speakers, f is the predominant pronunciation of th in words such as Ruth, tooth, and south, so that they are pronounced as Ruf, toof, and souf respectively. This is a pronunciation pattern which is apparently assimilated from Black English but its use is by no means restricted to PRE speakers with extensive black contacts (although, as might be expected, they do use it more frequently than those with restricted black contacts). In addition to f at the ends of these words, several other sounds may be represented by the th. When the preceding sound is the nasal sound n, t may occur, so that tenth and month
may be pronounced as tent' and mont' respectively. As in many nonstandard
dialects, the stop t or d is also used quite frequently with the prepo-
sition with, so that it is pronounced as wit or wid. And, occasionally,
the sound s is found at the end of the word where th may be expected in
Standard English, so that with and teeth may be pronounced as wis and tees
respectively. It should be noted, however, that this pronunciation tends
to be so infrequent that it would usually be classified as a matter of
vestigial interference. That is, it is only to be expected from PRE
speakers who have considerable interference from Puerto Rican Spanish
in their speech, and it is to be expected only occasionally from
these speakers. Although this pronunciation may be widespread among
first generation Puerto Ricans learning English, we see that it is of
minimal significance as a pronunciation among second generation PRE
speakers.

5.1.1.3 Nasals

There are several aspects of the nasal sounds, m, n, and ng
(phonetically [ŋ]) which must be discussed with reference to PRE. Some
of these are quite characteristic of other nonstandard varieties of
English, but others are unique to PRE.

5.1.1.3.1 Final ng for n

In Puerto Rican Spanish, ng is the most common nasal segment to
occur at the end of a word and it is generally used where n is used
in many other dialects of Spanish. The pronunciation of word-final
Standard English n as ng is one of the characteristic aspects of inter-
ference, and words like pan or when may be pronounced as pang and wheng
respectively. In addition to the application of this rule to words normally ending in n in Standard English, it may also operate on words not normally ending in n, but which do end in n after the application of another PRE rule. Thus, for example, if the consonant cluster reduction rule reduces a form such as found to foun', then the ng rule may apply to change the form from foun' to foung. For most second generation PRE teenagers, the frequency of ng for n is not very high, but there are occasional speakers who show a significant incidence of this rule.

5.1.1.3.2 The -ing Suffix

Despite the tendency to change word-final n to ng for some speakers of PRE, there is also a tendency to conform to the patterns of many other nonstandard varieties of English by using the -in suffix for -ing (e.g. singin', buyin', swimmin'). This process is sometimes referred to as a "dropping of the g." This form is one of the most stereotyped pronunciation features of nonstandard speech in the American language, and is characteristic of practically all white and black nonstandard varieties. It is also found to a certain extent in more casual styles of Standard English. Although it is certainly used to some extent in PRE, it may not be expected to occur as much as it does in a dialect such as Black English because of the counter effect of the ng for n rule which some speakers of PRE evidence. It then may be expected that speakers of PRE who do not regularly use the ng for n rule will evidence a higher incidence of -in for -ing suffixes.
5.1.1.3.3 Nasalized Vowels

Another feature which is found in PRE is the use of a nasalized vowel instead of a nasal consonant. Generally, this only takes place at the end of a syllable. In words like *man*, *bun*, or *bum* the final consonant is sometimes not pronounced; instead, a nasalization of the preceding vowel is found similar to the type of nasalization of vowels that is found in a language such as French. This means that words such as *rum*, *run*, and *rung* may all sound alike. This type of pronunciation rule is not found in PRE as frequently as it is in a nonstandard variety of English such as Black English.

5.1.1.3.4 Nasal Assimilation

When a nasal segment occurs preceding a consonant, there is a tendency in PRE to change the nasal to match the position (in the mouth) at which the following consonant is produced. For example, if the following consonant is a *b* (a labial consonant), then there is a tendency to pronounce the nasal segment as *m* (a nasal, labial consonant). Thus, *ten bombs* would be pronounced as *tem bombs* and *ten kites* as *teng kites*. It is reported that the tendency to change a nasal to match the position of the following consonant (a very regular pattern in Puerto Rican Spanish), is also found in the most casual and informal styles of Standard English, so that there is no real social significance to this rule.

5.1.1.4 Final Single Consonants

When single consonants occur at the end of a word, there are several different pronunciation rules which may operate in PRE; depending largely on what the consonant is and what the surrounding sounds are.
The absence of d is also possible when d represents the -ed suffix following verbal bases ending in vowels. It is possible to observe sentences like Yesterday he play it and He had play it the day before. However, since this rule is much less frequently applied than the rule eliminating the second member of a consonant cluster, there are many more cases of sentences like Yesterday he miss it than Yesterday he play it.

5.1.1.5 s and z

In PRE, s is sometimes pronounced where z would be expected in Standard English. Thus, zip, blazer, and buzz may be pronounced as sip, blaser, and bus. This pronunciation pattern is due, no doubt, to the fact that s and z are not distinguished in Puerto Rican Spanish. This lack of distinction leads to the fluctuation of the two sounds in PRE where z would regularly be used in Standard English. The s pronunciation for z is most frequently found at the end of a word, where it fits into the general devoicing pattern that we discussed previously.

It is also observed that there are some instances in which Standard English s is pronounced as z. Many of these are due to the fact that s can be pronounced as a z when it is followed by a voiced consonant in Puerto Rican Spanish. Thus, we may find nice man pronounced as nize man or bus-boy pronounced as buz-boy. Limited instances of this pronunciation pattern can also be observed in casual or informal style of other varieties of English, apparently including both nonstandard and standard varieties, but for some PRE speakers this pronunciation pattern is much more extensive than we would expect for other varieties of English. The actual incidence of this rule seems to vary considerably from speaker to speaker. (Parenthetically, we may say that the voicing of voiceless consonants when they
are followed by a voiced consonant can be found for consonants other than s (e.g., f, k), but is most frequently found with s).

Finally, we must mention that there are other limited instances of z where we would typically expect s in Standard English. We thus can observe instances of z in items like mezzing for messing and raizing for razing. The most reasonable explanation for these occurrences seems to be the process which has technically been called hypercorrection. Hypercorrection typically results when speakers who are unfamiliar with the rules for the placement of forms use these forms in inappropriate places in an effort to approximate the appropriate rules of usage governing the form. Thus, if a speaker who sometimes uses s where both s and z are expected in Standard English, sporadically uses z where s is expected in an effort to approximate the rules of Standard English, we have hypercorrection. The occasional instances of z for s cited above can be accounted for by this process.

5.1.1.6 sh and ch

The Standard English sounds represented by sh, as in wash and ship, and ch, as in watch and chip, are sometimes not differentiated in PRE. Generally, the ch sound is used where the sh is expected in Standard English, so that wash and ship are pronounced identically with watch and chip. This pronunciation rule is due to the fact that Puerto Rican Spanish typically only uses the ch sound. For most second generation PRE speakers, this pronunciation pattern occurs so occasionally that it can be considered a matter of vestigial interference; however, there are some speakers who use it more frequently. Although many first generation speakers may have trouble discriminating between those two sounds, most second generation PRE speakers do not
have this difficulty. In addition to the more usual pattern of \textit{ch} for \textit{sh}, there are occasional instances in which the \textit{sh} pronunciation is given where Standard English \textit{ch} is expected, so that \textit{watch} may be pronounced like \textit{wash}. These instances can most reasonably be attributed to hypercorrection as we described it previously for \textit{s} and \textit{z}. That is, the PRE speaker may compensate for a natural tendency to pronounce Standard English \textit{sh} as \textit{ch} by occasionally pronouncing Standard English \textit{ch} as \textit{sh}.

5.1.1.7 \textit{j} for \textit{y} \\

The sounds represented by \textit{y}, as in \textit{yellow} and \textit{you}, and \textit{ı} as in \textit{jello} and \textit{jew}, are sometimes not differentiated in PRE, so that there is no contrast between the pronunciation of \textit{yellow} and \textit{jello} and \textit{you} and \textit{jew}. Typically, both of these Standard English sounds are pronounced as \textit{j}, but they can also both be pronounced as \textit{y}. This pronunciation pattern is due to the fact that Puerto Rican Spanish does not typically distinguish between these two sounds. Like a number of other pronunciation features which can be traced to the influence of Puerto Rican Spanish, this pattern is not very frequent for most second generation PRE speakers, being confined mainly to those speakers who use Spanish rather extensively.

5.1.1.8 \textit{b} and \textit{v} \\

At the beginning of a word, \textit{b} is sometimes pronounced where \textit{v} would usually be expected in Standard English. This means that \textit{volleyball} may be pronounced as \textit{bolleyball} and \textit{vote} as \textit{bote}. This pronunciation pattern is again due to the influence of Puerto Rican Spanish, which does not have any contrast between these sounds. Generally, this pronunciation pattern is not found when the preceding word ends in a vowel. When \textit{b} or \textit{v} occurs
between vowels, a soft b-like sound is sometimes pronounced (technically, this is a fricative sound which is made with the friction between the two lips). This type of pronunciation pattern in between vowels is also found for other voiced stops, such as g and d, but it is generally used to such a limited extent and has so little social significance that it is only mentioned in passing here.

5.1.1.9 r and l Absence

For the most part, the pronunciation rules for r and l in PRE tend to match those of the surrounding New York speech community, and, particularly, the pronunciation rules of the immediately surrounding black community. At the beginning of a word, r and l are always pronounced, as in run, lip, rub, or lamp. In other positions, however, r and l are sometimes reduced to a vowel-like quality pronounced something like uh. The most important context to recognize in discussing the so-called "loss" of r and l is when they follow a vowel (technically called "post vocalic"). In such items as steal, sister, nickel, or bear, only a "phonetic vestige" of r or l is pronounced, so that we hear steauh, sistuh, nickuh, and beauh respectively.

Like some "r-less" American English dialects, the word which follows r or l is important in determining whether or not r and l loss may take place. For example, in the r-less dialect of New England, r is consistently absent when the following word begins with a consonant, as in brothuh Mike or fouh people; when followed by a word that begins with a vowel, the r is consistently present, as in brother Ed and four apples. In the surrounding Black English speaking community, r absence can be found in both types of contexts, but it is much more frequently found when followed by a
consonant. PRE seems to fall in between these two varieties in its 
\( r \)-lessness; that is \( r \)-lessness may occur in both types of contexts but 
not to the extent that it occurs in Black English.

It is important to note that in PRE, the type of \( r \) used in Puerto 
Rican Spanish which is pronounced something like the English pronuncia-
tion of \( t \) or \( d \) between vowels (i.e., a flap of the tongue) is not 
generally found for the sound represented by \( r \) in English. Most second 
generation PRE speakers are quite conscious that English \( r \) and Puerto 
Rican Spanish \( r \) are pronounced differently and they maintain this dif-
fERENCE. In fact, where \( r \) occurs before \( t \) or \( d \) and the normal Standard 
English pronunciation may be a flapped variation of \( t \) or \( d \) which approxi-
mates the Spanish flapped \( r \), there may be a tendency to hypercorrect by 
using an English \( r \) instead of the flap. This means Puerto Rican and quarterly 
may be pronounced as Puerto Rican and quartery respectively.

5.1.1.9.1 Effect on Vocabulary and Grammar

The consistent absence of \( r \) at the end of a word has led to several 
types of grammatical and vocabulary patterns which differentiate PRE 
from Standard English. Most of these have been aided by the influence 
of the surrounding Black English community. With respect to vocabulary, 
there are certain types of "mergers" between vocabulary items due to the 
similarity of words after the \( r \) pronunciation rule has taken place. For 
example, when the phonetic vestige which replaces the \( r \) is removed, there 
is only a small difference which separates \textit{they} from \textit{their}. It is thus 
observed that \textit{they} can be used as a possessive as in \textit{It is they book}. This 
type of merger is also found in Black English, which accounts for the fact 
that it can be expected more extensively from Puerto Ricans with extensive 
black contacts.
In addition to the effect on vocabulary items, we also observe certain instances in which absence apparently has some effect on the grammatical patterns of PRE. Where the contracted form of the verb to be is represented by 're (the contracted form of are) we find that PRE may indicate complete absence of the form, so that You ugly or They hungry may be used in PRE where You're ugly and They're hungry are expected in Standard English. In this respect, PRE is much like Black English. But it is important to note that when the form of the verb to be is represented by 's (the contracted form of is), only PRE speakers with extensive black contacts show its absence to any extent and these speakers do not nearly match the frequency with which it is usually found in Black English.

Like r, the loss of l may have important implications for grammatical functions. The most crucial of these deals with the loss of l on a contracted form of the future modal will. We may get a sentence such as Tomorrow I bring the things for Tomorrow I'll bring the things, where will becomes 'll and then is lost completely.

5.1.2 Vowels

In addition to the pronunciation characteristics involving consonants which we have already described, there are a number of vowel characteristics which may make PRE unique among New York City dialects. Most of these vowel differences stem from the vestigial effect of Puerto Rican Spanish. Although the cases of vestigial interference are mentioned here, it is essential for the educator to understand the relative infrequency of these pronunciation patterns for second generation speakers.
5.1.2.1 e and i

In PRE, the vowel contrast represented by the vowels in *beet* or *deed* (e) and *bit* or *did* (i) is not always maintained, so that *deed* and *did* and *beet* and *bit* may all be pronounced with the long vowel as in *beet* or *deed*. This lack of contrast obviously reflects the Puerto Rican Spanish vowel system, which does not have a contrast between these two vowels. It is important to note that this particular lack of contrast always fluctuates with the regular Standard English system which contrasts these two vowel sounds. For the vast majority of second generation speakers, this lack of contrast, if occurring at all, is a matter of vestigial interference.

5.1.2.2 u and u

Quite like the vowels represented as e and i, the contrast between the vowels represented in words like *boot* or *moon* (u) and the vowels in words like *put* and *would* (u) is not always maintained, due to the fact that Puerto Rican Spanish reveals no contrast between these two vowel sounds. Instead, a vowel sound similar to that in *boot* or *moon* is used for both sets of words. As with the vowels represented by e and i, the use of the vowel in *boot* for both *boot* and *put* is much less frequent than the contrast between these two vowels that is maintained in Standard English. For most speakers, it is a matter of vestigial interference.

5.1.2.3 e and a

Another Standard English contrast that may occasionally be absent in the speech of PRE speakers is that between the vowel sounds in words *less* or *bet* (e) and *lap* or *bat* (a) again due to the fact that
Puerto Rican Spanish has no sound corresponding to English a. Instead, both of these sets of words might be pronounced like the vowel sound in less or bet.

5.1.2.4 ã and uh

The Standard English contrast between vowel sounds in words such as father or cart (ã) and words like but or cut (uh) is also a contrast which may not always be consistently maintained. Rather, the vowel sound in father is used where Standard English might use the vowel sound in cut, due to the fact that Puerto Rican Spanish has no sound corresponding to English uh. The tendency to lower the vowel sound in a word like cut so that it approximates the vowel sound in father is not nearly as frequent as the maintenance of the contrast, but there are some speakers who show sufficient influence from the Spanish vowel system to be a noticeable influence in their speech. In some instances the vowel in but may also be pronounced as o or ö, but this also is quite rare.

5.1.2.5 ö and o

In some (but not all) dialects of Standard English, there is a contrast between the vowel sound in words like flaw and boat (ö) and the vowel sounds in words like fall and bought (o). In PRE, this contrast is not always maintained. Instead, a vowel sound which is actually in between these two sounds may be produced. This vowel sound does not have the glide-like quality of the ö sound in flaw, but approximates the first part (i.e., the non-glided part) of the sound. The use of this vowel sound, of course, fluctuates with the New York City pronunciation of ö and o, which are somewhat distinct in themselves. Like the other types of vowel sounds
which have been influenced by Puerto Rican Spanish, the lack of contrast indicated in the vowel sounds described here is much less frequent than the maintenance of the vowel contrasts expected in Standard English.

We may summarize the various Standard English contrasts which may not be consistently maintained by means of the following table. The table only lists those Standard English vowel contrasts which are sometimes not maintained due to the influence of Puerto Rican Spanish.

<table>
<thead>
<tr>
<th>Standard English</th>
<th>Examples</th>
<th>Puerto Rican English</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vowel</td>
<td></td>
<td>Vowel</td>
</tr>
<tr>
<td>e</td>
<td>beat, meat, leap</td>
<td>i</td>
</tr>
<tr>
<td>e</td>
<td>bit, hit, rip</td>
<td>e</td>
</tr>
<tr>
<td>e</td>
<td>bet, let, less</td>
<td>e</td>
</tr>
<tr>
<td>a</td>
<td>bat, mat, nap</td>
<td>o</td>
</tr>
<tr>
<td>H</td>
<td>father, cart, stop</td>
<td>H</td>
</tr>
<tr>
<td>uh</td>
<td>cut, but, run</td>
<td>o</td>
</tr>
<tr>
<td>o</td>
<td>flow, boat, go</td>
<td>o</td>
</tr>
<tr>
<td>o</td>
<td>flaw, bought, call</td>
<td>o</td>
</tr>
</tbody>
</table>

Table 6:3: Standard English Vowel Contrasts Showing Vestigial Interference from Spanish in PRE
Considering the group of vowel contrasts as a whole, it is essential to reiterate that most second generation PRE speakers generally indicate the types of contrasts expected in Standard English so frequently that the few instances in which the contrasts are not maintained amounts to little more than vestigial interference. Furthermore, when asked to discriminate between words differentiated only by the vowel contrasts in Standard English, such as heat and hit or bet and bat, second generation PRE speakers generally have no difficulty, unlike first generation Puerto Rican immigrants who are learning English. However, when there is no contrast maintained, as occasional as it may be for some speakers, it is essential for educators to understand this as a matter of vestigial language influence from Spanish. This is to be expected as quite normal speech behavior for these speakers because of their distinct language background.

5.1.2.6 Other Spanish Influences on Vowels

In addition to the types of contrasts occasionally neutralized in PRE, there are several other aspects of Puerto Rican Spanish influence which may sometimes be observed. Certain of the vowels which parallel Standard English vowels have a slightly different quality from their Standard English counterparts. Although this different quality does not have real linguistic significance like the vowel contrasts mentioned above, it does add to the overall impression of PRE as being influenced by Spanish. For example, the \( \ddot{e} \) and \( \ddot{u} \) sounds as used in PRE seem to be somewhat more tense, and do not always have the glide-like quality which is characteristic of the pronunciation of \( \ddot{e} \) and \( \ddot{u} \) (as [iy] and [uw] respectively) in Standard English. Although this has no real linguistic
significance in terms of the two vowel systems, it adds to the noticeable influence of Spanish on PRE. Similarly, there is a glide-like quality to \( \mathcal{e} \) and \( \mathcal{o} \) in Standard English which is not maintained as consistently in PRE. Instead of a glide, like \([ey]\) and \([ow]\) phonetically, these sounds tend to have a non-glided quality.

Finally, we should mention vowel differences which may be found in unstressed syllables in PRE and in Standard English. In unstressed syllables, it is quite common for many Standard English vowels to be reduced to an uh-like quality (phonetically \([\mathcal{a}]\)). Thus, the middle unstressed \( \mathcal{e} \) in a word like telegraph would be pronounced something like 'teluhgraph because the middle \( \mathcal{e} \) is in an unstressed syllable. But if the stress occurs on the middle \( \mathcal{e} \), as in tuh'legruhphy, then the first \( \mathcal{e} \) can be pronounced as uh. This type of "vowel reduction" is found not only in the stress patterns of words, but also in the stress patterns of sentences. For example, the word to is often reduced if it occurs in an unstressed position in a phrase or sentence. This means that the vowel in to would be pronounced with the uh quality in a phrase like got to go, sometimes represented as gotta go. In the Spanish vowel system, however, vowel reduction in unstressed syllables does not match that of English; vowels do not tend to reduce when unstressed. The effect of this influence on PRE is reflected by the fact that vowel reduction is not as common as it is in Standard English. Thus, the middle \( \mathcal{e} \) in telegraph may be pronounced as \( \mathcal{e} \) rather than uh. Like other types of Spanish influence, it is essential to note that this pronunciation fluctuates with the Standard English pattern of vowel reduction, so that any differences are matters of relative frequency. For most second generation Puerto Ricans, the Standard English pattern of reduction is considerably more frequent than the Spanish-influenced
pronunciation. The sporadic tendency not to reduce vowels in unstressed syllables, along with the different vowel quality for some vowels and the lack of consistently maintained contrasts between other vowels, although occurring relatively infrequently for most speakers, appear to contribute considerably to the identification of PRE as English with a "foreign accent."

5.1.2.7 Vowel Glides

In Black English and in certain varieties of Southern English, the second elements of such diphthongs as ay (e.g., side, time) and oy (e.g., boy, toy) are often not pronounced. Thus, side and time may be pronounced as sahd and tahm and boy and toy as boah and toah. To some extent this feature has been assimilated into PRE. As we might expect, it is much more frequently found in the speech of those PRE speakers who have extensive black contacts, but it is not nearly as pervasive in PRE as in Black English.

The absence of the glide is much more frequent when it is followed by a voiced sound or a pause than it is when followed by a voiceless sound. This means that the absence of a glide is much more likely in words such as side, time, or toy than it is in kite, bright, or fight. Many speakers always have a glide when followed by a voiceless sound (e.g., they always have [layt] for light) but sometimes do not have a glide before voiced sounds (e.g., They sometimes say sahd for side).

5.1.3 Rhythm and Intonation

Up until now, we have dealt only with those aspects of PRE pronunciation which concern consonants and vowels, that is, the segmental aspects of sound systems. But there are other aspects of PRE pronunciation
patterns which deal with the types of stress, timing, and intonational contours which accompany the consonantal and vowel patterns.

One of the essential differences between Spanish and English pronunciation systems concerns the timing of the various syllables in a phrase or sentence. In Spanish, every syllable is given nearly an equal length of time. This rhythmical pattern is sometimes referred to as "syllable-timing." In English, however, the rhythmical pattern is quite different. Stressed syllables are generally held longer, and unstressed syllables are shortened, with a corresponding reduction of the vowel to uh in these unstressed syllables as mentioned previously. For example, if we have a sentence like You hit the boy, we may stress any of the words, but the rhythmical effect will be to lengthen the stressed word and shorten the duration of the other words. If we stress hit in He hit the boy, we will tend to lengthen hit and shorten the other unstressed words, but if we stress boy, as in He hit the boy, we will lengthen boy while tending to shorten the duration of other words. This rhythmical pattern is sometimes referred to as "phrase-timing." For the most part, PRE follows the English rhythmical pattern and lengthens some syllables while shortening others. But sometimes, PRE may assign every syllable equal timing, which amounts to shortening English stressed syllables so that they are approximately equivalent in length to other syllables. This means that a sentence like You hit the boy would have equal length on each word. When compared to the English rhythmical pattern, syllable-timing gives the impression of speaking in a short, choppy cadence.

Sometimes, the syllable rhythm is accompanied by a Spanish-like intonational contour over a phrase or sentence. The Spanish intonation pattern does not seem to go either as high or as low as the extremes of
sentence intonation in English, and adds what might be interpreted as a monotonal effect to the sentence. Although most of the PRE speakers we have observed reveal some incidence of syllable-timing, the extent of usage varies greatly. Some speakers use it only on certain types of phrases, but others use it to a considerably greater extent. It should be noted that even if other pronunciation patterns in a syllable-timed utterance do not reveal the influence of Spanish, the effect of syllable timing gives a "foreign-accent" effect. In fact, it may be one of the crucial aspects in identifying PRE speakers as coming from a Spanish language background.

5.1.4 Stress

For the most part, the stress patterns of PRE words operate like those of other varieties of English. However, there are instances in which stress may be placed on a syllable on which it is not expected in Standard English. For example, when Standard English words of more than one syllable have their stress on the second rather than the first syllable, PRE speakers will sometimes follow the Black English pattern of stressing the first rather than the second syllable. This means that words such as police, hotel or July may be pronounced as pólice, hótel, or Júly respectively. This also means that pairs of words in English which are contrasted primarily in terms of stress, such as contest/contést or produce/prodúce, would not be distinguished on this basis. There are also occasional stress assignments which are not Standard English and do not conform to the patterns of Black English; these infrequent occurrences can be attributed to vestigial influence from the Spanish stress system.
5.1.5 Other Pronunciation Features

In addition to the systematic patterns which have been mentioned above, there are several features which are quite restricted. One such feature is the pronunciation of ask as aks, so that it sounds like axe. This feature, obviously assimilated from the surrounding Black English speaking community, is actually quite widespread in PRE, apparently regardless of the extent of contact with blacks.

Another feature which can be mentioned is the use of the indefinite article an or a. In Standard English, when the following word begins with a vowel, the indefinite article an is used, as in an apple or an egg; when it is followed by a word beginning with a consonant, a occurs, as in a boy or a dog. In PRE, the article a may be used regardless of how the following word begins. In this respect, PRE is simply like a number of other non-standard varieties of English.

One pronunciation feature obviously related to Spanish influence is the use of the vowel e before an item beginning with a consonant cluster in which s is the first member of the cluster. Thus, string, school, street may be pronounced as estring, eschool, and estreet respectively. This feature is obviously related to the fact that Spanish does not have these consonant clusters at the beginning of a word, generally having e before words beginning with these types of clusters. Although this is a widespread and stereotyped feature of Spanish-influenced English, its incidence in second generation PRE speakers is not nearly as common or regular as it is among first generation immigrants (i.e., it is generally vestigial interference).

There are, of course, other restricted types of differences between the pronunciation rules of PRE and Standard English which might be
mentioned. Other examples, however, are either so limited in terms of the items affected or so unobtrusive in terms of their social significance, that it is sufficient for the educator to have a firm understanding of the pronunciation features we have described here.

5.2 Grammar

In the preceding sections, we have discussed only features which result from differences in the pronunciation rules of Standard English and Puerto Rican English. There are other rules which relate to grammatical differences between dialects. These rules concern various aspects of the verb systems, negation, certain types of suffixes, word order, and so forth. Several of the features are technically pronunciation features, but are described as grammatical features because they are usually perceived as such. Like the features discussed under pronunciation, these features are derived from several different sources. Some of them are common to both black and white nonstandard varieties spoken in New York City; others are traceable to the Black English of the surrounding community; still others are traceable to the influence of Spanish; and some may have developed uniquely in PRE.

5.2.1 Negation

5.2.1.1 The Use of Ain't

Due to a series of phonetic changes in the history of English, the negative forms of is, are, am, and auxiliary have and has have become ain't. Although ain't is used by educated speakers in casual conversation in some parts of the country, the use of ain't in this way is one of the
clearest and most universal markers of nonstandard speech of all kinds. In PRE, the use of ain't appears to be as pervasive as its use in other nonstandard varieties of English. Thus we may get He ain't touched me or He ain't nobody for He hasn't touched me and He isn't anybody respectively.

In addition to the uses of ain't described in the above paragraph, ain't may occasionally be used where Standard English didn't occurs, thus producing sentences like He ain't go for He didn't go. This particular usage of ain't is obviously assimilated from Black English and is restricted mainly to those Puerto Ricans with extensive black contacts.

5.2.1.2 The Use of no

One of the stereotypic features of Spanish influence on the learning of English by Spanish speakers is the use of the negative no for various forms of Standard English negatives, including all types of auxiliaries plus not (e.g., do + not, have + not, etc.). This influence, no doubt, relates to the fact that Spanish does not attach the negative particle no to auxiliaries, but places the negative particle before the verb phrase. Thus, a Spanish speaker learning English may produce sentences like He no like the food and He no can do it for He doesn't like the food and He can't do it respectively. While these types of influences are quite common in first generation speakers of Spanish-influenced English, they are uncommon for second generation PRE speakers in New York. Nonetheless, there are occasional occurrences of the particle, and these occurrences can be attributed to vestigial interference from Spanish. Most of the examples of no are found where don't would be the expected form in Standard English, so that there are occasional instances of sentences like
He no like it for He don't like it. This usage is relatively unobtrusive since the nasalization of the vowel for n't and the loss of the initial d, common pronunciation rules for some nonstandard dialects of English, result in a form (He'on' like it) which is quite close to He no like it. At any rate, this is a feature which is quite sporadic in its occurrence in PRE.

5.2.1.3 Double Tense Marking with didn't

When the auxiliary do (as other auxiliaries) occurs in a verb phrase in Standard English, it is the main carrier of tense for the verb phrase. Thus, for example, in sentences such as He doesn't go to the store and He didn't go to the store, the form of the auxiliary do (i.e., do or did) indicates whether the activity occurred in present or past time. In both cases, however, the verb form (go) remains the same. For some speakers of PRE, however, it is possible not only to indicate past tense in the auxiliary do, but in the verb as well. Thus, we have sentences like I didn't meant it and We didn't called it a game, in which the past tense is indicated both in the verb and in the auxiliary do. This type of pattern may be indirectly related to Spanish influence, but the grammar rule which accounts for this type of construction is not found in Puerto Rican Spanish or in any of the nonstandard varieties of English that Puerto Ricans would be likely to have contact with in New York City. For the most part, it is more frequently used by PRE speakers who indicate the most Spanish influence in other aspects of their pronunciation and grammar systems.
5.2.1.4 Multiple Negation

"Double negatives" or, more accurately, multiple negation, is another very common feature of nonstandard dialects. A frequent misconception about multiple negation is that it leads to misunderstanding because "two negatives make a positive." For example, it is often said of a sentence like He doesn't know nothing that the intention of the speaker is reversed because if he doesn't know nothing, he must know something. But in actual usage, sentences with multiple negatives are always understood as the speaker intends them, by other speakers of nonstandard English and usually by speakers of the standard dialects as well. The reason is that there is basically only one negative in He doesn't know nothing which is expressed in more than one place in the sentence. Standard English allows negatives to be expressed only once; nonstandard dialects have no such restriction. Yet there are strict grammar rules in nonstandard dialects of English which govern precisely at which places in a sentence a negative can be expressed.

PRE follows the rules of most other nonstandard dialects of English in that whenever an indefinite word (such as any or anything) occurs after the verb in a negative sentence, a multiple negative may occur. Thus, Standard English You don't know anything may be produced as You don't know nothing in PRE. This general rule of negative placement may occur for as many indefinites as follow the verb in a sentence, producing sentences like He don't know nothing about nobody going nowhere, or nothing like that.

In all varieties of English, negation can be expressed with negative adverbs, as well as in verb phrases and by incorporation into any. Multiple negation can be expressed by a negative adverb and a negative element.
elsewhere in the sentence. The result is the utterance of sentences like He doesn't hardly come to see us any more, or more commonly He doesn't come to see us any more, hardly. Standard English speakers who never use other kinds of multiple negation sometimes use sentences like the above. In PRE, the marking of negation in the verb phrase or with any in sentences which contain hardly is the rule rather than the exception. PRE, along with other nonstandard English dialects, also allows negation to be multiply expressed when the same sentence contains the adverbs never and neither.

Multiple negation in PRE tends to occur slightly more frequently than it does in some white nonstandard varieties of English, but for most speakers it does not occur every time the indefinite following the verb occurs in a negative sentence, as it does for some speakers of Black English. For PRE speakers who have extensive black contacts, however, it may occur in all instances of indefinites in negative sentences. In addition, these speakers may reveal instances of multiple negation not shared by other nonstandard varieties of English in New York City. This means that a negative indefinite preceding the verb may be followed by a negativized auxiliary, producing sentences like Nobody didn't like it and Nobody can't do it. In addition, these speakers may have assimilated the Black English grammar rule in which the negativized auxiliary may be moved before the negative indefinite, giving declarative sentences like Didn't nobody like it and Can't nobody do it for Standard English Nobody liked it and Nobody can do it. These types of constructions, however, seem to be relatively rare even for PRE speakers with extensive black contacts.
5.2.2 Verbs

Some of the differences between FRE and Standard English are to be found in the FRE verb system. The differences in the verb structure are found in the various forms of verbs and the participle forms.

5.2.2.1 Past Forms

5.2.2.1.1 The -ed suffix. As we have seen already, the -ed suffix which marks past tense and past participial forms, as well as derived adjectives, is sometimes not pronounced in FRE because of pronunciation rules (pp: 392 and 393). When -ed is added to a verb base ending in a consonant, as in missed, it can be removed by application of the consonant cluster reduction rule. When -ed is added to a verbal base which ends in a vowel, as in played, it can be removed by the rule for deletion of syllable-final d. As we have already pointed out, the d-deletion and consonant cluster reduction rules apply much less often when the following word begins with a vowel rather than a consonant.

When -ed is added to a base ending in t or d, it is pronounced something like id, as we have mentioned before. In this form, it is not absent very frequently in FRE. However, this id form can be reduced to d alone in FRE and also in Standard English by some fairly complex, but very regular rules. In casual speech, the words want and start are the most frequently occurring verbs which are eligible for these rules. If these rules apply, the i-sound of id can be eliminated. The verb then ends in dd or td which is simplified to d. These operations result in sentences like He stard crying (from He started crying) and He wanda go (from He wanted to go). Such sentences are common in all varieties of American English and are not considered nonstandard. In the case of stard, FRE (but not Standard
English) has a rule for the elimination of the remaining \( \text{d} \), especially when the verb occurs before a gerund, as in *He sta\_ttering* (the \( \text{r} \) of \text{start} is absent for reasons we have already discussed). The verb \text{started} is virtually the only verb to undergo this process.

These rules are pronunciation rules. This means that the missing \(-\text{ed}\) suffix does not reflect a grammatical difference between PRE and Standard English. However, since the suffix is a part of the grammar of both kinds of English, any attempt to teach the \(-\text{ed}\) suffix as a grammatical entity will be superfluous. That is, PRE speakers do know the \(-\text{ed}\) suffix; they simply do not pronounce it.

Another important implication for teaching is that children who speak PRE should not be required to learn the careful pronunciation of \(-\text{ed}\) where speakers of Standard English usually do not pronounce it. When \(-\text{ed}\) is phonetically \( \text{t} \) or \( \text{d} \) and is the second member of a consonant cluster, and when the next word begins with a consonant (as in *Yesterday I burned my hand*), PRE speakers should be allowed to pronounce *burned* as *burn\'*, the way Standard English speakers do.

5.2.2.1.2. *Irregular verbs*

Verbs which form their past tenses in an irregular way distinguish present and past forms in the overwhelming majority of cases in PRE. The occurrence of sentences like *Yesterday he give it to me* are not very frequent. However, some verbs which have irregular past forms in Standard English have the same form for past and present tenses in PRE. There are also such verbs in Standard English (*They hit him yesterday; They hit him every day*). A few verbs, notably *say*, behave like *hit* for some speakers of PRE, giving, for example, *He say it every day; He say it yesterday*. In
the case of say, the situation is complicated by the fact that some speakers who actually use said will be heard by speakers of Standard English as having said say because the d of said has been removed by the word-final d-elimination rule. This feature appears to have been assimilated from Black English, where it is very common.

There are other forms which do not change in their past tense in PRE in a way that appears to match both white and black nonstandard dialects. Thus, for example, we may get a verb like come used in both the present and past tense, producing sentences like Yesterday he come over my house, or Last year he come to the games.

There are still other irregular forms which may occur in PRE. For example, the past tense form of stay may be stood so that it is identical to the past tense form of stand. Thus, we get sentences like He stood in school for a long time for Standard English, He stayed in school for a long time. It appears that this past tense form for stay may result from the closeness of the contexts in which stand and stay may be used in English. In addition to the differing uses of irregular verbs in PRE, it should also be noted that there are instances in which irregular Standard English verbs form their past tense with the regular -ed pattern rather than an irregular pattern. Thus, we may get forms like He spoke to the man or He took his money and left. And, there are other forms which may add the -ed regular past form to an irregular past or participial form, giving sentences like, I seened the man and He tooked a long ride.
5.2.2.2 Omission of the forms of have

In Standard American English, the present tense forms of auxiliary have can be contracted to 've and 's, giving sentences like I've been here for hours and He's gone home already. In PRE, however, the contracted form can sometimes be deleted. This results in sentences like I been here for hours and He gone home already. The deletion of 've is much more frequent than the deletion of -s in PRE. Although this type of construction can be found for many PRE speakers, it is more frequently found for speakers with extensive black contacts.

5.2.2.3 The Past Participle

In Standard English, most past participles are formed with the -ed suffix and so are identical with the past tense form. But there are a number of semi-regular and irregular verbs for which the past participle and past tense are formally distinguished (e.g., came versus has come; ate versus has eaten, etc.). In PRE, however, the past tense and past participle forms for some of these verbs are not distinct, as they are in Standard English. Commonly, the simple past form is used in both kinds of constructions (e.g., He came; He has came). For a few verbs, some PRE speakers generalize one form while others generalize the other (e.g., You done it; You have done it; You did it; You have did it). It is possible, then, that the PRE equivalents of the Standard English present and past perfect tenses are not formed with forms of have plus the past participle, but rather with a form of have plus a general past form.
5.2.2.4 The Third Person Singular Present Tense Marker

In Standard American English, the suffix -s (or -es) is used to identify the present tense of a verb if the subject of that verb is in the third person singular. The paradigm is:

<table>
<thead>
<tr>
<th>Singular</th>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td>I walk</td>
<td>we walk</td>
</tr>
<tr>
<td>you walk</td>
<td>you walk</td>
</tr>
<tr>
<td>he walks; the man walks</td>
<td>they walk; the men walk</td>
</tr>
</tbody>
</table>

In a sense, the use of the -s suffix to mark present tense with third person singular subjects is an irregularity, since no suffix is used to mark present tense with other persons.

The paradigm in PRE allows the -s suffix optionally.

<table>
<thead>
<tr>
<th>Singular</th>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td>I walk</td>
<td>we walk</td>
</tr>
<tr>
<td>you walk</td>
<td>you walk</td>
</tr>
<tr>
<td>he walks; the man walks</td>
<td>they walk; the men walk</td>
</tr>
<tr>
<td>or he walk; the man walk</td>
<td></td>
</tr>
</tbody>
</table>

It is important to realize that the -s suffix is not carelessly "left off" by speakers of PRE. It is perfectly legitimate, in terms of the grammar of PRE, for the suffix to be absent part of the time. Generally, however, the -s is present in PRE much more frequently than it is absent.
5.2.2.4.1 Don't and say

The verb do is used as an auxiliary in negative and other kinds of sentences. In PRE, the -s suffix is absent from the auxiliary don't in the present tense when the subject is in the third person singular, just as it is from other third person singular present tense verbs. The equivalent of the Standard English sentence He doesn't go, then, is He don't go. In PRE, the -s suffix is significantly more likely to be absent in the form don't than in other present tense verbs with third person singular subjects. The case of the verb to say is similar in this respect. The word say is also much more likely to be found without -s than other verbs. Say in the past tense (said) can also undergo a rule in PRE which removes the final d (leaving sai). It is possible for a standard English speaker to take this sai' for say without the -s suffix in some instances. Nevertheless it is the case that say is especially likely to be used by PRE speakers without the -s.

5.2.2.5 Invariant be

One of the most highly discussed features of Black English in northern urban areas is the use of the verb form be where the conjugated forms is, am, or are would be expected in Standard English. It has been shown that there are two basic explanations for the use of be in sentences like I be here this afternoon and Sometime he be busy. Both cases are the result of pronunciation rules which delete the contracted 'll or d; it is therefore possible to find sentences like He be here in a few minutes or If he could, he be here for Standard English He'll be here in a few minutes and If he could, he'd be here. PRE seems to be quite like Black English with respect to this use of be.
The other source for *be* usage seems to be quite different and is used to refer to an object or event distributed intermittently in time. This use of *be*, as in *Sometime he be there and sometime he don't*, is generally considered to be unique to Black English. Among PRE speakers, it can be found to some extent among Puerto Ricans with extensive black contacts, but it is generally not found among other groups of PRE speakers.

5.2.2.6 Agreement with forms of *to be*

PRE, like many other nonstandard varieties of English, does not show consistent person-number agreement when full forms of *to be* are used. The past tense form may be *was* regardless of the subject, giving sentences like *They was there, You was there*, etc. When the full form of the present tense form is used, *is* may be used where *are* would be expected in Standard English, as in *The boys is there, You is there*, etc. Typically, the use of *was* where Standard English *were* is expected occurs more frequently than *is* where Standard English *are* is expected.

5.2.2.7 Absence of copula

We have already seen, in the section on pronunciation, that certain pronunciation rules may operate to remove the contracted forms of *is* and *are*. Typically, this process affects *'re* much more frequently than *'s*. Because of the prevalence of this particular feature in Black English, it is much more typical of PRE speakers with extensive black contacts, although *'re* deletion can be found to a certain extent among PRE speakers regardless of their peer contacts.
5.2.3 S-suffixes

5.2.3.1 Possessive

5.2.3.1.1 With Common Nouns

Where the 's possessive appears in Standard English, some PRE speakers with extensive black contacts may indicate possessive by the order of the words. The phrase The boy hat corresponds to The boy's hat in the standard dialect. There is some reason to believe that the presence of the 's possessive suffix is more common at the end of a clause (i.e., in absolute position, as in The hat is the boy('s) than in the attributive possessive (The boy('s) hat). Pedagogically, it would seem wise to deal with both kinds, but to emphasize the attributive construction.

5.2.3.1.2 With Personal Names

Because the position of the 's possessive is somewhat unstable for some PRE speakers, they may use the 's suffix inappropriately with personal names when attempting to speak Standard English. In Standard English, of course, the rule is that the 's suffix is attached to the surname when the possessor is identified by his full name (Jack Johnson's car). Occasionally, a PRE speaker will attach the 's suffix to both names (Jack's Johnson's car) or to the first name (Jack's Johnson car). This apparently is a hypercorrection in attempting to use Standard English.

5.2.3.1.3 Mines.

Some speakers of PRE use the form mines for mine in the absolute possessive construction (never in the attributive construction) giving
sentences like This is mines. This is a regularization of the absolute possessive form of the first person pronoun to conform to the other forms which end in s (his, her, its, yours, ours, theirs).

5.2.3.2 Plural

5.2.3.2.1 Absence of the Plural Suffix

The -s (or -es) suffixes which mark most plurals in Standard English are occasionally absent in the speech of some FRE speakers. This results in sentences like He took five book and The other teacher, they'll yell at you. Plural and possessive -s absence are generally found less frequently than -s third person absence for most FRE speakers. There is no question that most FRE speakers have the use of the plural suffix as part of their grammar. It is possible that the absence of the plural suffix is more frequent when the noun is modified by a quantifier like two, some and all kinds of.

5.2.3.2.2 Regular Plurals with Irregular Nouns

Some nouns in Standard English form plurals by a vowel change (one foot, two feet), or with no suffix at all (one deer, two deer). In some cases, when a plural is formed by a vowel change, FRE speakers may change the vowel and add the plural suffix, (e.g., feets, mens) resulting in a "double plural."

5.2.4 Questions
5.2.4.1 Inversion

The form which questions take in Standard English depends on whether the question is direct or indirect. If the question is direct, word-order inversion takes place, but if the question is indirect, the basic word order is retained. In the case of direct questions, inversion affects the questioned element, if any, and the verbal auxiliary or copula, transferring them to the beginning of the sentence. The statement *He went somewhere* can be content-questioned or yes/no-questioned. To form the content question, *somewhere* is replaced by *where*, the auxiliary *did* is added and both are moved to the head of the sentence, giving *Where did he go*. The yes/no question simply requires the insertion of the auxiliary *did* and its transfer to the head of the sentence, giving *Did he go somewhere*. The indirect question, on the other hand, involves the transfer of the questioned element to the head of the clause only. In the case of yes/no questions, *if* or *whether* is used in the construction.

Examples of the two types of indirect questions corresponding to *He went somewhere* would be *I want to know if (whether) he went somewhere*. In PRE the inverted form of the question can be used for both direct and indirect questions, and the words *if* and *whether* may not be used to form indirect yes/no questions. The direct questions for *He went somewhere* are the same as the Standard English examples given above. But the two indirect questions would be *I want to know where did he go* and *I want to know did he go somewhere*. This feature is also quite common in Black English and is probably the result of this influence for some PRE speakers.
5.2.4.2 The Absence of Preposed Auxiliaries

In inverted direct questions, the auxiliary or copula form of the main verb phrase is moved to the front of the sentence, as we have seen. In this position, some of these elements are especially vulnerable to deletion. This gives questions like He coming with us? (deletion of is), Where you been? (deletion of have), and You understand? (deletion of do). Although this is frequently cited as a feature of nonstandard dialects, deletion of these auxiliaries in direct questions is very common in spoken Standard English.

One type of preposed auxiliary absence which is found in PRE, as in some other nonstandard varieties of English, is observed with certain types of questions in the past tense. In past tense questions, Standard English carries the past tense in the auxiliary rather than in the main verb, so that we have Why did you do this to my brother? or What did you bring with you? In Standard English even if the preposed auxiliary is deleted as described in the preceding paragraph, the main verb still does not carry the tense. But in PRE, the main verb may carry the past tense, so that we get sentences like Why you did this to my brother? or What you brought with you? For these types of sentences, it does not appear that there is a preposed auxiliary which is subsequently deleted. Rather, it appears that the declarative order is retained and the question is formed by the simple addition of a question word.

5.2.4.3 An Idiomatic Usage of how

Before concluding our discussion of questions, we may cite an idiomatic usage of how in PRE. In PRE the question word how may be
used where what is used in Standard English in the expression How you call that? This particular usage evidences the influence of Spanish and is peculiar to this expression.

5.2.5 **Definite and Indefinite Articles**

For the most part, the use of definite (the) and indefinite (a, some) articles in PRE is quite like the use of articles in other standard and nonstandard varieties of English. There are several instances, however, in which Spanish influence can occasionally be found where the Spanish system of article usage differs from the English system. There are two main types of interference which may occasionally occur. First, there are some instances in which Spanish does not require an article but English does. In these cases, interference may be manifested by the absence of the article where Standard English requires it. For example, when the verb to be is followed by a noun indicating simple identification, Standard English requires an article but Spanish does not. Thus, interference may be manifested by producing a Standard English sentence like He's a baseball player as He's baseball player. Second, there are cases in which no article is required in Standard English but in which Spanish uses an article. In particular, Standard English may not use articles in proper names, noun phrases referring to general conditions, or certain types of set phrases. For example, we may say Los Angeles has a good team or Onion is good with a meal in Standard English without using an article before the name Los Angeles or the general use of onion. But in PRE, we find occasional instances in which articles may be used, so that we get The Los Angeles has a good team and The onion is good with a meal. These instances can be attributed to vestigial interference from Spanish.
Although the grammatical rules for articles actually follow much more detailed and abstract conditions for occurrence in Standard English and Spanish than specified here, the instances of article usage where it is not expected in Standard English and vice versa are so infrequent that it is sufficient to understand the few examples occurring in PRE as vestiges of Spanish influence.

5.2.6 Word Order

If we were to look at the difference between word order in certain aspects of English and Spanish, we might predict a number of different areas in which the Spanish-influenced speaker of English would be expected to alter his English to conform to the word order patterns of Spanish. In the case of first generation learners of English, many predicted types of interference in word order do in fact occur. But in the case of PRE as spoken by second generation teenagers, the influence of Spanish patterns is quite limited, and, when it does occur, is generally of a much less obtrusive nature than that of first generation English learners. Nonetheless, there are occasional instances of word order in PRE which may relate to a vestigial influence of Spanish.

There are a few instances in which the subject of a sentence is placed following the verb where Standard English would be expected to place the subject preceding the verb. These types of changes relate to quite limited instances of expressions in Spanish where the subject can follow the verb. Sentences like It doesn't really matter the age or It doesn't make any difference the outcome appear to be instances of this type of potential interference. It is important to note that these kinds of examples, although systematic and patterned, are quite rare.
Subtle types of interference may occasionally be observed in the placement of certain adverbs or adjectives following the object (direct or indirect) rather than preceding it, as required in Standard English word order rules. Thus, for example, we may occasionally get sentences like I speak to her back or Send it to us back again for Standard English I speak back to her and Send it back to us again. And, there are isolated instances in which the adverb placement rules in Standard English would place the adverb at the end of the sentence, but PRE may allow it to be placed between the object and the verb. This accounts for sentences like Take slow the car or The Jets win again the Super Bowl. Although the reasons for these types of direct and indirect influence can be understood by looking at word order in Spanish and English, the relative rarity of these types of word order differences does not warrant the explication of the major word order differences between Spanish and English. It is sufficient here to note that the rare word order differences between PRE and Standard English can often be accounted for by appreciating some of the subtle ways in which Spanish word order may influence English. These are not random and haphazard changes in the order, but relate to the systematic carry-over of some subtle differences between Spanish and Standard English word order.

5.2.7 The Use of Prepositions

Of all the areas of potential interference which may be found in the English of speakers with a Spanish background, the use of certain prepositions different from Standard English is probably the one which is still found to the greatest extent among second generation speakers of PRE. There are several types of differences in the use of prepositions in PRE as
compared to Standard English. In most cases, different uses of English prepositions are based on a translation equivalent of a Spanish preposition. Phrases like He's married with my sister, pregnant of my little brother, rejected from the Salvation Army, to four to seven o'clock, etc. all indicate this type of pattern. Although it is difficult to systematically specify the types of difference which might be encountered because of the idiomatic nature of many of these prepositional uses, some of the more common pairs which are used equivalently include of/from, in/on, to/for, and by/from. The actual amount of prepositional interference varies considerably from speaker to speaker, as does the inventory of Standard English prepositions which are affected.

5.2.8 Pronominal Apposition

A well-known, but little understood feature of many nonstandard varieties of English is pronominal apposition. Pronominal apposition is the construction in which a pronoun is used in apposition to the noun subject of the sentence. Usually the nominative form of the pronoun is used, as in My brother, he bigger than you or That teacher, she yells at the kids all the time. Occasionally, the objective or possessive pronoun is used in apposition as well, as in That girl's name is Wanda, I never did like her or Mr. Smith, I got one F in his class one time. Pronominal apposition is actually used by all speakers, whether they are speakers of Standard English or not. It seems likely that the length of the modifying material which intervenes between the noun and the pronoun has an effect on acceptability; the more intervening material, the more acceptable the pronoun in apposition. For example, pronominal apposition in a sentence like That man that I met on the train to Chicago last week, he turned
out to be a Congressman is more acceptable than in a sentence such as My mother, she's here now. But the exact restrictions on the acceptable usage of pronominal apposition have yet to be discovered. PRE speakers who use the stigmatized kinds of pronominal apposition do not use it in every sentence. It has been suggested that the use of pronominal apposition is related to the entry and re-entry of participants in a narrative, but this hypothesis has not been thoroughly investigated.

5.2.9 The Conjunctive Use of which

The relative pronoun which in Standard English may refer to a preceding noun phrase or to the whole clause that precedes it. Thus, we may find examples like The pen, which cost me a dollar, doesn't work or Mr. Jones was the community leader, which is what everybody expected; in the first case which refers to the specific noun pen while in the latter case it refers to the fact that Mr. Jones was the community leader rather than the noun Mr. Jones specifically. In both instances, however, it should be noted that there is a noun or event which is the formal antecedent for the clause introduced by which. PRE appears to be like a number of other nonstandard dialects of English in that the second usage of which can be somewhat extended, so that there is no real formal antecedent to which it refers. Thus, we get examples like They were hoping to go someplace, which they didn't succeed. In some respects, this use of which has a relationship to the preceding clause which is equivalent to the use of the conjunction and in Standard English.
5.2.10 Grammatical Characteristics of PRE

There are a number of other grammatical patterns of PRE which might be included in our discussion, but many of these are so restricted in their effect that they relate only to specific vocabulary items. A number of these items are assimilated from Black English. For example, existential *it* may be used where Standard English uses *there*, so that we have sentences like *It's a boy in my room named Reynaldo* or *Is it a Broad street in this city?* for Standard English *There's a boy in my room named Reynaldo* or *Is there a Broad Street in this city?* We also find the verb *go* used to refer to existent location rather than direction, so that *There go the pencil* may be used where Standard English uses *There's the pencil*. Another expression apparently derived from Black English is the use of the verb *say* to refer to noises created by non-human objects, producing sentences like *The cannon say, 'Boom'* or *The water say 'Whoosh'* for Standard English *The cannon goes, 'Boom'* or *The water goes 'Whoosh'*. These illustrations could be expanded considerably, but most of them involve particular vocabulary items or idiomatic expressions and therefore do not have a general effect. It is sufficient to note here that some of the vocabulary of Black English has been assimilated by teenage Puerto Ricans through both direct and indirect contact. There are also idiomatic expressions or vocabulary differences which might be related to Spanish influence. To illustrate, the lack of distinction between *do* and *make* is not always retained, because one item is used in Spanish for two English functions. Thus, we get sentences like *A guy does a mistake* for Standard English *He makes a mistake*. This type of neutralization (i.e., two words are distinguished in English where one word is used in Spanish) also may account for an expression like *He always has a little bit of jokes*
for He always has a few jokes, or the use of much in PRE where many would be expected in Standard English (e.g., He has much friends).

Finally, English words may be used as literal translation equivalents of Spanish words. This may result in the use of words in a very different sense than they are used in Standard English. For example, a sentence like You look if you were dead may result from this type of interference. On the surface, it might appear to be a quite confusing use of if, but it is simply a usage of if equivalent to Standard English like or as if. Similarly, the negative adverb hardly may be used as either affirmative or negative by analogy with the equivalent Spanish item. This means that a sentence like Hardly everybody came may mean that practically everybody came. Initially, these types of sentences may cause considerable comprehension difficulties to the uninitiated hearer, but there are very reasonable explanations for all these occurrences.

The grammatical aspects of PRE which have been outlined here are by no means the only ones which differ from Standard American English. Yet, something has been said about most of the crucial features. What is essential to this discussion is an appreciation for and knowledge of the systematic and patterned rules under which PRE operates.

5.3 Implications for Teaching Standard English

In the preceding description, we have attempted to explicate in non-technical language a number of the features characteristic of second generation PRE speakers in Harlem and the Bronx. It is hoped that this description will benefit those educators who want to understand the English of their students and that it will serve as a reference for educators writing materials for teaching Standard English. On the basis of the
preceding discussion, we can make several general observations concerning the educational strategy for teaching Standard English to PRE speakers.

To begin with, it is crucial that the teacher understand the systematic and patterned nature of PRE, and the various sources which account for its development. We have tried to stress that the features are always rule governed and not haphazard and random "errors." PRE is like any other dialect in that it shows a highly detailed organization; therefore, the teaching of Standard English must begin with a non-paternalistic respect for this systemacity. Ultimately, the attitudinal problem towards this intricate and unique language system is probably the biggest problem we face. The teacher who understands this patterning is in a much better position to teach Standard English than the teacher who disregards PRE as an unworthy approximation of Standard English. We must reiterate that it is a system in its own right, with its own rules. These rules have been discovered by observing the actual usage of PRE by second generation teenagers.

In teaching English, it is important to uphold real spoken Standard English as a model to inner-city children rather than an artificially precise language based on an arbitrary prescriptive norm of what is "correct." A good rule of thumb for a teacher to follow is to carefully and honestly reflect on his own usage in casual conversation and not to insist on any usage on the part of his pupils which he does not find in his own casual speech. Children are quick to detect hypocrisy and will soon lose all motivation if they see that they are being taught "better" English than their teacher actually uses himself.

In terms of the features themselves, it should be obvious from our discussion that there are some items which are a much more integral part
of PRE than others. Furthermore, some of them have a much wider distribution in terms of the general population of second generation Puerto Ricans in New York City than others. It therefore appears appropriate to establish priorities in terms of the features which might be incorporated in teaching Standard English. Wolfram (1970) has suggested five sociolinguistic principles for educational sequencing which might be applied to the matter of educational priority in teaching Standard English to PRE speakers. These may be outlined briefly as follows:

1. **Social diagnosticity of linguistic variables**

   Since some features are much more socially stigmatized than others, those having the greatest amount of stigmatization should be given priority.

2. **The generality of rules**

   Some nonstandard dialect rules affect only small subsets of words or single items, whereas others involve general rules that operate on the form of every sentence of a particular structural type. General rules should be given priority.

3. **Phonological versus grammatical variables**

   Grammatical variables tend to be more discrete in their differentiation of social dialects than phonological rules and are often more socially stigmatized. Grammatical rules should, therefore, be given priority over pronunciation rules.
4. **Regional versus general social significance**

   The establishment of Standard English norms may vary from region to region, so that items which are considered nonstandard in one region may be considered standard in another region. Other features of nonstandard dialects, however, are constant and are considered nonstandard regardless of region. Those with general social significance should be given priority.

5. **The relative frequency of items**

   Some nonstandard patterns occur only infrequently during the course of a normal discourse, while others occur with great frequency. Those which occur with greater frequency should be considered more essential in teaching Standard English than those which occur relatively infrequently. The application of the above principles cannot, of course, take place in isolation, but must be intersected with each other.

We may recall that our description of PRE features included a number of different types of items in terms of their relative social significance, rule generality, distribution among PRE speakers, and relative frequency. If we apply the general principles enunciated in Wolfram (1970), we may arrive at several conclusions concerning the priority of Standard English equivalents to be taught. We have seen that a number of the items we have included in our discussion are matters of vestigial interference, at least for second generation Puerto Rican teenagers. This means that they occur...
only sporadically as remnants of Spanish influence. Therefore, despite the attention given to some of these features in our description, they should not be emphasized in the teaching of Standard English, either in terms of sequencing or concentration. A more efficient strategy would be to give priority to those items which are a more integral part of PRE. We have also seen that some of the features we have described are used by a large majority of second generation PRE speakers, whereas others are characteristic only of certain subsets of speakers. This is particularly true of some of the grammatical features of Black English which are only found among those speakers with extensive black contacts. In teaching Standard English, it would appear most advisable to start with those features which are expected to be most common to the Puerto Rican group as a whole.

This matter also brings up another crucial issue with respect to teaching Standard English to Puerto Ricans in New York City: namely, can the same materials be used for Puerto Rican speakers as are used for Black English speakers? Given the general picture of PRE speakers in Harlem and the Bronx, we can suggest that there can be some overlap in materials. With respect to pronunciation, there appears to be a considerable number of common features. We can cautiously suggest that many of the exercises utilized for teaching Standard English pronunciation features are appropriate for both groups. With respect to grammar, however, it would only be appropriate to use the same types of materials for PRE speakers who have extensive black contacts.
Finally, we may note that PRE has many features (e.g., multiple negation, d for th, etc.) characteristic of many nonstandard dialects in the United States, so that they would be characteristic of both black and white nonstandard dialects in New York City. These features tend to show the widest distribution in terms of the various subsets of speakers within the community of second generation speakers. It would therefore appear most efficient to teach the standard equivalents for these items before some of the features characteristic only of various subgroups of PRE speakers.
APPENDIX A: QUESTIONNAIRE

INFORMANT DATA SHEET

(To be completed after the Interview)

Name ________________________________ Age ____________

Address ______________________________ Race ____________

Grade _____________________________ School ______________________

Parents Birthplace:

Father ______________________ GF ______________________

GM ____________________________

Mother ______________________ GF ______________________

GM ____________________________

Occupation of Head of Household _____________________________

Highest Grade level of Head of Household _______________________

How long lived in New York ________________________________

Other places lived _________________________________________

Race of Peer Contacts _____________________________________
Section I Free Conversation

A. Games and Leisure

What kinds of games do you play around the neighborhood (stickball, games with bottle caps, marbles, handball, flying pigeons, etc.)?

How do you play these games (rules for the games, deciding who's IT, etc.)?

Do you follow any of the NY sports teams? What do you think of the Mets this year? How about the Knicks for next year (or Joe Namath and the Jets)?

What are your favorite TV programs? Describe a recent program.

What is your favorite movie of all time? What happens? (If you can elicit movies without trouble, ask about West Side Story and an opinion of how life in Harlem is portrayed in this movie)

Tell me about your experience here at camp. Describe a typical day. Contrast this with the city day.

B. Peer Group

How about the guys you hang around with? In this group is there one guy that everybody listens to? How come?

What makes for a leader in the group (tough, hip with girls, good sounder, etc.)?

Do the guys in the group sound on each other? How does this work? What do you sound on? Can it be true, etc? (If rapport right, get some sounds.)

What makes a good sounder?

Say a new kid moves into the tenement. Any way he can get into your group?

Who are some of the guys you're tight with? Name some.

Of the guys you named, are there any Negroes? Puerto Ricans in the group? How about whites?

Any of these guys speak Spanish? How about their parents?
C. **Aspirations**

How about when you're through with school? Any idea of what you might do? What does a ________ do?

If someone came up to you and said, "Here's all the money in the world," what would you do with it?

What is a successful man (If informant responds, have him define unsuccessful, good, bad, smart man)?

D. **Fighting and Accidents**

What kinds of things do fights usually start about on the street?

Any rules for a fair fight? (How about if someone was kicking somebody or hitting them with a chain or lead pipe, what would you do)?

Ever see anybody get beat up real bad? What happened?

Do the kids around here still fight in gangs? How do these start? (If answer negatively, pursue why gang fights have stopped)

Ever been in a hospital, or automobile accident? Describe.

How about a situation where you thought "Man, this is it, I'm gonna die for sure now," What happened?

Section II

I would like you to define some things for me as you look at them. I'll give a sentence and you complete the sentence.

For example, If I say "A good sounder is somebody that...." you might say "always has something to come back with"

1. The leader of a group of guys is somebody that ______
2. A smart person is somebody that ________
3. A person with common sense is somebody that ______
4. If a guy gets a girl into trouble he should _________
5. If you're going to get into a fight, the best weapon to have with you is a _______ because _______
6. A tough dude is somebody that _________
7. The thing I like the best about Harlem is the fact that _______
8. The thing I like the least about Harlem is the fact that ______
9. If you want to be hip with girls you gotta _________
10. The best way to make it in this world is to _________
Examples

A. My cousin should do his work
   Should what?
   I know he should
   Do his work

B. Daryl hit his brother
   Did what?
   I know he did
   Hit his brother

C. He will be five next month
   Will What?
   I know he will
   Be five next month

1. Jose can drive a motorcycle
2. Maria put it down
3. The lady a teacher
4. If he got a walkie talkie he be happy
5. He ain't see the boy
6. John wants you to leave
7. The people over at my house now
8. You walked home
9. Sometime Joseph be up there
10. He should work harder
11. He be here in a few minutes
12. Daryl got a brother
13. He will explain that to you
14. Dwight been met that girl at the pool
15. He could be at the country club now
16. Everday last year he be at the pool
Section IV

Possessive - Now we're going to ask you to fill in the blanks in a different kind of question.

A. If I said: "This man has a hat. You might say. It's not the woman hat, it's the ______."  
   Note: It is very important that you say "woman hat" not "woman's hat." The same is true for all questions in this test. If an informant corrects you, you may begin saying "woman's hat" etc.

B. "This girl has a bike. It's not the boy bike, it's the_____.

C. "This dog has a bone; it's not the cat bone, it's the_____.

D. This mouse has some cheese. It's not the rat cheese, it's the_________"

E. Jack Johnson has a car. It's not Paul Brown car, it's _______.

F. Derrick Black has a toy. It's not Paul Brown toy, it's _______]

Section V

Word-final consonant clusters with -ing. Now I'll give you a different exercise and you see if you can make the sentences the same way I do in these examples.

A. They eat
   They eat
   They are eating

B. They play
   They play
   They are playing

C. They buy things
   They buy things
   They are buying things

Now you try

1. They rest
2. They ask
3. They paste it
4. They bust it
5. They lift it
6. They test it
7. They risk a chance
Section VI

Plurals

Now I'll show you a picture of something. It may be something you've seen before or it may be something you've never seen. Then I'll show you a whole bunch of the same thing and ask you what they are (use No. 1 as example).

This is a tree. Now here's a bunch of them. What are they?

This is a lun. I bet you never saw one of them before. But if you did, these would be a bunch of __________?

This is a desk. And these are __________?

This is a biz. And if you had a whole bunch of them, they would be __________?

This is a fuss. And these would be a bunch of __________?

This is a foot. And here are two __________?

This is a box. And these are __________?

This is a cent. And now there are three __________?

This is a dollar. And now there are three __________?

Section VII Passive Test

Sample Stimulus  Sample Response

1. Yesterday somebody kicked him. 1. Yesterday he was kicked.
2. Yesterday somebody followed him. 2. Yesterday he was followed.
3. Yesterday somebody killed him. 3. Yesterday he was killed.
4. Yesterday somebody found him. 4. Yesterday he was found.
Stimulus

1. Yesterday somebody punched him.
2. Every day somebody rob him.
3. Every day somebody grab him.
4. Right now somebody like him.
5. Every day somebody cheat him.
6. Right now somebody hear him.
7. Right now somebody's shooting him.
8. Yesterday somebody was chasing him.
9. Right now somebody's scaring him.
10. Yesterday somebody was holding him.

Section IX (Use cards for informant)

WORD LIST

hut  sin  chew  pin
wolf  west  deaf  pen
hot  sing  jello  desks
woof  Wes  mother  watch
month  pass  right  find
sold  bet  kite  wash
boat  past  school  fine
soul  bat  Tom  clothe
vote  caught  Sam  tooth
so  side  sod  arithmetic
code  coat  sad  Catholic
feel  shoe  boil  yellow
oal  mass  death
<table>
<thead>
<tr>
<th>rows</th>
<th>rose</th>
<th>side</th>
<th>sod</th>
</tr>
</thead>
<tbody>
<tr>
<td>run</td>
<td>rum</td>
<td>shoe</td>
<td>chew</td>
</tr>
<tr>
<td>hut</td>
<td>hot</td>
<td>mass</td>
<td>mask</td>
</tr>
<tr>
<td>sold</td>
<td>soul</td>
<td>deaf</td>
<td>death</td>
</tr>
<tr>
<td>boat</td>
<td>vote</td>
<td>yellow</td>
<td>jello</td>
</tr>
<tr>
<td>sin</td>
<td>sing</td>
<td>time</td>
<td>Tom</td>
</tr>
<tr>
<td>rain</td>
<td>reign</td>
<td>pin</td>
<td>pen</td>
</tr>
<tr>
<td>west</td>
<td>Wes</td>
<td>watch</td>
<td>wash</td>
</tr>
<tr>
<td>bet</td>
<td>bat</td>
<td>boil</td>
<td>ball</td>
</tr>
</tbody>
</table>
APPENDIX B: INTERVIEW - ORAL

Introduction: We're doing a study of Harlem teens.

1. How long have you lived in Harlem or the Bronx? ____________________________

2. Where else have you lived in your life? ____________________________

3. Where do most of your friends live?
   e.g. in the immediate neighborhood?
   if not, why not? ________________________________________________________

4. Where do you spend most of your time outside of school?
   i.e. what streets etc. _____________________________________________________

5. Are most of the teachers at your school Black, Puerto Rican, other? ____________________________

6. Are most of the students at your school Black, Puerto Rican, other? Try to estimate, 3/4, 1/2. ____________________________

7. Are the people in your neighborhood mostly Black, Puerto Rican, other? ____________________________

8. If you were in trouble and needed help, who would you talk to? ____________________________

9. Is he/she Black, Puerto Rican, other? ____________________________

10. At your church, are most of the people Black, Puerto Rican, other? ____________________________

11. Is the minister Black, Puerto Rican, other? ____________________________

12. How often do you use Spanish? ____________________________

13. How good is your Spanish? i.e. can you talk about anything you want in Spanish? ____________________________

14. How old were you when you learned Spanish, English? Which did you learn first? ____________________________

15. Do you ever spend much time with people who just came to New York from Puerto Rico? ____________________________
16. What language do you use: with your parents

   with your brothers/sisters __________________
   grandparents and relatives _________________
   girlfriend _________________________________
   with your friends __________________________
   in the street with people you don't know well __________________
   with neighbors who are older _________________
   with neighbors who are younger ________________
   in neighborhood stores ______________________
   with your teachers __________________________
   with your minister __________________________
   when you make jokes _________________________
   at a dance _________________________________
   when you are angry __________________________
   on the subway/bus __________________________

17. Is there any one you speak only Spanish to? __________________________

18. Do you ever help people out by speaking English for them because they can't?______________________________

19. When you're not in school, which do you spend most of your time doing:

   ___ just hanging out and rapping with friends
   ___ at home with your parents
   ___ at home watching TV
   ___ at home reading
   ___ at a club or center
   ___ at the movies
   ___ at your girlfriend's house
   ___ playing sports
   ___ alone at home
   ___ alone on the street
20. Is there any difference between the way Puerto Ricans and blacks talk? If so, what?
BIBLIOGRAPHY

Bach, Emmon
1966

Bailey, Charles-James N.
1969a
"A Possible Explanation for an Assimilation Curiosity," Working Papers in Linguistics, issue No. 5, Department of Linguistics, University of Hawaii.

1969b
"Syllable Boundaries," Working Papers in Linguistics, issue No. 9, Department of Linguistics, University of Hawaii.

Baker, C.L.
1970

Broom, Leonard and Norval D. Glenn
1965

Burma, John H.
1954

Chomsky, Noam
1965

Chomsky, Noam and Morris Halle
1968

Cooper, Robert L. and Lawrence Greenfield
1968
"Language Use in a Bilingual Community," in Fishman et al., Bilingualism in the Barrio.

Crow, Richard G.
1971
Background information on East Harlem schools.

Delattre, P., A.M. Liberman, F.S. Cooper and L.J. Gerstman
1952

Doob, Christopher Bates
1970
"Family Background and Peer Group Development in a Puerto Rican District," The Sociological Quarterly 11.

Fant, C. Gunnar M.
1956
Fant, Gunnar

Fasold, Ralph W.
1971 "Minding your Z's and D's: Distinguishing Syntactic and Phonological Variable Rules," Georgetown University, Mimeographed.

Fasold, Ralph W. and Walt Wolfram

Fishman, Joshua A.

Fishman, Joshua A. et al.

Glazer, Nathan and Daniel Patrick Moynihan

Greenfield, Lawrence and Joshua A. Fishman
1968 "Situational Measures of Language Use in Relation to Person, Place, and Topic among Puerto Rican Bilinguals," in Fishman et al., Bilingualism in the Barrio.

Handlin, Oscar
Herman, Simon N.  
Human Relations 14.

Hoffman, Gerard.  

Kantrowitz, Nathan and Dannell M. Pappenfort  

Mitchell-Kernan, Claudia I.  

Kessler, Sister Carolyn  

Kiparsky, Paul  

Klima, Edward S.  

Kochman, Thomas  

Labov, William  


Labov, William, Paul Cohen and Clarence Robins  

Labov, William, Paul Cohen, Clarence Robins and John Lewis  
Lehiste, Ilse

Lehiste, Ilse and Gordon E. Peterson

Lehiste, Ilse

Levine, Lewis and Harry J. Crockett, Jr.

Levi, Oscar

Ma, Roxana and Eleanor Herasimchuk

McKay, June R.

Mills, C. Wright, Clarence Senior, and Rose Kahn Goldsen

Motley, Dena

Nahirney, Vladimir C. and Joshua A. Fishman

Navarro-Tomás, T.

Padilla, Elena

Peterson, Gordon E. and Ilse Lehiste
1960  "Duration of Syllable Nuclei in English," JASA 32.

Rand, Christopher

Rivero, María-Luisa

Seda Bonilla, E.
Shiels, Marie E.  
forthcoming  
Dialects in Contact: A Sociolinguistic Analysis of Puerto Rican English and Black English in Harlem. Dissertation, Washington, D.C., Georgetown University, School of Languages and Linguistics.

Sexton, Patricia Cayo  
1965  

Shuy, Roger W., Walter A. Wolfram and William K. Riley  
1967  
Linguistic Correlates of Social Stratification in Detroit Speech. Final Report, Cooperative Research Project No. 6-1347, United States Office of Education.

1968  

Silverman, Stuart Harold  
1971  
The Effects of Peer Group Membership on Puerto Rican English, New York City Yeshiva University.

Sobin, Linda  
1971  
"A Study of Noun Plural Formation in the Speech of First and Third Grade Negro Children," Austin, Texas, unpublished term paper, University of Texas.

Stanley, Richard  
1967  
"Redundancy Rules in Phonology," Language Vol. 43, No. 2.

Stewart, William A.  
1966  

Stockwell, Robert P., Paul Schachter and Barbara Hall Partee  
1969  
Integration of Transformational Theories on English Syntax. Los Angeles, Cal., University of California.

Thomas, Piri  
1967  
Down These Mean Streets. New York, Alfred A. Knopf.

Weinreich, Uriel  
1968  
Languages in Contact: Findings and Problems. The Hague, Mouton.

Wolfram, Walter A.  
1969  
Wolfram, Walt
1970

1971

Woodward, James C. and Robert Zambrano
1971