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This document comprises the final report of the Detroit Dialect Study (see also AL 001 422 and AL 001 419). In order to contrast the speech patterns of various socio-economic groups, the research design included--(1) randomly selecting approximately 700 Detroit residents of four major age groups from an enumerated population providing as few biases as possible; (2) developing a suitable questionnaire; (3) interviewing these people to solicit at least three styles of speech (conversational, single response style, and reading style); (4) securing background information about each informant (sex, race, age, education, birthplace, etc.) to correlate speech with social stratification; and (5) analyzing linguistic data and correlating it with sociological information. This document comprises a report on goals of the research, field methods, analytical procedures, structural frequencies, computer based phonological analysis, and some sociolinguistic implications for the teaching of standard English. In discussing these implications, particular attention was given to determining the attitudes of local teachers toward the language used by their students, the role of linguistics in developing and sequencing materials for teaching standard English as a second dialect, and the definition and importance of functional bi-dialectalism (or "biloquialism"). (JD)

Final Report

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A STUDY OF SOCIAL DIALECTS IN DETROIT

April 1968

**U.S. DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE**

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Final Report

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A STUDY OF SOCIAL DIALECTS IN DETROIT

Director: Roger W. Shuy

Michigan State University

East Lansing, Michigan

April 25, 1968

U.S. DEPARTMENT OF

HEALTH, EDUCATION, AND WELFARE

Office of Education
Bureau of Research

PREFACE

The final report of the Detroit Dialect Study is presented, as follows, in the form of a book rather than a research report. Since three people were primarily responsible for the major portion of the research and writing of this report, co-authorship is appropriate. As is so often the case, however, the authors are also indebted to many others for their part in the research. To be noted in particular are Dana Downing and Robert Cromack for their fieldwork as well as preliminary analysis; all the other fieldworkers -- Edmund Anderson, Judy Leidy, Rita Kology Seeligson, Catherine Wolczanski, C. William Johnson, James Ney and Virginia Lundstrom; the various typists and secretaries, including Joan Bennett Beam in particular; the consultants, Dr. Raven I. McDavid, Jr. and Dr. William Labov; the computer staff, including Edward N. Adams, Betty Darlington, Marilyn Johnson and Richard Winfield.

Special thanks must also go to the English Department of Michigan State University (especially to Dr. Sam Baskett) and the Department of Linguistics, Oriental and African Languages for arranging the director's teaching schedule so that the research could be carried out, for providing space and equipment, and for a genuine helpful interest in the project.

It must be noted at this time that the research on Detroit speech does not end with the termination of the project. The data are currently being analyzed by the staff of the Sociolinguistics Program at the Center for Applied Linguistics and by researchers at Michigan State University, the University of Chicago, the University of Wisconsin, and the University of Southern California.

LINGUISTIC CORRELATES OF

SOCIAL STRATIFICATION IN DETROIT

SPEECH

Cooperative Research Project No. 6-1347

Roger W. Shuy, Walter A. Wolfram and William K. Riley

Michigan State University
East Lansing, Michigan
1967

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PART I - GOALS AND RESEARCH DESiGN

It is the conviction of an increasing number of linguists that the speech of Americans is one of the most important clues to upward social mobility. Sociologists, psychologists, educators and others have pointed to a large number of indices of social stratification based on behavior, attitudes and abilities. But, to the linguist none of these indices seems as significant as language itself, for not only does it underly the very structure of communication, but it is also frequently beneath the surface of consciousness.

Objectives

To discover the linguistic correlates of social stratification, the Detroit Dialect Study embarked upon a methodological study in March of 1966. The broad objectives of this study were:

1. To describe the specialized linguistic features of the various English speaking sub-cultures of Detroit. At the 1964 Conference on Social Dialects and Language Learning in Bloomington, Indiana, linguists, sociologists and educators agreed that a sound procedure for any kind of English language engineering must begin with the actual speech of the various classes, age groups, races, occupation groups and in-migrants. Once the phonology, grammar, and lexicon have been adequately described, pedagogical applications can be made with efficiency and accuracy.

2. To determine the most efficient methods of language data gathering in an urban area. It is clear that each urban area is a complex of various in-migrations and social layerings. The speech situation in Detroit, for example, is quite different from that of other metropolitan areas. This is not to say, however, that similar techniques of

linguistic data gathering cannot be used in various urban areas. A
second objective in this investigation, then, was to determine which
methods of linguistic fieldwork are most productive with which types
of informants and to discover what combinations of techniques will
be most useful in the study of a large urban area.

3. <u>To determine effective methods of language data storage, retrieval
and analysis</u>. The analytical procedures of a large scale project
of this sort must necessarily vary from those more commonly known
in linguistic studies. With a large number of informants who are
urged to use different oral styles, the problems of linguistic
bookkeeping become vast. A significant phase of this research, then,
was devoted to establishing adequate analytical procedures, both manual
and electronic.

4. <u>To provide accurate and useful language data upon which educational
applications can be based</u>. Educators are aware of the fact that it is
better to know the systematic structure of the speech of various sub-
cultures than to have only an anecdotal awareness of it. It is
better to see the contrastive <u>patterns</u> of the standard and non-standard
speakers (whether native or in-migrant), and to teach accordingly, than
to engineer <u>individual</u> features in or out. Furthermore, it is
important that educators not waste time teaching against features which
do not actually exist.

Procedures

To contrast the speech of the so-called disadvantaged with that of the more
socio-economically successful, this study established a research design which had
these requirements:

1. Randomly selecting approximately 700 Detroit residents, newcomers and natives, of four major age groups from an enumerated population providing as few biases as possible. Establishing a questionnaire suitable to the above objectives.

2. Interviewing all of these randomly selected people with a standard questionnaire which yielded at least three styles of speech:

   a. Conversational (largely narrative and descriptive) style.

   b. Single response style. (Short answer responses to questions designed to elicit short answers).

   c. Reading style.

3. Securing background information about each informant (sex, race, age, birthplace, amount of education, etc.) which enables the research to correlate speech with social stratification.

4. Analyzing linguistic data and correlating it with sociological information.

PART II - FIELD METHODS

Before data gathering could begin, it was necessary to establish a viable research design. Careful attention was paid to matters of sampling, fieldworker orientation, field procedures and developing a questionnaire. Since there were eleven interviewers of different backgrounds and varying strengths, particular attention was paid to evaluating their fieldwork.

SAMPLING

The Base Sample

The Detroit Dialect Study has taken for granted the notion that although the major part of the investigation is linguistic, a part is also sociological. One area in which sociological expertise is crucial is sampling; the sample drawn for the Detroit Dialect Study has as one of its objectives to provide a cross section of the people of Detroit. The geographical distribution finally used was chosen on the basis of the assumption (drawn from conversations with urban sociologists and from examination of Census information) that these geographical boundaries were social boundaries as well The work of sociologists, whose divisions of Detroit related social stratification to geography, was used as a point of departure. The Census tract figures on income and race seemed to bear out Gerhard Lenski's divisions of Detroit, and the sample was constructed on the basis of his map. (Lenski, Gerhard E., The Religious Factor, New York: Doubleday, 1961).

Lenski divided Detroit and its subarbs into fourteen areas, nine of which fall within the boundaries of Metropolitan Detroit, on the basis of race and relifion. He distinguished four major groups, white Catholics, white Protestants, Negro Protestants and Jews, of which one group represented at least forty and frequently sixty per cent of the population of each geographical area. For example, the area marked outer city central was predominantly Jewish; the two inner city areas were

overwhelmingly Negro and Protestant. Taking the nine areas within the city limits of Detroit--inner city east, inner city west, middle city east, middle city west, outer city east, outer city central, outer city west, and the enclaves Hamtramck and Highland Park--it was found that only one, Highland Park, straddled Woodward Avenue, which had been pointed out as an important social boundary in Detroit. Because the investigators were interested in testing the Woodward Avenue hypothesis from a linguistic point of view, Highland Park was split into Highland Park East and Highland Park West with Woodward Avenue as the dividing line. (As it turns out, this oversampling of Highland Park is valuable in that it gives one area of the city in depth, to serve as a check on sampling procedures in general.) Including both halves of Highland Park and the other eight areas, there were ten areas of Detroit from which to draw a geographically stratified sample, or "Base Sample."

To select at random families with children from these ten areas, a procedure was formulated for drawing at random from the elementary schools in each area. (A random sample of all Detroit would have been the prime desideratum had it been feasible at this time.) In random sampling, each person in the total population sampled must have an equal chance of being selected for the sample. Any deviation from this may affect the reliability of the research unless it is carefully controlled or accounted for. The procedures of The Detroit Dialect Study were designed to minimize the effect of such biases.

At the suggestion of consultants for sampling procedure, the investigators decided to work through the elementary schools, realizing that this decision automatically biased the sample against childless people and people whose children were either too young or too old for elementary school. After all the public and parochial schools in each of Lenski's areas were listed separately one public and one parochial school were drawn at random in each area.[1]

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[1] See Figure 1, Detroit School Sample, p. 7

The Ethnic Sample

At this point it became clear that certain areas of possible linguistic interest which had been brought to attention were not covered by the Base Sample: the west Detroit Polish section, the areas inhabited by recent white in-migrants from the south, some middle and upper class Negro neighborhoods, and such anomalies as the ui..ysler School, which is attended by poor Negro and well-to-do white children. To supplement the stratified sample, the major object of the investigation, the investigators decided to draw a judgment sample based on information about sociologically interes ing areas of Detroit that were not included in the base sample. The schools chosen were located at the center of eleven such areas, and followed the same procedure used for the Base Sample; however, fewer informants were drawn from each school. The sample thus drawn was called the Ethnic Sample.[2]

Drawing the Samples

From each Base Sample school, the administrative assistant (see page 8) randomly selected thirty names, and from each Ethnic Sample school, fifteen. This was done by getting a total of all children in 4th, 5th, and 6th grades, in that school and dividing by thirty (fifteen, for the ethnic sample). This gave the ratio number for selection per grade. For example, if there were 300 children in fourth (100), fifth (100) and sixth (100) grades in a school, every tenth name per grade was picked. If there were 200 in fourth, 50 in fifth and 50 in sixth, every twentieth name in fourth, every fifth name in fifth and every fifth name in sixth were chosen from the alphabetized class lists. From the resulting list of thirty names (or fifteen), ten (or five) were chosen for the Detroit Dialect Study sample.

Just over half of the schools selected for the Base and Ethnic Samples combined were Detroit public schools; because of a school requirement, addresses could not be

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[2]

See Figure 1, Detroit School Sample, p. 7

obtained from the school files. Instead, letters had to be sent home to the parents
with return envelopes containing their addresses. This requirement caused a slightly
different procedure to be used for these schools than for the other schools in the
sample. The other schools--the private schools of Detroit, and the public schools
of Hamtramck and Highland Park--were amenable to a simpler procedure. The two pro-
cedures can be outlined as follows:

Procedure followed in Private Schools and Hamtramck and Highland Park Public Schools:

From the thirty (or fifteen) names obtained, every third name was
selected (beginning with fourth grade and ending with sixth). The
administrative assistant went to these homes and made an appointment
for an interview. If the people chosen in this way were not available
(gone for the summer, moved away, seriously ill, or unwilling), the
administrative assistant went to the top of the list, choosing the top
fourth grader first, the top fifth grader second, the top sixth grader
third, the second fourth grader fourth, and so on. This was done except
in a very few cases in which the names were taken out of order for some
reason.

Procedure followed in Detroit Public Schools:

In most cases, at least ten of the thirty (or five of the fifteen)
parents of Detroit public school children returned cards with addresses.
In each case, interviews were obtained from this list, in an attempt to
comply with the requirements of the system. Of course, some schools had
more cards returned than others. If twenty cards were retrieved in a
school requiring ten names, every other card, in alphabetical order, was
chosen. If one of the ten selected in this way were unavailable or un-
willing, the administrative assistant went to the top of the stack of
remaining names, working from top to bottom.

In cases where fewer cards were returned than interviews required, all of the returned cards were used; for example, where only eight were returned, those eight were selected and the remaining 22 names were divided by the number needed (2). Thus, every eleventh card was selected.

In one school, only one card was returned. In this school, the private school procedure was followed.

The Family Unit

In every family selected, the Detroit Dialect Study interviewed at least two people; the child whose name had been drawn at the elementary school, and one of his parents or acting parents. This gave a basic two-generational depth useful for studies of language acquisition. In addition, a third generation and on rare occasions a fourth were added wh.) interviews could be scheduled with grandparents and great-grandparents in the Detroit area. Moreover, wherever possible, a teenaged sibling of the elementary school child was interviewed to see if there were any significant changes in adolescent speech. Finally, in the three instances where the family selected contained a set of twins, both were interviewed. In general, the investigators tried to maintain a balance between fathers and mothers in the sample, but since they are generally more accessible, mothers are in the majority.

Biases

Several biases were recognized from the outset and can be regarded as controlled as long as they are considered in the analysis. They include the following:

1. Parochial heaviness. According to 1965 statistics, approximately one elementary school child in four was enrolled in Detroit parochial schools. The Base Sample allows for 50% parochial representation.

2. Willingness of participants. Of the 30 (or 15) names randomly selected in each public school, informants were drawn only from the list of those who willingly returned address cards.

3. Parental Imbalance. Various considerations caused the sample to include mothers far more frequently than fathers. Availability and willingness were strong factors here, but it must be recalled also that the matriarchal family is common in the inner city.

4. Localness. In other kinds of random sampling from the same areas it would be unlikely that 50 to 70 informants would be chosen from the same two school districts. Although all elementary school children initially stood the same chance of being selected, only a limited number were still eligible once the schools were selected.

5. Homogeneity. Only those families with children in the upper elementary grades were included in the sample. Childless adults and parents of children in other age groups were not eligible.

Completion of the Sample

When completed, the sample contained 702 interviews in 31 school districts and over 250 families.[3] Almost all the biases in the sampling were directly due to the differences between the type of information the sociologist requires and the kinds of data that interest the linguist. For example, only infrequently would a sociologist want a sample to include three people from each family; he would probably be satisfied with one. But the linguist's interest in the influences of parental and peer-group speech on the child make both this bias and the bias of localness useful, not detrimental to the study.

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[3] In only seven instances did the randomly selected informants decline to be interviewed.

Elementary School Districts From Which Sample Was Drawn:

Inner City East
    Foster
    Our Lady of Sorrows
    Chrysler*

Inner City West
    Estabrook
    St. Dominic
    Chaney*

Middle City East
    Hutchinson
    St. Philip Neri
    Hillger*
    Keating*

Middle City West
    Higgins
    St. Theresa
    Priest*
    Boynton*
    Sill*

Outer City East
    Atkinson
    St. John Berchmans

Outer City West
    Burgess
    St. Francis de Sales
    Koscuisko*
    St. Johns*

Outer City Central
    Winship
    Gesu
    Higginbothom*
    Hampton*

Highland Park East
    Barber
    St. Benedict

Highland Park West
    Willard
    St. John Vianney

Hamtramck
    Koscuiszko
    St. Florian

* Indicates Ethnic Sample.

For more specific information concerning the geographical location of each school and detils for each informant, see appendix.

FIELDWORK DESIGN

The Administrative Assistant

The Detroit Dialect Study relied heavily on the administrative assistant to secure all interviews. It was assumed that once the informants in the sample were drawn, one person should contact all families, secure permission for the following interview, answer preliminary questions, generally assure the people of their role, and set up a definite appointment for the interview itself.

Selection of an administrative assistant was a crucial matter. A major criterion was adaptability. The position required a person who would be able to convince the prospective informants to permit an interview. Specific knowledge of linguistics was not really as important as congeniality. A beginning assumption was, in fact, that a linguist per se would not be as good for this position as one with personnel experience. Consequently, a person with experience in administrative responsibilities who had done some personnel work was hired. The administrative assistant's background included close dealings with people of all social levels and all ages.

Scheduling the Interview

The administrative assistant drove to the area of the homes of each of the randomly selected informants and set up interview appointments in person. Gauging the reception or attitude of the informant, she tried to determine what approach to use. One type of statement of how the goals might be presented to the informant would be: "We are interested in how different people talk in this area." Securing an interview took anywhere from five minutes to an hour depending on the person's availability, willingness and attitude toward the project. In some homes it was necessary to listen to family history, examine bruises and cuts of the children and exchange recipes. Occasionally the contact was made away from the home at a place of business or some other designated area at the request of the prospective informant. In some cases the administrative assistant had to return to the home more than once in order to secure the appointment.

The administrative assistant's reception in the homes varied. Although all homes were sent a letter preceding her arrival, not all expected her. Some knew vaguely about the project but were slightly surprised. Others responded with little or no awareness of the project.

The administrative assistant's appointment book for time and work schedules contained information about:

a. The number of workers available that day.

b. Special information about the area (e.g., whether or not evening interviews might prove dangerous).

c. Accessibility of the area to the operations base.

Depending on the informants' work and living patterns as well as his availability for interviewing, the administrative assistant suggested an interview time varying from one day to six weeks in advance. (On two or three occasions, the interviews were set up immediately after the contact.) If the suggested time was acceptable to the informant, the appointment was confirmed and an appointment card was left in the home. This card served as a reminder of the appointment and also to give authority to the project and credentials to the administrative assistant. The sample appointment card is as follows:

```
Roger W. Shuy, Director
Summer Headquarters
Stouffer's Northland Inn        DETROIT DIALECT STUDY
357-4700 Room 539
     or 357-4108

in cooperation with the United States Office of Education and
                Michigan State University

School Area____Keating_____

Appointments____Mrs. H_____      Time____July 19
                                                Tues.
            ____Quinton_____      _____
                                             1:00
            ____Jeffrey_____      _____
```

Other credentials used by the administrative assistant to establish rapport included:

    a. information from the Archdiocese of Detroit (in the case of families from Catholic schools).

    b. information from various school principals (in the case of families from public schools)

    c. Michigan State University credentials: letter from Dr. Shuy, Director.

Only infrequently was it necessary to provide the informant with these special credentials.

Depending on the area, the individual and whether or not the person requested a reminder, a follow-up was initiated. This was either in the form of a telephone call, a visit or a postcard. The administrative assistant scheduled an average of sixteen interviews daily throughout the fieldwork period. The number varied from day to day, depending on how the informants chose to be scheduled. She also handled cancellations, time changes, rescheduling and other problems dealing with the interview.

The Operations Base

It was immediately clear that any large scale interview procedure such as this would need a common operations base. The director and the administrative assistant investigated several possibilities and decided upon a strategically located hotel as the best choice for a base. The major criteria for such a selection were:

    a. Availability throughout the summer on a five day per week basis.

    b. Relatively soundproof rooms for fieldworkers to listen to the tapes and do their phonetic transcriptions (see page 15).

    c. Accessibility to major Detroit arteries as well as to the Michigan State University home base in East Lansing.

The hotel selected for the operations base, though located on the northern limits of the city, met these criteria very well. It was on the major north-south expressway (which links to the major east-west expressway), it had ample and relatively quiet accommodations for phonetic analysis, and the management was agreeable to a five day a week schedule.

The necessity of the single operations base may be clearly seen in relationship to the following advantages:

    a. Formal and informal staff meetings were easily arranged, usually in the evenings.

    b. Car pool arrangements were easily made since all fieldworkers were in the same building.

    c. Accessibility of the director, the tape recording specialist-- technician   . and the administrative assistant for advice on matters pertaining to them.

    d. Accessibility of other fieldworkers for consultation concerning special elicitation techniques, help on difficult phonetics matters, etc.

    e. The indefinable unity or _esprit de corps_ which can develop in group projects of this sort.

The director's room served as the central message depository, switchboard and supply room during the fieldwork period. Completed tapes, phonetic transcriptions, and interview completion cards were turned in to his office daily.

Intensive Interview Schedule

An urban area is always in a state of flux and the longer the fieldwork is drawn out the more fluctuation will be included. To get a somewhat accurate picture of Detroit speech at a given point in time it was decided to complete all fieldwork within approximately ten weeks. In order to finish this task within such a short

period of time, it was necessary to engage a relatively large team of fieldworkers. Eleven linguists with rather widely differing professional backgrounds were chosen for this project. It was also felt that by having a team of linguists interview and transcribe phonetically, individual biases in technique and hearing might be minimized.

Simultaneous Interviewing

Since between two and four interviews were done in any given home, all interviews were scheduled at the same time and two to four linguists were sent in one car. There were several distinct advantages to this procedure. First, travel costs and time were obviously minimized. Secondly, the problem of parents observing (or interfering with) the interview of their children was avoided. The fieldworkers would go to different parts of the home for relative separation from other simultaneous interviews. A typical situation might find the child being interviewed in the kitchen, a parent in the living room and an older sibling in the backyard.

Fieldwork Teams

The administrative assistant and the director took particular care to assign interview teams which had complementary strengths. Certain fieldworkers, for example, established themselves as particularly effective at convincing informants to let the linguists interview them. Occasionally, even after agreeing to the interview and setting up an appointment, an informant might become uneasy. If the administrative assistant suspected this characteristic, she would try to assign the best "interview salvagers" to that home. Other fieldworkers showed special abilities for interviewing older people, children, teenagers, or certain ethnic groups. When possible, these linguists were assigned to their special strengths although all fieldworkers had considerable experience with all types.

Interview Sites

The interviews were done in the home or home areas of the informants. It was felt that the school environment might unduly slant the informants' speech to a more formal or "school-type" variety. Home interviews are a bit more casual and the informant has the distinct advantage of familiar surroundings. Occasionally, if the informant desired or if the home was too noisy, the interview was conducted in a nearby area.

Conducting the Interview

Assignment Cards

The evening before a given day's work the administrative assistant and the director devised fieldwork teams for the ensuing day based on routing possibilities, fieldworker specialities and available drivers.[1] A separate work assignment card for each interview was distributed to the room of each fieldworker sometime during the evening. Note that the appointment card and the assignment card were used inter-changeably but that the assignment card contained special directions relevant to the fieldworker, including the following information:

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[1] Five of the fieldworkers had cars. In addition, the director's car was available as a substitute.

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┌─────────────────────────────────────────────────────────────┐
│                                              REC              │
│              THE DETROIT DIALECT STUDY                        │
│                                                               │
│        in cooperation with the United States Office of Education │
│                  and Michigan State University               │
│                                                               │
│      School area    St. John Vianney                          │
│      Appointments   Mrs. J                                    │
│      REC            Debbie                                    │
│      WKR            Betsy                                     │
│      RKS            Wed. June 22 - 10am.                      │
│                                                               │
│   Dr. Roger W. Shuy, Director      Summer Headquarters        │
│   Phone 517-355-7575               Stouffer's Northland Inn   │
│   Michigan State University        Southfield, Michigan       │
│   East Lansing, Michigan           357-4700                   │
└─────────────────────────────────────────────────────────────┘
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The initials at the upper right indicated that this card was for fieldworker REC who

would understand from it that he was to drive (initials underlined on left) and that

his passengers were WKR and RKS. On the back of this card were directions on how to

get to this address and a note that it was a Polish-Italian family.

At the time indicated on the card, the fieldwork team assembled in the hotel

lobby and left for the interview. Exact assignments for the members of each family

were seldom made by the director or administrative assistant but after a few days of

interviewing, one could generally guess which linguist would interview which member

of the family.

Microphones

The entire interview was tape recorded using an Electro-Voice (Mod 647A Dynamic,

low impedance) lavalier microphone. It was hoped that the lavalier microphone would

be less conspicuous than a table model and therefore would allow for more casual

responses. In general this expectation seemed to be fulfilled. The lavalier micro-

phone was also valuable in that, being close to the informant's mouth, it yielded

rather high quality recordings. One the other hand, the microphone cord had two disadvantages. First, excessive handling of the cord produced static. Secondly, the length of the cord made it an effective antenna for short wave broadcasts. The microphone clip minimized both problems.

Phonetic Transcription

Fieldworkers were advised not to try to do phonetic transcription during the interview. It was felt that the interviewer would do well to devote his attention to the problems of speech elicitation and rapport. Upon completion of the interview, the fieldworker returned to his hotel room and transcribed phonetically section V (the short response section) of the questionnaire. Then he turned in his tape, assignment card (initialed next to person interviewed and noted with tape number) and transcription to the director.

Tape Recorders and Tapes

Each interview was tape recorded using a Uher 4000 L portable tape recorder and Scotch mylar #150 tape (900 feet). The Uher was particularly well suited to this sort of fieldwork. It is sturdy enough to withstand a heavy daily workload and, within reason, the wear and tear of being transported back and forth several times a day. The portable tape recorder was thought necessary because many interviews were done on porches, playgrounds, and backyards. All the homes of the informants had electricity but the number and quality of outlets was questionable. In simultaneous fieldwork of this sort maneuverability is of utmost importance.

Each fieldworker was assigned a tape recorder during fieldworker training week (see page 17). It was his responsibility to see to it that his machine was properly charged, in good mechanical condition and ready for each interview. He was also responsible for his battery charger, lavalier microphone, carrying case and tapes. A twelfth tape recorder was used by the director to listen to the work of the

fieldworkers and to serve as a substitute when necessary.[2]

The fieldworkers were also responsible for attaching the leaders to all the tapes and numbering them in advance. On three occasions during the fieldwork period, the fieldworkers assembled for a "leadering and numbering" session under the direction of the fieldworker who doubled as technical assistant. After each interview the field-workers were also responsible for labeling the tape box, the leader tape and the tape reel (see page 22).

Tape Recording Ethics

The staff of the Detroit Dialect Study was unanimous in rejecting the idea of tape recording speech when the informants were unaware that they were being recorded. The administrative assistant explained that the interview would be tape recorded before the assignments were made. The linguists made no effort to disguise the tape recording, usually talking about it before each interview. No tricks were played on the subjects and no pretentions were made of their being anything but linguists. There were no hidden microphones or bugged rooms. It was the feeling of the investigators that the recorded speech was not quite casual but also not formal. It was a good sample of the speech used by children to adults (perhaps similar to classroom language) and by adults to respected strangers. It could seldom be considered in-group speech, partic-ularly for teenagers or adults. It is, nevertheless, one of the most important styles of speech used by Americans for it is this style in which they make their moves up (or down) the social scale.

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[2] Because of scheduling conflicts and fieldworker illness, the director did ten interviews himself.

FIELDWORKER ORIENTATION

Orientation Schedule

In a project attempting to complete approximately 700 interviews within a period of ten weeks, the task of orienting 11 fieldworkers to the methods and goals of the research is one of the most essential aspects of the research design. On the one hand, there is limited time which can be allotted for such orientation. Thus only the initial week was set aside for fieldworker orientation, although several special seminars were held during the course of the fieldwork to discuss topics omitted or merely touched upon in the initial orientation week. On the other hand, however, it is imperative that fieldworkers gain a clear conception of the goals of the research and the means by which these are to be realized. Failure in this regard can have major consequences with potential effects on much of the sample. The orientation schedule was as follows:

Time	Monday	Tuesday	Wednesday	Thursday	Friday
8-9	goals of DDS and research design	phonetic drill	phonetic drill	phonetic drill	phonetic drill
9-10		instructions in operation of tape recorder	discussion and modification of phonetic notation system	interview evaluation	accommodation schedule
10-11	hiring procedure	practice interview	discussion of questionnaire		interview evaluation
11-12					
12-1	lunch	lunch	lunch	lunch	lunch
1-2	presentation and discussion of questionnaire and interview	presentation and discussion of sample design	practice interview	practice interview	practice interview
2-3		research design and analytical procedures			
3-4	presentation of phonetic notation system		interview evaluation	interview evaluation	interview evaluation
4-5	phonetic drill	phonetic drill	phonetic drill	phonetic drill	phonetic drill

Aims of Orientation

The first°aim of orientation was to acquaint the fieldworker with the goals of the project and the research design. The goals of the Detroit Dialect Study (see Part I, page 1) were presented and discussed, comparing the DDS with the "traditional" dialect geography study and the more recent urban dialect studies. Main areas covered under the presentation and discussion of research were: 1) the sample (see Part II, pages 1-4) 2) the questionnaire (see Part II, pages 25-43) 3) the interview (see Part II, page 20)   The presentation and discussion of the research design were considered essential as a basis for understanding the dynamics of the fieldwork. For example, an understanding of the selection of the sample stressed the importance of completing each randomly selected interview in order to minimize selection bias.

The second aim was to familiarize the fieldworkers with the questionnaire and the style of the interview. This was done in two ways. First, each question to be asked in the Discussion section, and each item to be elicited in the Short Response section was independently discussed. In the Discussion section the type of narration or description which emerge from each question and the adaptation of the questionnaire to elicit the desired narrative or description was treated; in the Short Response section the various lexical alternants and the possible definitions to aid the elicitation of items were treated. Second, practice interviews were done using residents of the Lansing area as informants.[3] These provided experience for the fieldworkers in utilizing the questionnaire in the interview situation; it also aided in coordinating the various sections of the questionnaire and the manipulation of the tape recorder in an actual interview situation. In conducting the practice interviews, each fieldworker was responsible for obtaining his own informants, and was asked to include representatives of both sexes, different age levels, and different races in his samples. The specification of sex, age, and race variables was intended to

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[3]   The orientation program took place at Michigan State University in East Lansing, Michigan.

introduce the fieldworkers to the different types of problems which might be expected

on the basis of these variables, and to practice adapting the questionnaire to the

different types of informants. The group listened to and evaluated a portion of each

fieldworker's tape-recorded interview, noting the apparent strengths and weaknesses

of the interview technique. Specific suggestions on the adaptation of the question-

naire to sex, age, and ethnic differences emerged from the practice interviews. These

interviews also served as a final check on the validity of the questionnaire and the

potential "productivity" or "non-productivity" of specific questions and items.

A third aim of the orientation week was the practice of phonetic transcription,

and the adoption of a phonetic notation system for the transcription. The notational

system adopted was as follows:

Phonetic Vowel Chart

	Front		Central	Back	
	Unrounded	Rounded	Unrounded	Unrounded	Rounded
High	i	$\underset{\wedge}{i}$		$\underset{\cap}{u}$	u
Lower-high	I		ɨ		
Mid	e	$\underset{\wedge}{e}$		$\underset{\cap}{o}$	o
Lower-mid	ɛ		ə		
Low	æ	$\underset{\sim}{æ}$			ɔ
Lower-low	a		ɑ	ɒ	

$\underset{\circ}{V}$ = devoicing

Vowel modifications:

1. off-glides - V^i, Vǝ, V^u, etc.

2. on-glides - wV, yV (strong)
   - ^uV, ^iV (weak)

3. fronting - $V^<$
   backing - $V^>$
   raising - $V^\wedge$
   lowering - V^v

4. nasalization $\tilde{V}$ (strong)
   $\underset{\varsigma}{V}$ (weak)

5. Rounding - Unrounding (opposite of
   (extreme) $\underset{\times}{V}$ (ex) standard)
   (slight) $\underline{V}$ $\underset{\cap}{o}$ = unrd.
   $\underline{e}$ = rd.

6. length - V· (longer than standard
   V: (very long)

7. diphthongs I (2 peaks)
   I (1 peak)

8. laryngealization $\overset{?}{a}$, $\overset{?}{i}$, $\overset{?}{o}$
   pharyngealization ą, i̦, ǫ
   breathy a̤, i̤, o̤
   retroflexed a̗, i̗, o̗

Consonant Chart

Stops: p   t   k   ʔ

(aspir.) pʰ   tʰ   kʰ

          b   d   g
_____

Affricates: ts   č

               čʰ

               dz   ǰ
_____

Fricatives: f   θ   s   š

               v   ⱡ   z   ž
_____

Nasals: m   m⃗   n   ŋ
                labio-
                dental
                nasal

Laterals: l̂ high tongue   l� voiceless
                               (high or
                                 low)
           lᵛ low tongue   t voiced
                                 fricative
           ɬ velar lat.   t̥ voiceless
                                 fricative
_____

Flaps: ť   ď

           r̆   r̃
_____

           ɾ (fric. r)
           ɾ̥ (voiceless fric. r)
_____

Uvular: (trill)   R̥̃ (voiceless)

                     r̃ (voiced)
_____

Modifications

1. Unreleased - C⌐

2. Fronted   - Cᶜ

   Backed   - C˃

3. Devoiced   - C̥ (except stops
                     and fricatives--
                     indicated by
                     other symbols)

   Vd. consonant to devoicing   C
                                 ₒ→

   Vl. consonant to voicing   C
                                 ←○

4. Retroflexed - C̣

5. Impediment: CVCVCVCVCV etc.   (notably
                                   absent)
                                  ↓
               (notably
                present)   ↑

6. Hesitation: ✗

7. Syllabic Consonant:

   --A syllabic consonant follows an
   unreleased consonant. TThe syllabi
   consonant must have its separate
   syllabic beat (ex) [ˈbət⌐n̩]

   --Where an audible release precedes
   a consonant in question, or a
   vowel precedes, transcribe it as
   a vowel + non-syllabic consonant.

        (ex) [ˈpʰIčʰɪn]

             [ˈweⁱɪŋ]

_____

In the above chart adherence to one previously established system, such as IPA, was

sacrificed for the convenience of this "eclectic" system as selected by the majority

of the field workers.

Each day two hours .ere allotted to phonetic drills, arranged to sharpen the
auditory perception of the fieldworkers prior to the actual fieldwork. Several
types of exercises were employed to emphasize the types of phonological differences
which might be important in the research.[4] The first type of exercise consisted of
articulatory production, particularly emphasizing the vowel production. It was felt
that if a fieldworker had an adequate articulatory control of the vowel differences
which might be anticipated in Detroit speech, he would be more consistent in his
auditory perception. Each fieldworker's phonetic realization of the English phonemes
was also noted in order to have some idea of the type of interference from a field-
worker's dialect one might expect.

The second type of exercise consisted of phonetic transcription. Transcription
was made both from dictation by various fieldworkers and from the tape recorded sample
interviews. Specific phonetic differences essential to the anticipated analysis were
emphasized in the transcription exercises. For example, consider the following
transcription exercise:

1. a: 'kʰḛi: ˌdɨ ᵁɪt   'I can't do it'

2. 'weᴵ yɨ ᵁ 'gõᵘ: 'Where are you going?'

3. ˌartɨ'fɪšəl   'artificial'

4. 'ẏanz 'goᵘɨn 'hoᵘm   'John's going home'

5. ˌaⁱ gaᵊ: goᵘ 'skuᵁ: 'I gotta go to school'

In the above exercise it should be noted that such phonological features as r, l loss,
nasalized vowel substitute for a nasal consonant, and specific vowel and consonant
variants were included to point out essential differences which the fieldworkers
would be expected to perceive and transcribe consistently. At the conclusion of the

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[4]
    One fieldworker was assigned as the leader of the phonetics drill although
    several fieldworkers assisted in the excercises.

week, preliminary impressions of each fieldworker's transcription "accuracy" (i.e. based on the leader's norm) were noted.[5]

A fourth aim of the orientation was to learn or review the basic skills of operating the tape recorder during the interview.[6] Standard procedures for satis-factory and consistent operation of the tape reccrders were outlined, and the information to be included with the submission of each tape was designated. For example, the information written on the leader of each tape was to include: 1) the date of the interview, 2) the fieldworker, 3) the number of tape recorder used, 4) the informant's name, and 5) tape number. Details such as the procedures for operatin; the tape recorder and the information to be included on each submitted tape, although seemingly trivial, were essential to the organizational success of the fieldwork.

The fifth aim of orientation week was simply the establishment of a working relationship between the fieldworkers. Preliminary impressions of the various abiliti< of the fieldworkers suggested the ways in which the interview teams were to be sent out (see Part II, page 12), and the arrangement of living accommodations for the fieldworkers while in Detroit.

Evaluation of Orientation

Having surveyed the main aims of the fieldworker orientation program we may now turn to an evaluation of it. The first question to be encountered is whether one week was sufficient time for orientation. To accomplish some aims, such as the presentation of goals and research design, operation of the tape recorder during an interview, and familiarity with the questionnaire, it would appear that one week was indeed adequate. For the phonetic drills and the attainment of an adequate interview

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[5]
    It should be mentioned that at the conclusion of the fieldwork a transcription exercise was again given to compare the transcription of each fieldworker at the beginning and end of the fieldwork.

[6]
    One fieldworker was appointed as the director of matters pertaining to project equipment.

style, however, more time (perhaps another week) might have been preferable.

Sufficient phonetic drill is imperative. On the one hand, one might assume that

fieldworkers have an adequate background in phonetic transcription so that minimal

drill is required; on the other hand, however, it is essential that consistent per-

ception of differences anticipated in varieties of Detroit speech be attained. It is

felt that more time on phonetic drills might have more adequately attained this goal.

As for the practice interviews, extending the orientation period would have

allowed more combinations of sex, age, and race variables to be represented. A

desired sample of interviews appropriate to the research design might have been two

children, representing both sexes and one of which was Negro, one teenager of either

sex and any race, two parents, representing both sexes and one of which was Negro,

and one grandparent of either sex and any race. As it stood, a fieldworker might, for

example, interview his first 10-12 year old Negro girl in the actual research having

interviewed neither a 10-12 year old girl nor a Negro child of either sex during the

sample interviews.[7] Another advantage of more practice interviews would have been a

more adequate assessment of fieldworker abilities with the different types of infor-

mants.

The location of the practice interviews in the Lansing area (the location where

orientation week was held) rather than in Detroit (the actual location of the research)

must also be brought into review. Ideally, no one can dispute the fact that practice

interviews in Detroit would have been preferable. Unfortunately, there were restric-

tions of time, budget, and convenience which eliminated this preferable alternative.

Another matter to be reviewed is the adoption of a standarized phonetic notation

system during the course of the orientation week. That a standardized system of

phonetic notation is required for a group of 11 fieldworkers can hardly be disputed.

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[7] The fact that some fieldworkers did not interview certain types of informants
in the sample interviews was compensated for by listening to interviews that
others did with a particular informant type during the interview evaluation.

However, when and how one is to arrive at such a standardization is open to discussion
The adoption of a notation system took place during the latter part of the orienta-
tion week, the system being selected by a consensus of the fieldworkers. The
advantage of adopting the system during the course of the orientation program lies in
the fact that a system might be adopted which would be both maximally useful for
transcribing the expected range of sounds in Detroit speech, and also at the same
time, a convenient compromise between the divergent notation systems of the individual
fieldworkers. The disadvantage lies in the fact that minimal time is allowed for the
adaptation of the fieldworker's personal system (and what linguist doesn't show some
idiosyncrasies in his phonetic notation system?) so that he can "comfortably" trans-
cribe in the standardized system.

A final matter for review is the presentation of desired items in the short
response section of the questionnaire (see Part II, pages 36-45). Although each item,
with a proposed definition for the elicitation of the item, was discussed in orienta-
tion during the actual research, it was discovered that several items were misinter-
preted by fieldworkers. For example, the question "What do you call a dish of fruit?'
was designed to elicit the Great Lakes northern variant, "sauce"; many fieldworkers
believed the anticipated response was "fruit cocktail." Such oversights could only
be eliminated by repeated review of the questionnaire and thorough evaluation of the
tape-recorded sample interviews.

THE QUESTIONNAIRE

Construction

Use of earlier questionnaires

In constructing the questionnaire, the Detroit Dialect Study first investigated questionnaires that had been used by other linguists, most importantly those of the Linguistic Atlas of the United States and Canada, of Raven I. McDavid, Jr., Lee Pederson and others in Chicago,[8] and of William Labov in New York.[9] An eclectic approach was adopted for several reasons. First, the fieldworkers were expected to elicit as many styles of speech as possible from the informants, both the single-response style of the Atlas interview and the congeries of styles elicited by Labov's questionnaire: careful speech, casual speech, reading and lists. Moreover, given the stringent time limitations of the interview, it was desirable to collect as much information on each informant's speech as could be gathered in a short time. Finally, where the questions on the DDS questionnaire are similar or identical to those on earlier questionnaires, it is often because the potential correlation of Detroit data with that already collected in Chicago and New York. For example, the reading passages used in New York were adopted intact in the expectation that a close comparative analysis would be made of reading style and phonology in Detroit and New York.

Standardization

In order to obtain comparable data from children and adults of different social strata, the questionnaire was constructed in such a way that only minor adjustments were necessary to accommodate various age, ethnic and social groups. The first

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8
McDavid, Raven I., Jr. and William M. Austin. "Communication Barriers to the Culturally Deprived," U.S.O.E. Cooperative Research Project 2107, and Pederson, Lee. The Pronunciation of English in Metropolitan Chicago: Vowels and Consonants, University of Chicago, dissertation, 1964.

9
Labov, William. The Social Stratification of English in New York City, Center for Applied Linguistics, 1966.

question of the interview illustrates age adjustment: the fieldworker asked either, "What kinds of games do you play around here?" or, "What kinds of games did you play when you were a kid?" or "What kinds of games do the kids play around here?" Ethnic adjustments, for example, were made in eliciting various items which were found in a delicatessen. Fieldworker adjustments to social strata were made by de-emphasizing the attention paid to group fighting when interviewing upper middle class informants. The object of this standardization was to insure maximum comparability of the data, so that the differences observed could properly be ascribed to the important factors of age, sex, race, and social class. Some independent variables did of course persist, such as individual informants' interviewing styles; but the informality of the interview minimized the former problem, and the structure of the fieldwork team-- living together, interviewing often within hearing of each other, comparing notes-- minimized the latter.

Adjustments

The informality of the interview was a crucial factor in obtaining data on casual speech in the interview context. The questionnaire was designed around this central requirement; in fact, the shortcoming, of the questionnaire can most accurately be divided into two main groups: those places where the informality of the interview was unwittingly violated (e.g. a few questions about school that were designed to elicit one word answers included among the discussion questions), and those places where some other goal (e.g., completion of the questionnaire) was sacrificed to maintain the informality.

The Interview

The framework of the interview was simple and standardized. The fieldworker would hook up the microphone around the informant's neck, start the tape, which had already been threaded onto the machine, and ask the informant to give his name and count to ten. This gave a recited list, one of the more formal styles we wished to obtain, and served as a further identification on the tape in case it should be mixed

up with others. The fieldworker would then proceed with Parts I through IV of the questionnaire. On completion of this section of the interview, he would turn the tape over, meanwhile telling the informant the ground rules for Part V. He might say, "Now, what I'm going to do next is try to get you to say some words, but it's cheating if I say them first," and explain that if the informant does not happen to have such a word in his vocabulary that he should just say so, that there are no wrong answers. Most informants could accept this, and could treat the short response section as a sort of Password game. Then the fieldworker would complete the Informant Data Sheet and begin the short response section and reading section. Finally, time permitting, the fieldworker would ask the informant if he had any questions. This was done to obtain question intonation and syntax.

The questionnaire is as follows:

DETROIT DIALECT STUDY   QUESTIONNAIRE

I.   Games and Leisure   (10 minutes)

   A. What kinds of games do you play around here? (perhaps marbles,
      Red Rover, kick-the-can, May-I, Capture the flag, Hide and seek,
      game with bottle caps)

      1. Note each game and ask about how each is played, number
         of players, etc.

      2. Get terms for "goal," "home," "when a new person comes,"
         "getting in free," how you decide who is IT, use of
         rhymes (also get marbles, jacks, hop-scotch, jump rope
         tackle-tackle pom pom, roof tag)

   B. What are your favorite TV programs. (theaters or movies)?
      (elicit recent episode on Batman, UNCLE, etc.)

   C. Do you have a pet? Tell me about it.

   D. Is there any way you can get a wish? (elicit eye lashes,
      chicken bone, or tooth comes out)

II.   School   (10 minutes)

A.   Tell me about your school? What do you study? (get geography, history, arithmetic, etc.)

   1.   From your seat in class, tell me what you can see. (get <u>blackboard</u>, <u>desk</u>, <u>chair</u>)

   2.   If you walk outside the classroom, where are you? (hall) What's in it? (fountain, lockers, stairs)

   3.   What's outside the school? Playground, horse, swings, teeter totter, <u>monkey</u> <u>bars</u> (define).

   4.   What do kids do after school is out? (from Negroes get rippin' and runnin')

B.   Did you ever have a teacher who hollered a lot? What about?

    Did you ever get yelled at? Was it your fault?

C.   Can you tell me about the best teacher you ever had? Who was she? Why did you like her?

D.   Did you ever have a teacher you just couldn't stand? What was there about her that you didn't like? Did the kids in your class really "trick" your teacher last year?

E.   Who was the smartest kid in your class? What did he do that was so good? What favors or rewards does the smart kid get?

F.   Who was the dumbest kid? What did he do that was dumb? What does the teacher do to dumb kids?

G.   What time do you get out of school? (or what time does it start?) get quarter till, of, to _____.

III. Group Structure (10 minutes)

    A. For child: Is there a bunch of guys you always hang ʳround with and do stuff with?

        For adult: Is there a group of people you used to (associate) with?

        1. About how old are they? (Were/are they about the same age?)

        2. Child: And you're_____(how old)?

            Adult: Are they still the same ones? Do you still see them a lot? If not, who?

        3. Do any of the guys (people) speak Polish? Spanish? Hungarian, etc.?

        4. Are there any Negro (white, Jewish) kids (people) in your bunch? (group)

    B. In your bunch (group), is there one guy (person) that everybody listens to (regards as leader)?

        1. Why? (smartest, biggest, etc.)

        2. Can new kids get into your bunch? How?

    C. What do you want to be when you finish school? (What did you hope to be when you were younger?) How long does it take to become a _____?
What does a _____ do?

        If you could do it all over again, what would you want to be?

        If you had all the money you could ever want, all the money in the world, what would you do with it?

    D. Your job (for men or working women). Describe what you do in a day's work (try to get specialized vocabulary of the occupation)

        Where do you work?_____

    E. Neighborhood

        1. What do they call this part of town?_____

        2. What are the boundaries?_____

        3. What is this city called?_____(if necessary by now).

III. Group Structure

    E. Neighborhood (continued)

        4. What are some streets of Detroit? What about the _Pig_
           ones?

           a. The one that goes to E. Detroit? (Gratiot)
           b. The one that goes by the University of Detroit (Livernois)
           c. Down by Cobo Hall is_____? (Fort Street)
           d. The one that Hudson's is on? (Woodward) (get others, too)
              Get expressways or freeways, too (Ford, Lodge, Chrysler)

        5. Where were you born?_____

        6. Where else have you lived in Detroit?

        7. Where else have you lived outside of Detroit?

        8. Where have you gone on trips?

    F. Special Occasions

        1. How does your family celebrate the holidays? (For Jewish
           kids--Bar Mitzvah. For Jewish girls--Bas Mitzvah)
           (Catholics--first communion)

         . (elicit family or group customs and terms, especially
           religious elements, special cooking, gifts, etc.)

        2. What would you like for Christmas this year? (if a bike,
           etc., describe it)
           What was the best Christmas present you ever got?
           (Jewish holiday--Hanukkah)

        3. What do you do on October 31 (elicit pumpkins, _Halloween_,
           witch)

           a. When you ring the doorbell, what do you say?
           b. Tell me about your costume last year. If you had
              your choice, what would you choose this year?

IV.   Fighting, Accidents and Illness   (10 minutes)

A.   What kinds of things do fights usually start about around here?

   1.   Are there rules for a fair fight? (When is it over? Does the loser say "uncle?", "I give?")
       (IF you get nothing above)

       If you saw someone kicking someone else on the ground (or using a stick, or a chain, or a lead pipe, etc.) and it was supposed to be a fair fight, what would you do?

   2.   Did you ever see anyone get beat up real bad? What happened to him?

   3.   Did you ever get into a fight with a guy bigger than you? What happened?

   4.   Do the guys usually fight one-against-one or in gangs? What are the rules for gang fights?

B.   Have you ever been in the hospital?

   1.   What is the worst illness you have ever had? Describe it (and others).

   2.   When a person starts to sneeze or cough, you might say he is _____(catching, taking) a cold.

C.   Have you ever been in an automobile accident? (Or tell me the worst one you ever saw--draw out details).

D.   Were you ever in a situation where you thought you might be killed or die?

   After response ask: Sometimes people say whatever is going to happen is going to happen. How do you feel about that?

INFORMANT DATA SHEET

Name_____Sex_____Age_____

Address_____Race_____

Highest grade level reached in school_____

Schools attended_____

_____

Oldest child in family?   Yes   No

If not oldest, what? _____

Parents birthplace:

                                           Grandfather_____

    Father_____

                                           Grandmother_____

                                         Grandfather_____

    Mother_____

                                         Grandmother_____

Religion (be as specific as possible)_____

What language besides English is spoken?_____

              At home?_____

Father's Occupation_____

Mother's Occupation_____

Spouses' Occupation_____

Spouse's Birthplace_____

Other places spouse has lived_____

_____

ADDENDUM

INFORMANT DATA SHEET

Nationality_____

Birthplace_____

Other places lived_____

_____

Years in Detroit_____

Spouse's Parents Birthplace: Father_____

                                    Mother_____

Maiden Name_____

Friends (Detroit and others)_____

_____

_____

_____

_____

V.   Short Response

A.   IN AND ABOUT THE HOUSE

1. living room (front room, parlor, sitting room)

2. dining room

3. kitchen (Breakfast room, nook, summer kitchen)

4. bathroom (john, lavatory)

5. bedroom

6. hall (foyer, vestibule)

7. closet (also, movable closet, wardrobe)

8. attic (garret, loft)

9. basement (cellar)

10. roof

11. chimney

12. soot

13. gutters (eavestroughs, spouting)

B.   OTHER BUILDINGS AND FEATURES

   1.   garage

   2.   outhouse (privy)

   3.   shed

   4.   patio (describe)

   5.   porch (stoop) with or without roof

   6.   grass strip between sidewalk and curb

   7.   barn

   8.   creek

C.   FURNITURE

   IN BEDROOM

      1.   bed

      2.   dresser (define--with mirror)

      3.   chest of drawers

      4.   wardrobe

      5.   cover for bed (comfort, comforter)

   IN LIVING ROOM

      6.   couch (sofa, davenport)

      7.   chairs

C. FURNITURE (continued)

    IN KITCHEN

    8. table

    9. refrigerator (fridge, ice box)

    10. stove (range)

    IN OTHER ROOMS:

D. FOODS AND COOKING

    What do you call the morning meal?_____
    What do you eat then?

    1. eggs

    2. doughnuts (fried cakes)

    3. pancakes (flapjacks)

    4. coffee (how do you prepare it? Cook? Make? Boil?)

    5. sausage (links, little pigs)

    6. bacon (sidemeat, salt pork)

    7. hogs

    8. syrup

D. FOODS AND COOKING (continued)

  9. waffles

10. toast

11. milk

12. jelly

What do you call the noon meal?_____

What do you eat then?

  1. cottage cheese (smearcase, Dutch cheese, pot cheese)

  2. hamburger (hamburg) (What is on it when it has everything?)

    onions

    mustard

    catsup

    mayonnaise

  3. sandwich designed to be a meal (submarine, hero, grinder,
                                    poor boy, hoagie)

  4. hot dogs (franks, wieners, weinies)

  5. What do they sell at a delicatessen?

What do you call the evening meal?_____

What do you have?

  1. meats (special cuts of beef or steak)

  2. potatoes (white and sweet) (potato chips)

  3. green beans (snap beans, string beans, etc.)

D. FOODS AND COOKING (continued)

    4. greens (collard, turnip, dandelion, mustard)

    5. corn-on-the-cob (roasting ears, sweet corn)

    6. lima beans (butter beans)

    7. peas (black-eyed, English)

    8. carrots

    9. vegetables

What goes into a salad?

    1. lettuce

    2. celery

    3. cabbage

    4. radishes

    5. tomato

What desserts do you eat?

    1. ice cream

    2. cookies (cake, pie)

    3. dish of fruit (sauce?)

    4. melons (muskmelon)

    5. fruits (center of peach, center of cherry)

D. FOODS AND COOKING (continued)

Between Meals

1. snack (bite, lunch)

2. carbonated drink (pop, soda)

3. rootbeer float (Boston Cooler, Black Cow)
        (note variations)

Nuts

4. pecan

5. cashew

6. peanuts

7. Brazil nut

8. almond

E. HOUSEHOLD TERMS

1. frying pan (skillet, spider--also electric)

2. spoon

3. spatula (kid cheater, scraper)

4. apron

5. greasy

6. washing

7. iron

E. HOUSEHOLD TERMS (continued)

    8. straightens up (redds up)

    9. washes

    10. rinses

    11. dries (wipes)

    12. bucket (pail)

    13. faucet

    14. paper) sack (bag)

F. MISCELLANEOUS:

    1. babies (creep, crawl)

    2. baby buggy (cab, carriage)

    3. sick to (on, at) your stomach

    4. zinias

    5. portulaca (Fourth of July)

    6. peony

    7. letter carrier

    8. cop

    9. guarantee

    10. armful (armload)

F. MISCELLANEOUS: (continued)

11. chipmunk (ground squirrel)

12. Battle Creek

13. mantel/mantelpiece

14. hearth

15. toilet

16. sink

17. bathtub

18. medicine)_____

19. kitchen cupboard/cabinet

20. catch (take cold)

21. quarter (to, til, of, before) five

READING

one	six	Tuesday
two	seven	Wednesday
three	eight	Thursday
four	nine	Friday
five	ten	Saturday
		Sunday
		Monday

Last month I read five books.

Tom read all the time.

So... I sold my soul to the devil.

When I passed by, I read the posters.

Don't you <u>dare</u> hit your <u>dear</u> little brother.

When I liked a story, I read every word.

They cost a nickel yesterday, but today they cost a dime.

Now I read and write better than Alfred does.

I looked for trouble when I read the news.

NOBODY KNOWS YOUR NAME

Last year I went out for the basketball team, and I made out better than I expected. I wasn't too big, but I was quick on my feet, and my jump shot used to drop in when it counted. The coach told me himself I was a real help to the school.

But you couldn't tell that to Eleanor. No matter if I did good or bad, she'd ask me after every game: "Why can't you be the man to put it in the basket?" I'd tell her, "Look, Eleanor, Everybody can't be a star. I'm not a forward; I'm not a center: I'm a guard. I play the back court.

"But you passed it to Lester again," she used to say, "you must have passed it to Lester sixty times, and he missed it most of the time. Why don't you make the shots?" "It's easy enough to explain," I told her, "if you only know what's what. Lester is seven-foot-two; I'm five-foot-ten. He just twists his wrist and puts it in.

She wouldn't see it, and I couldn't make her see it. I'd talk till I was out of breath, but I might as well have kept my mouth shut. It was always something: if it wasn't this thing, it was that thing, or the other thing. I'd tell her again, "Look Eleanor, I'm a guard. I play the back court."

Then she tried a new line. "I know you're right," she said. "But what about my pride? I don't think any of my friends remember if you're a center or an end or a tackle. Nobody knows your name!"

She made my blood boil. I said I wasn't going to hog the ball to please her. I was ready for murder or worse. And she said she wouldn't go out with me any more if I didn't score a lot of points. So I told the coach about it. He said, "Artie, everybody can't be a star. You're a good team man. It should be an easy game tomorrow night, so we'll keep setting you up."

They fixed me up to look good all right. I just hung under the basket, and everybody passed me the ball. I pushed the easy ones in, and nobody noticed when I missed. By the end of the game, I had thrown in thirty-three points. The whole school was cheering for me: Everybody was shouting my name.

Everybody that is, but Eleanor. I looked for her here, there, everywhere--but there wasn't hide nor hair of her. Finally I called her father on the phone. "I just made thirty-three points, Mr. Jones-- but I can't find Eleanor. Do you know where she is?"

Her father said, "Just a minute." Then he said, "She says she can't come to the phone right now, son. She's watching the Dave Clark Five on Channel 2. But she says, will you please do it for her again next week--she can watch you then."

Next year I'm going out for the swimming team--under water. Down there, nobody--but nobody--is going to know my name.

Evaluation

In general, the questionnaire yielded a great deal of discourse and could be completed within the time limitation. The one and a half hour limit was imposed for several reasons: 1) The Uher tape recorders could hold only 5" tapes, which, when run at 3 3/4 i.p.s., last for one and a half hours; 2) urban informants rarely have more time than that to give to the interviewer; 3) the DDS could not possibly have completed so large a sample if the interviews had been longer. The questionnaire provided sufficiently diversified topics so that at least one section might be expecte; to interest the informant enough to inspire discourse.

Three different kinds of criticism may be made of the questionnaire.

First, a number of one word responses were elicited in the sections primarily intended for the elicitation of discourse. Specifically it might have been preferable to include Section II, A 1-4, and b; Section III, 1f, Halloween, witch and a; and Section IV, B, 2 in the short response section.

Secondly, the sections on the informant's occupation (Section III, D), birthplace and travel (Section III, E, 5-8) might better have been included on the Informant Data Sheet, even though the travel section occasionally produced an interesting narrative.

Third, certain questions were either misunderstood or unproductive for eliciting discourse: Section I, D and Section III, E and F. The latter followed so closely on school questions that the informant's answer was occasionally biased toward regarding intelligence as good scholarship rather than as cunning or leadership.

Usually, Section I sufficed to initiate narrative; very few informants did not respond to at least one of these questions. Almost everyone had either a most-loved or most-hated teacher to discuss in Section II. The questions on friendships, ambitions, holidays, and fighting were reasonably productive; most informants would talk about at least one of them. And the last section, dealing with accidents, close brushes with death, and fate, while not always appropriate for children, drew

strong emotional responses from many adults. There was ample material to start all but the most hostile or reticent informants talking. In general, however, the field-workers felt that the discussion questions were more than enough to start the informant talking, and the fieldworkers usually felt free to follow up any line of questioning that seemed productive for the elicitation of discourse.

The Informant Data Sheet might have included additional material useful in stratifying, classifying and otherwise processing the sample. Some of the information needed by the analysts--informant's birthplace, informant's occupation--was elicited elsewhere in the interview. On the other hand, where the use of a scale for social stratification (see Part III, pages 2-5) made it necessary to know how many years of schooling the head of household had received, the analysts were later obliged to contact families in which the wife had been the informant since this scale for social stratification requires knowledge of the educational achievement, occupation, and residential level of the head of each household. Residential information proved difficult to obtain, as there were no data on Detroit comparable to the ecological studies of other cities in previous sociological research. Consequently, we used the 1960 U.S. Census block data to establish a housing and area scale.[10] At this point it might also be suggested that to each data sheet be added the name of the school attended by the base child in each family in order to expedite the organization of the data.

The Short Response Section had several items that were either totally unfamiliar to the informants (the strip between the sidewalk and the curb) or very difficult to elicit (certain food and flower terms). But in general the items could be elicited fairly easily. One problem, the tendency of some older people to garrulity, could be handled by beginning with the short response section whenever the informant seemed to be extremely loquacious; otherwise the fieldworker risked running out of tape with half the short answers left to elicit. Such problems, however, were rare.

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[10] This suggests that in future projects of this sort fieldworkers might be trained to apply housing and residential area scales after each interview.

Finally, the Reading Section caused several problems. It was placed at the end for two reasons: 1) it was potentially the most intimidating section of the inter- view and 2) sequentially it fit into the progression of styles from less formal to more formal.[11]

Two different reading passages were used, resulting in problems of comparability. For example, bright children were often given the longer reading, while semi-literate adults were given the short diagnostic list of sentences. It is therefore difficult for anyone to compare all the children, or all the adults, with each other. The reading had to be handled diplomatically in many cases. Perhaps by giving the short reading first, and then the longer reading to those who did well on the first, greater comparability could have been achieved.

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[11]
Because it was not stapled onto the questionnaire, the fieldworkers occasionally forgot it.

FIELDWORK EVALUATION

Complete homogeneity of performance with a new questionnaire and transcription system cannot be expected from a group of eleven different fieldworkers. In fact, any such claim would generate suspicion. There is no general agreement among linguists on what aspects of field work are most important, and what should be the stengths of the ideal fieldworker. One may expect, however, that it is possible to assemble with a high degree of confidence a group of fieldworkers who are almost uniformly competent, but with varying strengths and weaknesses.

Given the stated goals and proposed methods of operation of the Detroit Dialect Study (see Part I, pages 1-3), it is possible in a general way to assess the performances of the fieldworkers. What is intended is not an evaluation of individuals as such, but an organized assessment of the performance of the group, which will be useful both as a measurement of the success of the project in meeting its goals and as a reference for other projects in the future.

Methods of Evaluation

The evaluators picked two tapes at random from those done by each fieldworker in the second and fifth weeks of the fieldwork in Detroit. This was done to minimize any bias which might have been introduced by choosing only tapes which were felt in some unspecified way to be representative of the interviewers' best work. Consequently the particular tape chosen may not be representative of the fieldworker's typical performance for reasons which have more to do with the time, place, and informant than with the fieldworkers' abilities, style of interviewing, or understanding of the goals and methods of the Detroit Dialect Study.

The second week of the project was the time during which the fieldworkers had had enough experience with each other and with the interview and questionnaire to begin making self-analysis improvements. At this time they were also arriving at preliminary evaluations of each other's performance, and preliminary evaluations and revisions of the interview questionnaire. This was, then, a time when fieldworkers

were still making adjustments in technique. The tapes from the second week were
included in this evaluation in an attempt to discover those areas which may most
fruitfully be stressed in training fieldworkers for similar projects in the future.
The tapes from the fifth week, on the other hand, represent a time when most adjust-
ments in technique had been made.

A list of the important categories of the interview and questionnaire was compiled,
and the evaluators then ranked the fieldworkers in relation to each other on a five
point scale: Superior, Good, Average, Weak, and Poor. The evaluation scale is as
follows:

EVALUATOR_____   TAPE NO._____   FIELDWORKER_____

ELICITATION SIDE 1   RANK

1. Cues   1   2   3   4   5

2. Interruptions   1   2   3   4   5

3. Digressions   1   2   3   4   5

4. Completing Questionnaire   1   2   3   4   5

5. Adaptability   1   2   3   4   5

ELICITATION SIDE 2

1. Definitions of desired terms   1   2   3   4   5

2. Allowance for variants   1   2   3   4   5

3. Fieldworker cue sheets   1   2   3   4   5

4. Adaptability   1   2   3   4   5

Completion of interview   1   2   3   4   5

Completion of informant data   1   2   3   4   5

Suggested responses   1   2   3   4   5

Minuteness of transcription   1   2   3   4   5

1 = Superior   2 = Good   3 = Average   4 = Weak   5 = Poor

Each evaluator scored four to six tapes. No two tapes by the same interviewer were evaluated by the same reviewer. As a check, the evaluators then exchanged tapes, and points of disagreement were discussed and resolved.

Explanation of Categories

Sections I through IV of the questionnaire were usually covered on the first side of the tape, and Section V on the second side. (See Part II, page 26). Also on the second side was the sample of the informant's reading style and the various items of non-linguistic data which were necessary to correlate different variables with speech phenomena. Since the general aims of the questions on the first side were different from the aims of those on the second side, these two sides were ranked separately.

The first category, Cues, is an evaluation of the interviewer's alertness to opportunities for eliciting further narration and conversation from the informant. For example, the following type of performance was rated superior:

> "(FW) Do you play marbles? (INF) Yes, I have 197 marbles right here.
> (FW) Oh, tell me about them. How'd you get them? What are the
> different ones called?"

In other words, when the informant said something that indicated to the fieldworker that there was an object or event in which the informant was interested, and about which he might like to talk, the fieldworker should have attempted to elicit speech on this subject. At the other end of the scale are such passages as the following:

> "(FW) Did you ever play hide and seek? (INF) Yes, I played that a
> lot. (FW) What other games did you play?"

Here the fieldworker has missed an opportunity to elicit a description of the game of Hide and Seek.

Interruptions are instances in which the fieldworker asks a question or makes a comment while the informant is in the process of speaking. Since it is essential that the informant be given every opportunity for extended discourse and narrative, superior ratings were assigned to those interviews in which there were very few interruptions or none at all. Lower ratings were given when there was interference by the field-worker in the stream of the informant's speech.

Digressions are instances where commentary by the interviewer seems to be unrelated to the effort to elicit speech from the informant. For example, in the following passage, the interviewer seems to be conversing on a topic which is of interest to him, and is not apparently intended to get the informant started talking:

> "(INF). . .automation, computers, and all that stuff. (FW) Do you know how much these people are in demand now? That's something you should really know, you know. Beginning pay for computer programmers, for instance, which is not very--you should have math for a computer programmer--it's about six dollars an hour. That's what they charge at Michigan State University. It's pretty good, huh? How's that compare with what you get now? (INF) Yes, quite a bit. (FW) You just can't find computer programmers. I'd really encourage you to go into mathematics. . ."

The fewer the digressions an interviewer made, the higher his rating.

For the purpose of achieving maximum comparability in the more than 700 interviews a standard set of questions was designed. Therefore the category called Completing Questionnaire is meant to indicate whether or not all the questions were asked in any given interview. Occasionally informants were so talkative, especially the elderly persons, that the interviewer was unable to cover the standard set of questions in the allotted time. This is not necessarily undesirable, except in terms of the attempt to achieve maximum comparability. It was on the basis of this attempt that higher ratings were given to those interviews which included all the standard questions, and lower to those which did not, either because the interviewer forgot to ask some of them, or because the informant talked freely at length without having to be urged.

One essential point that an interviewer must bear in mind in the collection of dialect material is that, in order to make certain that the informant's speech is as representative of his natural patterns as possible, there must generally be few or no outside influences, especially from differing speech patterns brought into the interview. This requires that the interviewer arrive at some preliminary understanding of the informant's natural speech, and attempt insofar as he can to avoid contradicting it. The category Adaptability is intended to evaluate the interviewer's success with this attempt. On the one hand, a negative reaction may be obtained from an

interviewer's attempt to utilize speech patterns which are obviously not his own. On the other hand, however, a simple problem of comprehension may result from the failure of the interviewer to adopt speech patterns appropriate to the particular interview situation. The interviewer's questions and comments should not contain grammatical, lexical, or phonological features which directly contrast with the natural speech of the informant. For example, the following might have occurred in an interview with a teenage Negro girl of lower socio-economic status:

> "(INF) I'm Baptist, but I ain't been baptized yet. (FW) Oh, you mean you haven't been immersed?"

> "(INF) I wanna be a mortician. (FW) I would consider that a perfectly legitimate occupation."

These kinds of occurrence would be given a low rating for adaptability. A low rating would also be given in a case where the interviewer seems explicitly to question or contradict a form given by the informant. For example:

> "(INF). . .and at the front i: the chalkboard. (FW) How come you call that a chalkboard? Don't you usually say something else?"

Examples of high rated adaptability are the following:

> "(FW) Have you ever seen an automobile accident? (INF) No. (FW) Have you ever seen two cars crash? (INF) Oh, yeah, I seen one just a while back. . ."

and

> "(INF). . .she used to whup me. (FW) What did she whup you for?"

In the section of the interview found on side two of the tape, emphasis is given to short response from the informant. The aim was to elicit as many individual terms as possible, to be used in studying the lexical and phonological variety of the speech of Detroiters.

Related to adaptability as discussed above is the category Definitions. The definitions which were used by the interviewer to elicit the desired responses were ranked in terms of whether or not they were phrased in language which seemed to conform to the expected natural speech patterns of the informant, and whether or not they were phrased in such a way as to prejudice the informant's response toward a particular

term or pronunciation. For example, a definition such as the following may bias the response toward one of the three possible responses, <u>postman</u>, <u>mailman</u>, and <u>letter carrier</u>:

"(FW) Who is the man that brings the mail to the house?"

A high rating was given to the following type of definition, which seemed invariably to get the idea across without mentioning any part of any of the possible responses:

"(FW) When somebody writes to you, who brings it to the house?"

<u>Allowance for Variants</u> is the category intended to cover the practice of asking whether the informant ever says anything else besides his first response. High ratings were given to those tapes where the fieldworker not only asked for other terms, but also included them in his transcription of the second side of the tape.

Under the category <u>Fieldworker Cue Sheets</u> high ratings were given to interviews for which the transcribed sections either contained a separate sheet of remarks by the interviewer on impressions of the informant's speech and its peculiarities, or where such remarks were written on the short response form itself. A sample of a highly rated cue sheet is enclosed.

Mrs. L.R. (WAW)
Tape 406

FIELDWORKER CUES:

The Interview Proper: Although the informant was quite willing to assist in the interview, it was obvious that she was greatly handicapped in the speaking of English. It was difficult for her to put together more than two or three sentences in English. There was a large amount of phonological, lexical and grammatical interference. A number of items the informant only knew in Spanish terms with no English equivalent; on a number of items I also prompted her, since it was difficult to associate the description with a particular item. All places where I feel my prompting enabled her to get an item are marked. She switched to Spanish terms a number of times, particularly in the discussion when talking about childhood activities.

Phonology: The following types of phonological interference from Spanish were noted:

1. use of unglided vowels [ˈbɛdrumz]
2. use of unaspirated voiceless stops e.g. [ˈpaŋkeks]
3. use of ɛ (sometimes lowered) or a̱ where æ̱ is used in English
4. use of bilabial fricative intervocalically e.g. [ˈbeb̞Il]
5. use of light l̲ in all environments e.g. [xɔ^l^]
6. use of velar fricative for h in English at time e.g. [xɔ^l^]
   (The informant's dialect of Spanish (Mexican) uses an x̲ instead
   of an h̲ in some varieties of speech)
7. at times a flap r̲ is used for a retroflexed r̲ in English; at other times a variety of the English retroflex is used. Her retroflex, however, is back in the mouth further, more retroflexed, has a certain amount of friction, and at times is voiceless
8. use of dental d̲ and t̲ [t̪ˈeb̞Il^]

Morphology and Syntax: Several types of grammatical interference were noted (only one example is given of each)

1. omission of indefinite article   e.g. make wish
2. omission of passive auxiliary   e.g. I born
3. omission of modal   e.g. I help (for I would help)

Impressionistically there were other areas of interference such as double negative, use of present with past tense context, etc.; however I did not note the examples while taking the interview.

The same remarks which applied to the category <u>Adaptability</u> on the first side of the tape also apply on the second side, except that more attention was given to phonetic adaptability. It is questionable whether repetition of the informant's response by the interviewer is necessary or even a good idea at all. When that repetition embodies a different pronunciation by the fieldworker, it seems to imply a contradiction by the fieldworker of the informant's response, and as such is undesirable. Low rating would be given, for example, to the following type of occurrence:

> "(FW) What do you call the thing that keeps the rain out of the house? (INF) 'ruf/ (FW) Oh, /rUf/."

The remaining categories apply to the overall interview. High ratings for <u>Completion</u> <u>of</u> <u>Interview</u> were given to those tapes which included all the questions from all sections of the standard questionnaire, as well as the reading and any questions the informant had for the interviewer. High ratings also were given under <u>Informant</u> <u>Data</u> for the inclusion on the tape of answers to all the questions about non-linguistic status of the informant, such as birthplace, race, and so forth.

Since there were a certain number of short response questions on both sides of the tape, the category <u>Suggested</u> <u>Responses</u> applies to the overall interview. A low rating would be assigned to the following:

> "(FW) What's the kind of white stuff that women who diet have to eat a lot of? Curds. It's a kind of cheese. (INF) Cheese. (FW) This is white, you probably don't think of it as a cheese, though, cottage cheese. (INF) Oh, yeah. (FW) Do you like that? (INF) (no) (FW) Could you say that for me just once? (INF) Cottage cheese. (FW) Have you ever heard it called anything else? (INF) (no) (FW) Like smear-case or Dutch cheese? (INF) Well, once in a while I hear of it, but mostly it's cottage cheese. (FW) You do hear it called Dutch cheese once in a while? (INF) Just once in a while, but usually cottage cheese. (FW) (yes) or pot cheese, you won't hear it called... (INF) (yes) (FW) Do you hear pot cheese, too? (INF) I haven't heard pot cheese, just Dutch cheese. (FW) Would it be around the house or from your friends? (INF) Cottage cheese? (FW) No, Dutch cheese. (INF) Um, from my friends. (FW) That's not so usual in this area, they use it further east."

In the preceding passage, the interviewer seems so desirous of getting <u>Dutch</u> or <u>pot</u> <u>cheese</u>, that the informant, who is trying hard to please, seems to have been forced into admitting a term which he may very well never have actually used. Lower ratings

were assigned to those tapes where the fieldworker suggested a response outright, or showed the informant a written word to have him simply pronounce it.

An indication of the range and average value of the Minuteness of Transcription is given in the final category. One page of the transcription of the short response section was examined for each of the interview evaluated. A page was selected which generally had elicited a response for each item, and on which the responses were nearly always the same terms. Instances in which a response was omitted by a field-worker were compensated for by assigning an average value on the basis of the other fieldworkers' notation. The total number of different symbols used in the transcription was then tabulated for each interview, and the figures for the two interviews of each fieldworker were averaged. The totals seemed naturally to fall into five groups.

MINUTENESS RANKS

WKR	119.5	1
JL	108.5	2
WAW	106	2
REC	102	3
JWN	102	3
EAA	101	3
RKS	99	4
CMW	98	4
DD	97.5	4
VHL	92.5	5
CWJ	90	5

These figures are not intended as an evaluation of the perception of the inter-viewer or his ability to transcribe phonetically. A number of uncontrollable varia-bles obviously helped to determine what figure was arrived at for any particular tape, such as the informant and the quality of the tape recording.

In order to characterize more explicitly the nature of the differences between different transcribers, a tabulation of the number and kinds of symbols used by each fieldworker was made (see Table 1). The count shows the number of _types_ of vowels, diphthongs, and lateral consonants used by each fieldworker in these two interviews, while the number of _tokens_ in each of the other categories has been tabulated. The absence or low number of occurrences or types of a particular symbol is generally balanced by a large number of types or tokens in other categories. This reflects the fieldworker's assessment of what in his data is phonologically interesting and relevant to the study of phonological variation in urban speech. For example, one fieldworker never marked stress at all, but consistently marked fronting, raising, lowering, and backing vowel modifications, as well as length. The number of words missing from the page checked is included since some of the missing or infrequent symbols might have occurred had these words been elicited.

Table 1. Tabulation of Number and Kinds of Symbols used by Each Fieldworker

Field-worker	Week	Types # vowels	Types # diphthongs	Types # 1's	Tokens # stress	Tokens #⊆∧⊇ #∨	Tokens # nas.	Tokens # length	Tokens # voicing	Tokens # lenis	Tokens #ʰ,ˀ,ˆ	Words missing
EAA	2nd	7	4	1	6	7	1	2	2	2	4	
	5th	8	3	1	10	7	6	9	2	1	8	
REC	2nd	7	3	1	11	2		9	1		3	
	5th	9	2	1	11	1		6			3	1
DD	2nd	7	6	3	11	10	1	1			7	
	5th	3	7	1	9	4	1	1			3	3
CWJ	2nd	8	3	1	13	6	1	1			3	
	5th	6	3	1	9	4	1				3	
RKS	2nd	9	3	1		10	6	2			1	
	5th	9	6	1		10		4			2	1
JL	2nd	9	7	1	2	25	2		3		6	
	5th	5	7	1	7	17	4				9	1
VHL	2nd	6	4	1	9	1	1		1		6	
	5th	8	4	1	7	2					5	2
JWN	2nd	8	4	2	12	9	1		2		2	
	5th	6	4	2	12	11			1		3	2
WKR	2nd	7	7	2	13	14	9		1		6	
	5th	5	9	2	12	18	8		5		5	
CMW	2nd	8	4	2	20	1	1	3	1		2	
	5th	8	2	2	10						4	1
WAW	2nd	7	5	3	5	4	7	2	1	1	7	
	5th	10	1	1	14	14	1	1	3	2	4	1

The following two charts list the categories and the relative ranks for the second and fifth weeks of fieldwork respectively. The number of fieldworkers rated within each specific rank is given. Since Minuteness of Transcription was arrived at by an average of the two weeks' figures, the number in that row are the same on both charts.

Chart 1. Evaluations in Categories, Second Week

Category	Rank 1	2	3	4	5
Cues	2	5	3	--	1
Interruptions	5	5	1	--	--
Digressions	9	1	--	--	]
Completing Questionnaire	9	1	--	--	1
Adaptability (Side 1)	3	2	3	2	1
Definitions	2	5	3	1	--
Allowance for Variants	1	3	6	1	--
Cue Sheets	--	--	2	3	6
Adaptability (Side 2)	4	3	3	1	--
Completion of Interview	11	--	--	--	--
Informant Data	5	3	2	--	1
Suggested Responses	3	2	3	1	2
Minuteness of Transcription	1	2	3	3	2

Chart 2. Evaluations in Categories, Fifth Week

Category	Rank 1	2	3	4	5
Cues	5	2	2	2	--
Interruptions	3	3	2	2	1
Digressions	3	4	2	2	--
Completing Questionnaire	3	4	2	2	--
Adaptability (Side 1)	5	2	2	--	2
Definitions	3	4	4	--	--
Allowance for Variants	1	3	6	1	--
Cue Sheets	3	1	--	3	4
Adaptability (Side 2)	4	2	4	--	1
Completion of Interview	3	6	1	1	--
Informant Data	4	4	3	--	--
Suggested Responses	--	4	2	3	2
Minuteness of Transcription	1	2	3	3	2

Several areas of general improvement seem to reflect an increasing facility with the standard interview. One such area is that of <u>Cues</u>; another is <u>Adaptability</u> on side one of the tape. <u>Interruptions</u> and <u>Digressions</u> generally decreased from the second to the fifth week, as did the rankings for <u>Completion of Interview</u> and <u>Completing Questionnaire</u>. The latter two may reflect a growing feeling of freedom among the interviewers to elicit discourse where possible with a minimum of questions. <u>Cue Sheets</u> were more often submitted in the fifth week than in the second, and <u>Definitions</u> seem to have generally improved.

The categories in which there are several persons with ranks of 5 would seem to be areas where further explicit training of future fieldworkers might be profitable. This is also true for one or two categories in which the rankings seem to be generally lower in the fifth than in the second week, for example, <u>Suggested Responses</u>.

In conclusion, it should be noted that for both weeks a number of the fourth and fifth rank spaces are blank, and large numbers occur in the first three ranks. It is believed that this fact indicates that the overall quality of the fieldwork of the Detroit Dialect Study was quite acceptable.

PART III - ANALYTICAL PROCEDURES

The correlation of social status and linguistic performance first requires a careful delineation of each. That is, before it is possible to make any statements about "working class" or "professional" speech, it is necessary to rank all informants on objective, non-linguistic criteria.

The following section contains the procedures used by the Detroit Dialect Study for social classification along with several of its grammatical and phonological correlates. Although these linguistic correlates are by no means exhaustive, they serve rather well to describe the ways in which various groups of Detroit residents set themselves off from other groups.

The linguistic indices of social stratification were derived, in every case, from hypotheses suggested by the fieldworkers. It was also decided that, in addition to isolation of special indices, the frequency of occurrence of particular grammatical types of clauses and phrases would be observed with regard to the variables of status, age, race and sex. This was done in order to determine whether or not structural frequency might be correlated with social stratification.

SOCIAL STRATIFICATION *

Social stratification of the Detroit informants was done according to the procedure outlined in Appendix II of August Hollingshead's <u>Social Class and Mental Illness</u> (1958). Three factors are used to evaluate social status: residence, education, and occupation. In order to rank an individual, one needs to know his job, how many years of school he has had, and what kind of neighborhood he lives in. Hollingshead used a pre-existing survey of housing in his study of New Haven; the Detroit Dialect Study had to use the United States Census data and derive a ranking system from it. With this exception, Hollingshead's procedure was followed exactly.

The educational scale is as follows:

<u>Class</u>	<u>Level of Education</u>
1	Any graduate degree (professional)
2	College graduation (four-year)
3	One year or more of college
4	High school graduation
5	Some high school (tenth grade up)
6	Junior high school (seventh through ninth)
7	Less than seven years of school

(Attendance at business college or some sort of training institute was NOT taken as equivalent to attendance at a college or junior college).

The occupational scale practically requires the use of Alba Edwards' <u>Alphabetical Index of Occupations and Industries</u> (U.S. Government Printing Office, 1940), unless the analyst is very familiar with job classifications. The breakdown is as follows:

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*

The authors are indebted to graduate assistant Dana Downing for the basic research described in this section.

Class	Occupation
1	Major professionals Executives of large concerns
2	Lesser professionals Executives of medium-sized concerns
3	Semi-professionals Administrators of small businesses
4	Technicians Owners of petty businesses
5	Skilled workmen
6	Semi-skilled workmen
7	Unskilled workers

There were a few difficulties in applying Edwards' Index as Hollingshead was not explicit on what consituted a "lesser professional", or on where the protective service workers were to be classed in this system. Protective workers and service workers were treated as semi-skilled, unless they had extra responsibilities (a detective sergeant was grouped with the foremen and skilled workmen, for instance). But this system was generally unambiguous and easy to manipulate.

Finally there was the difficulty of ranking residence by the Census data. In order to use as much of the Census data as possible, a fairly complex procedure was worked out. First, each informant was placed on the 1960 block census, i.e., by means of the City Directory and the street address, it was determined on which block he lived and he was assigned a block and tract number. Then, for each of the tracts in which our informants lived, a rating was determined. From the Housing Census, it was discovered how many of the houses in the tract were sound and had all plumbing facilities. The tracts were then grouped on the basis of this percentage. Group A included those tracts in which at least 98% of the houses were sound with all plumbing; Group B, 87.5%; Group C, 66.6%; Group D, 50%; and Group E, under 50%. Each group was then further sub-divided by the number of rooms per house in the tract. Subgroup 1

included the tracts where the average number of rooms was at least 10.5; Subgroup 2, 7.5-10.5; Subgroup 3, 5.5-7.4; Subgroup 4, 4.5-5.4; and Subgroup 5, 4.4 or under. Then, the subclasses were regrouped into six categories: I, 1A, 2A, and 1B; II, 3A, 2B, and 1C; III, 4A, 3B, 2C, and 1D; IV, 5A, 4B, 3C, 2D and 1E; V, 5B, 4C, 3D, 2E; and VI, 5C, 4D, 5D, 3E, 4E, 5E. The median family income figure for each tract was then taken from the population census, and a median of these medians was found for classes I through VI. The medians correlated with position on the scale, with a top of $14,220 for Class I and a low of $3,582 for Class VI. The average value of houses also showed a close correlation.

Next, the same classification was done for the individual blocks in which our informants lived. One modification was made: Group A included only those blocks in which 100% of the houses were sound and had all plumbing facilities. The classification proceeded as above, into Classes I-VI. Then the median family income for the tract in which the block was located was compared with the median of median family incomes for the classification by tracts into Classes I-VI. If it exceeded the median by $2,000 or more, the block moved up into the next class (IV to III, for instance); and if it was $2,000 or more below the median, the block was moved down one class. Classes I through VI were then used as an equivalent of Hollingshead's six-point scale for residence. (The Brewster Projects received an automatic VI classification.)

At this point, each informant had three rating numbers: a) a rating from one to seven on education; b) a rating from one to seven on occupation; and c) a rating from one to six on residence. These numbers were then multiplied by factors of five, nine, and six, respectively, and the sum of these numbers gave the informant's position on the scale. For instance, a lawyer who lived in a Class I neighborhood would receive a 1 for education, a 1 for occupation, and a 1 for residence. Multiplied by 5, 9, and 6 respectively, they gave a combined score of 20, the highest score possible on this scale. The lowest, for a person rated 7 on both education and occupation (a laborer with a third grade education, for example), with a house in a Class VI neighborhood, was a score of 134.

The above procedure was not used for the Hamtramck district, since the 1960 block census of housing did not cover it. Therefore, only the median family income figures were available. In this case, the medians for the classification by tracts into Classes I-VI were used. Class I, with a median of $14,220, had a range of $10,000 to $18,440; all tracts with a median family income of $10,000 or more were rated as Class I, for the purpose of rating tracts in Hamtramck. The complete listing is as follows:

Class	Median	Range: Median Family Income (tracts)	Hamtramck
I	$14,220	$10,000 to $18,440	$10,000 and up
II	9,213	9,026 to 12,926	8,000 - 9,999
III	6,362	5,111 to 8,809	6,350 - 7,999
IV	6,327	4,254 to 7,648	5,500 - 6,349
V	4,713	4,085 to 6,008	4,300 - 5,499
VI	3,582	1,879 to 4,440	4,299 and under

Obviously, the lowest number (20) has the highest prestige, and vice versa. Once all the families were ranked by this system, conclusions about the relationship of language and social class could be drawn.

GRAMMATICAL INDICES OF SOCIAL STRATIFICATION

Introduction

One convenient way to study the correlation of grammatical patterns and social stratification is to isolate particular features within the grammatical system and relate their relative frequency of occurrence to such variables as status, sex, age, and race. Naturally, in an interview not designed specifically to elicit a given grammatical feature, two requirements are basic for this type of study: 1) the particular feature must be expected to occur in the types of discourse which are elicited in the interview and 2) the feature must be readily quantifiable.

As a starting point, two potential grammatical indices were chosen for investigation, namely multiple negation (i.e. negative concord) and pronominal apposition. Several reasons may be cited for choosing these particular features. In the first place, for some time now educators have focussed on them as "stigmatized" features of American English. An impressionistic association of these features with social stratification thus nominates them to be investigated for their actual correlation with the social variables of status, age, sex, and race. They also meet the requirement of sufficient occurrence in the corpora. Furthermore, these features can be readily quantified.

Selection of Informants

In a sample of more than 700 informants it is necessary to select a small representative group of informants as the basis for a pilot study. On the one hand, the group should be sufficiently large to insure a wide spread of social status, age, sex and geographical location; it should be large enough to suggest some of the correlations of grammatical features with the status, age, sex, race and region variables. On the other hand, the sample should be small enough to guarantee completion within a reasonable length of time.

As a starting sample, 36 informants from the total sample were chosen. Four informants were chosen from each of the nine geographical areas in Detroit, Hamtramck and Highland Park. Of the four informants from each region, two were children 10 to 12 years of age, one an older sibling, and one an adult. The criteria by which these tapes were selected can be enumerated as follows:

1) The informant should be a resident of Detroit for at least 10 years and should be, preferably, a native of Detroit[1]

2) The fieldworker should feel impressionistically that the informant was in some way representative of the persons interviewed in the particular area

3) The fieldworker should feel that the interview was a good one in terms of apparent ease and naturalness of the informant

4) There should be a sufficient amount of discourse to expect a reasonable variety of syntactic structures to be included

On the basis of the above criteria, obviously no claims concerning randomness can be made. The sample does, however, provide a convenient starting point which can then be expanded to cover more informants in the total sample.

Multiple Negation and Social Stratification

In one variety of English there is a general rule for negative concord which states that when a negative sentence occurs with an indefinite pronoun (e.g., anybody, anything, etc.), adverb (hardly, scarcely, etc.) or determiner (a) the negative may only be realized once in the sentence, either on the auxiliary or the indefinite.[2]

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[1] Although it might have been preferable to have a sample including only natives of Detroit in some areas, particularly the Inner City areas, the vast number of southern negro in-migrants made this criterion unreasonable. In-migration appears to be the rule rather than the exception in the Inner City areas.

[2] The rule for negative concord does not cover such sentences as It is not that nothing can be done about the matter since there's always a way out, a grammatical sentence in this variety of English.

Thus, in this variety of English one finds:

<u>He can't hit anybody</u>

or

<u>He can hit nobody</u>

but not

*<u>He can't hit nobody</u>

When two or more indefinites occur in the same sentence, the general rule states that the negative element is attached to the first indefinite in the sentence. Thus, one finds:

<u>Nobody will hit anyone with anything</u>

or the passive

<u>No one will be hit by anybody with anything</u>

but not

*<u>Anyone will be hit by nobody with anything</u>

or

*<u>Nobody will hit nobody with nothing</u>

It is essential to note that in the above variety of English only one realization of the indefinite is permitted within the sentence.

In another variety of English, however, the realization of the negative is quite different, the general rule allowing for the negative element to be realized on both the auxiliary and the indefinite. In the case of multiple indefinites the negative may be realized on every indefinite (Like the other variety of English, however, it's occurrence on the first indefinite is obligatory). Thus we have:

<u>He can't hit nobody</u>

and

<u>Nobody will hit nobody with nothing</u>

It has been suggested for sometime now that the application of the above type ...le, the so-called "double negative" (referred to here as multiple negation), is an

index of social stratification. Exactly how this usage correlates with different

social variables such as age, sex, race, and status, however, has not been investigat

It is thus the purpose of this experiment to suggest the different ways in which

these variables may correlate with the use of the "multiple negation" on the basis

of the sample of 36 speakers.

Procedure

In tabulating the index the procedure was as follows. For each informant all

instances of negatives co-occurring with indefinites were tabulated. This procedure

gave a total number of "potential occurrences" for multiple negation (e.g. he didn't

hit anybody). From this total, the number of "actual" occurrences (he didn't hit

nobody) of multiple negation was tabulated. The percentage of "actual" multiple

negatives in relation to "potential" multiple negatives was then computed.

The totals of actual multiple negation in relation to potential occurrence are

given for each informant in the following chart, which is arranged in order of des-

cending social rank. (See pages 2-5 for the discussion concerning the assignment of

social status numbers.) For each informant the tape number, sex, age, and race are

given.

Chart .   Double Negative -- Arranged by Social Rank

Social Rank	Informant				Potential Occ. Double Negative	Realized Double Negative	Percentage
	Tape No.	Sex	Age	Race			
20	95	F	13	W	5	0	--
32	388	M	42	N	16	1	6.3
37	41	F	43	W	23	0	--
41	88	F	41	W	10	0	--
43	347	F	10	W	5	0	--
54	499	F	11	W	8	1	12.5
54	284	F	10	W	15	0	--
59	575	F	42	W	5	0	--
60	101	F	15	W	14	0	--
71	300	M	38	W	12	7	62.5
74	243	M	9	W	9	1	11.1
74	281	F	20	W	2	0	--
74	283	F	10	W	17	0	--
77	128	M	13	N	14	2	14.3
78	92	F	11	W	7	0	--
78	649	M	10	N	2	2	100.0
80	141	F	16	N	11	0	--
92	596	M	15	W	15	8	53.3
97	137	F	10	W	8	1	12.5
97	208	F	31	N	12	3	25.0
97	305	M	35	N	32	11	34.4
98	401	M	10	N	4	0	--
99	648	F	11	W	6	4	66.7
102	256	F	12	N	2	1	50.0
103	445	M	38	W	9	1	11.1
103	15	M	10	N	4	4	100.0
104	193	F	12	N	5	4	80.0
108	65	F	12	W	6	0	--
108	230	F	13	N	9	8	88.9
109	315	M	12	N	11	6	54.5
111	565	F	14	N	17	16	94.1
113	214	F	32	N	18	5	27.8
120	491	F	10	W	6	2	33.3
122	403	F	11	W	10	7	70.0
129	237	F	9	N	5	3	60.0
134	506	M	48	N	32	29	90.6

Several observations seem apparent on the basis of the preceding chart.   In the
first place, there is one group of speakers for whom the multiple negative realiza-
tions · are always absent (i.e. There is no rule of the second type).[3] The chart
indicates that these speakers consistently evidence higher social rankings (i.e. lower
social index scores) than those speakers who use the multiple negative. There are also
two speakers in whose speech the multiple negative is always realized; in these cases,
however, the low number of potential occurrences (two and four) suggests that there is
not necessarily an invariable application of the second type of rule. This appearance
may simp'y be an artifact of the low number of negative-indefinite constructions
found in the particular informants' corpora.

Among the speakers using the multiple negative a large range of variation in the
frequency of realized multiple negatives in relation to potential occurrences is
observed (e.g. from 6.3 to 100 per cent). This observation suggests that there may be
a correlation between the relative frequency of multiple negatives and different
social groups. In order to investigate this correlation an arbitrary division into
approximate social level quartiles was made on the basis of the social index scores:
1) those with scores ranging from 20-49 2) those with scores ranging from 50-79
3) those with scores ranging from 80-109 and 4) those with scores ranging from 110-
134.[4] The quartile social divisions should not be construed as a representation of

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3

It may well be that for some speakers multiple negatives are permitted with certain
types of indefinites (e.g. adverbial as in Hardly nobody can see the stage) but NOT
with others (e.g. pronominal as in *No one is going to hit nobody with nothing).
Although this type of phenomenon seems to be suggested by the present corpus, no
definitive statement can be made because of the paucity of examples.

4

Naturally, the decision to make a quartile social classification means that for
any feature a correlation with no more than four social groups can be made. Althougl
a "finer" classification might have been preferred, in an initial sample of 36,
some groups would have had too few members to make any significant correlations.
As it now stands, for some variables the groups are too small to make valid
correlations on the basis of a quartile classification.

"absolute" social class divisions. It is only possible to assign social class "labels" (e.g. upper middle class, lower middle class, etc.) to the divisions of the social level scores in an arbitrary way. The only positive use of the scores is as indicators of relative social status, so that at one end of the scale is upper class, and at the other end, lower class. Where the divisions can be made in between, and how many can be made, or whether they can be made at all is an open question. For the purpose of discovering what kinds of social groupings may be correlated with the linguistic data, however, arbitrary divisions of the social ranks can be made. By comparing the different divisions with the linguistic data the natural groups can then be identified.

The tabulation of the percentage of realized multiple negation in relation to potential occurrence for each group can be indicated in the following graph:

GROUP

| PERCENTAGE | I | II | III | IV |

| RANK | 20-49 | 50-79 | 80-109 | 110-134 |
| No. in Group | (5) | (11) | (14) | (6) |

Multiple Negation Social Classification
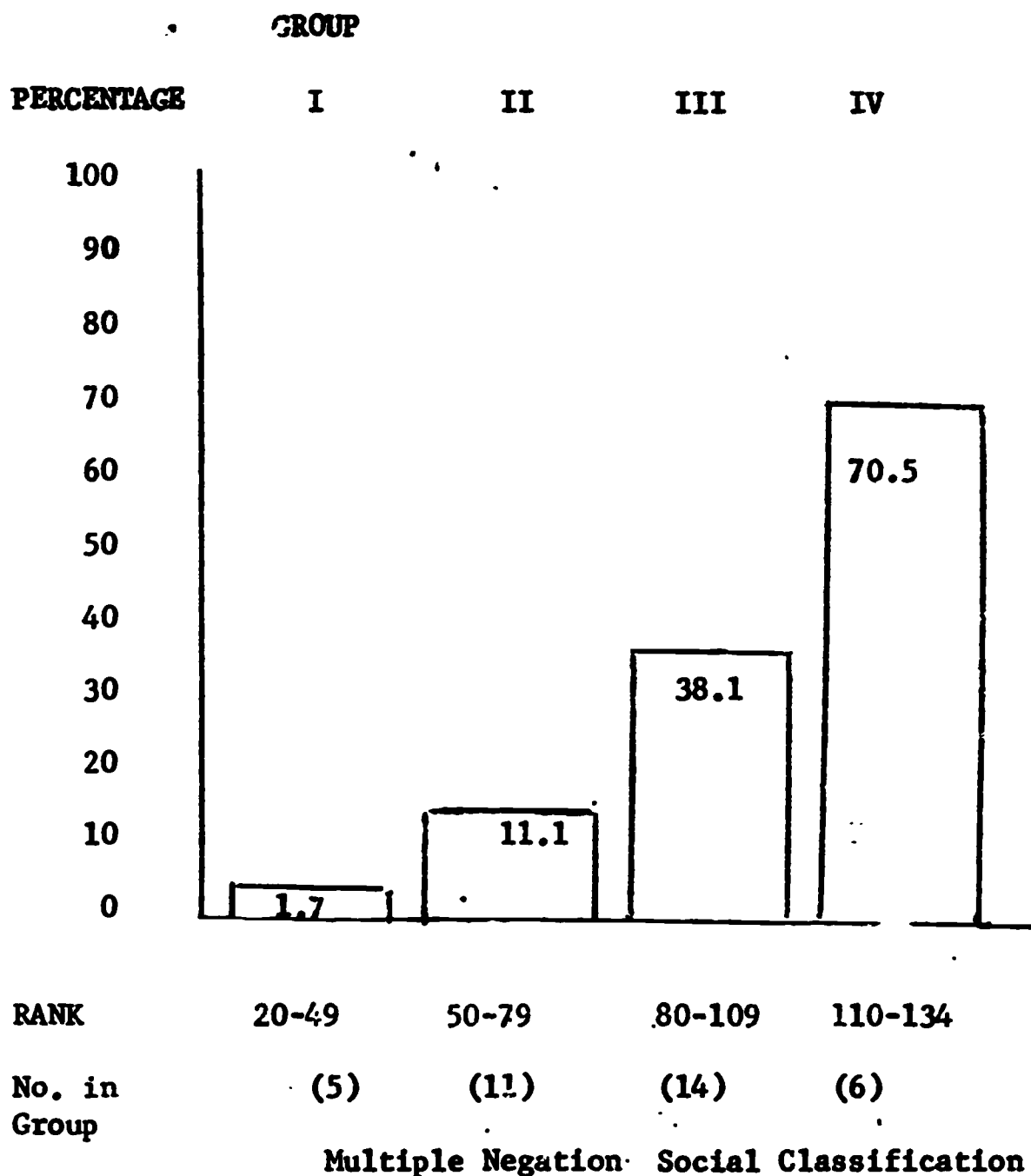
The preceding graph indicates that there is a definite gradation of multiple negation frequency on the basis of the four social groups. The most significant[5] gradation is found between Group II and Group III, and, Group III and Group IV, the difference in each case being over 25 per cent. The difference between Group I and Group II although suggestive, does not reveal the same sharp ascent in frequency that is shown between the other groups.   In Group I four of the five members reveal the complete absence of multiple negation, while in Group II six of 11 members show complete absence. The above graph, then, suggests that the relative frequency of multiple negation can indeed be correlated with at least four social groups.

On the basis of the overall correlation of multiple negation with at least four social groups, other variables such as age, sex, and race can be investigated.

Age

The following graph indicates the relative frequency of multiple negation for children 10-12 years of age. This age range includes 18 of the 36 informants used in this initial sample.

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[5]
    The use of the term "significant" is not intended in a statistically valid sense, since at this point no calculation of "confidence levels" has been attempted.
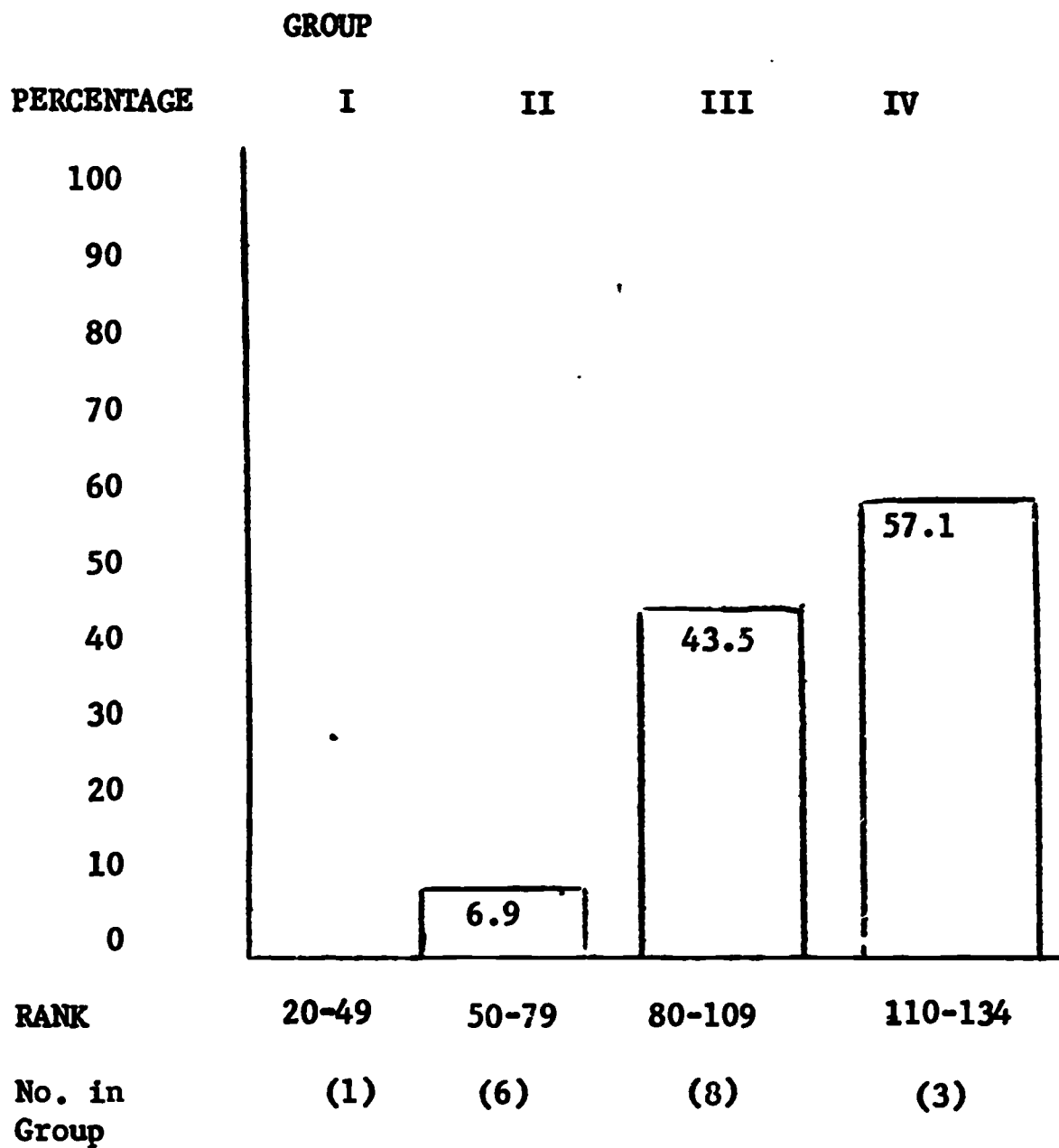
Multiple Negation: Children 10-12

The above graph, although still indicating a gradation within the four social groups, suggests a somewhat different classification in comparison with the "overall" social stratification. In the first place, the most significant contrast is found between Group II and Group III the difference being 36.6 per cent. In the second place, the contrasts between Group I and Group II and, Group III and Group IV are minimized, the differences being 6.9 and 13.6 per cent respectively. The exaggeration of the contrast between Group II and Group II, and, Group III and Group IV suggests that the social stratification of multiple negation among 10-12 year olds may be basically binary. On the one hand, it is clearly evident that multiple negation among 10-12 year olds has been acquired as an index of social stratification; on the other hand, however, the "fineness" of its stratification may not yet be acquired.

Compare, now, the following graph of multiple negation for the adult informants:
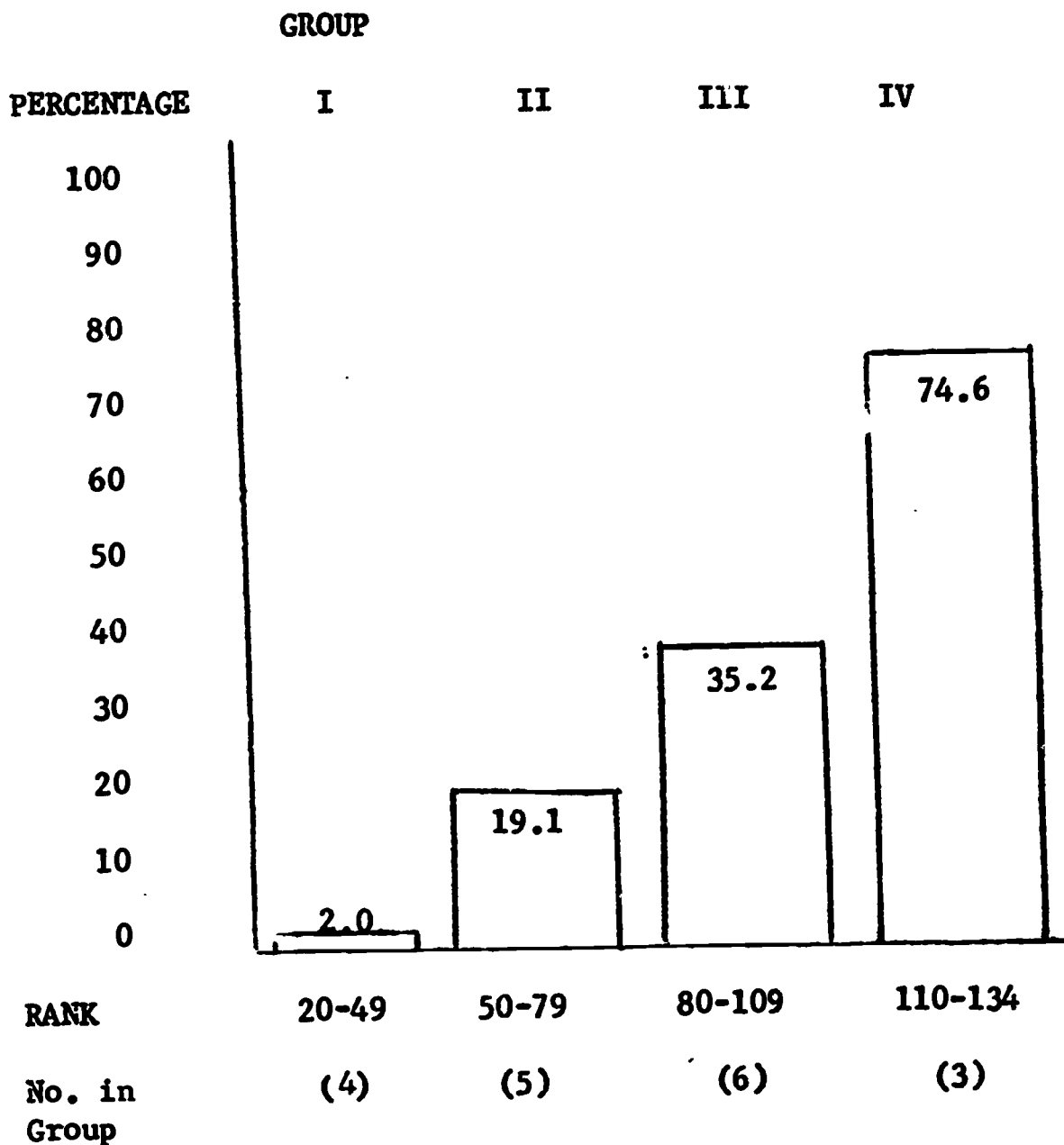
GROUP

Multiple Negation :-Adults

In the above graph of adults, it appears that there is a distinct contrast between all four groups. There is an obvious difference with the graph for children in that the contrast between Group I and Group II (19.1) and Group III and Group IV (39.4) is greater than that between Group II and III; among the children the most significant contrast was seen between Group II and III. The comparison of the adult and child relative frequencies then suggests the hypothesis that adults may be expected to show a "finer" stratification with reference to multiple negation. This difference in the fineness of stratification may be due to the greater consciousness of multiple negation as a feature of social stratification by the adult population. The contrast between the adults and children may be seen in the following linear graph:

GROUP

PERCENTAGE	I	II	III	IV

100

90

80 — 74.6

70 ·

60 — -57.1

50 — 43.5

40 — 35.2

30

20

19.1

10 — 6.9

0 — 0

| RANK	20-49	50-79	80-109	110-134
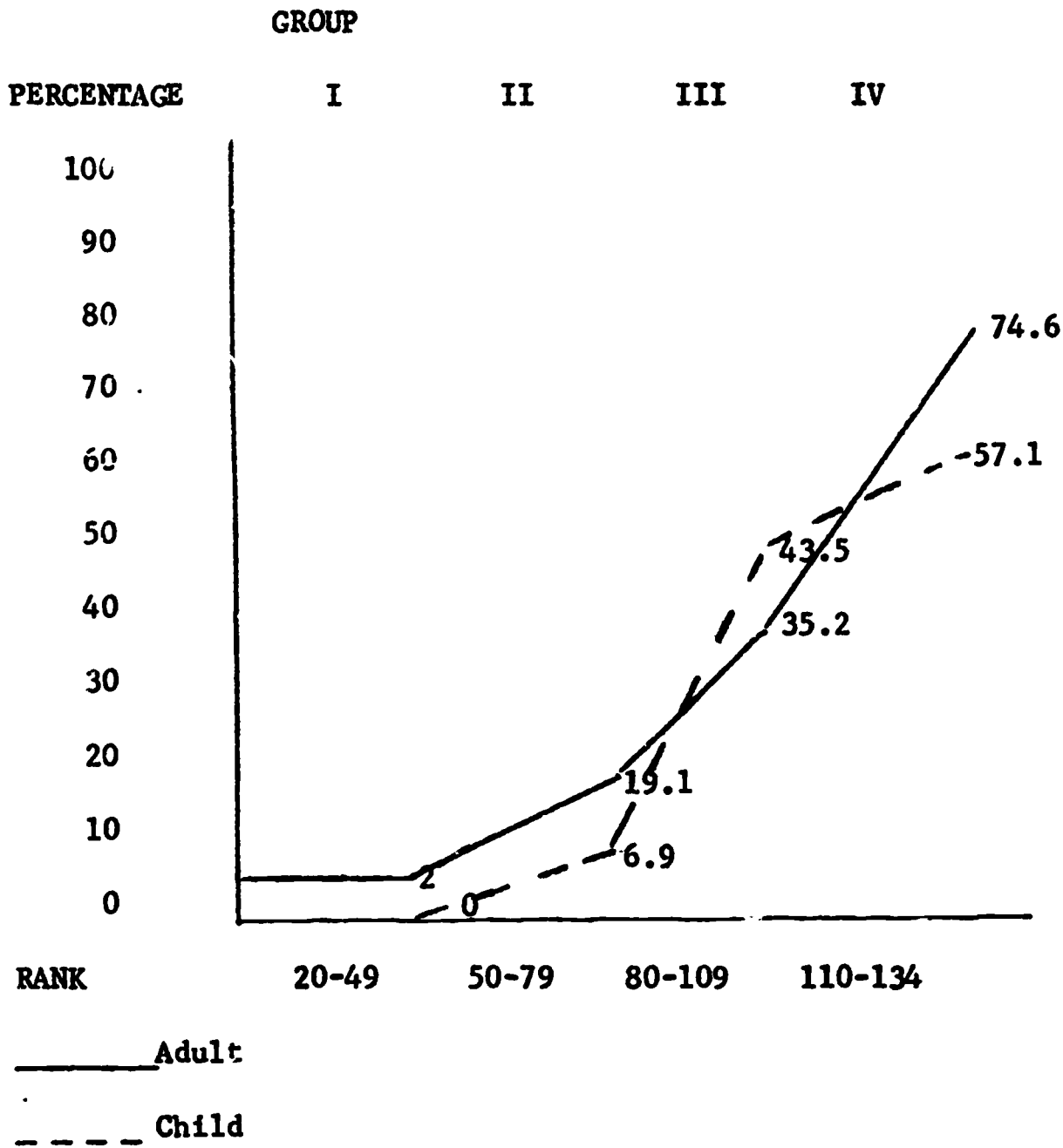
_____Adult

_ _ _ _ Child

Multiple Negation: Adult/Child

Sex

The next variable which may be examined is that of sex. Although there is a somewhat disproportionate ratio of men (12) to women (24) in the sample this variable can be investigated keeping this limitation in mind. The following graph indicates the relative frequency of multiple negation for women:

GROUP

PERCENTAGE	I	II	III	IV

100
90
80
70
60
58.9
50
40
35.6
30
20
10
1.4
0

RANK	20-49	50-79	80-109	110-134
No. in Group	(4)	(7)	(8)	(5)
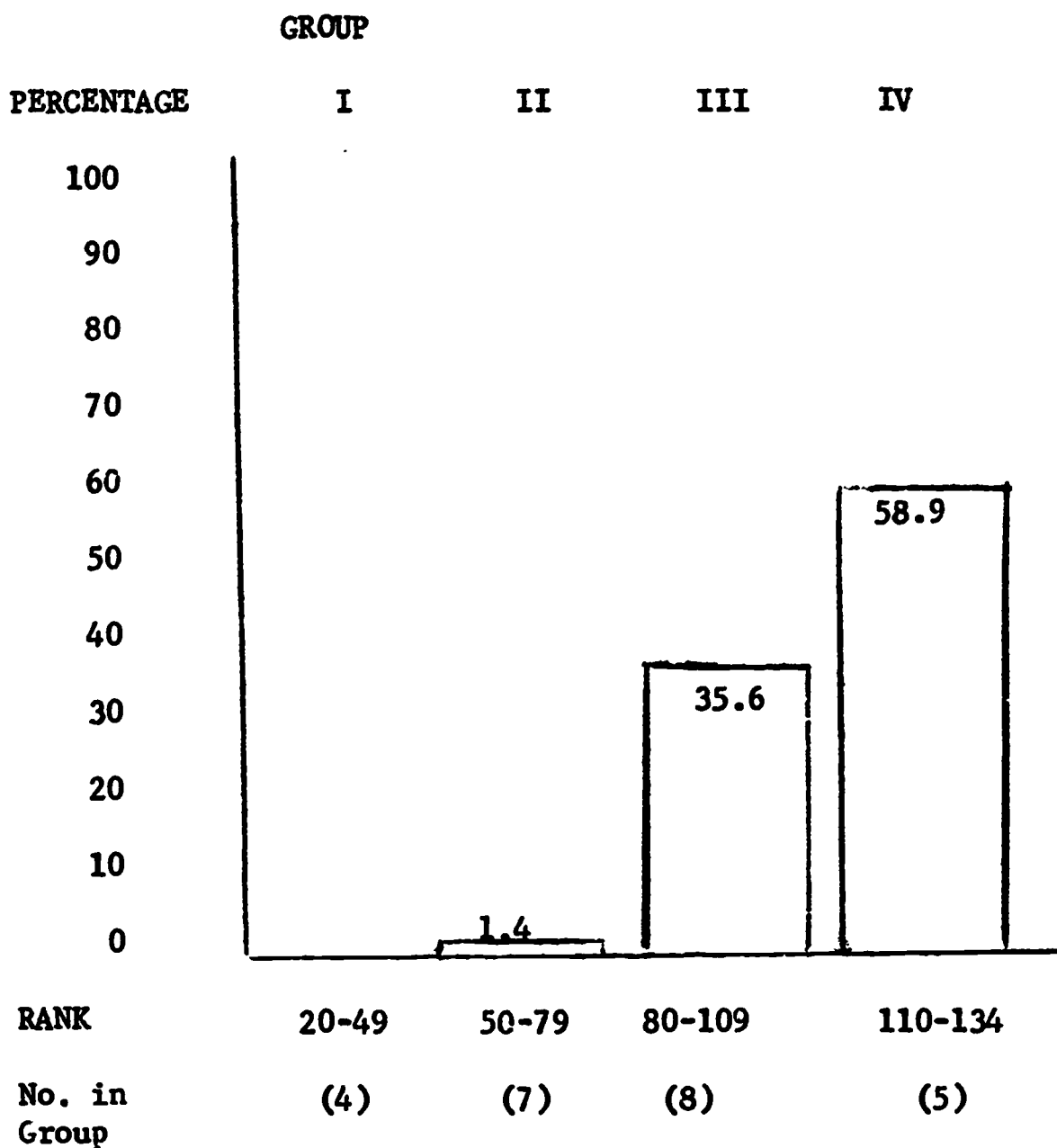
Multiple Negation : Female

The most outstanding feature to be noted in the above graph is the lack of contrast between Groups I and II (there is a difference of only 1.4 per cent). In fact, six of the seven informants included in Group II reveal a complete absence of multiple negation. There is, however, a clear-cut contrast between Groups II and III and Groups III and IV (The difference is 34.2 and 23.3 per cent respectively). The evidence thus indicates that among women the two upper social groups merge, and only three social groups can be delimited on the basis of multiple negation.

Now, compare the relative frequency of multiple negation for the men:

GROUP

PERCENTAGE   I   II   III   IV

RANK   20-49   50-79   80-109   110-134

No. in   (1)   (4)   (6)   (1)
Group
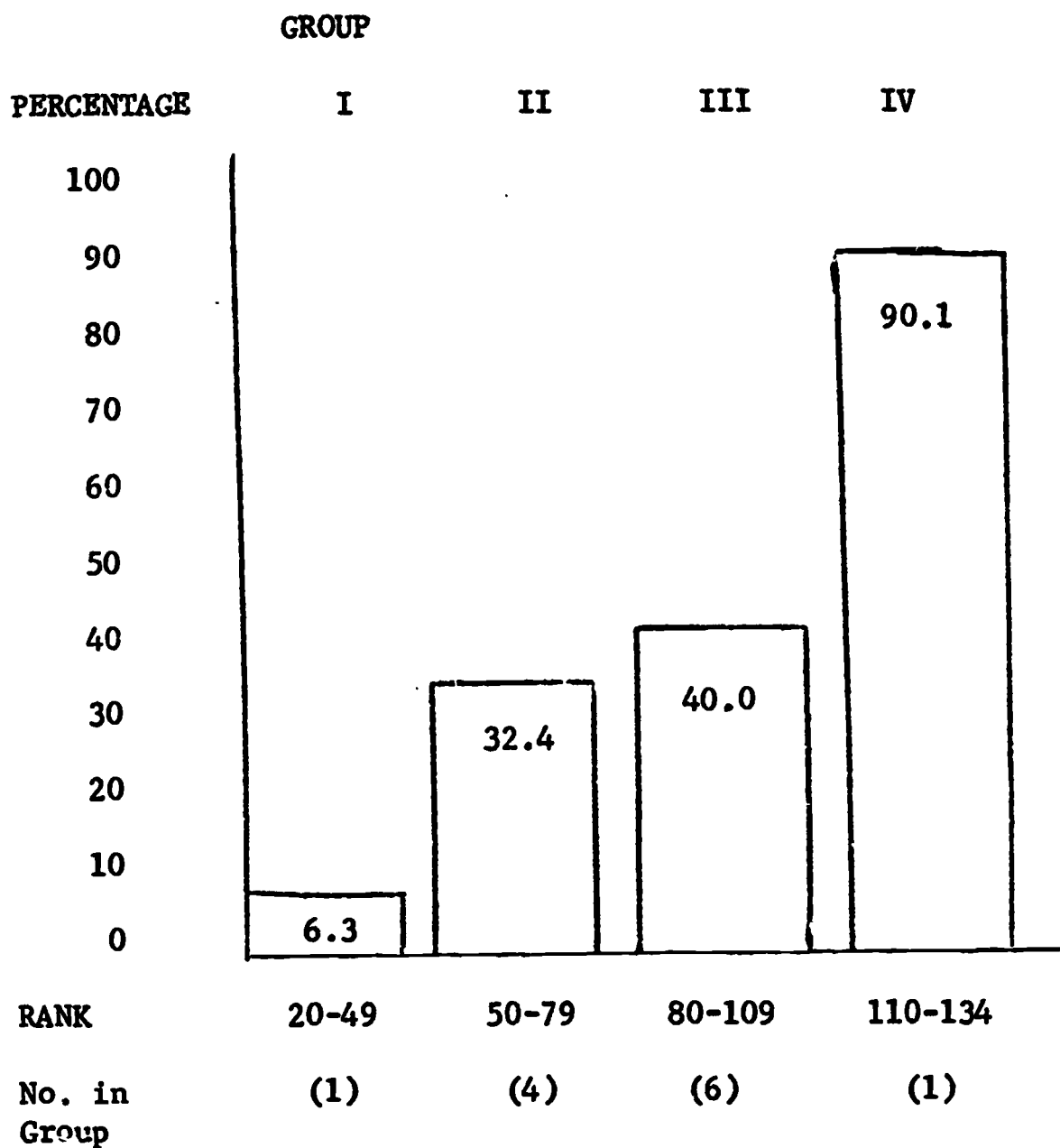
Multiple Negation : Male

The men, in opposition to the women, clearly indicate a contrast between Group I
and Group II; there is less of a contrast between Group II and Group III, the point
at which the most significant contrast among the women was observed. The graph also
indicates a sharp contrast between Group III and Group IV: however, since there is
only one member in Group IV the significance of this contrast cannot be emphasized.

The comparison of the men and women can be seen in the following linear graph:

GRO"P

PERCENTAGE	I	II	III	IV

RANK   20-49   50-79   80-109   110-134
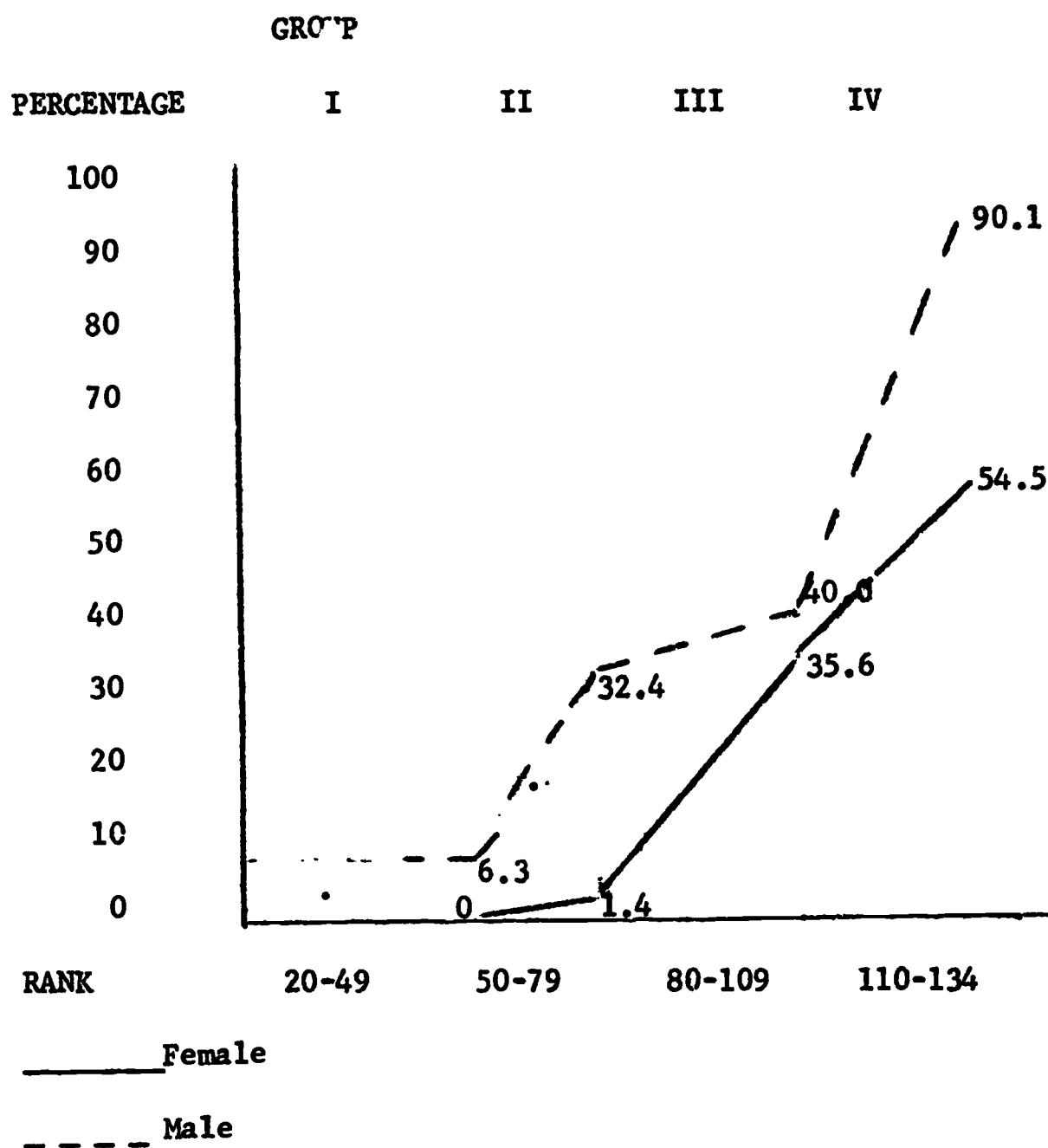
_____ Female

_ _ _ _ Male

Multiple Negation : Male/Female

The most outstanding feature indicated in the above graph is the consistently
higher frequency of multiple negation among men when compared with women. Also, the
relative absence of contrast between the two highest social groups among the women
as opposed to the importance of the contrast between these groups among the men must
be noted. On the basis of the above observations it appears reasonable to hypothesize
that women show a greater "sensitivity" to multiple negation as an index of social
stratification than men.[6]

_____

6
    The overall frequency for women (23.9 per cent) and men (47.9 per cent) bears
out this hypothesis, which is made on the basis of the social groups.

Race

The final variable to be investigated is that of race. The following graph

gives the relative frequency of multiple negation for the 16 negro informants in the

sample:

GROUP

PERCENTAGE	I	II	III	IV

RANK	20-49	50-79	80-109	110-134
No. in Group	(1)	(2)	(9)	(4)
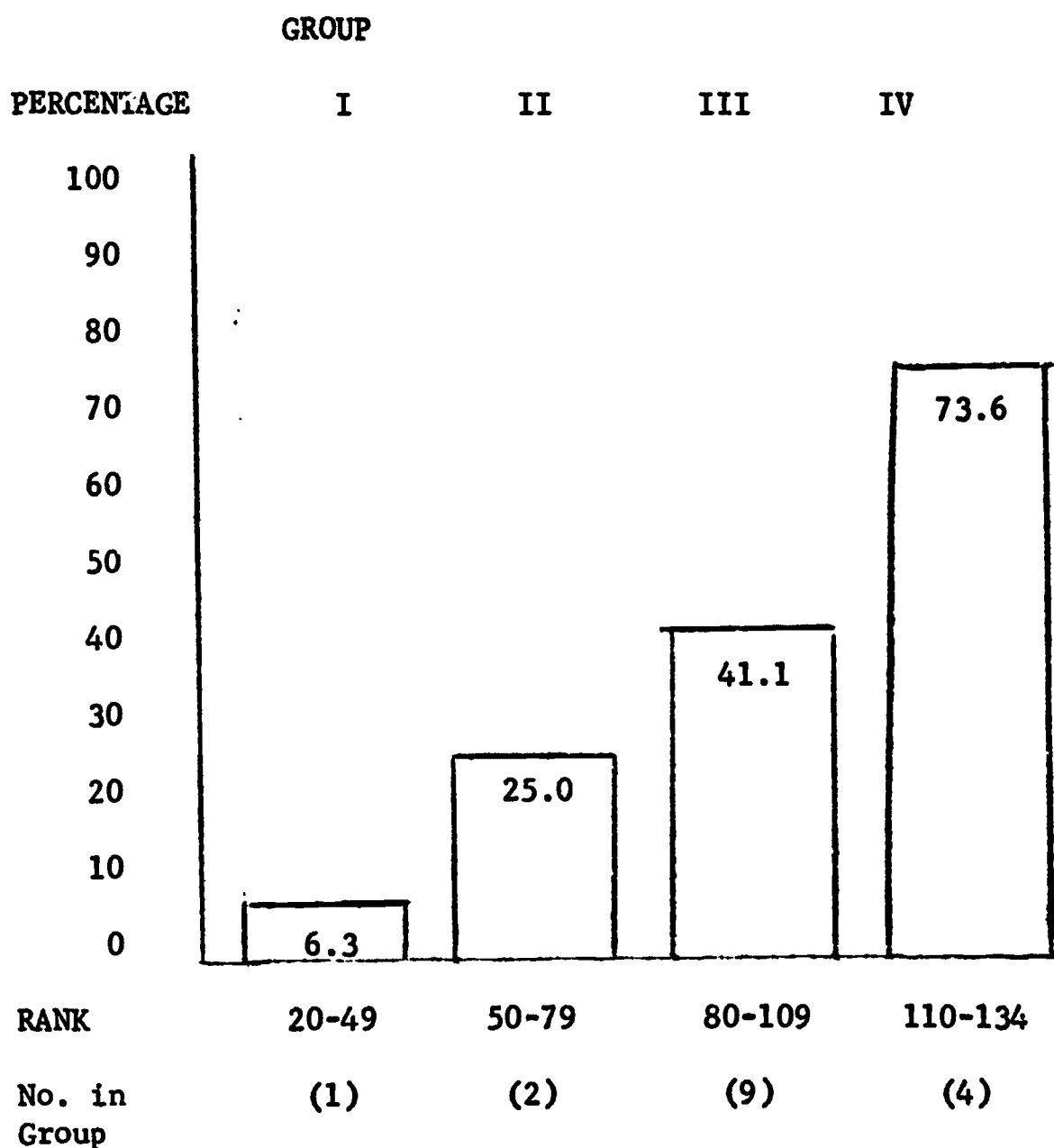
Multiple Negation: Negro

The above graph reveals contrast between the four social groupings, in each case

the difference being over 16 per cent.[7] There is a limitation in interpreting the

relative frequencies, of course, which is due to the fact that there is only one

informant in Group I and two informants in Group II.

7

   The paucity of negro informants in Groups I and II of this restricted sample
reflects the fact that there is a small number of negroes in these groups in the
unrestricted random sample.

Now consider the graph for the white informants:

GROUP

| PERCENTAGE | I | II | III | IV |

| RANK | 20-49 | 50-79 | 80-109 | 110-134 |
| No. in Group | (4) | (5) | (5) | (2) |
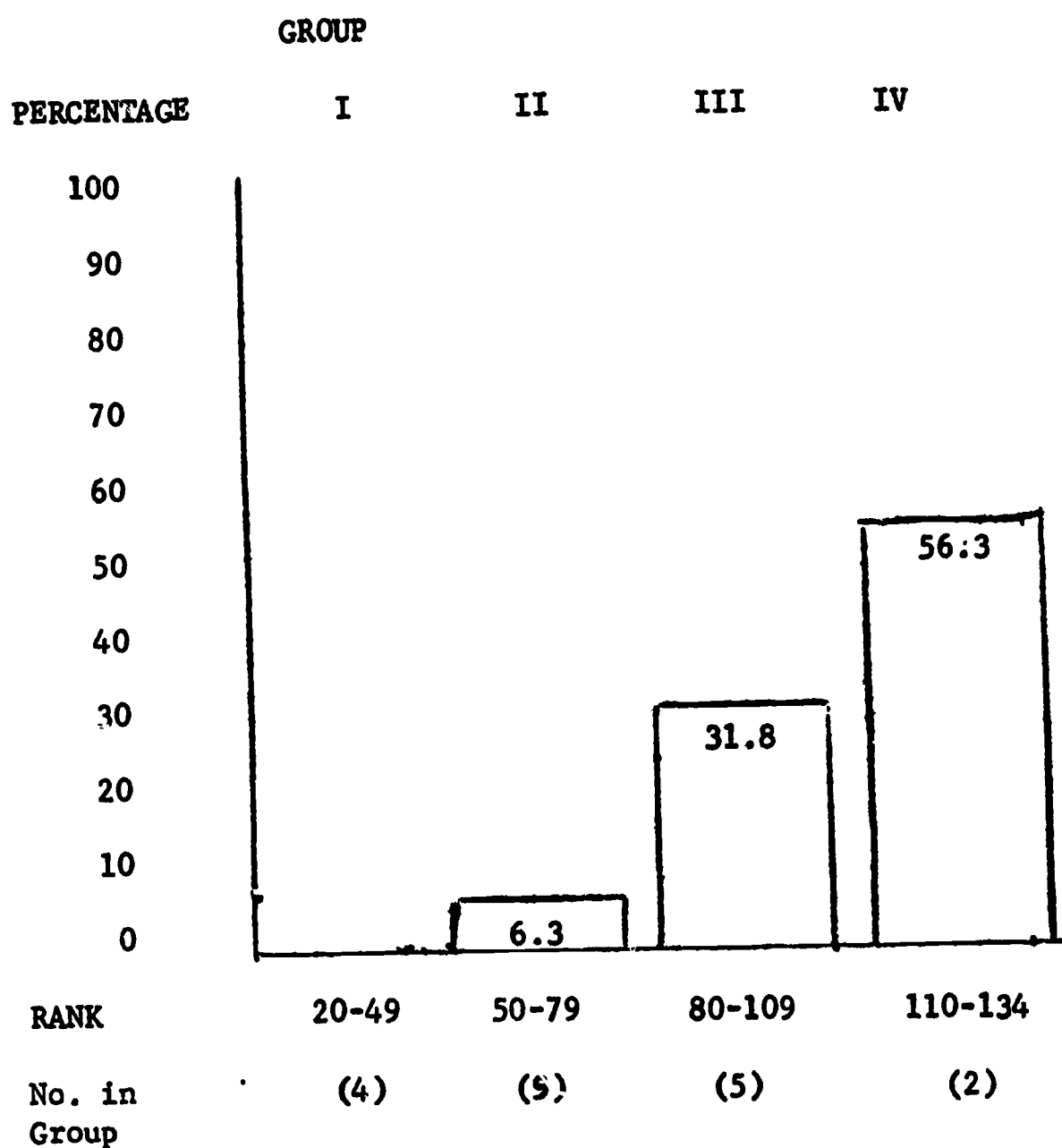
Multiple Negation: White

The white informants also show a gradation in terms of the four groups; howeve[r] the significance of the contrast between Group I and Group II is not as contrastive as in the negroes. Also, the relative frequency in Groups II, III, and IV is consi[der]ably lower than in the comparable groups of negro informants. This difference is shown in the following linear graph:

GROUP

| I | II | III | IV |

PERCENTAGE

```
100
 90
 80                                           ,73.4
 70
 60                                      / '56.3
 50
 40                              41.1/
 30                            /31.8
 20              25.0 /
 10          _ / 10.1
  0        o_/
           6.3
RANK    20-49    50-79    80-109    110-134
```
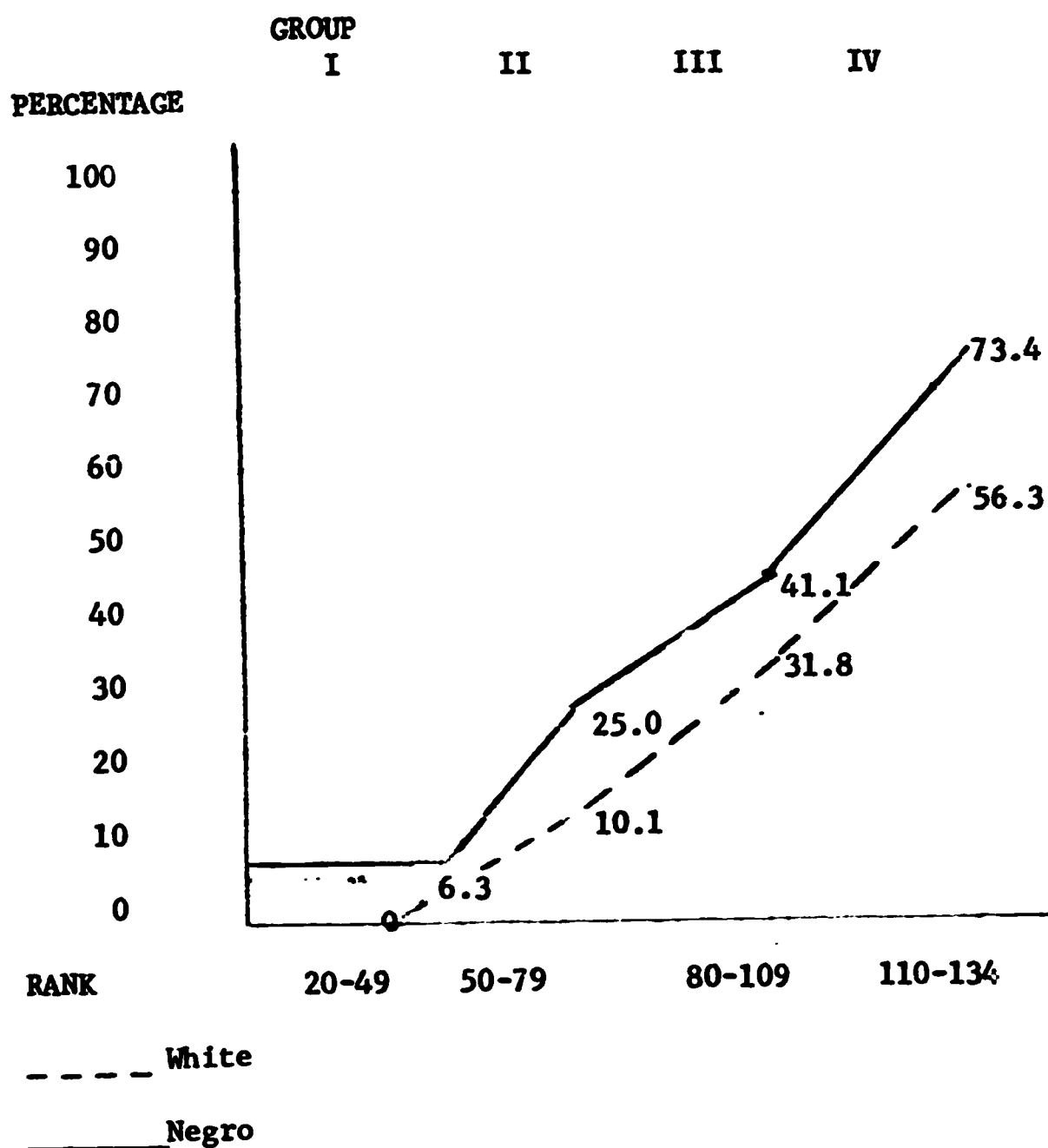
_ _ _ _ White

_____Negro

Multiple Negation: Negro/White

The above graph clearly demonstrates that the white informants consistently have

a lower relative frequency of multiple negation than the negro informants. Among

both white and negro informants there appears to be a contrast between the four

social groups, although the difference between Group I and Group II is considerably

less among the white informants than among the negro informants. The important aspect

of the variable of race is the relatively higher frequency of mult ie negation among

negroes in all groups than among white informants in the same groups.

Conclusion

The preceding discussion suggests that there is a definite correlation between

the relative frequency of multiple negation and the variables of social status, age,

sex, and race. These correlations have definite implications on such areas as

language acquisition, consciousness, and sensitivity in relation to social stratification. At this point, naturally, the results can only be postulated as "suggestive". However, with an adequate extension of the sample population and a rigorous measurement of the statistical validation of the results one would expect that many of the proposed correlations would indeed be confirmed.

PRONOMINAL APPOSITION AND SOCIAL STRATIFICATION

In some varieties of spoken English, one of the features of narrative and descriptive style is the use of a pronoun in apposition. First and third person plural, and third person singular pronouns may occur in apposition when the noun phrase to which they refer is the subject of the sentence.[8] For example:

> Once me and my brother we went to the park and there was this man
> and I guess he was drunk or something and there was this other man
> in the car and the man that was outside the car, he was trying to
> get the guy that was inside the car...Then the other guy, he tried
> to run the car so he couldn't get away, and the other guy, he came
> after him.....

An appositional pronoun may be realized immediately following the noun phrase (...the other guy, he...) or it may be realized following an embedded or parenthetical sentence (...the man that was outside the car, he...). Although frequently pronominal apposition is realized when the subject has the feature "animate", it may also be realized on non-animate subjects such as:

> ...The playground, it has all kinds of bars and stuff...

For some time now, educators have impressionistically focussed on pronominal apposition as a feature of "non-standard" speech and an index of social stratification.[9]

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[8] Although certain instances of pronominal apposition occur with second person plural (e.g. You and John, you're going to the playground). These are not found in the corpus, and are thus no considered here.

[9] From a descriptive standpoint several functions of pronominal apposition (in terms of the semology and grammar) seem apparent: a) To indicate that the main subject of the sentence is being referred to following an embedded or parenthetical sentence (e.g. The boy who I don't like, he hit me.) b) To emphasize the head noun when it is "qualified" in some way (i.e. possession modification, etc.) (e.g. My sister, she always hits me.) c) To indicate the entry or re-entry of a participant in a discourse (e.g. So the other guy, he hit him back.)

It is thus the purpose of this description to establish if the realization of pronominal apposition is related to social stratification, and if so, how it correlates with variables such as status, age, sex, and race.

Procedure

In tabulating the index the procedure was as follows. For each informant all instances of noun phrases in which "potential" (i.e. where it is grammatically possible occurrences of pronominal apposition could be realized were tabulated. This included all first and third person plurals and first person singulars (e.g. John and I went. The boys went. My brother went.) when they functioned as subjects. From this total, the number of "actual" occurrences (our family, we went..., etc.) was tabulated. The percentage of realized pronominal appositions in relation to potential occurrences was then computed.

Analysis

The totals of realized pronominal appositions in relation to potential occurrences are given for each of the 36 informants in the following chart, which is arranged in the order of descending social rank (cf. pages 2-5 for the discussion concerning the assignment of social status numbers). For each informant the tape number, sex, age and race are given.

Chart 2.   PRONOMINAL APPOSITION

Status	Tape No.	Sex	Age	Race	Potential	Realized	Percentage
20	95	F	13	W	35	2	5.7
32	388	M	42	N	20	1	5.0
37	41	F	43	W	51	1	1.9
41	88	F	41	W	76	0	---
43	347	F	10	W	36	4	11.1
54	499	F	11	W	80	8	10.0
54	284	F	10	W	27	1	3.7
59	575	F	42	W	69	2	2.9
60	101	F	15	W	55	4	7.3
71	300	M	38	W	53	11	20.8
74	243	M	9	W	56	7	12.5
74	281	F	20	W	44	5	11.4
74	283	F	10	W	80	16	20.0
77	128	M	13	N	44	4	9.1
78	92	F	11	W	68	11	16.2
78	649	M	10	N	53	19	35.8
80	141	F	16	N	47	15	29.8
92	596	M	15	W	84	16	20.0
97	137	F	10	W	50	3	6.0
97	208	F	31	N	41	20	48.8
97	305	M	35	N	58	8	13.8
98	401	M	10	N	88	11	12.5
99	648	F	11	W	44	11	25.0
102	256	F	12	N	33	9	27.3
103	445	M	38	W	41	8	19.5
103	15	M	10	N	47	23	48.9
104	193	F	12	N	71	17	22.1
108	65	F	12	W	52	20	38.5
108	230	F	13	N	80	16	20.0
109	315	M	12	N	63	15	23.8
111	565	F	14	N	27	7	25.2
113	214	F	32	N	67	7	11.9
120	491	F	10	W	40	7	17.5
122	403	F	11	W	23	4	17.4
129	237	F	9	N	28	13	46.4
134	506	M	48	N	44	11	25.0

The differences between the informants in terms of relative social status, although apparent in the above chart, can be seen more readily if it is converted into a graphic representation. This is done in the following graph:
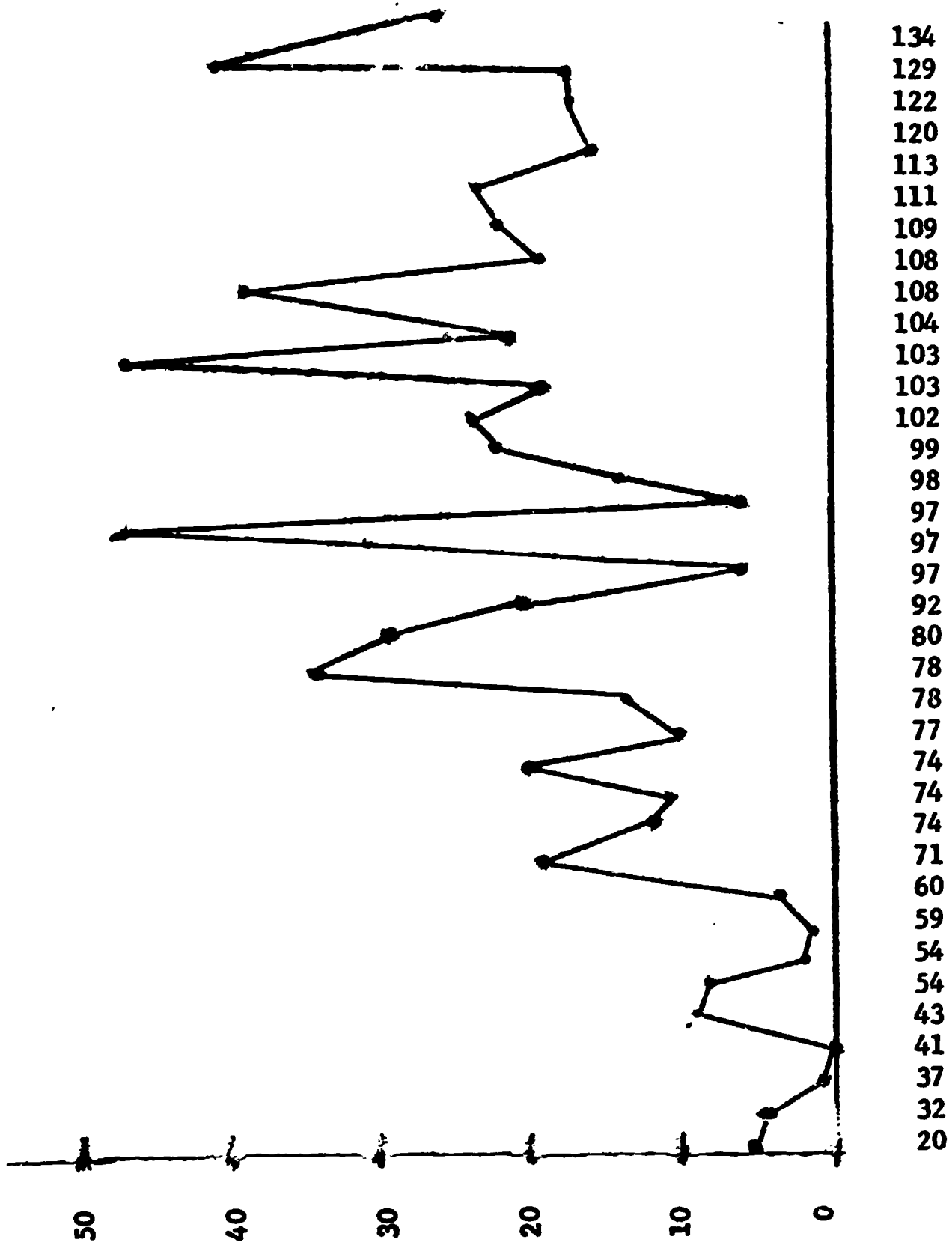
Social Distribution: Pronominal Apposition

Several observations may be noted on the basis of the above graph. In the first place, there is a general pattern progressing from low to high frequency, even though there is considerable variation among the individual informants. Also, only one informant shows a complete absence of pronominal apposition, thus suggesting that contrast between informants is NOT significant in terms of absence versus presence of the realization, but in the relative frequency of the realized apposition.[10]

The next step in correlating the relative frequency with social status was to categorize the informants in terms of social groupings. Following the general procedure for grouping elsewhere (see page 11) a quartile social classification was adopted. For convenience these are referred to as Group I (20-49), Group II (50-79), Group III (80-190) and Group IV (110-134). For each group the mean percentage was computed. The following graph gives the mean percentage of realized pronominal apposition for each group. The mean percentage is indicated in the columns.

---

[10]
The realized apposition may vary qualitatively in terms of specific environments although there is insufficient evidence to support this claim at present. For example, some informants seem to realize pronominal apposition predominantly after embedded relatives or parenthetical sentences. Similarly, for some speakers the realization of the apposition following a condition (e.g. If my brother he comes, ...) is present whereas it appears that other speakers show a qualitative absence in this environment.

GROUP

	I	II	III	IV

Status   20-49   50-79   80-109   110-134

No. in   (5)   (11)   (14)   (6)
Group
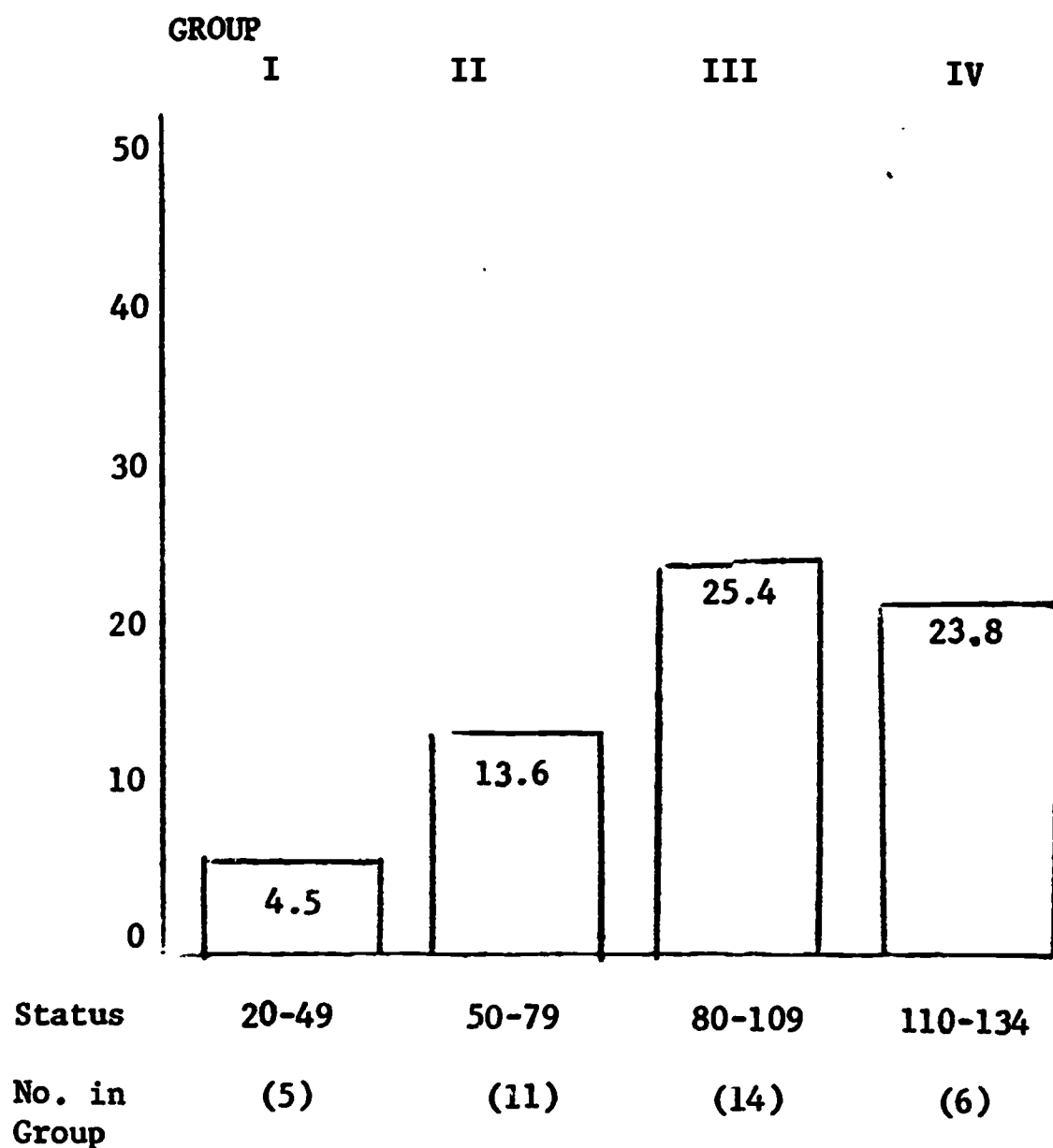
Pronoun Apposition: Quartiles

The above graph indicates that there is a definite contrast between the mean of

Group I and the means of Groups III and IV. Group II, as an intermediary step between

these groups, shows contrast between III and IV, but not nearly as clear-cut as

Group I.[11] The significance of contrast between Groups I and II is somewhat tenuous.

It is quite interesting to note that there is a complete lack of contrast between

Group III and Group IV (indicated by brackets); in fact, Group III, the higher of the

two social groups, reveals a higher relative frequency of pronominal apposition than

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[11]
    An application of the "t Test" (See Harold Yuker, A Guide to Statistical
Calculations, 1958, pgs. 62-64), used to measure the "statistical significance" of
these differences, verifies these observations. The statistical significance of
the difference between Group I and Groups III and IV is calculated at the .01 per
cent level (i.e. There is a 1/1000 probability that the difference can be ascribed
simply to chance). The significance of the difference between Group II and Group
IV is calculated at the 5 per cent level (i.e. There is a 5/100 chance). Statis-
tical validity of the other differences has not been computed since this study is
only intended to be suggestive.

than Group IV. Thus. one does not see the same graduated "fineness" of stratification between four social groups that appears to be characteristic of other indices (e.g. multiple negation; cf. page 7 to 23). At most, the relative frequency of pronominal apposition can be correlated with three social groups.

Having established the fact that there is a correlation between the relative frequency of pronominal apposition and the "over-all" social stratification, we may now turn to the variables of age, sex and race.

Age

In dividing the sample on the basis of age, children twelve and under were distinguished from adults, which included both teen-agers and adults.[12] The following graph reveals the relative frequency for the children (i.e. children 10-12 years of age

| GROUP	I	II	III	IV
Status	20-49	50-79	80-109	110-134
No. in Group	(1)	(6)	(8)	(3)
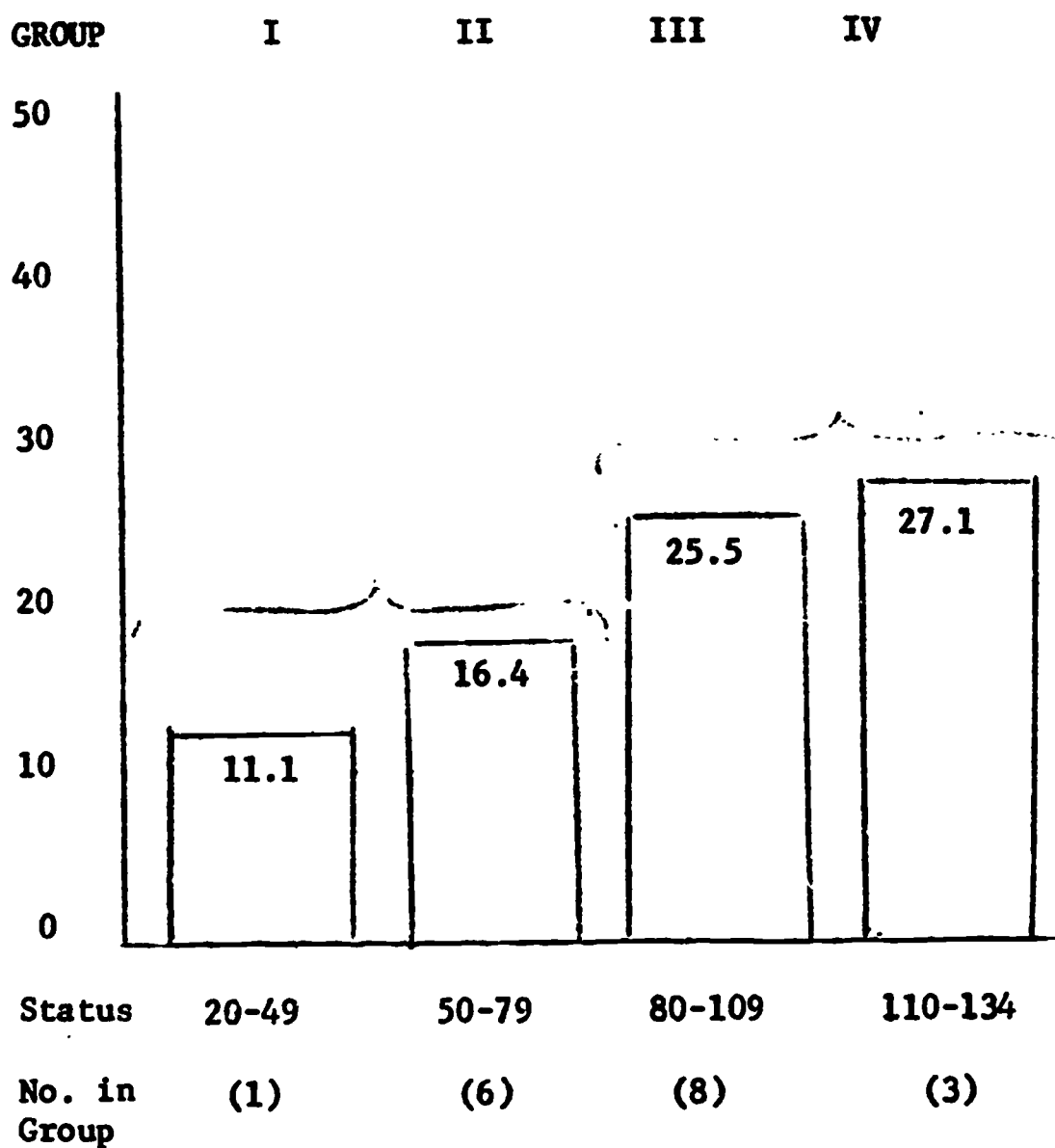
Pronominal Apposition: Children

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[12] There is an insufficient number of teen-agers to divide the sample into adult/ teen-age/child. A preliminary division on this basis revealed that the teen-agers grouped with the adults with regard to the realization of pronominal apposition.

The preceding graph indicates that there is at least a contrast between Group II and Group III. Group I and II, and Group III and IV, however, tend to merge, although the fact tnat there is only one child in Group I makes any interpretation rather tenuous. If, however, the above graphs could be assumed to be an adequate representation of the population, it would be clear that there is only a binary social division for the children with regard to pronominal apposition.

The following graph gives the mean percentages for each social group for the adults:

GROUP	I	II	III	IV

|	I	II	III	IV
	3.2	10.1	25.3	20.7
Status	20-49	50-79	80-109	110-134
No. in Group	(4)	(5)	(6)	(3)
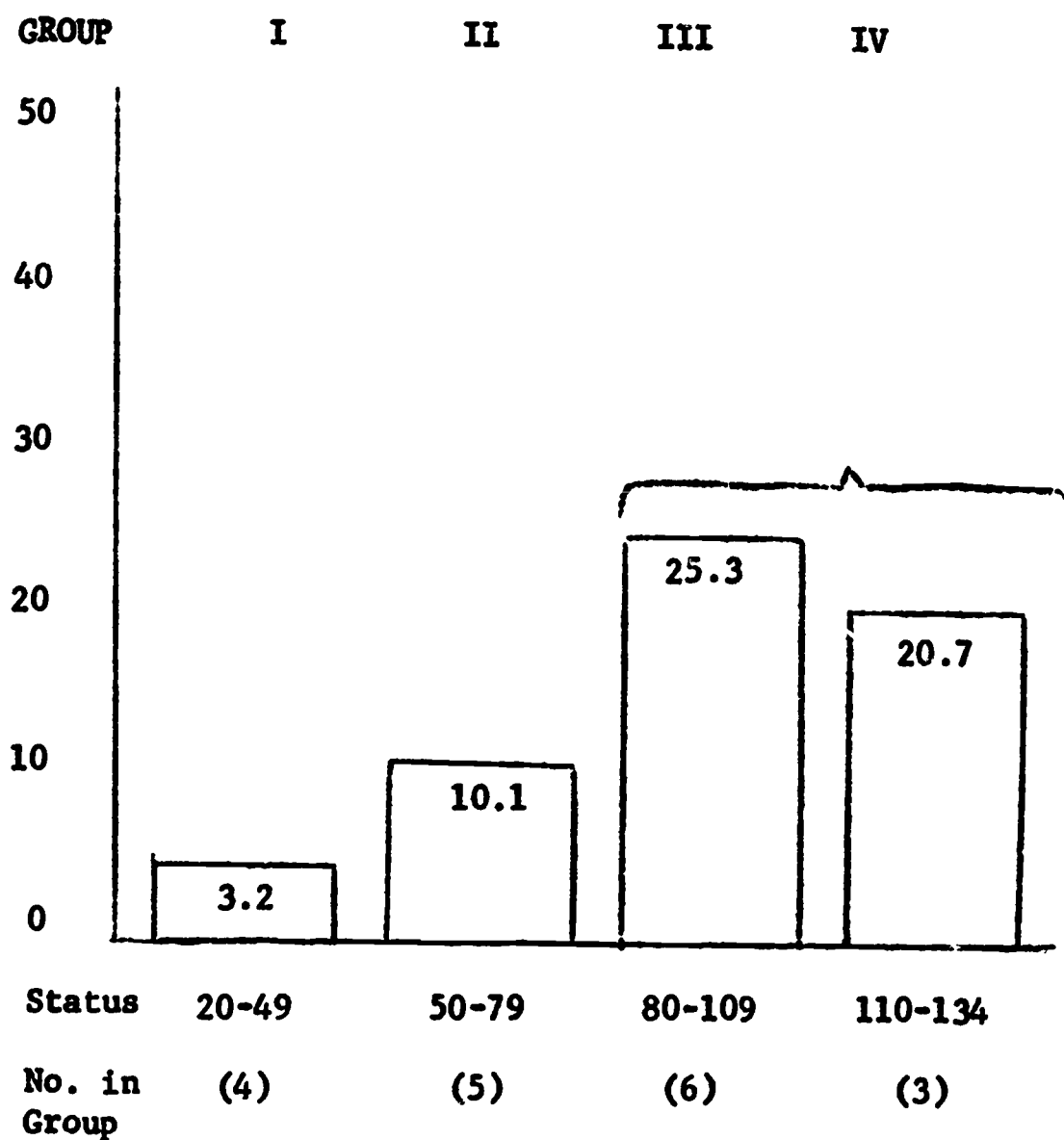
Pronominal Apposition: Adults

One observes in the above graph that there seems to be a more clear-cut contrast among the adults with reference to the first three groups. Groups I, II and III indicate a rather definitive graduation. As with other variables, the lowest two social groups show little contrast.

Now, consider the difference between the adults and children, which is indicated in the following linear graph:

GROUP   I   II   III   IV

```
50


40


30                                          27.1
                                    25.5
                                    25.3    20.7
20
                        16.4

10      11.1        10.1


0              3.2
```

Status   20-49   50-79   80-109   110-134
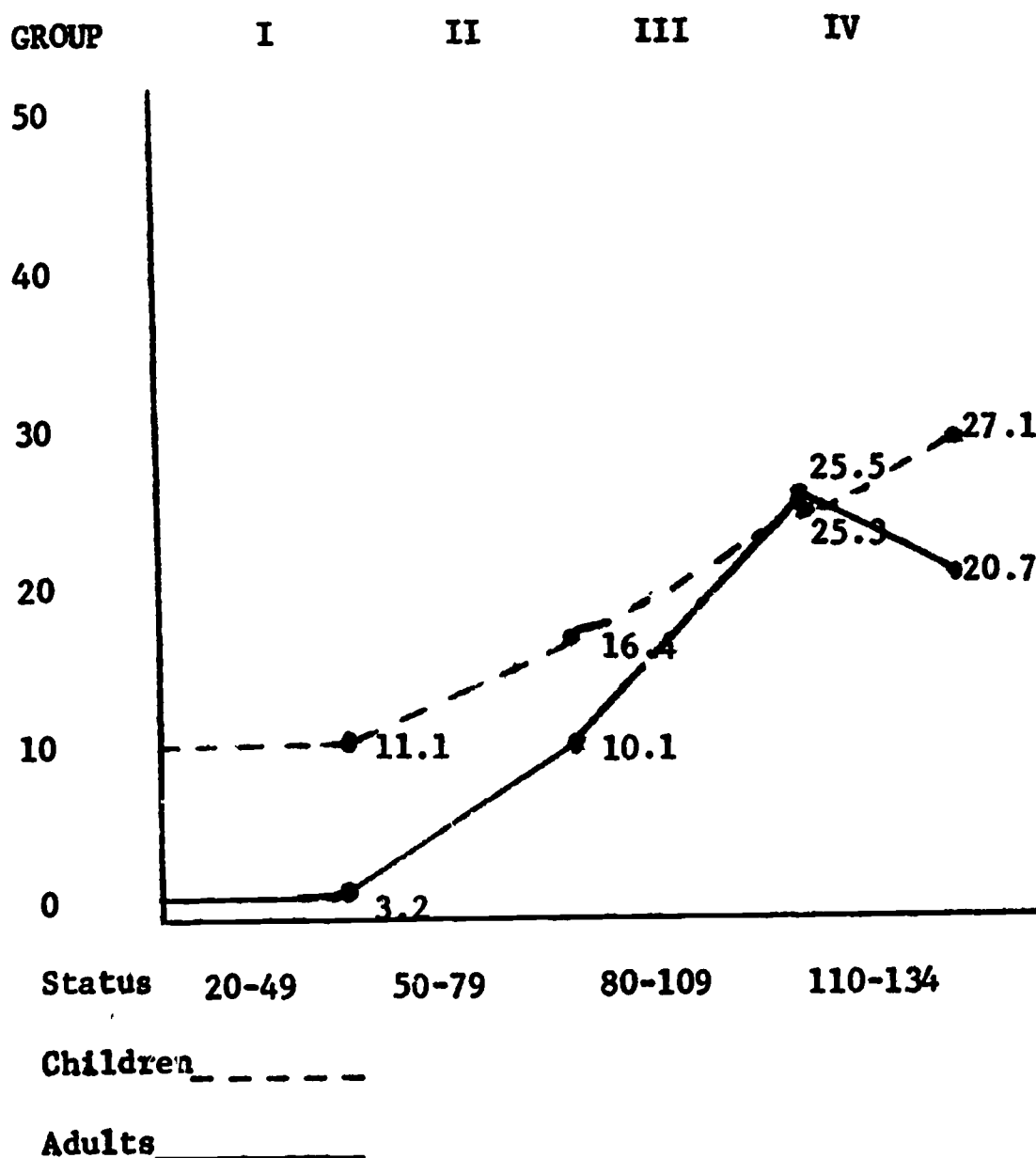
Children_ _ _ _ _

Adults_____

Pronominal Apposition: Children/Adults

In the first two groups, the adults show lower relative frequencies than the children. Also, between Group I and Group II there is a somewhat clearer difference among the adults than the children. It thus appears that one can suggest that among the groups which show an awareness of pronominal apposition as a social index, the adults reveal a finer stratification.

In the lower two social groups, III and IV, no contrast between children and adults can be postulated, thus suggesting that neither adults nor children in the lower social groups indicate a consistent awareness of the social consequences of pronominal apposition.

Sex

Now, attention may be turned to the variable of sex. The following graph gives the mean relative frequencies for the women in each of the social groups:

GROUP	I	II	III	IV


```
50

40

30                              ⌢‾‾‾‾‾‾‾‾‾‾‾‾‾⌣
                              ┌──────┐
                              │ 27.2 │ ┌──────┐
20                            │      │ │ 23.7 │
                              │      │ │      │
                   ┌──────┐   │      │ │      │
10        ┌──────┐ │ 9.2  │   │      │ │      │
          │ 4.8  │ │      │   │      │ │      │
 0        └──────┘ └──────┘   └──────┘ └──────┘
```

Status	20-49	50-79	80-109	110-134
No. in Group	(4)	(7)	(8)	(5)
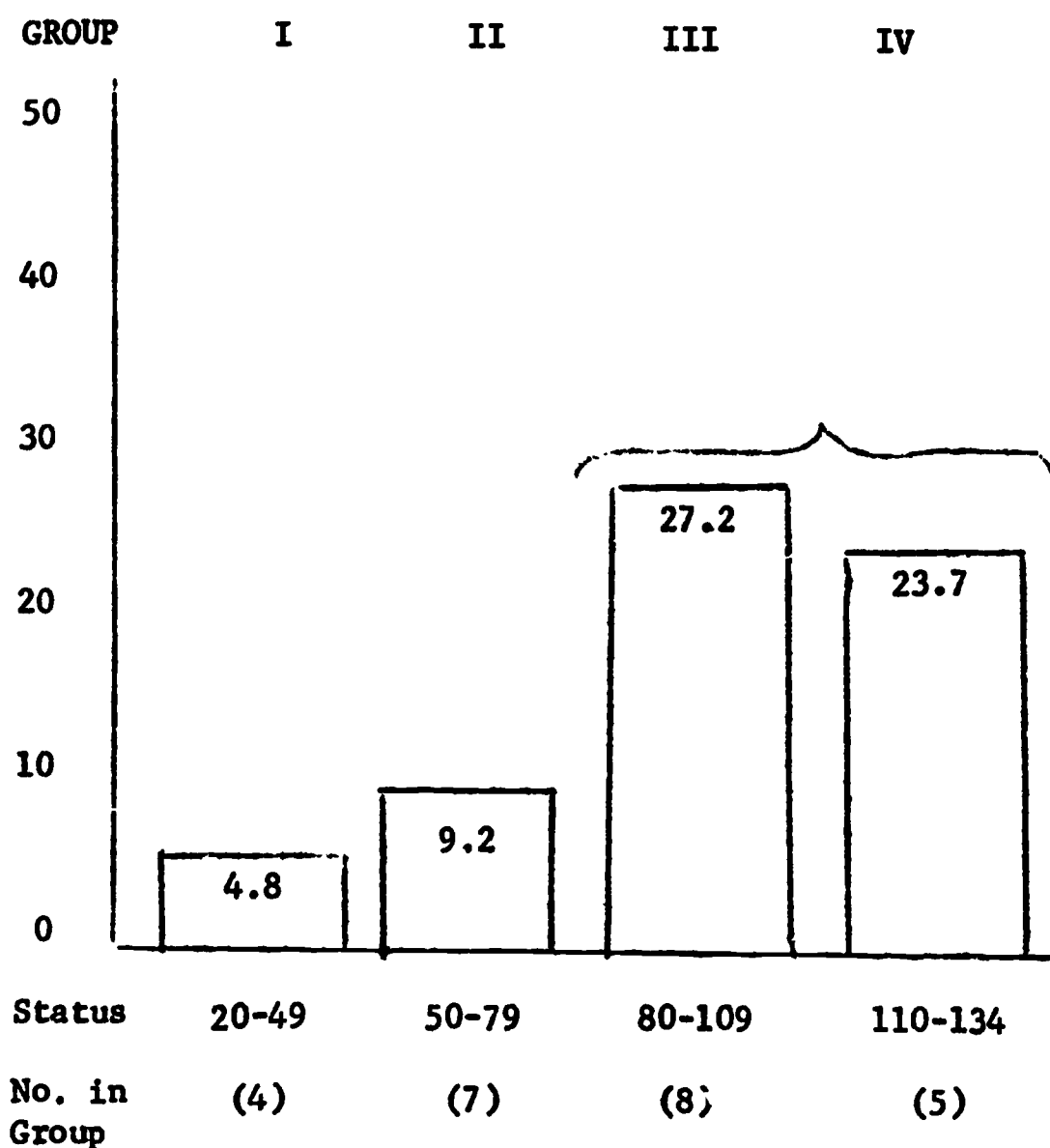
Pronominal Apposition: Female

What is interesting in the above graph is the fact that there is such a defini-tive distinction between Group II and Group III, whereas there is apparent lack of contrast between Group I and II, and Group III and IV. Now compare the following graph for the men:

GROUP   I   II   III   IV

```
50 |
   |
40 |
   |
30 |                    ⌒‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾⌒
   |                  ⌐‾‾‾‾‾‾‾‾‾‾‾      ┌──────┐
   |                           ┌──────┐│ 25.0 │
20 |                  ┌──────┐ │ 23.1 ││      │
   |                  │ 19.3 │ │      ││      │
   |                  │      │ │      ││      │
10 |                  │      │ │      ││      │
   |       ┌──────┐   │      │ │      ││      │
   |       │ 5.0  │   │      │ │      ││      │
 0 |_____│_____│___│_____│_│_____││_____│__
```

Status   20-49   50-79   80-109   110-134

No. in   (1)   (4)   (6)   (1)
Group
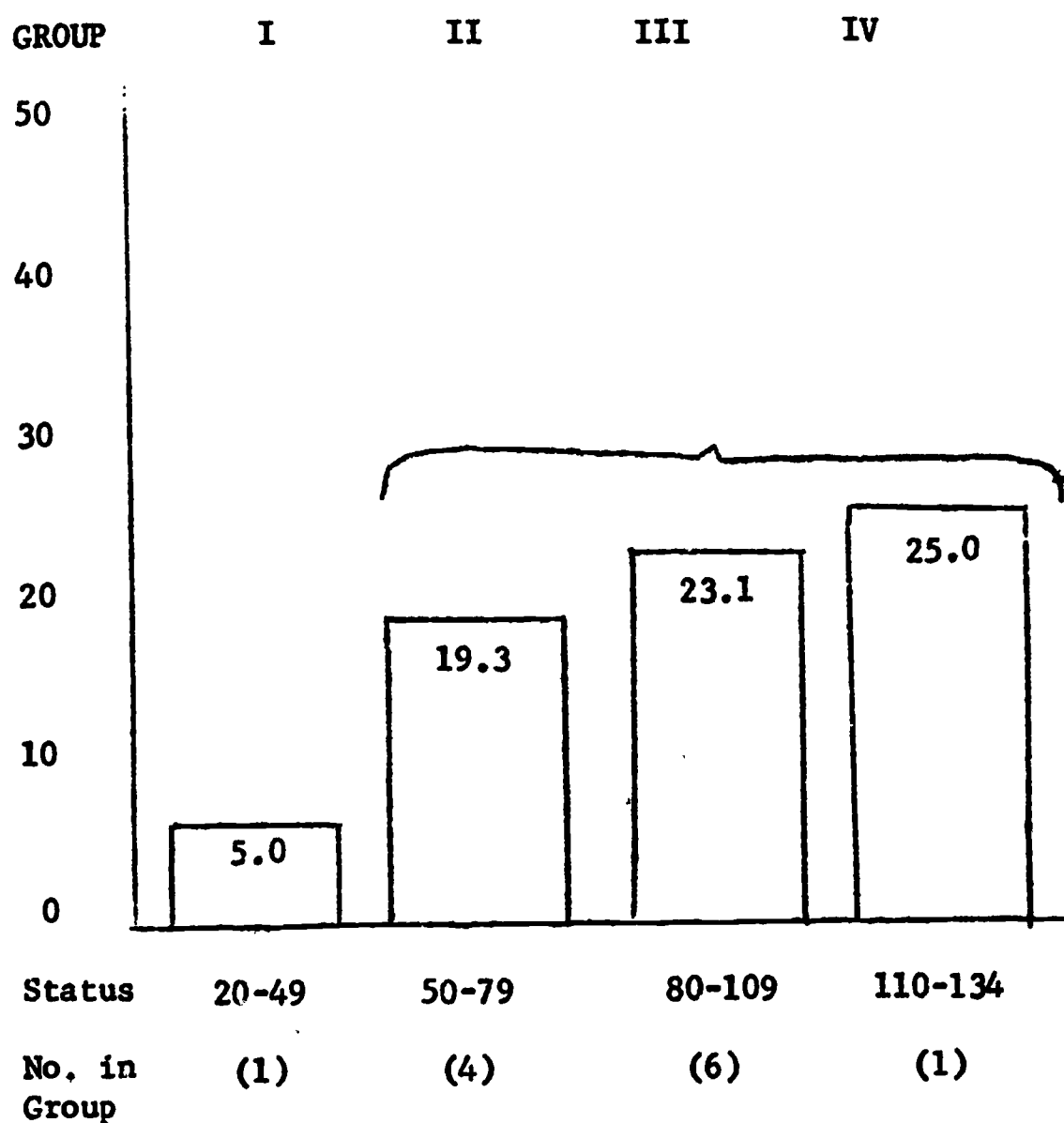
Pronominal Apposition: Male

For the men, as for the women, it appears that only two main social classifica-
tions can be correlated with the relative frequency of pronominal apposition.
However, for the men the contrast appears to be between Group I and the other three
Groups (1I, III, IV), whereas for the women the contrast was between Groups I and II
and Groups III and IV. These differences can be observed in the following linear
graph:
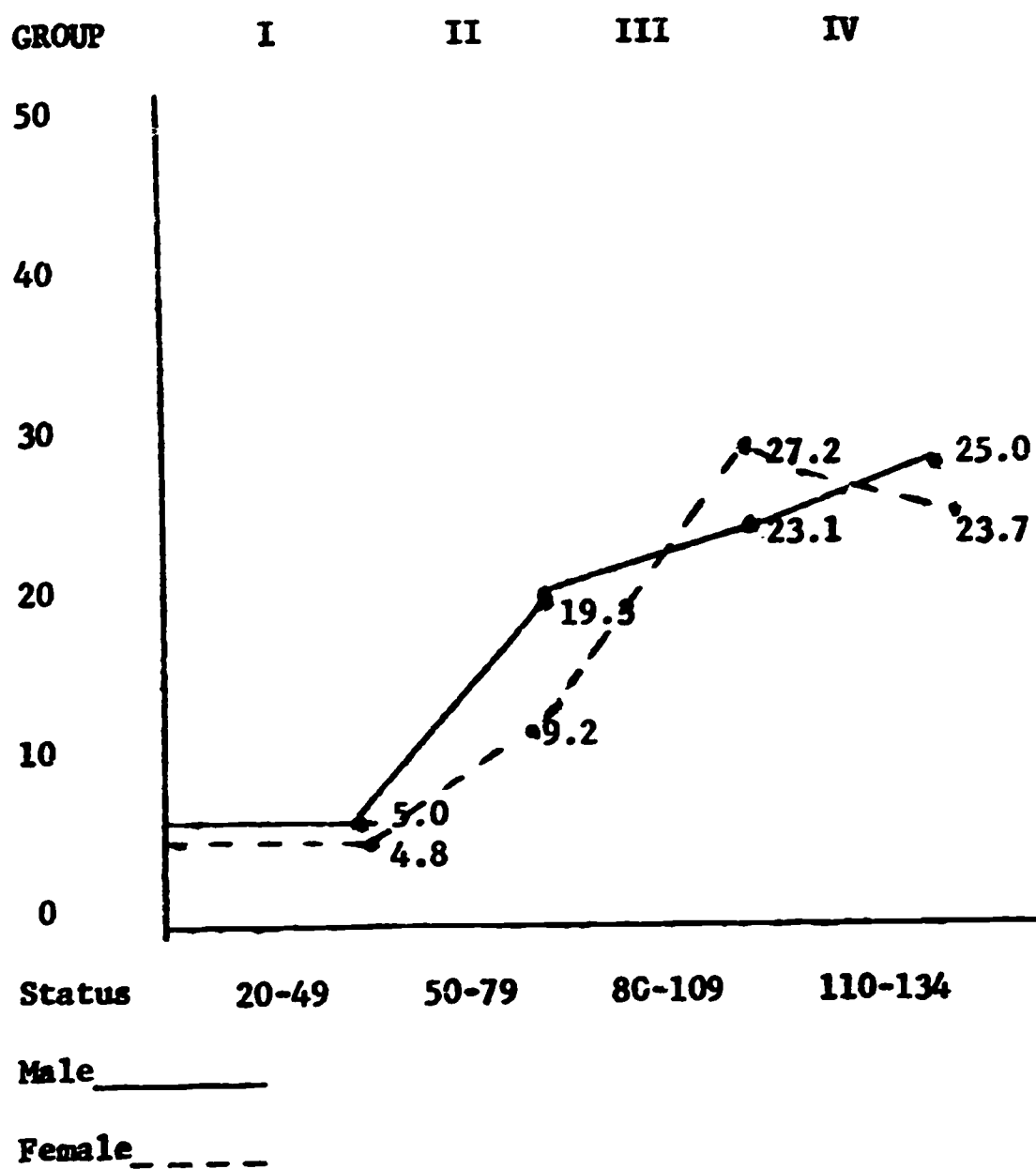
Pronominal Apposition: Male/Female

The above graph then indicates that sensitivity to pronominal apposition as a social index includes a larger social status range for women (namely, Groups I and II) than for men, suggesting the greater sensitivity of women to a grammatical index of social stratification (cf. multiple negation pages 7-23). This applies only to the two upper social groups, since there is no contrast between men and women in the lower groups.

Race

Finally, we may look at the variable of race. The following graph gives the mean percentages for the Negro speakers:

GROUP   I   II   III   IV

| | 5.0 | 22.5 | 27.4 | 21.5 |

Status   20-49   50-79   80-109   110-134

No. in   (1)   (6)   (9)   (4)
Group
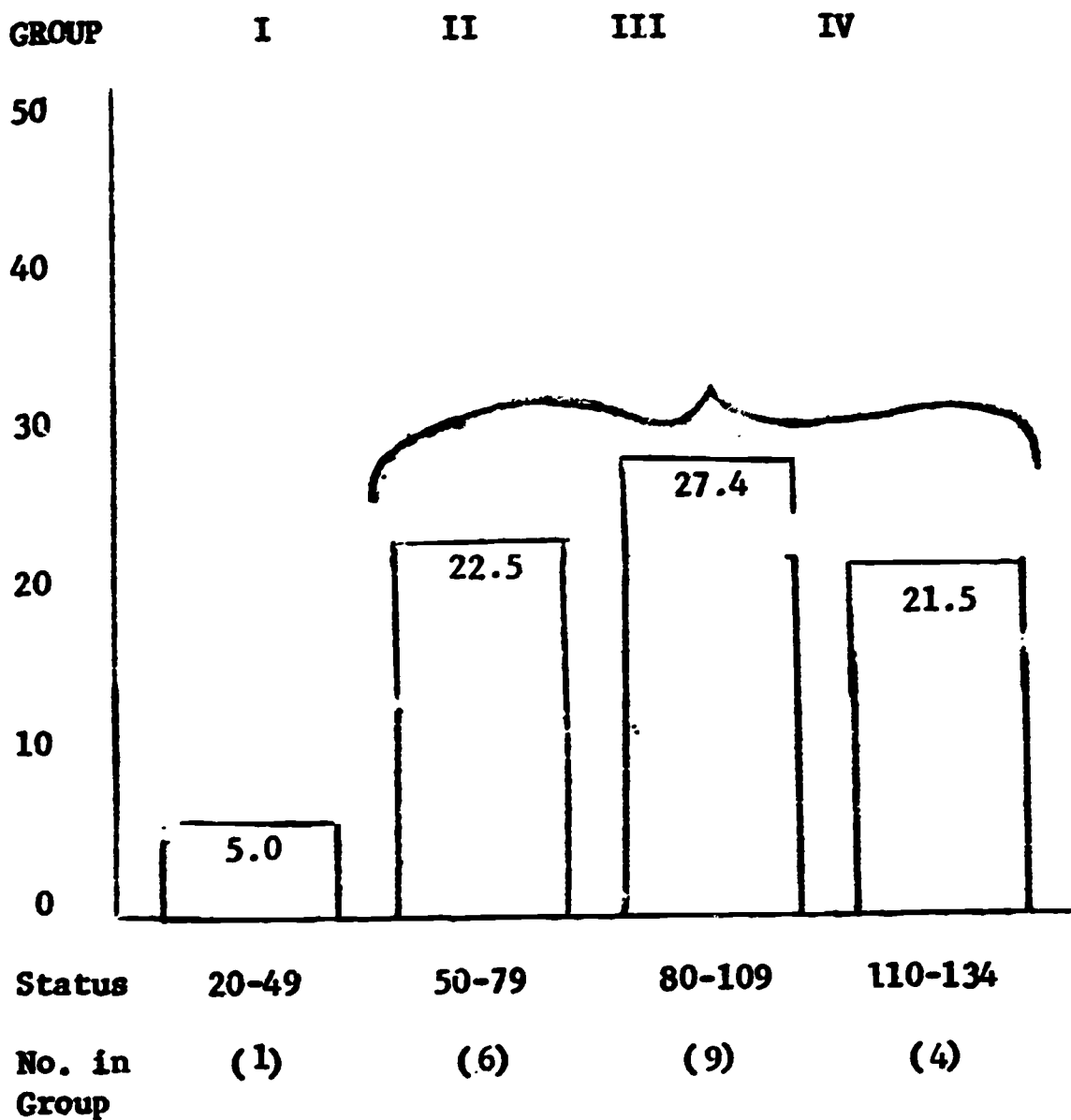
Pronominal Apposition: Negro

It is interesting to note in the above graph that the first group (although there is, of course, a limitation in that there is only one member) is apparently contrastive with Groups II, III, and IV; however, Groups II, III, and IV do not indicate a significant contrast with one another. Thus, one observes that only the highest social group reveals a distinct difference; any contrast between other groups is apparently minimized.

Now compare the relative frequencies for the 20 white informants, given in the following graph:

GROUP	I	II	III	IV

```
50 ┤

40 ┤

30 ┤

20 ┤                        ┌──────┐
   │                        │ 21.8 │   ┌──────┐
   │               ┌──────┐ │      │   │ 17.5 │
10 ┤               │ 11.6 │ │      │   │      │
   │      ┌──────┐ │      │ │      │   │      │
 0 ┴──────┴──────┴─┴──────┴─┴──────┴───┴──────┴──
           4.8
```

Status	20-49	50-79	80-109	110-134
No. in Group	(4)	(9)	(5)	(2)
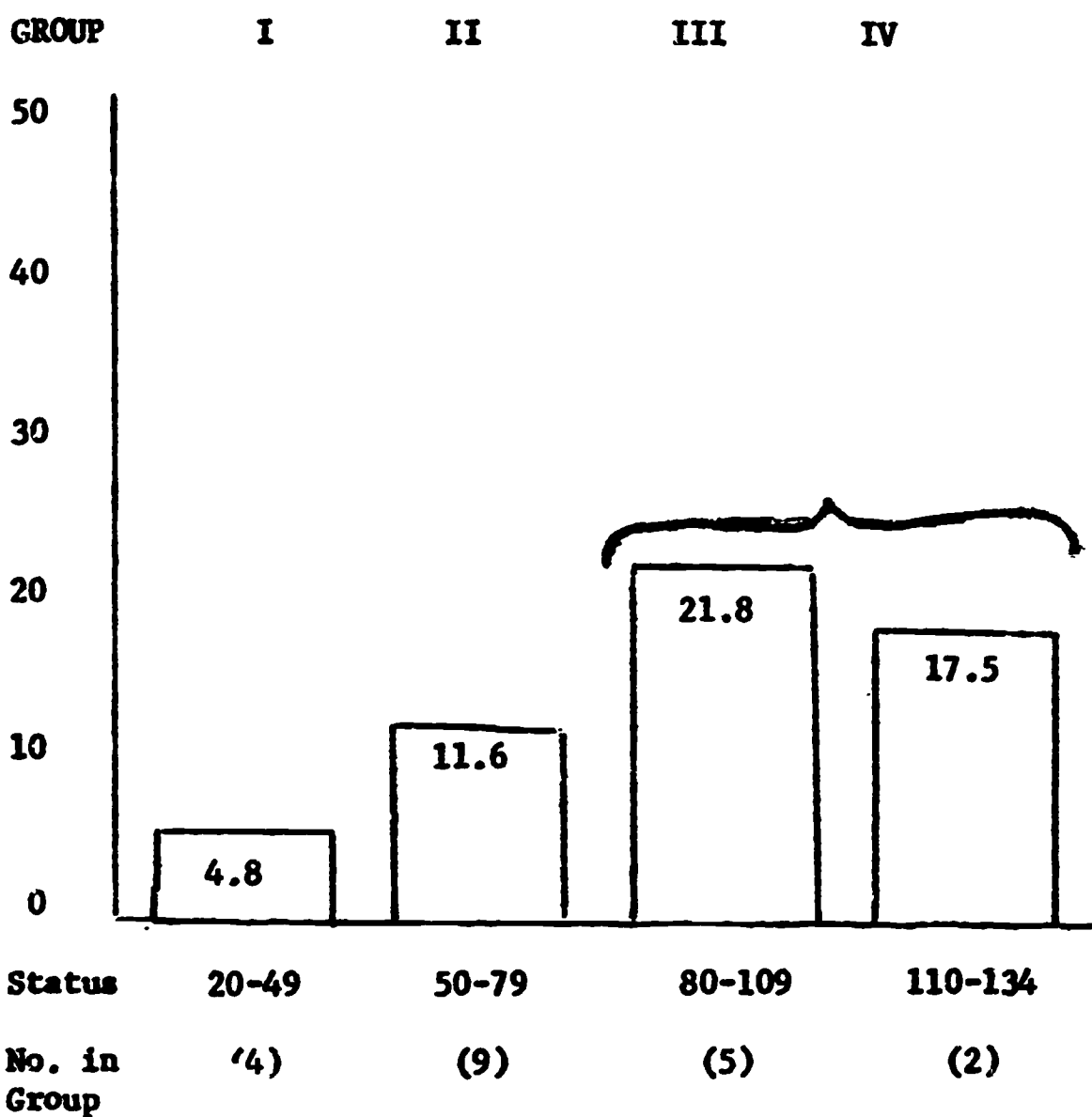
Pronominal Apposition: White

In the white group, a more definite graduation is seen between Groups I, II and

III (10.2). As with other variables, no contrast is found between Groups III and IV.

The difference between the white and negro informants is represented in the

following linear graph:

GROUP   I   II   III   IV

```
50


40


30                              27.4

                        22.5          21.8        21.5
20                                                 17.5

                              11.6
10
                     5.0
                     4.8
 0
```

Status   20-49   50-79   80-109   110-134
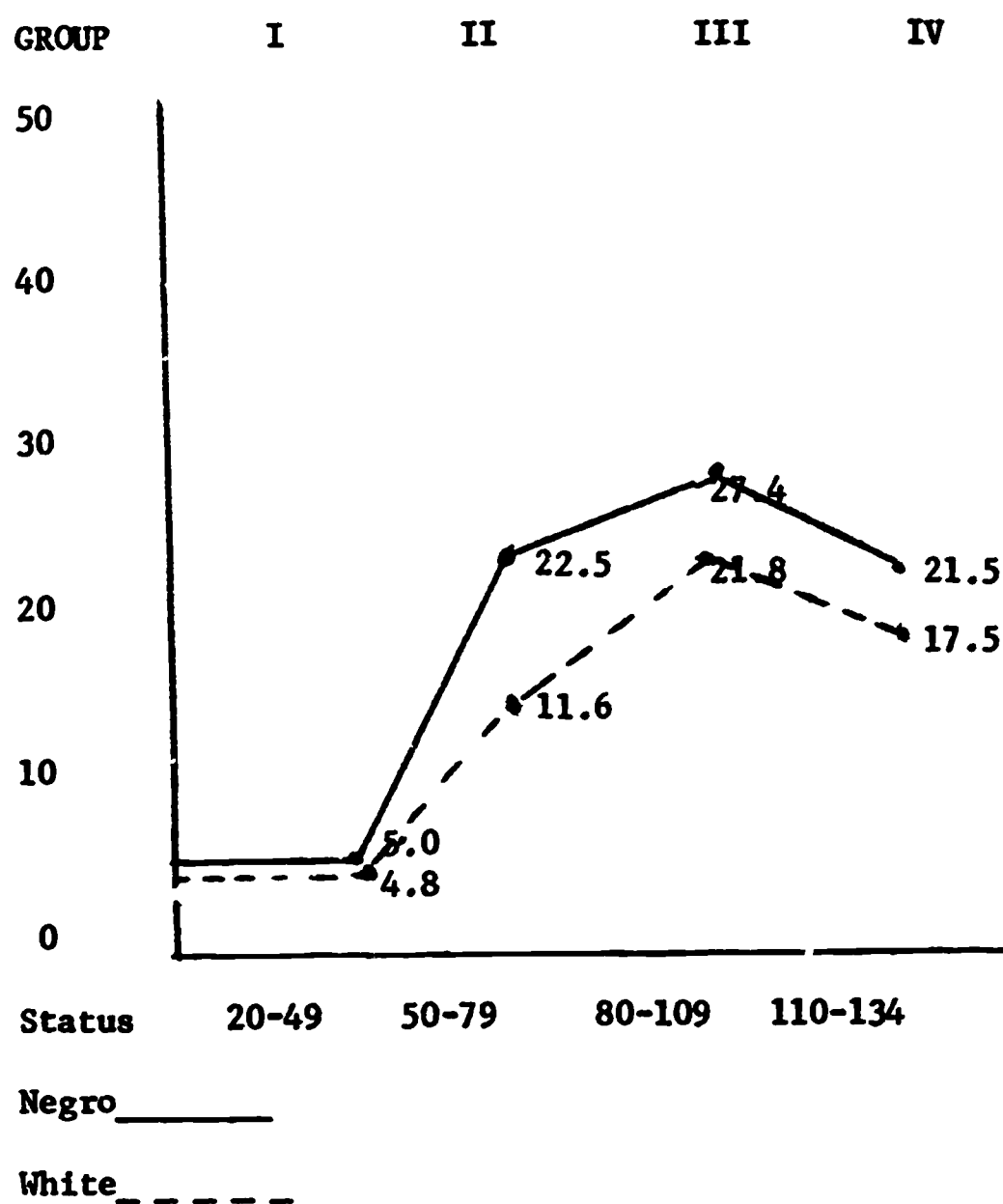
Negro_____

White_ _ _ _ _

Pronominal Apposition: Negro/White

The consistently lower percentage of relative frequency among the white informants suggests the hypothesis that the white informants show a greater sensitivity to the social consequences of the use of pronominal apposition than the negroes. It should also be noted that the relatively lower frequency of white informants is consistent in the two lower social groups; the age and sex variables, on the other hand, showed that the relative frequency was not relevant among the two lowest social groups.

Conclusion

The correlation of pronominal apposition and social stratification indicates some rather interesting similarities and contrasts with the index of multiple negation which was previously described (see pages 7 to 23). For both indices it is apparent that there is a definite correlation between relative frequency of usage and social stratification, at least in the style which was elicited in the interviews.

Furthermore, the variables of age, sex and race, along with over-all social stratifi-
cation, are relevant in describing both indices. Both indicate a greater sensitivity
of females as opposed to males, adults as opposed to children, and whites as opposed
to negroes. The way in which these variables correlate with the different social
groups, however, reveals some interesting contrasts between the two indices. In the
first place, multiple negation shows a "finer" stratification; in the over-all social
stratification by quartiles, it is not at all unreasonable to suggest that all four
groups contrast in terms of the relative frequency of multiple negation. For pronomina
apposition, however, the two lowest social groups indicate a complete lack of contrast
with one another.

Also, the hypotheses of sex, age and race differences were only consistent for
Groups I and II in pronominal apposition, whereas these were more consistent for all
four groups in multiple negation.

How, then, can one account for the fact that both correlate with social stratifi-
cation, but that they correlate in a different manner? One reasonable hypothesis to
account for this difference may be found by viewing these indices in terms of a
continuum of concsious versus unconscious indices. On the one hand, it is evident
that multiple negation is one of the most "conscious" grammatical indices of social
stratification existing in American English. On the other hand, pronominal apposition
does not enjoy the same amount of popularity as a diagnostic grammatical index of
social stratification, despite the continued attempt of educators to eliminate its
use. If one postulates that the more conscious an index is, the finer it will
stratify socially, one can account for the difference in the fineness of stratification
which seems to exist between the two indices.

PHONOLOGICAL INDICES OF SOCIAL STRATIFICATION

Nasal Consonants

One of the immediate goals of the Detroit Dialect Study was to collect data which would contain evidence of the language forms current in Detroit, which could then be used to construct materials that would aid in the improvement of the teaching of English, language arts, and reading in the city's public and private schools. With this goal in mind, the fieldworkers were asked to construct some preliminary notions of what lexical, grammatical, phonological, and syntactic features of Detroiters' speech might be socially distributed. Items on which there was widespread agreement among the fieldworkers would then be assigned priority in the process of analysis.

One phonological phenomenon which was generally suspected by the fieldworkers to be a potential social index was the variety of articulation of the English nasal consonants. Phonemic analyses of English generally identify three nasal consonant phonemes, /m/, /n/, and /ŋ/. In a close phonetic transcription of American English speech, the vowels and semivowels which are next to these consonants are generally marked as nasalized. However, the consensus of the Detroit fieldworkers was that in certain informants' speech, strong nasalization of surrounding vowels and semivowels was frequently retained, but the labial, alveolar, or velar closure for the consonant was either not made at all, or made very weakly.

A study of the kinds of articulation of the English nasal consonants and their distribution in the speech of Detroiters was subsequently undertaken.

Description of Corpus

The first problem faced in the present phonological study was the necessity to select from among the more than seven hundred interviews of the Detroit Dialect Study a sufficient number of informants to assure a fairly wide spread in social level, age, sex, race and region of the city. The group of 36 informants chosen for the grammatical index studies was used, but with a few replacements. It was felt that the passages chosen for examination should be fairly long and should be uninterrupted

by the interviewer, except where such an interruption constituted no more than an encouragement of the informant to be continue. A length of from two and one-half to five minutes was arbitrarily required, since it was felt that a large enough number of occurrences of the nasal consonants would be included in such a passage to show the variety of their articulation and its social distrubution.

Some of the tapes chosen for the grammatical studies proved to lack a long, uninterrupted passage of the sort mentioned above. They were replaced with other tapes of interviews with persons from the same area, of the same race and age. In some cases it was not possible to find suitable informants who were of the same sex as the informant in the original sample, or who were also natives of the city of Detroit. The importance of sex in speech performance was not known at this time, but a nearly equal number of male and female speakers, seventeen and nineteen respectively, was included. A very few persons who were not natives of Detroit were also included in the hope that any divergence in the performance of these speakers from that of the others might suggest whether the variations under study were or were not regionally distributed.

In the attempt to limit uncontrolled variables in the data, it seemed necessary to determine that the passages of speech chosen for analysis were all in the same general style of speech. In his book, The Social Stratification of English in New York City, William Labov describes ways of determining speech styles.[13] He outlines several "channel cues," such as rapid speech, changes in breathing tempo, and laughter, and several "contexts," such as the interview situation or remarks made by the informant to someone outside the interview situation. Occurrence of one or more of the "channel cues" within the "context" of the interview situation marks speech as being in the least "careful" of careful styles as opposed to "casual" styles. It is this

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[13]
   William Labov, The Social Stratification of English In New York City (Washington, D.C.; Center For Applied Linguistics, 1966), pp. 90-112.

least careful of careful styles in which the passages of speech under analysis are believed to occur.

Description of Problem

Most phonemic analyses of American English identify three nasal consonant phonemes, /m/, /n/, and /ŋ/. For the purposes of the present investigation, the position of the nasal consonant in the syllable is important. Charles F. Hockett describes the syllable system of English as the "peak" type, in which the occurrence of a phoneme of a particular class, that is, vowel, constitutes a syllable peak.[14] The occurrence of a vowel phoneme peak within a phonological unit then defines that unit as a phonemic syllable.

In the speech of the Detroit informants, the three nasal consonants appear to contrast almost invariably in syllable initial position. However, when the nasal consonant phoneme is in syllable final position, or is the first member of a syllable final consonant cluster, an interesting variety of realizations occurs, influenced by the phonological context. Instead of describing this variation as an alternation of phonemes, it is perhaps better to postulate a unit such as that referred to by Benjamin Elson and Velma Pickett, a morphophoneme.[15] The nasal consonant morphophoneme may be written |N|, where the vertical lines indicate morphophoneme, and the capital letter stands for nasal consonant.

In the descriptions below, the phoneme which occurs in the syllable in focus when the word is uttered in isolation will be called the "normative" phoneme. When a non-normative phoneme is mentioned, the normative phoneme with which it is in variation will be identified by a superscript letter. For example, /m/^{n} indicates an occurrence of the phoneme /m/ where the normative phoneme is /n/.

14
   Huckett, Charles F. A Course in Modern Linguistics (New York: MacMillan, 1958), p. 99.

15
   Elson, Benjamin and Velma Pickett. An Introduction to Morphology and Syntax (Norman: SIL, 1965), p. 39

Perhaps as a consequence of the fact that the data under study here consist. of larger phonological units than citation forms, one other phenomenon occurs. This is the realization of the morphophoneme |N| as nasalization of vowels and semivowels, with concurrent absence or lenis articulation of the nasal consonant phonemes. The nasalization phenomenon poses certain descriptive difficulties. On the one hand, there does not seem to be sufficient motivation for proposing nasalized vowel phonemes which contrast with oral vowel phonemes. On the other hand, the conventions of biuniqueness and linearity in traditional phonemic analysis would seem to militate against the postulation of a nasalized vowel allophone shared by all three nasal consonant phonemes.

For the purpose of describing the Detroit data, however, it seems most reasonable to choose the latter alternative, and to propose that the three nasal consonant phonemes do share one allophone, [Ṽ] . As it is used in this work, morphophoneme means the class of syllable final nasal consonants which is made up of the morphophonemes |m|, | n|, and |ŋ|, each of which may be realized as the phonemes /m/, /n/, or /ŋ/. The nasalized vowel allophone varies with the phonemes listed in the examples when those phonemes in the citation forms or "standard" pronunciations of the examples occur in the given environments.

Description of Data

The following examples from the speech of the Detroit informants are intended to illustrate the kinds of phonological phenomena which seem to require the postulation of the morphophoneme |N| and nasalized vowel allophone [Ṽ], which is shared by the three nasal consonant phonemes /n/, /m/, and /ŋ/. A close phonetic transcription is used in order to avoid obscuring any facts which might be lost in a phonemicized presentation.

1. Morphophoneme

    a. |N| may be realized as /n/ when /n/ in the citation form of an example is in syllable final position or as the first member of a consonant cluster

coda: when followed by alveolar stops, vowels and semivowels, pause or juncture. This conclusion is based on the following examples of phonetic occurrences:

"...and he came there..."   [ɬni'kʰeɪ̃n'deɬr]

"...working. going around..."   ['wɨrkĩn'ɬgoɬəˈraʊ̃n]

"...he's going to die..."   [ˌhiz'gɜ̃nəˈdali̞]

"...getting into..."   ['gɪtn̥'ĩntʰu]

"...trying to find..."   ['c̬ɹaɪɬntəˈfaɪ̃nd]

"...fighting."   ['faɪtn̩#]

"...living with us..."   ['ɫ̂ɪʳɬn̩ˈwɪθəs]

b. |N| may be realized as /m/ when /m/ in citation forms is in syllable final position or is the first member of a consonant cluster coda: when followed by bilabial or labiodental stops, fricatives and semivowel, or when preceded by bilabial consonants or glottal stops. The following phonetic examples illustrate the basis for this conclusion:

"...back and paint..."   ['bækm̩'pʰeɪ̃nt]

"...in between..."   ['ĩmbɨ'tʰwĩn]

"...when we used to..."   ['hwɨ̃m'wiˈyustə]

"...had conflicts..."   ['hɛəd'kʰãmfɫ̂ɪks]

"...seven-thirty..."   ['sɛbm̩'θɨrti#]

"...something you got..."   ['sã̃mʔm̩'yuˈgaɬ]

"...something but..."   ['sã̃mθɨm'baɬ]

"...taking pictures..."   ['tʰeɪkɨ̃m'pɪkčɨrz]

"...working for the..."   ['wɨrkɨ̃mfɨrðɨ]

c. |N| may be realized as /ŋ/ when /ŋ/ in citation forms is in syllable final position or is the first member of a consonant cluster coda: when followed by velar stop consonants, or when preceded by velar stop consonants. This conclusion seems warranted by the following examples in phonetic transcription:

"...and gave it..." _æŋ'geɪvɪt_

"...kept on coming..." ['kʰɛpˢ̌ɔ̃ŋ'kʰʌ̃mɪ̃n]

"...reckon you might..." ['rɛkŋ'yu'mãɪt]

"...sometimes cartoons..." ['sɨmtʰaɪ̃ŋ'kʰɑr'tʰũnz]

"...I'm going to produce..." ['ʌ̃ŋgʌ̃'ʔɔrə'dus]

2. Allophone

a. [Ṽ] is an allophone of /n/ when /n/ in citation forms is in syllable final position or is the first member of a consonant cluster coda: when followed by all consonants except voiced stops, all vowels, and pause or juncture. This conclusion is illustrated by the following examples, which would probably contain the allophone [n] in the citation forms of the units shown in phonetic transcription:

"...and he started..." ['ʔæ̃ĩ'startɨd]

"...Man from Uncle..." ['mɛ̃ãfrɨ̃m'ʌ̃ŋkɨ̃lᵛ]

"...come down,...." ['kʰʌ̃m'dãʊ̃ ‖]

"...and when..." [ʔæ̃ã'hwɨn]

"...and wants..." [ʔæ̃ã'wãnts]

"...and he shoots him..." [ɪ̃ĩ'šutsɪ̃m]

"...turns around and sees him..." ['tʰɨ̃rzə'rãʊ̃ĩ'sizɨ̃m]

"...turns around to..." ['tʰɨ̃rzə'rãʊ̃tʰu]

"...and you go..." ['ɛ̃yɨ'goʊ]

"...captured one." ['kʰæpčɨr'ʔwã̃ #]

"...when I saw it..." ['hwɨ̃'aɪ'sɔɨt]

b. [Ṽ] is an allophone of /m/ when /m/ in citation forms is in syllable final position or is the first member of a consonant cluster coda: when followed by juncture, [a], [w], [h], [š], [z], and [d]. The following examples would contain the allophone [m] in citation forms:

"...told him did he..."   [ˈtʰɔɫᵛɨ̃ˈdɪdi]

"...comes in..."   [ˈkʰɔ̃zˈɪ̃ə̃n]

"...time we put..."   [ˈtʰaɪ̃wiˈpʰʊt]

"...told him he was..."   [ˈtʰʊɫᴧ̃ɪ̃ˈhiwɨz]

"...stretching him..."   [ˈsčrɛčʰɪ̃nɪ̃ ǁ]

"Boom!"   [bṹː#]

"...every time she comes..."   [ˈɛvrɪˈtʰæ̃ˈšikʰɔ̃m]

"...one time I was going..."   [ˈwɔ̃nɫæ̃ːɨzˈɡəɪ̃ŋ]

c.   [Ṽ] is an allophone of /ŋ/ when /ŋ/ in citation forms is in syllable final position or is the first member of a consonant cluster coda: when followed by all consonants except voiced stops, all vowels, and pause or juncture. The following examples in citation form would contain the allophone [ŋ]:

"...anything he was..."   [ˈʔæ̃niˈθɪ̃ˈhiwɨz]

"...painting of the..."   [ˈpʰeɪ̃ntɪ̃əvðɨ]

"...working on it..."   [ˈwɨrkʰɪ̃ˈɔ̃nɨt]

"...fighting with them..."   [ˈfaɪtɪ̃ˈwɪθðɪ̃m]

"...arguing for some..."   [ˈarɡyuɨfɨrˈsɔ̃m]

"...something wrong."   [ˈsɔ̃mθɪ̃ŋˈrɔ̃ṍ#]

"...marking I got..."   [ˈmarkɪ̃ˈaɪˈɡat]

"...making some..."   [ˈmeɪkɪ̃ˈsɔ̃m]

"...looking sloppy."   [ˈɫᴧʊkɨˈslᴧapʰi#]

"...coming after him..."   [ˈkɔ̃mɨˈæftɨrɨm]

The strange assortment of contexts above in 2.b. is probably a consequence of the fact that /m/ is the least frequently occurring of the nasal consonant phonemes. It seems quite possible that a much larger body of data would show the nasalized vowel occurring as an allophone of /m/ in the same contexts which were noted for /n/ and /ŋ/.

One exceptional occurrence which should be noted, though, is that of the nasalized vowel allophone of /m/ preceding [d]. This is the only instance in the data of any

[Ṽ] before a voiced stop consonant without any pause or juncture. The data is not sufficiently extensive to afford an explanation. Spot checks of the occurrences in the speech of persons of lower social levels of nasal consonants before voiced stops do suggest a hypothesis, however. It seems that an explanation might be that most frequently in such positions the nasal consonant is retained and the voiced stop is absent, or perhaps realized as length in the nasal consonant. Examples would be such things as ['bæ̃n:+ɟ], ['rã̃m:lʷ], or ['bõ̃n:lʷ]. Much more extensive research is needed to test this hypothesis.

Procedures

Standard orthography is a sufficiently accurate key to the citation forms of English nasal consonant phonemes so that the selected passages could be typed in it as a reference for the analysis. The nasal consonants were then marked on the typed page and the phoneme or allophone which was present on the tape was indicated. For further comparability, the passages were then timed with a stopwatch and divided into minutes, with long silences and interruptions excluded. No significance was attached to the simple number of occurrences per minute of each of the nasal consonants, since uncontrollable semantic, syntactic, and contextual variables applied. A range of from two minutes and twenty seconds to seven minutes and seven seconds was measured, though it should be noted that the latter was very unusual. The next longest passage is only four minutes and seventeen seconds.

The potential nasal consonants were marked on the typed page and counted. The totals were listed on a separate sheet in columns by minute, so that the final row might represent as little as three seconds of actual time.

The count was aided by the fact that English orthography contains very little ambiguity in its representation of nasal consonants. That is, an $/m/^m$ is invariably represented by the graph 'm'; and $/n/^n$ is invariably represented by the graph 'n'; and an $/\eta/^\eta$ is nearly always represented by the graphs 'ng'. Where $/\eta/^\eta$ is represented

by graphic 'n', it is invariably followed by one of the several graphs or graphic

sequences which represent the velar stop consonants in English.

At this point two distinct advantages of the tape recorded interview for this type

of work became apparent. First, at times the nasal consonants occur so rapidly and

so close together that no on-the-spot transcription could hope to identify all of

them accurately. The taped interview is available for replay as often as necessary

until the tape wears out from use. Second, an operation which can never be reliably

performed with the cooperation of the informant can be done with the proper tape

recorder. The particular passage that is of interest can be played at a speed half

or one quarter as fast as the speed at which it was recorded. This results in a

certain amount of distortion of various sorts but some of this is ultimately very

helpful to the analyst. Many of what might be called corollaries of the production of

particular sounds become emphasized or high-lighted. Aspiration and the lack of it

are very obvious, nasalization and points of articulation are more accurately iden-

tified, and very short sounds in terms of real time, either vocalic or consonantal,

can be heard. The identification of points of articulation was very important for

the present study. Although a tape recorded $/m/^m$ is fairly easy to distinguish from

an $/n/^n$ or $/\eta/^\eta$ the latter two are sometimes difficult to distinguish from each other.

Slowing down the tape also makes it obvious whether there has been actual solid

closure for the production of a nasal consonant or not. A few of the tapes which

represented informants at the top, middle, and bottom of the social level scale for

the sample were examined to see if some factor other than non-linguistic might account

for the variety of nasal consonant occurrences. It was found that no apparent con-

trast between the social levels in the distribution of the nasal consonants in stresse

and unstressed units, both word and clause, or in the various word classes could be

seen.

Consequently it was decided that a straightforward percentage of the potential

phonological inventory of nasal consonant segments which were realized by either a

[Ṽ] or one of the three nasal consonant phonemes would be most useful. That is, the phenomena under investigation are not believed to be affected in different ways by their distribution in higher level units in the speech of persons of different social levels.

The realization of the [ṽ] should be understood to consist of two kinds of phenomena. It includes those instances of nasalization where the citation form of the nasal consonant is intervocalic. And it also includes those instances where the citation form of the nasal consonant is followed by a homorganic stop, fricative or affricate consonant. The latter may perhaps best be called lenis articulation or absence, since in such cases it is not possible, using the ear alone, to make sufficiently precise measurement of the segment to say that it is or is not definitel present.

Finally, it must be remembered that the realization of phonemes other than the normative phoneme never, or almost never, occurs syllable initially. However, the counts and percentages below include both syllable initial and syllable final positions. Consequently, it is not necessary to attempt to resolve the problem posed by interludes. Unless there is a significant difference between speakers in the ratio of syllable final to syllable initial occurrences, which seems highly unlikely, the inclusion of both will not distort the examination of the data.

Vowel Nasalization

After compiling the figures representing the percentages of potential nasal

consonants realized as nasalization of contiguous vowels, a first attempt was

made to correlate the informants' performance with their social level numbers.

Figure 2 illustrates the results. It is difficult to see anything more than a

general rise in the percentage of occurence of this allophone as the social level

descends, when the figures are simply listed in tabular form.

One interesting fact is immediately obvious, however; that is, that there is no

informant at any social level whose speech performance does not contain at least

some instance of the realization of nasal consonants as nasalization of contiguous

vowels. The $[\tilde{V}]$ is therefore not a social index which operates in terms of simple

presence or absence in speech. It is instead necessary to compare percentages

of nasalization at the various social levels.

In Figure 2 are also shown the figures for percentage of realization of all

phonemes other than the normative added to the percentage of $[\tilde{V}]$. With few

exceptions, these figures seem to be no more than a slightly higher number.

There are four informants whose percentages of both phenomena seem to be

very much lower than those of other persons at nearby social levels. Although

there is some danger in any research project in attempting to explain those facts

which do not seem to fit the pattern, it was felt that perhaps some non-linguistic

data could suggest reasons for the extreme divergences of these four informants.

The informants at social levels 81 and 104 are both children whose parents

had recently moved to Detroit. In one case, the head of the household was working

on the assembly line at an automobile factory, though at one time in his life,

he had been a teacher. It seems reasonable to suggest, then, that the social level

numbers may not accurately determine the ideal position in Detroit society for these

two families. These families may not have lived in Detroit long enough to have

found their proper position in residence and occupation.

Figure 2.   Social distribution of non-normative phonemes and $[\tilde{V}]$

Social Number	Percentage of $[\tilde{V}]$	Percentage of Non-normative Phonemes and $[\tilde{V}]$
20	4.1	9.7
37	2.9	3.4
41	9.4	9.4
54	2.1	3.3
59	.6	1.3
59	6.2	7.5
60	10.8	13.4
63	4.2	8.4
65	7.2	14.4
71	2.9	9.7
74	5.7	9.7
74	7.3	15.1
74	7.4	9.7
77	11.4	15.9
78	16.8	23.9
80	12.0	16.9
81	2.5	6.2
87	20.8	29.6
92	11.5	18.6
97	10.9	17.1
97	12.4	16.4
98	17.9	25.9
99	4.3	5.4
99	6.9	8.9
100	17.6	25.5
102	25.9	33.3
103	11.8	19.9
103	22.7	28.4
104	.7	1.9
108	19.3	24.4
108	10.0	13.6
109	13.2	21.0
109	13.3	16.0
112	8.1	15.4
113	12.5	16.6
134	15.4	27.5

Of the two informants at social level 99, one is a white girl, the other a negro girl. The white girl lives in a part of the city where white residents seem generally either to have speech patterns very like those of the negroes, or to have extremely precise articulation, in an apparent effort to emphasize their difference from the negroes.

The negro girl has a special physical difficulty which could quite conceivably affect the nasal aspects of her speech. A short time before the interview, her nose had been badly injured in an accident.

Those who do not seem to fit in the apparent pattern of percentages of non-normative occurrences thus have in each case some reasonable non-linguistic data which suggests why they fail to fit. This fact is indicative of the level of confidence which apparently can be placed in the social stratification charts for these phenomena.

Since it is difficult to make significant generalizations on the basis of data in tabular form, the percentages were next transferred to a line graph, which appears in Figure 3. Social level numbers run from left to right on the bottom line of the graph, while percentages of $[\tilde{V}]$ from about .6% to 26% are represented vertically.

The general trend from low percentages at the upper social levels to high percentages at the lower social levels is still the most obvious fact about the data. The four informants who do not fit the general pattern well are the most outstanding divergences from this line. And when the line indicating the social level median is drawn in, it can be seen that the shift from generally low percentages to generally high percentages occurs very near the median.

From the range of non-linguistic data available one feature which could be checked as a potential stratifier of the sample was race. And it does seem to be true that the nasalization phenomenon is commoner among the negro informants in this study than among the whites.

Figure 3. Social distribution of [V] : line graph
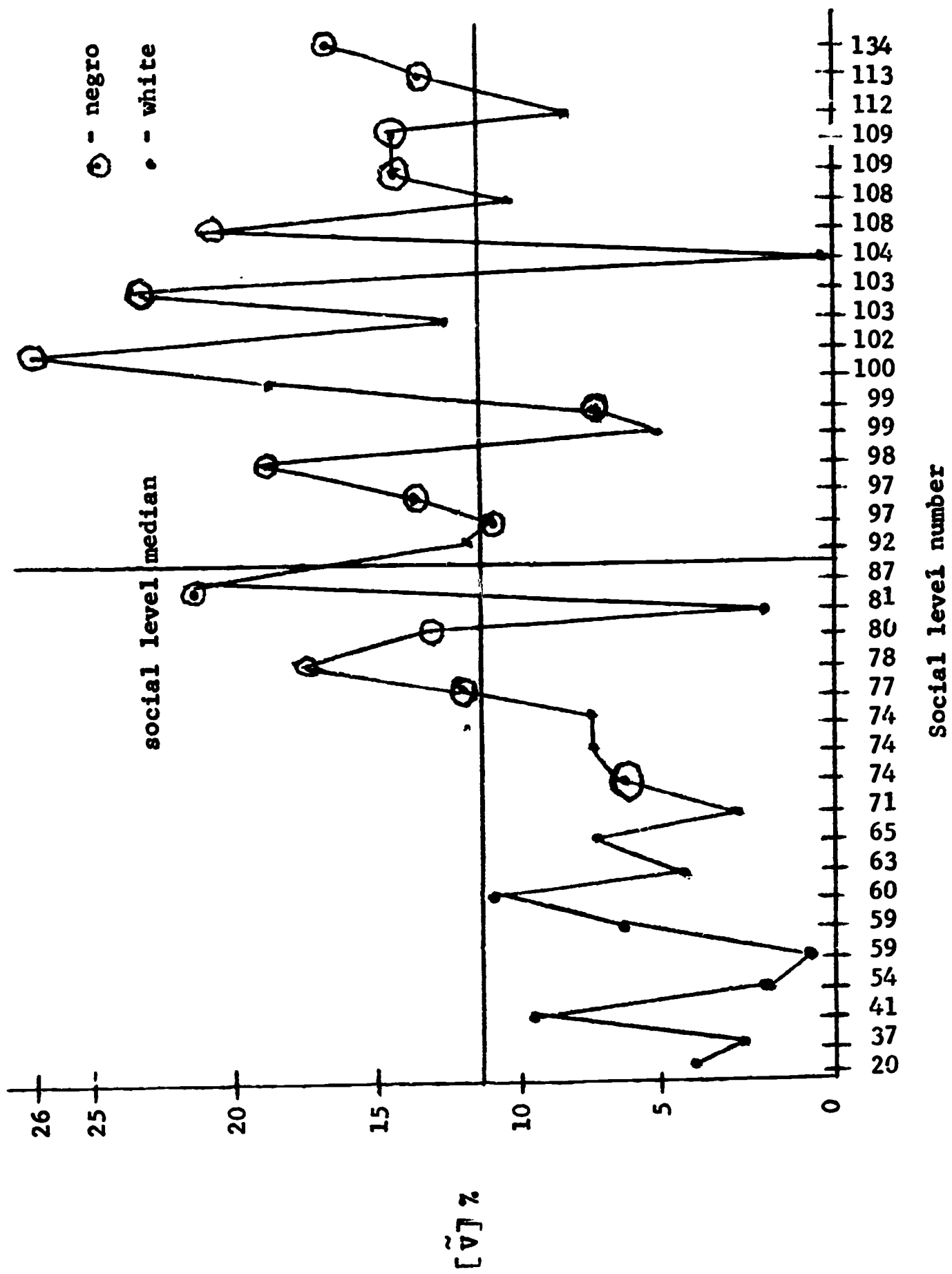
This is not to say, however, that the $[\tilde{V}]$ is a feature of "negro speech." It is rather to say that the phenomenon is basically stratified by social level, but that in our society there are more negroes than whites at the lower social levels. Negroes in the United States may be said to have generally less education, lower income, less prestigious jobs, and more crowded and dilapidated dwellings than whites. Since these are the factors used to establish social level numbers for the Detroit informants, it is not surprising that there are more negroes than whites in the lower social levels of the sample.

Here and elsewhere in this research, then, the comparison of negro and white informants is not intended to show that there is a "negro dialect." Instead it should be understood as a reflection of the fact that even within given social level groups, there are at least two identifiable speech communities, possibly better called ethnic groups. One of these groups is made up primarily of white persons, while the other group is mostly negro.

One good reason for postulating speech communities which are not exclusively racial is that at least one white informant in the present sample, and several of the negro informants, exhibit language behavior which would tend to identify them as members of the group which is made up predominantly of persons of the other race.

Informant number 216, for example, who is a white female, has those features in her speech which are characteristic of the predominantly negro community.

The social level mean for this group of informants is 84.5. Only four persons of the seventeen in the sample above this level are negroes. To show that the $[\tilde{V}]$ is a feature more common in the negro speech community than in the white speech community, it would be necessary to divide the sample into different social groups which contain members of both communities. If there is then found to be a contrast in each level between negroes and whites in percentages of $[\tilde{V}]$ is a characteristic of the negro speech community.

With a total sample population of only 36 informants, including members of two ethnic communities, it does not seem feasible to divide them into more than four social groups. A division was made into quartiles of the sample population. There are no negro informants in the upper quartile. Figure 4 illustrates the mean percentage of [V̰] for whites and negroes of each of the four quartiles. The population represented by each column is indicated below it in parentheses.

The first quartile contains no negroes, and is thus not relevant for the purpose of this check. Though there is only a relatively small difference in the third quartile between the ethnic groups, there is a wide difference in the second and fourth quartiles. This fact suggests the hypothesis that the [v̰] is not only a feature of speech which is stratified socially, but also a feature which indicates a difference between ethnic speech communities.

The peaks and valleys of the line graph make it difficult to determine how many social groups can be said to stratify on the basis of the [V̰]. Consequently, the social level numbers were arbitrarily divided into four groups of approximately thirty points each. The mean percentages of [V̰] were then plotted for the population within each of the four social divisions. The results are shown in Figure 5. A definite contrast can be seen between those informants above the level of number 80 and those below it. However, there seems to be no natural division between the two upper groups; nor is there such a division between the two lower groups.

On the basis of this fact it was felt that the [v̰] stratifies the sample socially into no more than two groups, upper social level and lower social level. In the illustrations below, the performance of the group as a whole will be shown, then contrasting figures for those above the median social level (89.5) and those below the median.

Figure 4.   Social distribution of $[\tilde{V}]$ in sample
   quartiles by ethnic community

Mean $[\tilde{V}]$ %

20

15

10

5

5.3%   (9) W
       (8) N
5.0%   (4) W
13.3% (5) N
11.3% (4) W
14.8% (5) N
6.3%   (3) W
19.3% (6) N

Sample quartiles and ethnic community
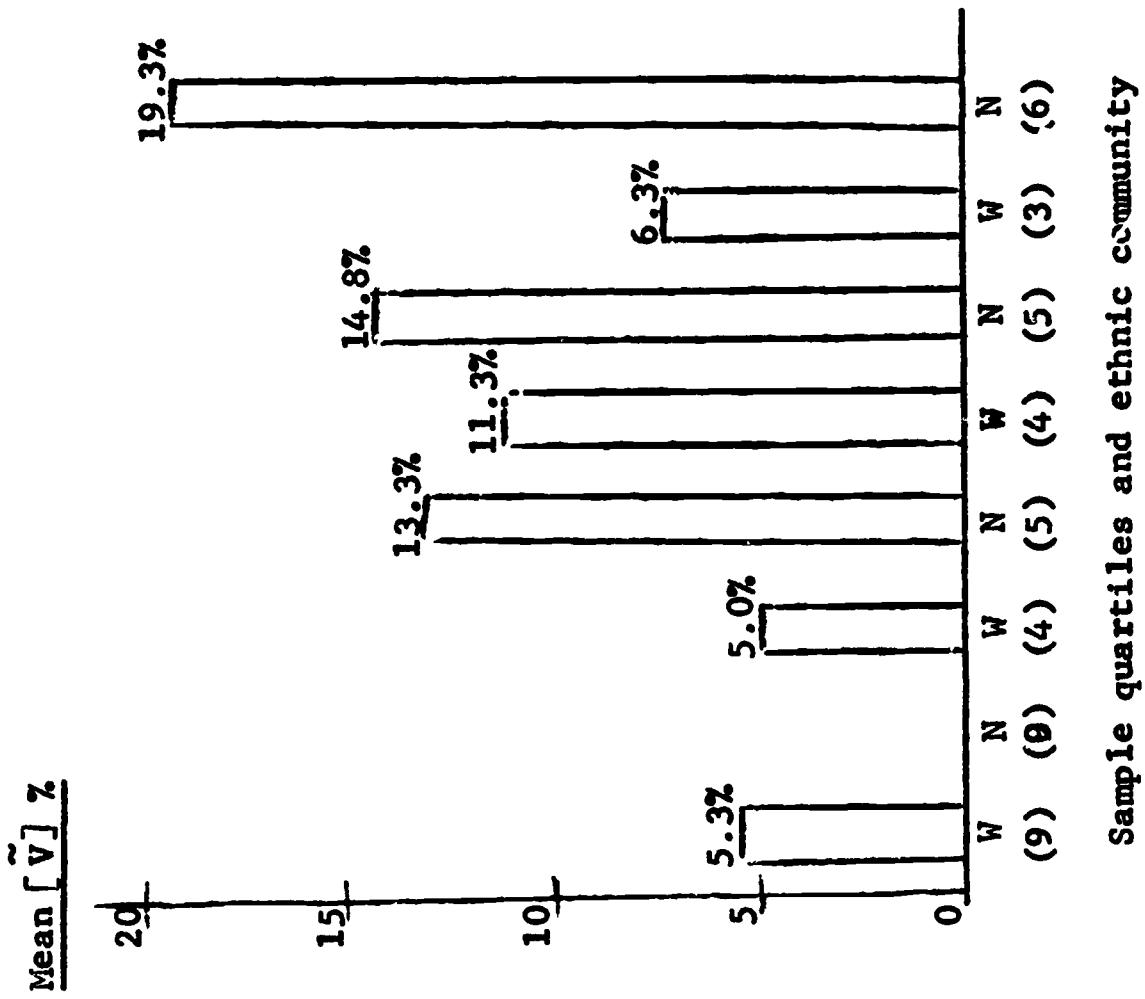
Figure 5.   Social distribution of $[\tilde{V}]$
             in social level quartiles

Mean $[\tilde{V}]$ %

15

10

5

0

5.5%   (3) 20-49
6.8%   (12) 50-79
12.9% (18) 80-109
12.0% (3) 110-134

Social level groups
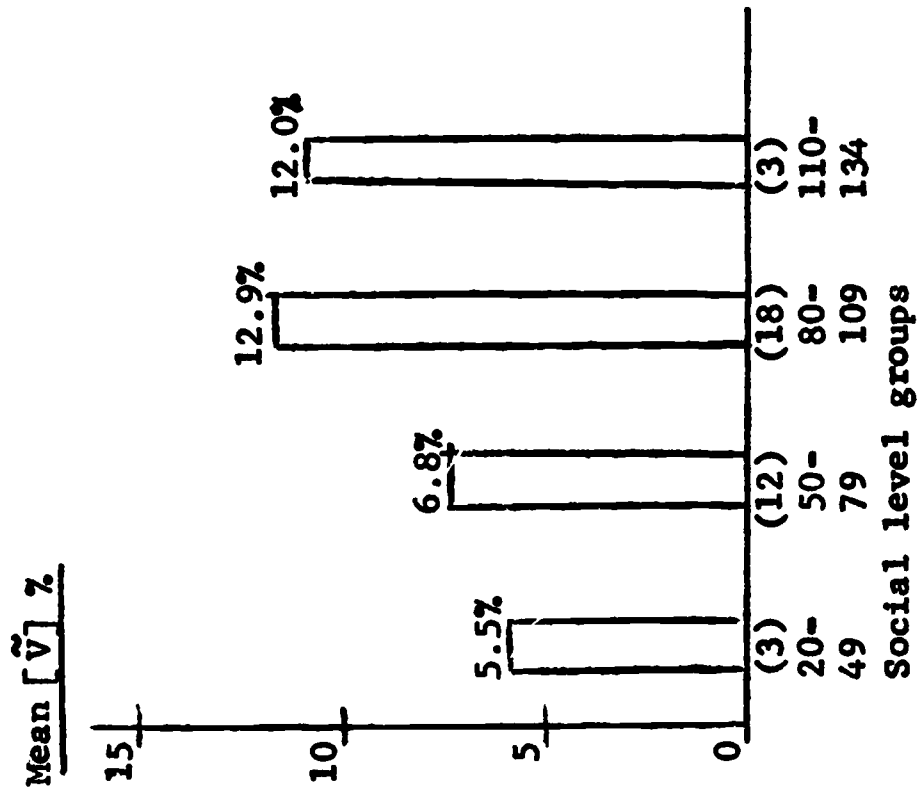
Distribution of the [Ṽ]

In the preceding pages it has been demonstrated that several ways of displaying the relationships between the linguistic and the non-linguistic data are possible. Each kind of display shows something of interest, but one seems to be more useful than the others for abstracting generalizations from the data. This most useful one is the bar graph, which will be used most frequently below. In the history of this research project, however, all three kinds of display have been made and compared with each other in testing each of the hypotheses about the distribution of the [Ṽ]. Occasionally another kind of graph or table which seems to have revealed some striking fact about the data will be included also.

That the mean percentage of [Ṽ] stratifies socially into no more than two groups has been shown above in Figure 5. The sample was therefore divided at the social level median (89.5), and percentages displayed for the total sample, and for those above and below the median.

Four different hypotheses were tested for the [Ṽ]: (1) the percentage of occurrence is distributed socially, with a difference between those above and those below the social level median; (2) it is distributed differently according to sex; (3) it is distributed differently according to ethnic community; and (4) it is distributed differently according to age.

In Figure 6 the results of the testing of these four hypotheses are shown. The percentage of occurrence of the [Ṽ] in the group of informants below the social level median is nearly twice that of informants above the median. This fact would seem to support the first hypothesis, that the [Ṽ] stratifies socially.

There is a slightly greater percentage of occurrence of the [Ṽ] for males than there is for females. However, the difference is not as great as that which appears between the upper and lower social levels. In the separate figures for the upper and lower social groups, the same kind of small difference between males and females is seen. The lower level males and females differ from each other slightly, but considered

together, they differ more from the upper level males and females. Consequently, there
is some doubt that the difference between males and females is great enough to consider
the second hypothesis as likely as the first.

In the speech of the group as a whole, the $[\tilde{V}]$ occurs much more often in the
speech of negroes than it does in the speech of whites. There is still a wide
difference between the ethnic communities when the sample is split into two groups at
the median social level. This suggests that the percentage of occurrence of the $[\tilde{V}]$
is an important feature of the difference between the phonological structures of the
two ethnic speech communities, as well as a feature of the different social levels.

It should be remembered, however, that above the social level median there are
only five negroes, but thirteen whites. Below the social level median there are seven
whites and eleven negroes, a more comparable distribution. Here there is still a
difference between the two ethnic speech communities. And it was shown before
(Figure 4) that in the three sample quartiles which contain both negroes and whites,
there is always a difference in performance between the two ethnic speech communities.

The figures for children and adults are generally very close to the same, both
for the total sample, and for the informants above and below the social level median.
The teenagers, however, show an interesting and suggestive difference. For the total
sample, the percentage of occurrence of the $[\tilde{V}]$ in the speech of teenagers is just a
little greater than that for either children or adults. In the socially divided
sample, the teenagers evidence $[\tilde{V}]$ below the social level median in very much the same
way as adults and children. But in the group of informants above the social level
median, the percentages for teenagers are outstandingly different from those for
adults and children, that is, much higher.

It seems quite reasonable to propose that this difference in the speech of teen-
agers and all persons of other age groups above the social level median may reflect in
some way the general effort by teenagers to assert their independence. One way in
which they show themselves to be different from their younger siblings and from their

elders is by speaking differently. (In this case, it may be that $[\tilde{V}]$ is a part of the

larger system of lenis articulation sometimes inveighed against by school teachers

under the name of "sloppy speech").

What is not clear at this point is why there is not the same wide difference

between teenagers and other age groups below the median social level as above it.

Having seen the difference between the ethnic speech communities in percentage

of occurrence of $[\tilde{V}]$ it may be asked whether the above facts about the performance of

upper level teenagers do not reflect some uneven distribution of the ethnic groups.

In fact, however, there are in the teenager column above the social level median three

white informants and four negroes. It is felt, then, that the difference between the

teenagers and others is a genuine reflection of an age gradation, rather than a con-

fusion with some other form of grading present in the data.

Figure 6: Mean [V] %

Social Median

15

13.0%

10

7.5%

5

0

Above   Below
(18)   (18)

Sex

15

11.1%

10 9.5%

5

0

F   M
(19) (17)

Above Median (20-89.5)

15

13.5%

11.4%

10

8.4%

6.6%

5.2%   5.4%

4.6%

0

F   M   W   N   C   T   A
(9)   (9)   (13) (5)   (6)   (7)   (5)

Ethnic Community

15

14.2%

10

6.6%

5

0

W   N
(20) (16)

Age

15

12.3%

10 9.7%

8.7%

5

0

C   T   A
(16) (11) (9)

Below Median (89.5-134)

15.5%

15

14.2%   13.9%

12.1%   12.7%   12.8%

10   9.1%

5

0

F   M   W   N   C   T   A
(10) (8)   (7)   (11) (10) (4)   (4)

F - female   C - child (9-12)
M - male   T - teenager (13-17)
W - white   A - adult (30-50)
N - negro
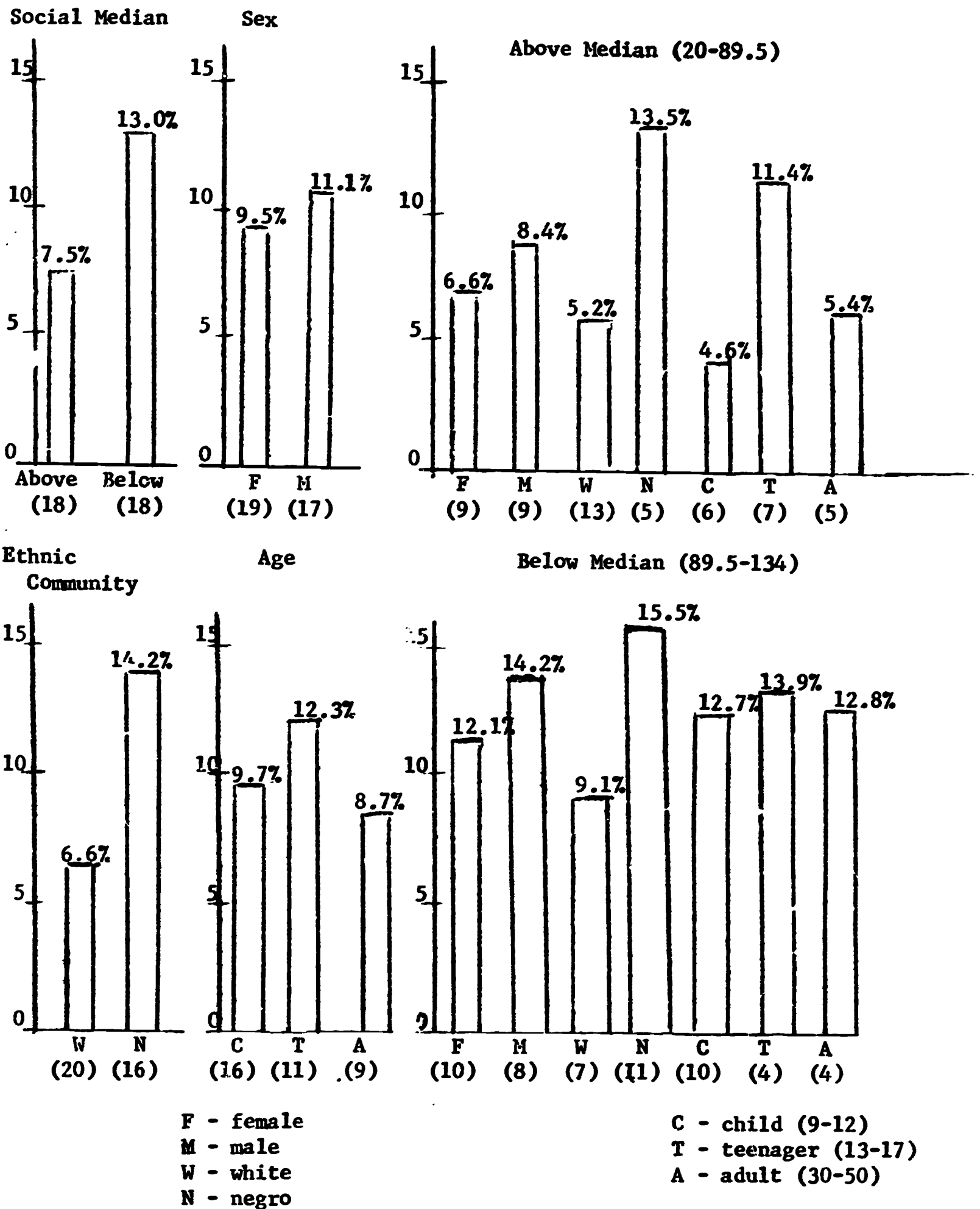
Distribution of Non-Normative Phonemes

It has already been noted that any one of the three phonemes or the [V̄], may be realized in syllable final position. Whether the realization is generally the normative phoneme or one of the other three possibilities seems to depend partly on phonological context. There is reason to believe, however, that which phoneme is realized also depends on the social level and other non-linguistic attributes of the informant.

To show how the phonemes are distributed by social level, Figure 7 was constructed The twelve possible realizations are listed vertically on the left, ordered according to the number of informants in the sample who evidence them in the passages examined. The social level numbers are listed below the chart from high level on the left to lower levels on the right. No information on frequency of occurrence is shown, since a single instance of any of the elements is considered to indicate that the informant has it in his speech.

It can be seen that in a very general way the number of different realizations in the informant's speech increases as the social level descends. Arbitrary divisions might be made, for example, at 59-60 and 99-100. When this is done, informants of level 59 and above have five or six of the twelve possibilities; informants between levels 60 and 99 generally have about eight or nine of the twelve possible realizations; and informants at levels 100 or below have usually nine or ten of the twelve possibilities.

The pattern displayed in Figure 7 suggests that the speech of informants in the lower social levels may be characterized by a generally stronger context sensitivity in the nasal consonants than is found in the speech of upper social level informants. In order to test this hypothesis, it was necessary to plot the percentages of non-normative occurrences on graphs like the ones made for the [V̄] alone. That information appears in Figures 8 and 9.

/n/	/ɲ/	[ṽ]ᵐ	/m/	/ɲ/	[ṽ]ᵈ	/m/	/n/	[ṽ]ⁿ	/ɲ/	/m/	/n/	
			X	X	X	X	X	X	X	X	X	134
			X		X	X	X	X	X	X	X	113
			X		X	X	X	X	X	X	X	112
		X	X	X	X	X	X	X	X	X	X	109
			X	X	X	X	X	X	X	X	X	109
			X	X	X	X	X	X	X	X	X	108
		X	X	X	X	X	X	X	X	X	X	108
								X	X	X	X	104
		X	X	X	X		X	X	X	X	X	103
		X	X	X	X	X	X	X	X	X	X	103
	X	X	X	X	X	X	X	X	X	X	X	102
		X	X	X	X	X	X	X	X	X	X	100
						X	X	X	X	X	X	99
			X	X	X	X	X	X	X	X	X	99
X		X			X	X	X	X	X	X	X	98
			X	X		X	X	X	X	X	X	97
		X	X	X	X	X	X	X	X	X	X	97
		X		X	X	X	X	X	X	X	X	92
	X		X	X	X	X	X	X	X	X	X	87
	X	X		X	X	X	X	X	X	X	X	81
	X	X	X	Y	X	X	X	X	X	X	X	80
X	X		X	X	X	X	X	X	X	X	X	78
X			X	X	X	X	X	X	X	X	X	77
	X		X		X	X	X	X	X	X	X	74
			X		X	X	X	X	X	X	X	74
				X		X	X	X	X	X	X	74
			X	X	X	X	X	X	X	X	X	71
		X	X	X	X	X	X	X	X	X	X	65
	X	X		X	X	X	X	X	X	X	X	63
		X		X	X	X	X	X	X	X	X	60
			X		X		X	X	X	X	X	59
						X	X	X	X	X	X	59
			X		X		X	X	X	X	X	54
				X			X	X	X	X	X	41
					X		X	X	X	X	X	37
			X				X	X	X	X	X	20

Figure 7: Phonemes and [ṽ] by speaker

Figure 8: Non-normative phoneme and $[\tilde{V}]$ %: total sample
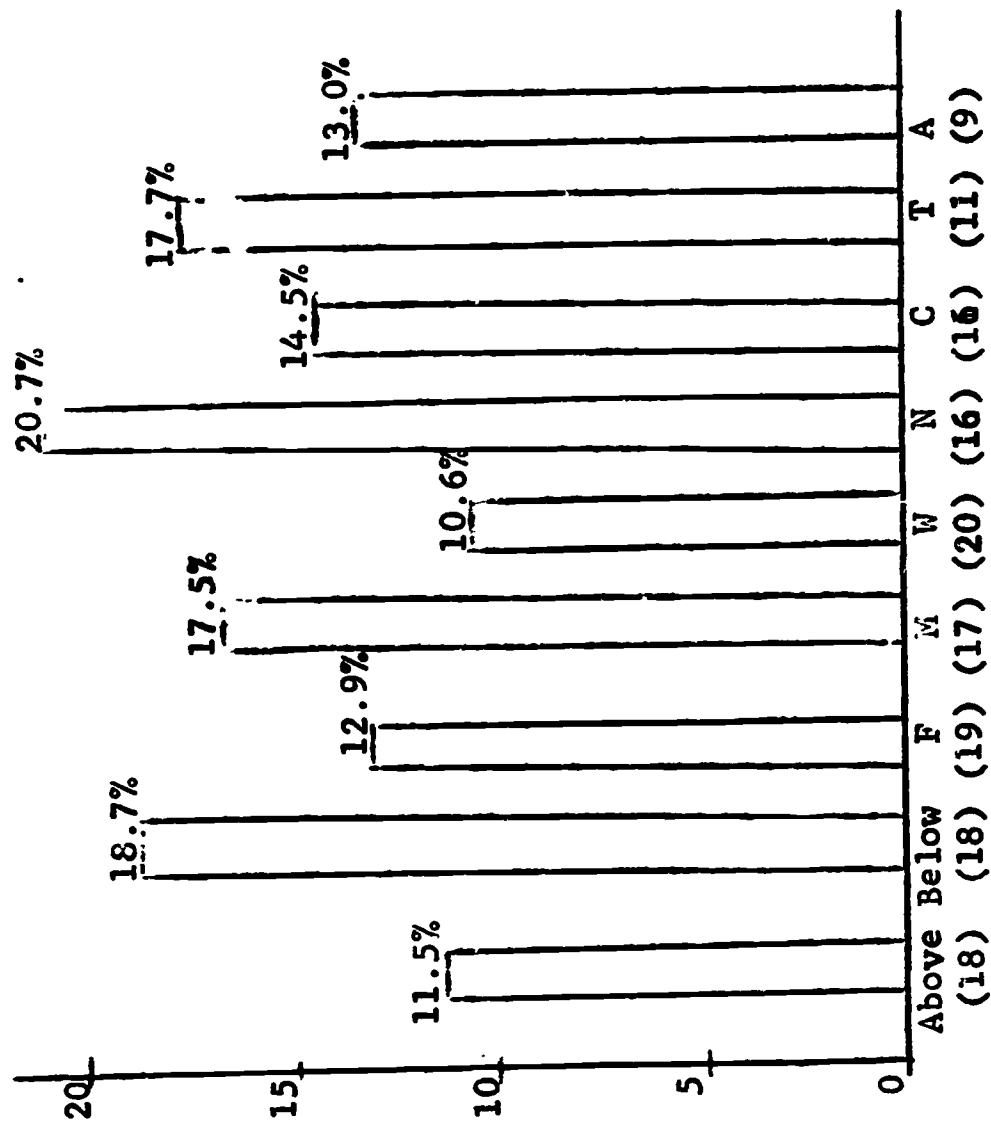
F - female	C - child (9-12)
M - male	T - teenager (13-17)
W - white	A - adult (30-50)
N - negro	

Figure 9: Non-normative phoneme and [v̇] %: above and below social median

F - female
M - male
W - white
N - negro
C - child (9-12)
T - teenager (13-17)
A - adult (30-50)

Below Median

Above Median
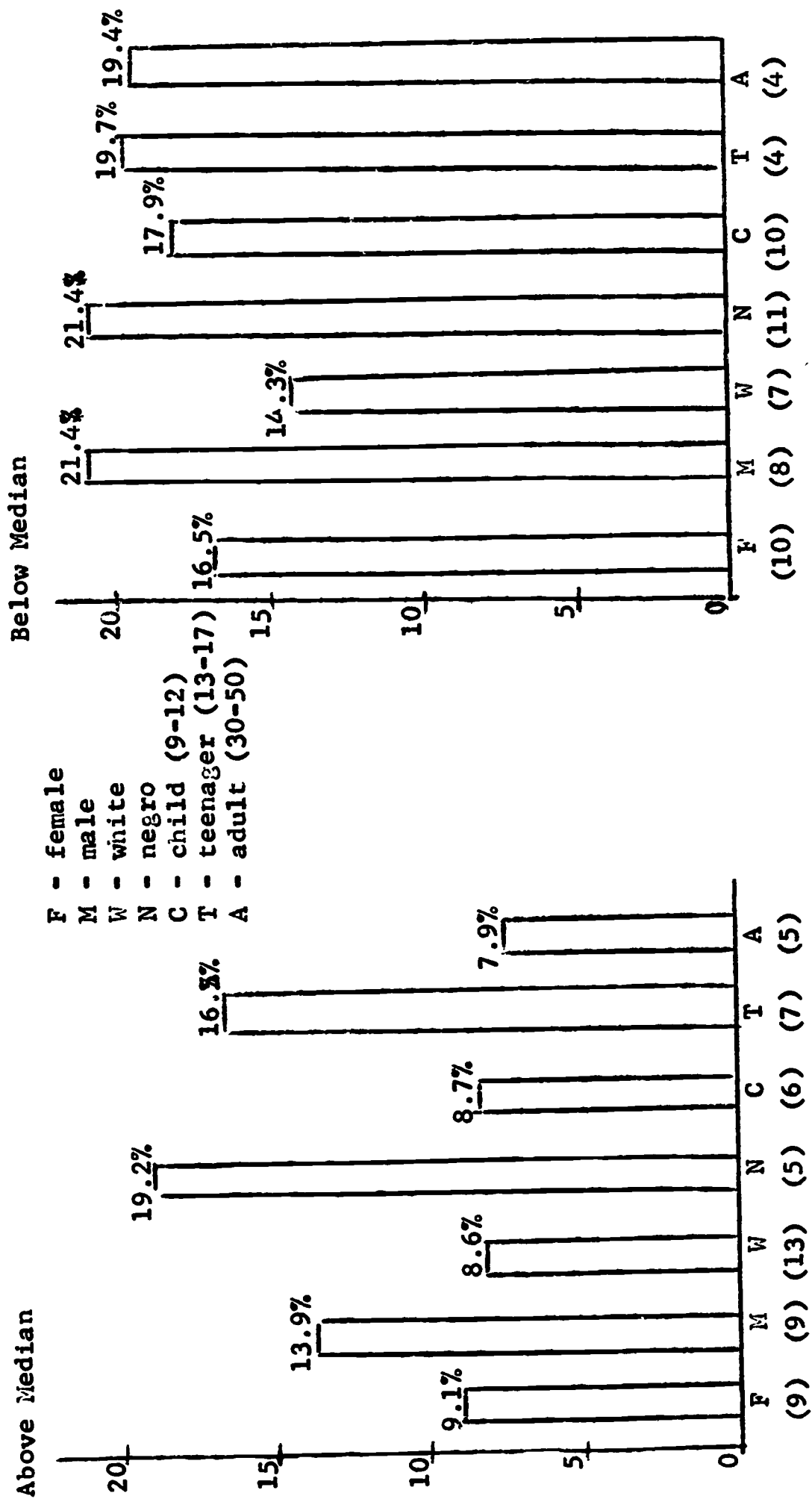
It should be noted that [Ṽ] is one of the non-normative elements, and as such is included in the percentages plotted for Figures 8 and 9. These percentages seem to differ from those plotted for [Ṽ] in Figure 6, only in that they are slightly higher. There is still considerable difference between the informants above the social level median and those below it. There is a large difference between informants of the two ethnic communities, both for the total sample and for divisions above and below the median. It must be remembered, however, that inferences drawn from the graphs about the differences between the ethnic speech communities may be misleading because of the unequal distribution of those communities in the various social levels. The difference between age groups seems to be important above the social level median, where the teenagers, as mentioned before with regard to [Ṽ], are sharply different in their performance from both adults and children.

The addition of the non-normative phonemes to the figures for [Ṽ] causes an increase in the difference between the figures for males and those for females, both for the total sample and for the divisions above and below the median. The number of males and females in each of the graphs is close enough to the same that there may be indication of an important correlation of percentage of non-normative phoneme and [Ṽ] realization with sex. Perhaps a considerably larger sample would show this difference more clearly.

Social Perception

In a recent article describing his work in New York City, William Labov proposes that the perception of socially conditioned variation in speech does not begin until a particular age is reached.

> The third stage of acquisition of English begins with early
> adolescence, as the child begins to come into wider contact
> with the adult world. The social significance of the dialect
> characteristics of his friends becomes gradually apparent to
> him as he becomes exposed to other speech forms, even while he
> himself is still confined to the single style of his own

> vernacular. At the age of fourteen or fifteen children begin
> to respond to the subjective reaction test with patterns that
> resemble the adult pattern.[16]

To test this hypothesis, that is, that social stratification of language data may

be more clearly structured in persons older than 13, another graph was prepared. The

results are shown in Figure 10. In this figure, the social level numbers of persons

from age 13 upward are shown running horizontally from upper on the left to lower on

the right. Their percentages of non-normative phoneme and $[\tilde{V}]$ realization are plotted

vertically, from about 1.3% to 29.6%. It should be noted that the removal from the

graph of informants below the age of 13 eliminates all four of the extreme deviants

from the general trend who were discussed above.

If an arbitrary division is again made at about the 15% level, there is only one

negro informant below it, and only two white informants above it. There is a very

clear division of the line into two segments, those on the lower left, and those on

the upper right. The social level median of this group is 78, and the sharp division

between upper social level and lower falls very near it.

There are, however, generally still the same kinds of peaks and valleys that were

seen on the graphs which included informants below age 13. The sample is relatively

small, yet almost half are below the age of 13. If Labov's hypothesis is to be

considered valid, then, much wider deviations from the general upward trend of the

line graph might be expected when the informants below age 13 are included. Of course,

the measurements in the present study are based entirely on an examination of speech

performance, while Labov's hypothesis is made on the basis of subjective reaction

tests. At best, then, Figure 10 has shown results which may only be considered incon-

clusive. Further investigation is needed to test the hypothesis that social strati-

fication in language does not begin until the age of 14 or 15.

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[16]
    Labov, William. "Stages in the Acquisition of Standard English," Social Dialects
and Language Learning (ed. Roger W. Shuy), (Champaign: NCTE, 1965), pp. 77-103.

Figure 10: Non-normative phoneme and [Ṽ] %: 13 years and older

Non-normative occurrence %

Social level numbers
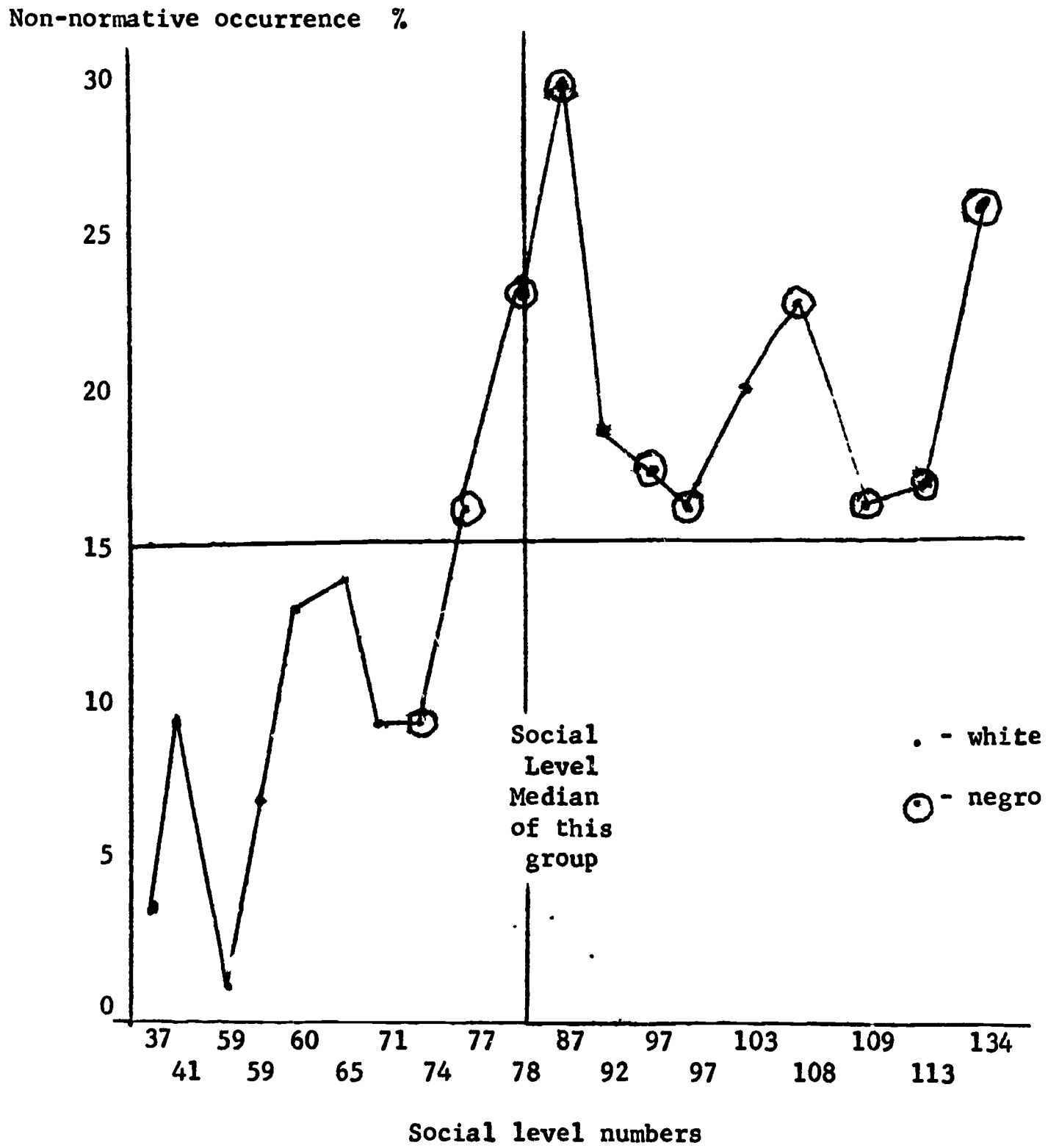
Conscious vs. Unconscious Indices

In his article "Social Dialect and Language History,"[17] William Bright discusses the possibility of distinguishing between conscious and unconscious variations in language. This phenomenon was previously discussed in this report in connection with the grammatical indices. The kinds of morphophonemic and allophonic variation which have been described so far seem to be instances of unconscious variation. They may be seen as a part of a larger system of morphophonemic and allophonic variation in syllable final positions. The larger system includes variations in the realization of stops and fricatives, as well as nasal consonants, all of which variations would seem to be socially conditioned. These variations are unconscious phonetic differences between social levels, because they have not acquired the explicitly negative social value that is accorded to such consciously controlled phenomena as the "multiple negation," which has been attacked in the public schools for years.

Bright offers a tentative explanation for the fact that unconscious variations seem to occur more often in the speech of those at lower social levels than in the speech of the upper social level person.

> In general, the Brahmin dialect seems to show great innovation on the more conscious levels of linguistic change--those of borrowing and semantic extension--while the non-Brahmin dialect shows great innovation in the less conscious types of change--those involving phonemic and morphological replacements.
> . . . .
> A possible hypothesis is that literacy, most common among Brahmins, has acted as a brake on change in their dialect--that the 'frozen' phonology and grammar of the literary language have served to retard change in Brahmin speech.[18]

Among the Detroit informants there is not the straightforward division between "literate" and "illiterate" which Bright found in his research. Rather, there may be degrees of literacy along a continuum. If it is assumed that there is a general

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[17] Bright, William. "Social Dialect and Language History," Language in Culture and Society (ed. Dell Hymes) (New York: Harper and Row, 1964), pp. 469-72.

[18] Ibid., p. 471.

direct correspondence between social level and degree of literacy, a greater variation in phonetic behavior may be expected at the lower social levels than exists in the upper levels. What has been seen in the Detroit data above would seem to offer support for this hypothesis in American English.

It seems reasonable to extrapolate from Bright's remarks above that there is also a continuum from conscious to unconscious. If this is so, it might be proposed that a "more conscious" linguistic index of social level would exhibit a closer correlation with social level than a "less conscious" index. Since such a "more conscious" index exists among the nasal consonants of English, it was decided to test this hypothesis.

The status of the "participial -ing" as a more conscious social index is confirmed by the teaching against its "mispronunciation" which has occupied the public school teachers' time for years. The variation which exists is between /n/$^\eta$ and /η/$^\eta$, where the latter phoneme occurs in the morphemic unit which may be called "participial ing."

To test the hypothesis that the variation between /n/$^\eta$ and /η/$^\eta$ in this morphemic unit correlates with social factors in a more regular way than the variation of other non-normative phonemes, a series of graphs was drawn up. The occurrence of the morphemic unit "participial -ing" was counted in the speech of each informant, and the percentage of realization of /n/$^\eta$ calculated. The results are shown in Figure 11.

The differences between the columns representing quartiles of the social level range suggest that there may be as many as four separate groups divided by the stratification socially of the /n/$^\eta$ occurrence in the "participial 'ing." However, since there are only three persons in the first and last columns, a similar test with a much larger sample should be conducted to lend more definite support to the hypothesis.

Figure 11:   /n/l0 % in "participial -ing"; total sample

Social Level Quartiles

Total Sample

F - female
M - male
W - white
N - negro
C - child (9-12)
T - teenager (13-17)
A - adult (30-50)
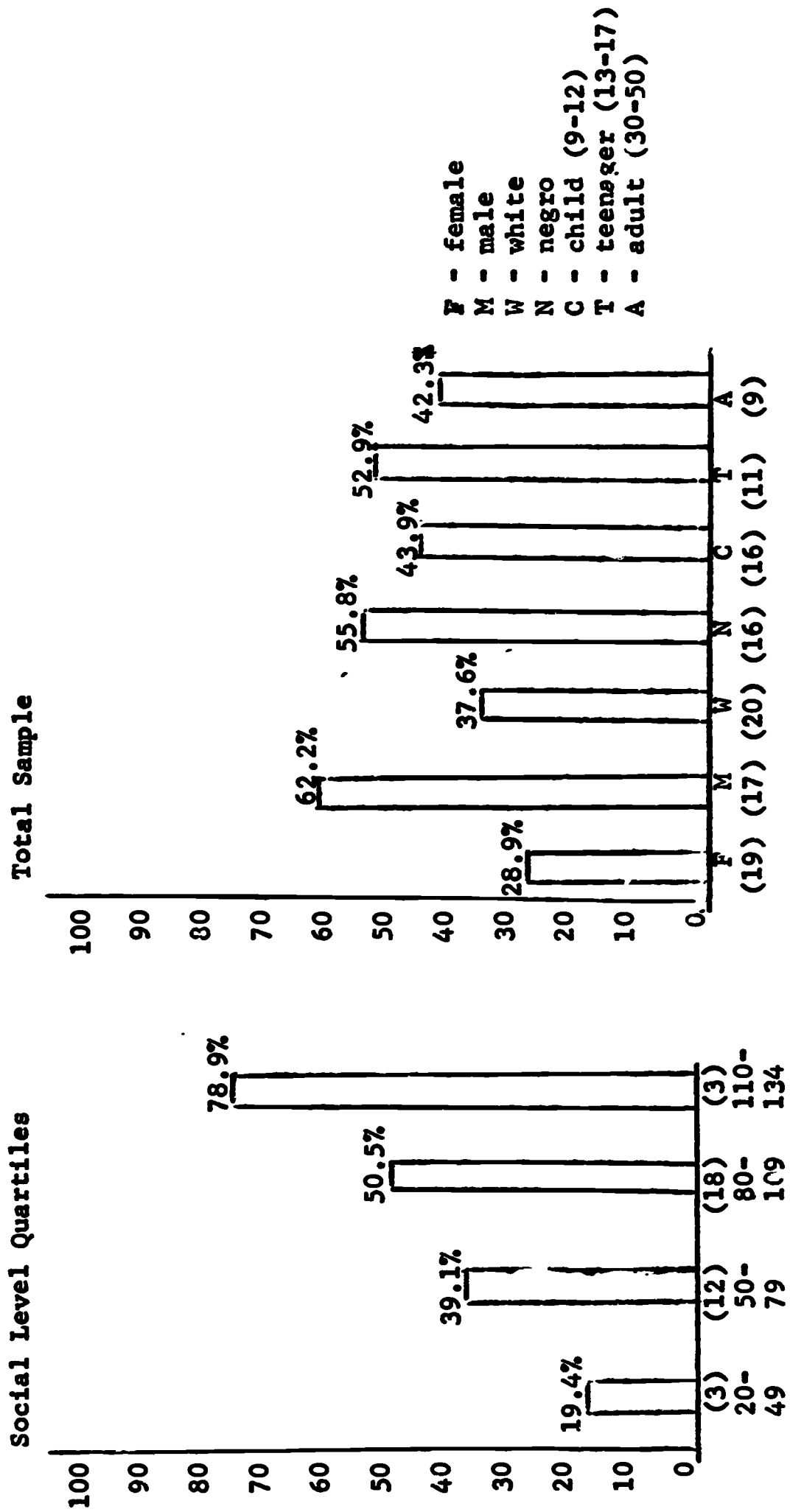
The difference between the performance of males and females seems to suggest that this feature is probably a sex differentiator. There is still an obvious difference also between the ethnic communities, though not as great as was shown for the less conscious morphophonemic and allophonic variations. And finally, though the teenagers have a slightly higher percentage than other age groups, it is not believed to be large enough to constitute an important variable.

The small number of informants in the first and fourth quartiles makes it difficult to assemble separate comparisons by sex, ethnic community, and age for each quartile. Consequently, Figure 12 depicts these comparisons for those informants above and below the social level median. Above the median there is a great difference between males and females, between whites and negroes, and between teenagers and other age groups. With respect to age and ethnic community, the informants' behavior is very much like that shown in Figures 6 and 8 for other kinds of morphophonemic and allophonic variation. However, with respect to sex, there seems to be a much more important difference in behavior with the "participial -ing," than there is with other variations. This seems to support the findings of an earlier research project on "participial -ing" reported by John L. Fischer.[19] In a much smaller and more socially restricted investigation, Fischer concluded that the phoneme /n/$^{\eta}$ was patterned according to sex and social class, among other factors.

Below the median social level, there is still a difference between males and females. In this group, there is little difference between the ages, as was seen before in Figures 6 and 8. The fact that the percentage for the negro ethnic community is smaller than that for the white group below the social median seems very peculiar. However, it must be noted that these percentages reflect only the number of /n/$^{\eta}$'s, and in the negro group many of the "participial -ing's" contain instead $[\tilde{v}]^{\eta}$.

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Fischer, John L. "Social Influences on the Choice of a Linguistic Variant," in Hymes, op. cit., pp. 483-8.

Figure 12: /a/Ø% in "participial -ing"; above and below social median
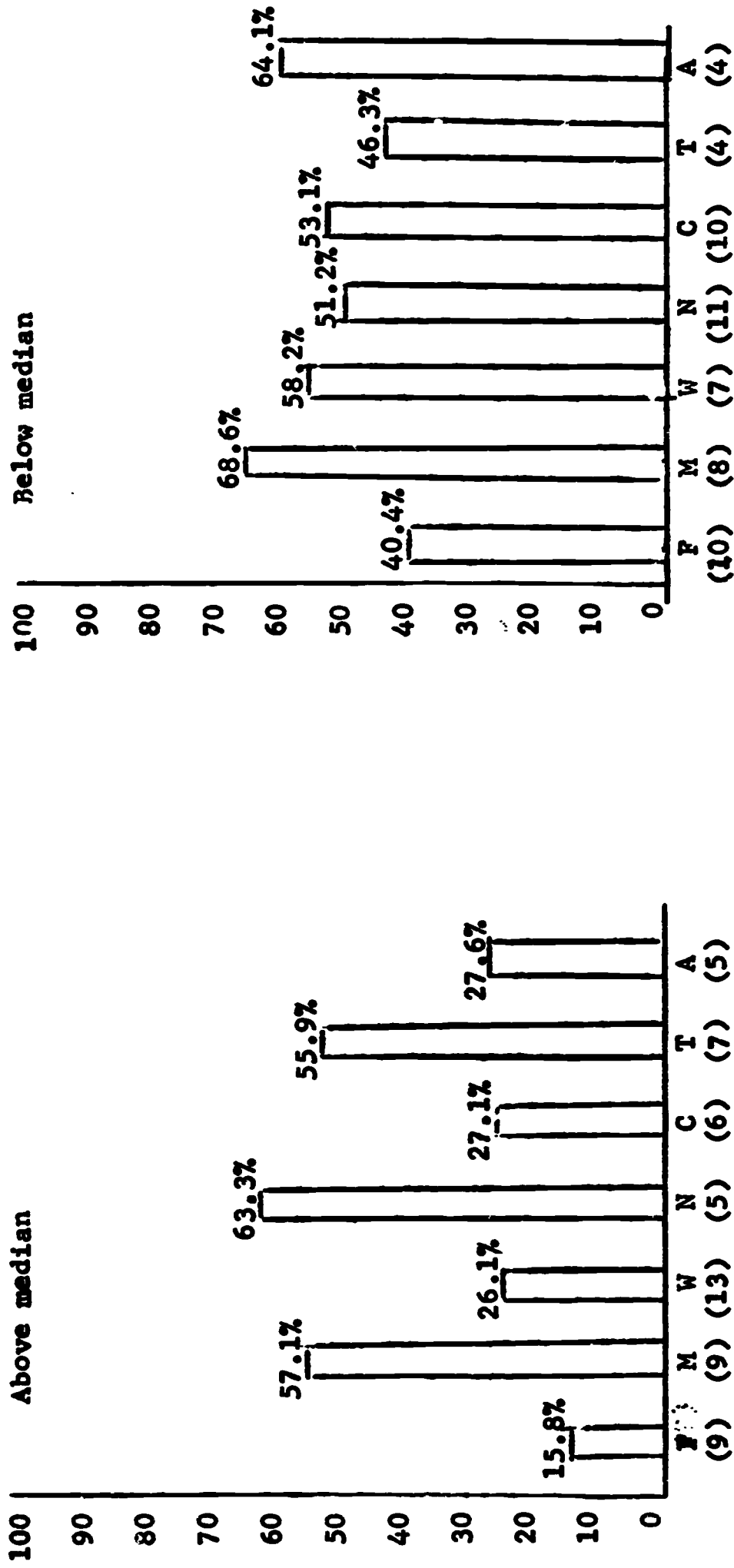
F - female
M - male
W - white
N - negro
C - child (9-12)
T - teenager (13-17)
A - adult (30-50)

Two further checks were made of the data to make more certain of the difference between the sexes. Figure 13 illustrates by line graph what the problem with this sample is, that is, that there are no males in the first social level quartile, and only one female in the fourth quartile. Consequently, bar graphs were constructed for groups above and below the social level median, where there are more nearly the same number of males and females in each group. It can be seen (Figure 13) that there is a wide difference between males and females on both sides of the social level median. It is believed, then, that the distribution of the phonemes in "participial -_ing_" is an important linguistic differentiator of the sexes.

Figure 13: /n/ $^{\rho}$ % in "participial -ing": males vs. females

Social Quartiles

No males in 1st quartile
One female in 4th quartile

Above Median   Below Median
Social Number   Social Number
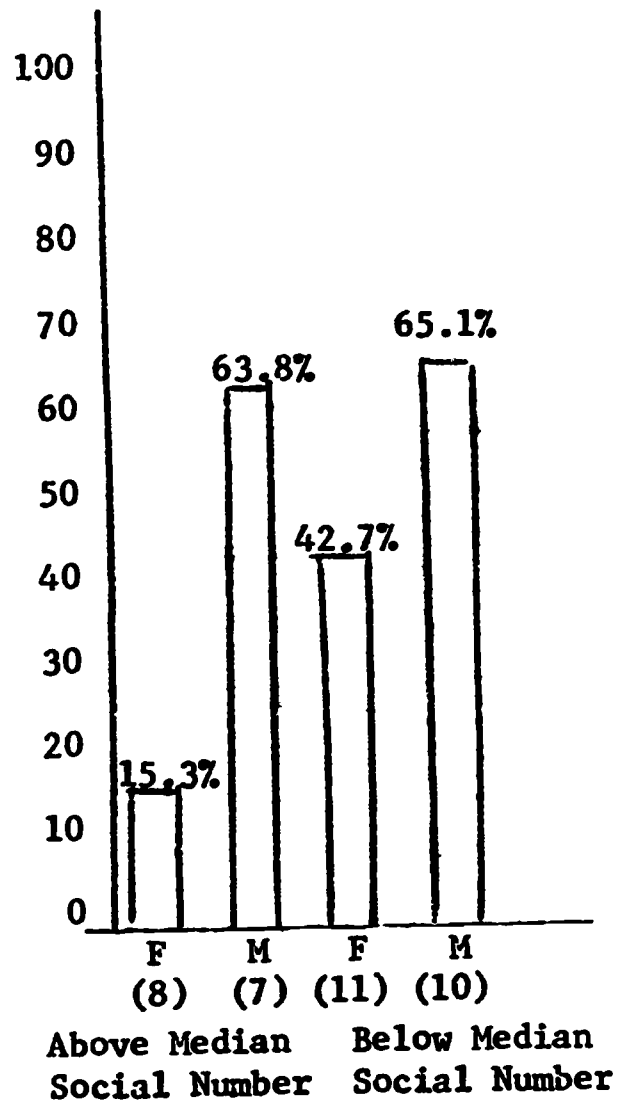
Conclusions

The graphic display of the data on the preceding pages seems to warrant a number of interesting tentative conclusions. First, it appears that the occurrence of the [Ṽ] allophone of all three nasal consonants in syllable final position and as the first member of a consonant cluster coda is distributed in such a way as to occur much more often among lower social level informants than among upper level persons. This is not, however, simply a matter of presence or absence of the allophone, since it occurs in the speech of all informants. It is rather a matter of the relative frequency of its occurrence, illustrating that what has been called "free variation" may more accurately be termed "socially influenced variation." This variation in the occurrence of the [Ṽ] allophone apparently constitutes no more than a two-way division into upper and lower social levels.

Second, though there is a small difference in the use of [Ṽ] for males and females, and a slightly larger difference in the use of all non-normative phonemes and [Ṽ], it is the large difference between male and female use of /nⁿ/ which is believed to show that the nasal consonants evidence sex differentiation in their occurrences.

Next, the differences between negro and white speakers' use of [Ṽ], all non-normative phonemes, and /nⁿ/ apparently suggest that social level groups are separated by nasal consonant occurrences into ethnic communities, which parallel the social groups. That is, the primary division seems to be into social levels, while each of these is divided into ethnic communities.

Finally, although the age groups show only small differences in the use of [Ṽ], non-normative phonemes, and /nⁿ/ when the total sample, or only those below the social level median, are examined, the teenagers above the median differ widely from the other age groups. This would seem to suggest that the behavior of nasal consonant phenomena is an age grader above the social level median.

Since the informants seem to split into four separate groups on the basis of the occurrence of /n/ η, it seems reasonable to suggest that this may be a "more conscious" index of social status than is either [V] or the distribution of all non-normative phonemes and [V]. For the latter two phenomena, it does not seem feasible to divide the 36 informants into more than two groups.

Two kinds of possibilties for future research suggest themselves. The first should be a carefully structured subjective reaction test of the kind described by William Labov.[20] It would seem that only in this way will it be possible to establish the existence of, and the degree of conscious control of, the various kinds of nasal consonant phenomena described above as phonological indices of social level.

In this regard, it is curious to note that the behavior of [V] in particular is a "potential" social index in at least two different ways. It is potential in that it cannot be considered as proved beyond a shadow of a doubt. And it is potential in that it may in the future be consciously recognized by speakers in the different social levels.

The other kind of future research involves the institution of other studies of language in metropolitan areas in other geographical regions of the United States. Many of the features of lower social level and ethnic community speech seem to be frequently identified as southern characteristics. Investigations of social indices in the phonology of some southern metropolitan areas could show what the relationships between social and regional dialects are.

It appears, then, that, even in such a small portion of the phonetic system of American English in Detroit as the nasal consonants, there is sufficient variety within the style analyzed above to discover a correlation of linguistic performance of speakers with non-linguistic and social factors about them.

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[20]
    Labov, William. <u>The Social Stratification of English in New York City</u> (Washington, D.C.: The Center for Applied Linguistics, 1966), pp. 405-54.

PART III A — STRUCTURAL FREQUENCY STUDY*

Introduction

In an isolated index study one starts with impressionistic hypotheses concerning potentially diagnostic features and their relation to social status. This assumes a certain degree of awareness concerning the particular feature. Another way to study potential indices is to tabulate the relative frequency of different types of patterns within the system. In this section such an attempt is made.

As a starting point, two aspects of English were chosen, namely, the clause patterns and noun phrase patterns. As a pilot study, various types of clauses and phrases were tabulated to see if any correlation could be made between the relative frequency of various types of patterns and several social variables.

Clauses

The purpose of this study is to look for possible grammatical indices of social stratification focusing on the clause as the primary unit for analysis. The point of attention is the internal structure of the clause and its distribution as an element in units larger than the clause. One of the principal reasons for choosing the clause as an analytical unit is that it constitutes the largest manageable grammatical unit. The sentence, for our purposes, is too ill-defined to be useful since one might legitimately question where to cut off a "run-on sentence". The key word is "manageable." Clauses are easy to segment: one verb is generally associated with one clause. How clauses are strung together into connected speech is easily handled by noting the use of conjunctions, or the lack of conjunctions; by noting the sequences and embeddings. And from the other end, clause level units (e.g. phrases, etc.) are easily handled in terms of their distribution within the clause. And all this is not to minimize the usefulness of noting the transformational relations between clauses.

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* The authors are indebted to graduate assistant Robert E. Cromack for the basic research described in this section.

Corpus

As a pilot study, four informants were chosen and an analysis of their use of clauses was made. The selection of the four was made primarily on the basis of age and race. A secondary consideration was the size of the corpus. The informants used in this study include:

1) a female white adult with a social status ranking of 37 (tape no. 41)

2) a female negro adult with a social status ranking of 97 (tape no. 208)

3) a female white child with a social status ranking of 97 (tape no. 137)

4) a male negro child with a social status ranking of 103 (tape no. 15)

Methodology

Since the search was for grammatical indices, the following methodology was adopted. Standard grammatical categories already established for English, namely Paul Roberts[1] and H.A. Gleason's[2] clause patterns, (which Roberts refers to as "sentence" patterns) were first used in labeling every clause in the corpus. This classification includes most of the patterning which is significant in English. It is also known to many teachers of English, so that any pedagogical applications from this study can be more easily presented in terms of something with which they are acquainted. It was assumed that since no new clause patterns turned up, the grammatica differences in clause usage must be statistical, that is, how often a clause pattern occurs in a given position or in a relationship with another clause e.g. in coordination, embedding, etc.

Clause Patterns

Every clause in the four texts was classified according to Roberts' and Gleason's 16 basic "sentence" patterns. The clauses were so labeled no matter in what

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1
      Roberts, Paul. English Sentences (New York: Harcourt, Brace and World, 1962).

2
      Gleason, H.A., Jr. Linguistics and English Grammar (New York: Holt, 1965).

transformational form they were realized, for example, the passive was classed as IV, and the attributive phrases such as "the man with the hat" were tagged as pattern XI since it was considered to be a transformation of "he has a hat". The 16 patterns can be summarized as follows: (S = subject, DO = direct object, IO = indirect object, Comp = complement, tV = transitive verb, IV = intransitive verb, cV = copulative verb, lV = linking verb). The formulas represent the minimum, nonexpanded form of the clause.

With intransitive verb:

I = S IV   e.g. "He goes."

With transitive verb:

IV = S tV DO   e.g. "He hit her." (One direct object)

V = S tV IO DO   e.g. "He gave her food." (DO and IO)

VI = S tV DO O-Comp e.g. "They called him Paul/foolish." (object complement using noun or adjective)

VII = S tV DO O-Comp e.g. "They elected him president." (object complement with noun only, not adj.)

XI = S tV DO   e.g. "He had a dog." (No passive transformation possible with "lack", "befall", "have", "resemble", and perhaps a few other verbs.)

XII = S tV DO   e.g. "He walks miles." (DO of measure)

XIII = S tV (IO) Comp e.g. "It cost me plenty." (complement of measure)

XIV = S tV DO DO   e.g. "He taught them that." (Two DO's occur with "ask", "tell", "teach", "strike", etc.)

XV = S tV O   e.g. "He looked at the house." (inseparable verbs)

XVI + S tV O   e.g. "He looked him up; he looked Jim up; he looked up Jim." (separable verb)

With linking verb:

II = S lV S-Comp^a e.g. "He looked fierce." (adjective as subject complement)

III = S lV S-Comp^n e.g. "They become men." (noun as subject complement)

With copulative verb:

VIII = S cV S-Comp$^{adv.}$ e.g. "He was outside." (Adverb as subject complement)

IX = S cV S-Comp$^{adj.}$ e.g. "It is green." (Adjective as subject complement)

X = X cV S-Comp^{noun} e.g. "They are animals." (Noun as subject complement)

Every clause, whatever its transformational shape, has been classified in two ways in addition to the basic Roberts-Gleason labels. It has been categorized 1) according to whether or not minimum/expanded and deleted/non-deleted form of the clause occurs and 2) according to the way the particular clause is connected to other clauses.

Expandability

In the process of marking the type of clause according to the Roberts-Gleason system, four subcategories were set up, labeled A, B, C and D for notational convenience.

A indicates that the minimum form of the clause as represented by the formulae (e.g. S tV DO) has occurred.

B indicates that in addition to the complete basic minimum form, other clause elements have occurred to expand it, e.g. additions of time, location, etc.

C indicates that no additions have occurred but that the basic minimum form of the clause is not complete, that is, it indicates that there has been a deletion in the realization of the basic clause pattern. The subject, predicate, or some other element may have been deleted.

D indicates that a deleted form of the basic minimum pattern has occurred, together with some expansion by the addition of other clause elements, such as time, location, etc.

The following examples illustrate these subcategories:

A = the minimum form. e.g. "John hit Mary" (S tV DO)

B = the expanded form. e.g. "John hit Mary on the shoulder" (S tV DO L)

C = the deleted minimum form. e.g. "Hit Mary" (perhaps as a response to the question "What did he do?" = S tV)

$\underline{D}$ = the deleted form, with some expansion, e.g. "Hit Mary on the shoulder."

(tV DO L)

In the case of C and D it may be hard to establish the basic pattern which is being realized. This can be done by referring to the context, either to the question which elicited the "elliptical construction," or in the case of anaphoric verbs by reference to the antecedent clause, or by noting the conjuctions, e.g. "he went home and # told his mother", in which subject is deleted but identified by the coordinate structure with "and". The primary reason for using the A-D subcategories is that it facilitates investigation of the "surface realizations" in relation to the underlying structure. It focuses attention on how each speaker utilizes the options available in his language to distribute the information content that he wants to communicate.

Clause Connection

The ways in which clauses connect were categorized on the basis of four types of connection in this preliminary analysis. The four categories are:

1. A dependent clause; that is, a clause with a dependent conjunction
   e.g. "If, when."

2. A coordinate clause; that is, a clause is connected to another clause by a coordinate conjunction, e.g. "and", "or"

3. A relative clause; that is, a clause which is embedded with another clause. The relative clause may have an overtly expressed pronoun (the man who was here), a relative clause without a relative pronoun (the man I saw), or a prepositional phrase transformation of a relative clause, (the man with a hat came = the man who has a hat came).

4. A parenthetical clause; that is, a parenthetical clause which is not part of the surface structure is included within the clause in question, (My friend--he lives in New York--is a stamp collector).

The above four categories provide a starting point for the investigation of how the combination of clauses may vary in regard to such variables as age, status, etc.

Description

On the basis of the above described categories a number of different parameters were examined, and an attempt was made to suggest the ways in which the informants contrast. The following chart presents the total number of clauses as they were classified in terms of the Roberts-Gleason patterns:

Informant

	15		41		137		208	
	No.	%	No.	%	No.	%	No.	%
I	230	26.2	184	12.3	155	18.9	139	17.1
II	---	----	12	.8	11	1.3	16	2.0
III	---	----	4	.3	---	---	---	---
IV	357	40.7	681	45.5	326	39.8	330	40.6
V	5	.6	13	.9	11	1.3	9	1.1
VI	16	1.8	27	1.8	20	2.4	18	2.2
VII	---	----	---	----	---	----	---	----
VIII	74	8.4	25	1.7	27	3.3	35	4.3
IX	45	5.1	113	7.4	58	7.1	75	9.2
X	79	9.0	234	15.6	96	11.7	88	10.8
XI	37	4.2	110	7.3	50	6.1	69	8.4
XII	---	----	---	----	1	.1	---	----
XIII	---	----	---	----	1	.1	---	----
XIV	17	1.9	36	2.4	15	1.8	5	.6
XV	9	1.0	47	3.1	22	2.7	17	2.1
XVI	9	1.0	14	.9	27	3.3	12	1.6
Total	878	99.9	1500	99.9	820	99.9	813	100.0

Figure 1: Clause Pattern Frequency

On the basis of the above chart, several observations must be made. It should be noted that for all informants, patterns I (S iV), IV (S tV DO) and X (SCV S-Comp^{nour}) are the most frequent patterns, accounting for over two-thirds of all clause patterns. For all informants, pattern IV is clearly the most frequent pattern. Several of the Rogerts-Gleason patterns were not found in the corpora, as indicated in the above chart. No contrast between informants can be postulated, however, on the basis of absence or presence of particular patterns.

In terms of the relative frequency of the particular types, several contrastive frequencies must be noted. Informant 41 seems to contrast with the others in terms of the infrequency of pattern I (12.3 per cent as opposed to 26.2, 17.1, and 18.9 per cent for the others). The relatively higher frequency of this pattern in Informant 15's speech (26.2) must also be noted. Informant 41 seems to contrast with the other informants in the relatively high frequency of pattern IV (45.4 as opposed to 40.7, 40.6, and 39.8 for the others). It is interesting to note that pattern X is one of the three patterns occurring with a copula; the other patterns containing a copula (XIV and XV) are also higher for Informant 41 when compared with the others. In attempting to account for the revealed differences which tend to isolate Informant 41 from the other three informants, one may turn to contrastive social status of ranking the informants. Informant 41, with a social status ranking of 37, clearly contrasts with the social status of the Informants 15, 208, and 137, whose social status rankings are 103, 97, and 97 respectively. Although there are other contrastive frequencies, such as the relatively high percentage of pattern VIII for Informant 15, these must at this point be considered ideolectal since no definite variable such as status, age, sex, or race can clearly be correlated with the difference.

The next chart reveals the relative frequency of the minimum/expanded and non-deleted categories A-D:

	15		41		137		208	
	No.	%	No.	%	No.	%	No.	%
A.	338	38.5	769	51.3	304	37.1	331	40.7
B.	199	22.6	255	17.0	164	20.0	183	22.5
C.	278	31.7	371	24.7	245	29.9	249	30.6
D.	63	7.2	103	7.0	107	13.0	50	6.3

Figure 2: Minimum/Expanded Clause Forms

What is interesting in the above chart is the fact that Informant 41, who has the highest social ranking, shows a much greater infrequency of minimum forms, both in the non-deleted (A) and deleted (C) categories. This seems to contradict the impressionistic suggestion that the use of expanded forms may correlate with social status. Even when non-deleted minimum and deleted minimum are combined (i.e. $\underline{A} + \underline{C}$) informant 41 shows a considerably higher frequency than the others. This contrast, however, is somewhat less distinct when the deleted and non-deleted minimums ($\underline{A}$ & $\underline{C}$) are tabulated, since informant 41 has the lowest frequency of deleted minimum forms. In fact, in category C, informant 41 seems to contrast with the other informants in having less frequency of minimal forms. The only other apparently contrastive frequency is the relatively high frequency of category $\underline{D}$ for Informant 137; howev , no hypothesis concerning the correlation of this difference to the present variables being investigated can be made.

The final parameter investigated is the way in which the various classes are combined and connected. Since the ways in which different types of patterns shown in Chart I combine may be relevant, each of the four types of combination and connection is tabulated for each pattern.

The following chart gives the occurrence of dependent clauses for each of the patterns:

Informant

	15		41		137		208	
	No./Total	%	No./Total	%	No./Total	%	No./Total	%
I	29/230	12.6	18/184	9.8	20/155	12.9	16/139	11.5
II	------	----	2/12	16.7	1/11	9.1	8/16	50.0
III	------	----	-/4	0.0	------	----	------	----
IV	40/357	11.2	44/681	6.5	44/326	13.5	33/330	10.0
V	1/5	20.0	1/13	7.7	1/11	9.1	1/9	11.1
VI	7/16	4.4	-/27	0.0	3/20	15.0	-/18	0.0
VII	------	----	------	---	------	----	------	----
VIII	3/74	4.1	1/25	4.0	2/27	7.4	3/35	8.4
IX	17/45	37.8	10/113	8.8	9/58	15.5	8/75	10.7
X	8/79	10.1	19/234	8.1	8/96	8.3	2/88	2.3
XI	4/37	10.8	9/110	8.2	6/50	12.0	9/69	13.0
XII	------	----	------	---	-/1	0.0	------	----
XIII	------	----	------	---	-/1	0.0	------	----
XIV	5/17	39.5	7/36	19.2	2/15	13.3	1/5	20.0
XV	1/9	11.1	4/47	8.5	4/22	18.2	1/17	5.9
XVI	1/9	11.1	1/14	7.2	5/27	18.5	1/12	8.3
Total	116/878	13.2	116/1500	7.7	105/320	12.8	83/813	10.2

Figure 3: Dependent Clauses

What is interesting in the above is the rather consistent lower frequency shown in Informant 41's speech when compared with the other informants. This observation is particularly apparent in the transitive clauses (i.e. patterns IV-VII and XI-XVI), and is reflected in the total percentages of dependent clauses, Informant 41 having a total of 7.7 as opposed to 13.2, 10.2, and 12.8 for Informants 15, 208 and 137 respectively. The adult informants, 41 and 208, also reveal lower frequencies of dependent clauses than the 10-12 year old children.

The following chart shows the relative frequencies for the clauses which are connected by coordination:

	15 Occ./Total	%	41 Occ./Total	%	137 Occ./Total	%	208 Occ./Tot.	%
I	94/230	40.9	47/184	25.4	44/155	28.4	51/139	36.7
II	------	----	3/12	25.0	4/11	36.7	7/16	43.8
III	------	----	1/4	25.0	------	----	------	----
IV	111/230	47.8	140/681	20.6	113/326	34.7	88/330	26.7
V	3/5	60.0	6/13	43.8	3/11	27.3	4/9	44.4
VI	4/16	25.0	6/27	22.2	2/20	10.0	2/18	11.1
VII	------	----	----	----	------	----	------	----
VIII	10/74	13.5	1/25	4.0	0/27	----	7/35	20.0
IX	12/45	26.8	24/113	21.2	14/58	24.1	20/75	26.7
X	18/79	22.8	57/234	24.4	14/96	14.6	13/80	14.8
XI	12/37	32.4	26/110	23.6	14/_	28.0	20/69	29.0
XII	------	----	------	----	1/1	100.0	------	----
XIII	------	----	------	----	0/1	0.0	------	----
XIV	10/17	58.8	8/36	22.2	8/15	53.3	2/5	40.0
XV	6/9	66.7	13/47	27.7	15/22	65.5	6/17	43.8
XVI	5/9	55.6	6/14	42.9	11/27	40.7	6/12	50.0
Total	285/872	32.4	336/1500	22.5	243/820	29.5	226/813	27.8

Figure 4:   Clauses connected by coordination

The above chart reveals a rather consistent pattern for the informant having the highest social status ranking. Namely, informant 41 has fewer clauses connected by coordination than the other three informants. A less significant contrast is that between the adult informants, 41 and 208 (32.7 and 29.5 respectively). One may, on this basis, submit the hypothesis that the connection of clauses by coordination may be correlated with age and status. That is,)-12 year old children and people at lower social status ranking tend to use more coordination than adults and people at a higher social status ranking.

Next, the chart of the clauses combined by relative embedding may be examined:

Informant

	15 Occ./Total	%	41 Occ./Total	%	137 Occ./Total	%	208 Occ./Total	%
I	25/230	10.9	39/184	27.2	20/155	12.9	9/139	6.5
II	-----	----	6/12	50.0	-/11	0.0	2/16	12.5
III	-----	----	1/4	25.0	------	----	-----	----
IV	25/357	7.0	82/681	12.0	18/326	5.5	18/330	5.5
V	1/5	20.0	3/13	23.1	2/110	1.8	-/9	0.0
VI	2/16	12.5	10/27	37.0	3/20	15.0	1/18	5.5
VII	-----	----	-----	----	------	----	-----	----
VIII	39/74	52.7	17/28	60.7	16/27	59.3	5/35	14.3
IX	10/48	20.4	38/113	33.6	18/58	31.0	25/75	33.3
X	5/79	6.3	42/234	17.9	8/96	8.3	12/88	13.6
XI	6/37	16.2	23/110	20.9	12/50	24.0	11/67	15.9
XII	-----	----	------	----	0/1	0.0	------	----
XIII	-----	----	------	----	1/1	100.0	------	----
XIV	-/17	0.0	5/36	13.9	-/15	0.0	-/5	0.0
XV	-/9	0.0	13/47	27.7	4/22	18.2	3/17	17.7
XVI	1/9	11.1	3/14	21.4	4/27	47.7	1/12	8.3
Total	114/878	12.8	282/1500	18.8	106/820	12.9	87/813	10.7

Figure 5: Relative Embedding

In the above chart, the most significant contrast is seen between informant 41 and the other three informants. This time, however, the higher incidence of relative clauses is observed. In all patterns except XVI (which occurs overall quite infrequently) there is a consistently higher relative frequency for informant 41. The total frequency of relatives shows that there is approximately 6 per cent difference between informant 41 and the others (18.8 per cent versus 12.8, 10.7 and 12.9). One may again hypothesize that this difference can be correlated with the educational and status difference which sets this informant apart from the others.

Finally, the parenthetical insertion of a clause within another clause may be observed:

Informant

	15 No./Total	%	41 No./Total	%	137 No./Total	%	208 No./Total	%
I	6/230	2.6	12/184	6.5	2/158	1.3	1/139	7.2
II	------	---	1/12	8.3	1/11	0.0	1/16	6.3
III	------	---	-/4	0.0	-----	---	-----	---
IV	16/357	4.5	42/681	6.2	13/326	3.6	7/330	2.1
V	1/5	20.0	-/13	0.0	-/11	0.0	-/9	0.0
VI	-/16	0.0	1/27	0.0	-/20	0.0	-/18	0.0
VII	------	---	------	---	-----	---	-----	---
VIII	1/74	1.4	2/25	8.0	-/27	0.0	-/35	0.0
IX	1/45	2.2	4/113	3.5	-/58	0.0	1/75	1.3
X	3/79	3.8	30/234	12.8	1/96	1.0	4/88	4.5
XI	2.37	5.4	10/110	9.1	-/50	0.0	1/69	1.4
XII	------	---	------	---	-/1	0.0	-----	---
XIII	------	---	------	---	-/1	0.0	-----	---
XIV	1/17	5.9	3/36	8.3	-/15	0.0	1/5	20.0
XV	-/9	0.0	3/47	6.4	-/22	0.0	1/17	5.9
XVI	-/9	0.0	1/14	7.2	-/27	0.0	1/12	8.3
Total	31/878	3.5	108/1500	7.2	15/820	1.8	18/813	2.2

Figure 6: Parenthetical Embedding

Although there are relatively few instances of parenthesis in relation to other types of combination, a contrast is seen in the chart between informant 41 and the others. The overall frequency of 7.2 in this informant's corpus reveals contrast with the others who group at 3.5, 2.2, and 1.8 per cent. Parenthesis, which may be considered as a special type of embedding to complement relative embedding shows the same type of contrast that the relative embedding does.

The types of clause connection and combination can be summarized by a chart giving the total frequency of the four categories:

	Informant 15	Informant 41	Informant 137	Informant 208
Dependent	13.2	7.7	12.8	10.2
Coordinate	32.4	22.5	29.5	27.8
Relative	12.8	18.8	12.9	10.7
Parenthetical	3.5	7.2	1.8	2.2

Figure 7: Clause Correction and Combination

One should note in the above chart that the relatively lower percentages of dependency and coordination for informant 41 seem to be compensated for by the relatively higher frequency of relative and parenthetical embedding. What this suggests is not a difference in terms of overall "complexity" in construction, but a difference in the frequency of certain types of clause connection and combination which may be correlated with social status.

Conclusion:

On the basis of such a small pilot study it would indeed be presumptuous to suggest that any definitive conclusions can be drawn. One cannot be sure when he is dealing with ideolectal features and when he is dealing with features of social dialects. Despite this limitation, however, several hypotheses seem to warrant attention, their verification or rejection subject to a more representative study. In the first place, the most clear-cut contrasts were found between Informant 41, the informant who contrasted on the basis of status (the most important aspect of this status perhaps being educational), and the other three informants. Race seemed to be irrelevant, and age of only peripheral importance.

At this point, of course, it must be noted that this is only a preliminary "generalized" study which precedes a more specific kind of structural frequency study. Thus, it is necessary to follow this tabulation of all kinds of relative embedding, for example, with a more specific delimitation of the kinds of relative embedding which occur and their relative frequency.

Noun Phrases:

The purpose of this aspect of the structural frequency study is to look for possible grammatical indices of social stratification in terms of a particular grammatical unit, namely, the noun phrase. The focus of attention is the internal structure of the phrase.

Corpus

As a pilot study, four informants were chosen and an analysis of their NP's was made. The selection of the four, following that of the clauses, was made primarily on the basis of age and race, a secondary consideration being the size of the corpus. The informants used in this study include:

1) a female white adult with a social status ranking of 41 (tape No. 88)

2) a female negro adult with a social status ranking of 97 (tape No. 208)

3) a female white child with a social status ranking of 97 (tape No. 208)

4) A male negro child with a social status ranking of 109 (tape No. 137)

It should be noted that two of the informants are the same as those used in the study of the clauses and two are different.

Methodology

Since the search was for grammatical indices, the following methodology was used as a starting point. An adaptation of the standard grammatical categories of the NP established for English was adopted. Although it is true that this classification of the NP is largely based on the surface structure, this provides a convenient starting place for the analysis in this preliminary study.

Description

The first step in organizing the NP's is to separate them into the following groups: "Simple" non-prepositional, "Simple" prepositional, Appositional, Relative (embedded following the NP) and Coordinate. Examples of the different groups are as follows:

"Simple" non-Prepositional

    e.g. <u>the small man</u>, <u>my friend</u>

"Simple" Prepositional

    e.g. <u>on the windows</u>, <u>in the basement</u>

Appositional

    e.g. <u>This particular teacher, Mrs. Houston</u>, <u>my teacher, she</u>

Coordinate

    e.g. <u>my mother and her friend</u>, <u>George and his brother</u>

Relative

    e.g. <u>All these children that are deformed</u>, <u>the man with the bat</u>

It must be noted that this classification is not meant to separate mutually exclusive groups. There is some overlapping. Nor are these groups meant to distinguish phrase "types". The terms "Simple" non-prepositional and "Simple" prepositional do not mean non-complex in the traditional definition of these terms. The term "simple" is intended only to refer to non-appositional, non-relative, and non-coordinate.

The following chart gives the number and percentage of each of the five categorie

	88		137		208		315	
	No.	%	No.	%	No.	%	No.	%
Simple Non-Prep.	379	46.7	293	52.9	232	51.9	304	46.0
Simple Prep.	250	30.8	155	28.0	119	26.6	229	34.7
Relative	100	12.3	53	9.6	40	8.9	67	10.1
Appositional	25	3.1	13	2.3	29	6.5	34	5.0
Coordinate	58	7.1	40	7.2	27	6.0	27	4.1
TOTAL	812		554		447		661	

Figure 8: Phrases

Several features should be discussed with reference to the above chart. In the first place, the frequencies of Simple non-prepositional and Simple prepositional tend to group informant 208, a negro adult and informant 137, a white child. Any correlation on the basis of age or race, however, seems to be ruled out and it seems likely that this grouping is insignificant. It should be noted with regard to apposition that the two white speakers, 88 and 137, group together with lower frequencies than the negro speakers. The frequency of relatives seems to support the observation that was made with reference to the clauses, namely, that this may be correlated with social status, since Informant 88, who is distinguished from the others on the basis of social status, indicates a higher frequency of relatives than the others. However, unlike the clause structure, this is not correlated with a lower frequency of coordination.

Next, all Simple non-prepositional and Simple prepositional phrases are distinguished on the basis of whether or not they were minimum or expanded. A minimum NP is defined as one in which only the determiner slot is filled (e.g. the man); an expanded phrase is defined as one in which other pre-noun slots are filled beside the determiner (e.g. the tall man). The following chart gives the relative frequency of expanded verus minimum NP's:

Informant

	88 No./Total	%	137 No./Total	%	208 No./Total	%	315 No./Total	%
Non-Prep. Expanded	161/379	42.5	106/293	36.2	59/232	25.4	125/304	41.:
Prep. Expanded	67/250	26.8	34/155	26.6	22/119	18.4	38/229	16.(
TOTAL	228/629	36.2	140/448	31.3	81/351	23.1	163/533	30.(

Figure 9: Expanded NP's

In the above chart it is indicated that informant 88 is distinguished from 315 and 208 by relatively higher frequencies and 137 is distinguished by relatively

lower frequencies. Informant 88, it will be remembered, is set apart from the others on the basis of social status thus suggesting a possible correlation on the basis of this variable. It is interesting to note that in terms of the clauses, the informant with the highest social ranking revealed less frequent expanded clause patterns than the others; with regard to the tabulation of expanded NPs, this seems to be reversed.

Another aspect of the NP tabulated is that of the pre-head noun slots which are filled. Adapting Gleason's classification from Linguistics and English Grammar, six slots were distinguished. The following formula was used in the classification of the slots:

$$N^{-6} \quad N^{-5} \quad N^{-4} \quad N^{-3} \quad N^{-2} \quad N^{-1}$$

| Predeter- | Det. | Num. | Spec/ | Adj | Noun | Head noun |
| miner | | | Adj | | | |

e.g.   Only   the   three   best   new   iron   beds...

On the basis of the above classification, the relative frequency of each slot is tabulated. The following chart gives the relative frequency of all slots except N^{-5} (determiner). This slot was not tabulated since it is obligatorily filled.[1]

Informant

Slot	88		137		208		315	
	No.	%	No.	%	No.	%	No.	%
N^{-6}	32	12.6	30	20.0	20	21.7	36	19.5
N^{-4}	39	15.4	24	16.0	17	18.5	38	20.5
N^{-3}	67	26.4	25	16.7	25	27.2	43	23.3
N^{-2}	73	28.7	33	22.0	21	22.8	42	22.7
N^{-1}	43	16.9	38	25.3	9	9.8	26	14.1
	254		150		91		185	

Figure   : Pre-Head Noun Slot Frequency

The above chart indicates that there may be a contrast between informant 88

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[1] The analysis of the determiner slot as obligatory is based on an interpretation positing a determiner.

and the other informants in the relative frequency of N^{-6} and N^{-2}. In N^{-6} a lower frequency is indicated for informant 88, a fact which seems to be compensated for by the relatively higher frequency of N^{-2}. The relatively high frequency of N^{-2} is rather interesting, because it relates to an earlier observation that a higher frequency of relative embedding might correlate to social status. The N^{-2} slot, which contains such modifiers as small and big, is a surface structure slot which may be derived by embedding (The boy came and The boy is big being the constituent and matrix sentences) from which the big boy came is derived. Thus a rather consistent pattern of embedding is observed. The slot revealing the most variant frequency is N^{-1}, ranging from 9.8 to 25.3. The rather wide variation without obvious correlation on the basis of age or status suggests that this is ideolectal.

Another aspect of the NP which is tabulated is the relative frequency of certain types of post-noun relative phrase realization. First, the functional relations in which relatives are found is tabulated. The function of the head noun and the shared noun (i.e. the noun head of the embedded relative) is tabulated in terms of Subject, Object (i.e. direct object) and Object of a Preposition.

The following chart displays the relative frequency of relatives on the basis of these functions:

Informant
Head Noun

	88		137		208		315	
	No.	%	No.	%	No.	%	No.	%
Subject	52	52.0	15	28.3	14	35.0	31	46.2
Object	33	33.0	30	56.6	21	52.5	24	35.8
Preposition	15	15.0	8	15.1	5	12.5	12	17.9
Total	100		53		40		67	

Shared Noun

	88		137		208		315	
Subject	76	76.0	34	65.1	30	75.0	38	56.7
Object	10	10.0	6	11.3	7	17.5	10	14.9
Preposition	14	14.0	13	24.5	3	7.5	19	28.3
Total	100		53		40		67	

Figure 11: Shared and Head Noun by Function

The function of the head noun shows that informant 88 has the highest frequency of head nouns which function as subjects. Informant 208, a lower class adult negro woman and 137, a lower class white girl tend to group together in having a higher frequency of head nouns functioning as objects. With regard to the function of the shared noun, the two adults, informants 88 and 208, show a higher frequency of shared nouns functioning as subjects. Thus, the functioning of shared and head nouns in relatives may be related to age and status.

Embedded relatives were also tabulated on the basis of the types of relator which were used.

Three basic categories were set up: 1) a wh- relator (who, which e.g. He saw the man who was from his home town) 2) a that relator (e.g. He saw the man that was from his home town) 3) the absence (i.e. deletion) of a wh- or that relator (e.g. he saw the man from his home town). The relative frequencies are tabulated in the following chart:

Informant

	88 No.	88 %	137 No.	137 %	208 No.	208 %	315 No.	315 %
wh-	34	34.0	1	1.9	4	10.0	4	6.0
that	17	17.0	18	34.0	10	25.0	11	16.4
∅	49	49.0	34	62.2	26	65.0	52	77.6
Total	100		53		40		67	

Figure 12: Realization of Relator

In the above chart, informant 88 clearly contrasts with the others in the wh- realization of relator. Also, the adults, 88 and 208, indicate a relatively higher frequency than the children, 315 and 137.

In the following chart the relatives have been divided further on the basis of whether or not the head noun is "Personal" or "Non-Personal":

Informant

	88		137		208		315	
	No.	%	No.	%	No.	%	No.	%
wh-	34	34.0	1	1.9	4	10.0	4	6.0
that	17	17.0	18	34.0	10	25.0	11	16.4
∅	49	49.0	34	62.2	26	65.0	52	77.6
Total	100		53		40		67	

Figure 13: Realization of Relator

In the above chart, informant 88 clearly contrasts with the others in the wh-realization of relator. Also, the adults, 88 and 208, indicate a relatively higher frequency than the children, 315 and 137.

In the following chart the relatives have been divided further on the basis of whether or not the head noun is "Person" or "Non-Personal":

Informant

	88		137		208		137	
	No.	%	No.	%	No.	%	No.	%
wh-	12	57.1	0	0.0	0	0.0	2	11.8
that	2	9.5	2	14.3	7	77.8	4	23.5
∅	7	33.3	12	85.7	2	22.2	11	64.7
Total	21		14		9		17	
wh-	22	27.8	1	2.6	4	12.9	2	4.0
that	15	19.0	16	41.0	3	9.7	7	14.0
∅	42	53.2	22	56.4	24	77.4	41	82.0
Total	79		39		31		50	

Figure 14: Realization of Relator: Personal/Non-Personal

When the tabulation of relator realizations is divided, the contrast reveals definite significance with reference to relatives having personal head nouns on the basis of status. Informant 88 indicates that 57.1 per cent are realized by the wh-form, whereas both informant 208 and informant 137 show no occurrences of the wh-form and informant 315 only 11.8 realizations.

The final tabulation of phrases attempts to investigate the relation between relative and appositional phrases; to compare the relative frequency of each. For

the appositional phrases only the noun appositions (my friend, the teacher) were

considered, since pronominal apposition has been treated elsewhere (See Page __ to __

The following chart gives the relative frequency of relative as opposed to

appositional phrases:

Informant

	88		137		208		315	
	No.	%	No.	%	No.	%	No.	%
NP Appositionals	23	18.7	10	15.9	10	20.0	17	20.2
Relatives	100	81.3	53	84.1	40	80.0	67	79.8
Total	123		63		50		84	

Figure 15: NP Appositional/Relative

No clear-cut contrast is seen between the ratio of the NP Appositionals to

Relatives among the informants, although the white informants (88 and 137) do show

a slightly lower frequency of NP appositions than the negro informants. Because of

the small degree of difference, however (18.7 and 15.9 versus 20.0 and 20.2), any

definite correlation between these frequencies and race is highly tenuous. No

contrast can be seen on the basis of age or status.

Conclusion:

As was observed of the clauses, the most clear cut contrasts in the phrases are

found in relation to status. One informant (88) differs from the others on the basis

of status and reveals the most contrastive features in the structural frequency

tabulation. Race and age, at most seem to be of peripheral importance. If this is

indeed the case, this kind of structural frequency study shows interesting contrasts

with the study of isolated indices, where the variables of status, age, sex, and race

are all quite relevant. Naturally, any such comparisons must be made on the basis of

a sufficiently larger representation of informants. This study has only intended to

suggest the possible direction in which the investigation might proceed for the for-

mulation of hypotheses concerning the correlation of certain types of structural

frequencies and social stratification.

PART III B - COMPUTER BASED PHONOLOGICAL ANALYSIS

After the fieldworkers phonetically trnascribed section V of every interview, these transcriptions were recoded into alpha-numeric symbols which were keypunched and verified for a computer retrieval program. The program is geared for retrieval of both phonological and lexical items. In order to do this, it was necessary to devise a code book in which all informant background data and lexical variants could be coded.

The Code Book

The code book included separate fields for each salient bit of information required of each informant. Field number one, for example, was for tape number (0435), field two for informant's name, field three for sex, etc. In all, thirty-four fields were devoted to informant background data.

Language data fields began at field 35 and extended through field 170. A sample page from the code book follows:

35. living room

    1. living room
    2. parlor
    3. sitting room
    4. front room

36. dining room

    1. dining room

37. kitchen

    1. kitchen

38. bathroom

    1. bathroom
    2. john
    3. lavatory
    4. powder room

39. bedroom

    1. bedroom
    2. chamber
    3. chamber room

40. hall

    1. hall
    2. hallway
    3. vestibule
    4. entrance way
    5. entrance hall
    6. main hall
    7. corridor

41. closet

    1. closet

42. attic

    1. attic
    2. loft
    3. garrett

43. basement

    1. basement
    2. cellar

44. roof

    1. roof

45. chimney

    1. chimney
    2. smoke stack

46. soot

    1. soot
    2. coal dust

47. gutters

    1. gutters
    2. eavestroughs
    3. spouting

48. other

    1. breakfast nook

The code book specifies that any phonetic transcription of field 35, for example, must be for one of the four subcategories of that field (<u>living room</u>, <u>parlor</u>, <u>sitting room</u>, or <u>front room</u>). Thus [ʹpʰarɫɪr] would be coded under 35.2. Every field had an open number of subcategories so that, as the coding proceeded, lexical responses noted for the first time could be added. This flexibility was particularly useful in the more general fields (such as field 100 in which almost 100 various meats eaten for dinner were recorded). Furthermore, at the end of each broad lexical area (e.g. names for furniture) a separate field was assigned for volunteered responses which, though in the general semantic area, were not specifically requested by the field-worker. Consequently almost any response could have been coded from the phonetic transcriptions but once it was assigned a number within a field, no other lexical variant could be classed with it.

To be sure, the coders frequently had to make decisions on borderline matters. For example, <u>corn-on-the-cob</u> (106.1) was occasionally recorded as <u>corn-on-the-carp</u>, <u>corn-on-the-car</u> and <u>corn-on-the-horn</u>, as opposed to the more usual variants, <u>roasting ears</u> and <u>sweet corn</u>. In such cases, the coders categorized by the more normative variants and <u>corn-on-the-carp</u> is currently coded under <u>corn-on-the-cob</u>.

<u>Coding</u>

Two graduate assistants in linguistics coded all of the phonetic transcriptions of Part V of the Interview, using the following symbols:

Consonant Code Sheet

b . . . . .B	k^h . . . . .KH	r . . . . .R	t^h . . . .TH
č C	1 L	r̃ . . . . .R$	tš . . . . .TS
d . . . .D	𝓁 LX	ɤ . . . . .R-	c^h . . . .CH
dz . . . .DZ	ƚ . . . . .L-	R̃ . . . . .RX$	θ . . . . .T-
ʄ . . . .D-	m . . . . .M	s . . . . .S	v V
f . . . .F	n . . . . .N	š . . . . .S(	z . . . . .Z
g . . . .G	ŋ . . . . .NX	t . . . . .T	ž . . . . .Z(
h . . . .H	p . . . . .P	ƛ . . . . .T(	w . . . . .W
ǰ . . . .J	ph . . . .PH	ď . . . . .D(	y . . . . .Y
k . . . .K	ʔ . . . . .Q	ř . . . . .R(	x . . . . .KS
			ṛ . . . . .RR

Vowel Code Sheet

i . . . . .U^1	ə . . . . .U^8	**Glides**
I . . . .U^2	ɑ . . . . .U^9	place E on side nearer the raised
e . . . .U^3	ɯ . . . . .U^{10}	vowel, for example
ɛ . . . .U^4	ʋ . . . .U^{11}	$[a^i]$ $U^6 U^1 E$
æ . . . .U^5	o . . . . .U^{12}	$[^iu]$ $EU^1 U^{10}$
a . . . .U^6	ɔ . . . . .U^{13}	
ɨ . . . .U^7	ɒ . . . . .U^{14}	

Modifications

^ raising . . . . I^1	á laryngealized . . I^9	˞ unreleased + (plus)
v lowering . . . .I^2	a pharyngeal. . . , I^{10}	͜ devoiced consonant , (comma)
̃a nasal . . . . . .I^3	a̟ breathy . . . . .I^{11}	< fronted * (asterisk)
ą weak nasal . . I^4	h aspiration . . . . H	> backed $ (dollar)
ą opposite rd. . I^5	v hatchik (except in j which is J)	vd. devd. = (equal)
a slight rd. . . I^6	co-articulation [ ] coded as ? + vl. vd. ' (single quote)
a: length . . . . I^7	c retroflex (same as backed) $ (dollar)
a: extra length . I^8	ç syllabic C A	lenis 8/5 ' stress

The data were transferred from questionnaire sheets to punched card coding forms as follows: from left to right on the card, material is punched, one character per column, and when there is too much for one card, coding carries over from column 72 to column 1 of the next card. Each field is coded consecutively starting with the first and ending with one blank field after the last one on the questionnaire. The field number is punched, followed by a period (.) followed by each coded subfield for that field. A subfield is coded by first punching its lexical code, followed by a left parenthesis, followed by encipherment of each phonetic symbol according to the phonetic coding scheme. After all the phonetic symbols are coded, the subfield is terminated by a right parenthesis. Each additional subfield is coded immediately afterwards in exactly the same way, and after the last right parenthesis of the last subfield is a slash (/). The next field is coded the same way, and each blank field appears on the record as a field number followed by a period and a slash.

A sample of the coded material is as follows:

37.1 (& KHU2C*U7*N)/

for

[kʰIč< ɨn]   (kitchen)

39.1 (QBU417DRU1014U7$EM)/

for

[be·dru m]   (bedroom)

The Computer Program*

To facilitate the display of the correlation of such non-linguistic factors as age, status, sex, race and geographical origins, it was decided that a distribution table, or a "contingency table," would be convenient. A contingency table of one variable versus another variable with respect to a particular population is a tabulation of the number of people who fall into the categories defined by all possible combinations

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*The authors are indebted to graduate assistant Edward N. Adams for devising the computer program in this study.

of the two variables. The program is devised to accommodate the following general

tasks:

1. To maintain a large permanent file of answers for all the respondents.

2. To provide a convenient means for the linguist to specify hypotheses as to the relevant categorization of any given variable.

3. To assess the information file by requesting contingency tables of several variables so categorized with each other.

After the file of information was punched on computer cards, it was stored permanently onto magnetic tapes in a machine-oriented form. There will be at all times two copies of the permanent tape. One of these will be used by the linguist as the permanent tape, to produce a recoded tape for use in making tables. The second will be a back-up tape in case of loss or deterioration of the other.

The program reads the cards and puts the information in slightly different form onto tape. If the reading program encounters two contiguous fields whose numbers are not in order and consecutive, then the whole record for that respondent is rejected with instructions to correct the cards and put them back in. Thus it is also true that if a record does not begin with the word PERSON, then the program will reject that respondent's cards.

The second program is the part which enables the linguist to temporarily recode the permanent data according to phonological criteria into a few categories, and to give these categories mnemonic names. These names will ultimately be used by the third program as row and column headings. The linguist will have prepared a deck of recode packs, and the program will read all of them. Then it starts reading the permanent tape, one person at a time. After it has read the information for one person, it looks at the first recode pack, and finds out which field number it refers to. Then it skips to that place on the person's record, and then tries to scan this field for the first set of characteristics, and keeps going until it finds a set of characteristics which this field satisfies. Next it writes on the temporary

tape the category name associated with that set.   Then it looks at the next recode pack, and goes through this routine again, until all the recode packs have been treated for this speaker, and all of the categories have been written on tape for this person.   Then the next person is read in from the permanent tape, and he is treated in the same way.   When the entire permanent tape has been treated, this program is finished, and the next program can then be used.

The next program merely sets up tables on the basis of table requests supplied by the linguist in the following form: V1xV2xV3, which will produce a table in which variable V1 appears spread down the side, V2 spread across the top and V3 spread in each cell of the table.   Each row will have a heading, which is one category name. Each column will similarly have a heading and at the intersection of a row and a column will be a list of all the third variable headings with numbers following them indicating how many people answered that combinatic.. of three.

The following chart is illustrative of the kind of display available in this program.

vowel of fog*

	10-12 year olds	teenagers	parents
[ɑ] [ɑᴧ] [ɑᶜ]	211	150	130
[ɔ] [ₒᶜ] [ɑ]	23	25	94
[ₒᵘ] [ɔᴧᵾ] [ₒᵛᵾ]	10	23	27

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* The data in this chart are illustrative only, and are not tabulations for the corpus.

PART IV - SOME SOCIOLINGUISTIC IMPLICATIONS FOR THE TEACHING OF ENGLISH

One of the four major objectives of the Detroit Dialect Study was to provide accurate and useful language data upon which educational applications could be based. The 700 systematically collected interviews, all tape recorded and all containing sections of phonetically transcribed data, provide a data bank unparalleled among America's larger cities. This collection of language data will be useful in many ways as more and more is discovered about the social correlates of American English usage.

Although it was not the intention of this research to develop classroom materials, several important prerequisites for such material preparation were investigated. Of particular concern were the beginning assumptions of Detroit teachers, the principle of conscious versus unconscious control of a given linguistic correlate of social stratification, and the development of biloquialism on the part of Detroit school children.

The Teachers' Concept of the Problem*

The real worth of language knowledge in terms of curriculum development and revision depends greatly on the teachers' concept of the problem.

Like so many aspects of urban culture, urban language problems suffer from having been ignored, overgeneralized and stereotyped. Public apathy is perhaps to be expected when the educational system promotes a type of linguistic insecurity which makes us all run from the problem. We may legitimately ask how urban language problems can be identified when we have done a less than adequate job of identifying what we mean by standard English. Linguists have only recently begun to come to grips with the inadequacies of simplistic usage scales which range from literary to formal to informal to vulgar to illiterate. But at any rate, it

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The authors are indebted to graduate student Anne E. Hughes for the basic research on the teachers' concept of the problem.

is not surprising that the special language problem of the inner-city youth have been largely overlooked in past decades.

Generalizations about these special language problems have been left, largely, to the classroom teacher and it is because of this that much of our stereotyped information about urban language has developed. Recently, as an adjunct to the Detroit Urban Language Study, thirty randomly selected urban teachers were asked to identify the language problems of their students who were designated, in one way or another, as "disadvantaged."

To introduce the study to the principals whose teachers would take part in the second set of interviews, a letter was sent to the schools asking for permission to speak to the teachers who had been so selected. This letter stated that the study described and identified the speech of children and adults in Detroit for possible future in-service training and curriculum revision for teachers. It went on to say that the teachers would be asked to react to questions concerned with their opinions of Detroit speech. The questions were then stated for the principals' information.

The first two questions in the statement were proposed to the teachers in an attempt to get the teachers to state their opinions concerning the language problems of children. These questions were:

1) What do you think are the major problems your children have with vocabulary, grammar and pronunciation?

2) In what ways does the language of the parents influence children in your class? What problems with vocabulary, grammar and pronunciation in the language of the parent are reflected in the problems of the child?

The teacher was then asked to listen and react to a tape of the speech of children in their program. For convenience and economy we will cite only exerpts of these reactions here.

Vocabulary

Eighty percent of the teachers observed that their students have a limited vocabulary and many teachers offered a reason for this handicap:

> "In the program, the children come with a very meager vocabulary,
> I would say. I think it's because of the background of the home
> and the lack of books at home, the lack of communication with
> the family, especially, if there are only one or two children
> in the family. Perhaps if there are more children in the
> family communication might be a bit better. They might have
> a few more words in their vocabulary".

> "In the inner-city, the child's vocabulary is very limited.
> His experiences are very limited.

These comments are typical for they blame the limited vocabulary on the home situation. Neither teacher gave any indication that the home environment might produce a _different_ vocabulary. On the contrary both felt that lack of school vocabulary was equivalent to a lack of overall vocabulary.

This widely held but erroneous concept (that "disadvantaged" children have limited vocabularies or, as it is sometimes observed, that they are "non-verbal") appears to stem from fairly recent research reports on the language of the disadvantaged child. Nothing in the current research of linguists of the Detroit Dialect Study supports this idea. The notion that children in disadvantaged homes are the products of language deprivation seems to mean only that the investigators proved to be such a cultural barrier to the interviewee that the informants were too frightened and awed to talk freely or that the investigators simply asked the wrong questions.

It is not surprising that teachers who have thirty to forty children in class never hear more than two or three word responses. The mechanics of the question-answer classroom relationship promote short responses. These are, indeed, part of what we might call oral language. Other parts include conversations with friends, speeches in class, oral reading and listing things. If the formal classroom situation does not yield high vocabulary production it does not mean

that the child has a limited vocabulary. It may mean only that his vocabulary

differs from the teacher's. An inner city teenager may not be able to use vivid

verbs in an assigned composition but one might overhear him tell his buddies how

his tires "bark and howl"when he accelerates suddenly.

The interviewed teachers' misconceptions about the size of a disadvantaged

child's vocabulary may be illustrated as follows:

> "Some had a vocabulary of about a hundred and some words, I'd
> say; no more than that. They got along fine with what they
> knew. They didn't have any trouble expressing themselves.
> They knew the important words for them to get along okay.
> Some could talk your foot off. I mean, they just knew every-
> thing. The quieter ones were the ones who didn't have a
> large vocabulary.

The absurdity of assuming that a child has only a hundred words or so is one

of the curious stereotypes of the teaching profession. What is more distressing

than this hyperbole, however, is the condescending tone (they got along fine with

what they knew) and the assumption that quiet children are quiet because they have

no vocabulary.

One last common generalization about the vocabulary of the lower status child

is that they use monosyllables and fail to "speak in sentences:"

> I imagine they have trouble because their parents speak in one-
> syllable words and they don't even make sentences.

> "They use one-syllable words. They are like children who have
> no training at home".

> "The vocabulary is definitely limited; they speak in single words,
> simple words, no sentences".

Ten percent of the teachers expressed the belief that these children do not

talk at home, some admit to not really understanding them in school:

> "To be perfectly honest about it, I have a very hard time trying
> to communicate with these children. Forgetting the social
> differences, the children are simply language-starved".

Grammar

The responses of these teachers to the grammar problems of their disadvantaged students is equally naive. One third of the teachers characterized th. child's greatest problem as his failure to speak in sentences and/or complete thoughts:

> "I can't get them to make a sentence. Even if I have them repeat after me exactly, they don't do it. They repeat in sentences they are familiar with. They're not really sentences but fragments of sentences that are familiar to them, and they understand them. They don't realize that they aren't making a complete thought".

> "Where we would use a sentence to convey a thought, they are in the habit of maybe using a phrase or just a few words to try to convey the same thought which I would presume would affect their communication to a great extent".

Although 30% of the teachers described their students' grammar as poor and/or limited, one might seriously question some teachers' understanding of what grammar means:

> "The biggest problem that I've had so far is 'I'm gonna'".

> "Because there is no real honest communication between parent and child, the child isn't taught to listen. He doesn't hear; he doesn't enunciate, you see".

> "These children cut words off: 'could' would be 'ould', such as in 'Ould you like to do this?' Too, their 'l's' were often missing.

Even when their responses reflected a clearer distinction between phonology and grammar, the description was often not accurate enough to be diagnostically useful.

> "Their grammar problems are many because they use substitutions, this for that".

> "They use a personal pronoun after a name".

When asked for specific examples of grammatical problems two teachers mentioned a deleted verb inflection, one cited seen for saw, one mentioned verb agreement, two observed that there were problems with noun plurals and four felt that there were considerable problems with pronouns.

As for current pedagogical technique, there is little to choose from if the teachers' responses are considered as a guide:

"I introduce the verb to children as an action word showing them what they're doing and the noun as the name of the person or place. That helps them write and speak in a complete sentence.

"When I say, 'Where can I get a pencil?', they will answer, 'Here it goes'. It is hard for them to say 'Here it is', but if I talk enough about it, they may change".

It would be nice if all we had to do was point out action words and names or "talk enough about it" but, unfortunately, there is considerably more at stake than this.

Pronunciation

The teachers generally had more to say about pronunciation than vocabulary or grammar. Again there were wild generalizations such as:

"Most of them don't talk at all when they first come to school".

"I have one child who mispronounces almost every word, but they say he does not have a speech problem".

"Many times they mispronounce because they do not know the sounds".

In fact, 13% of the teachers observed that some students did not talk at all when they first came to school and an equal ratio felt that some children do not know or hear the sounds.

One-tenth of the teachers mentioned slurring or mumbling as characteristic of the disadvantaged child's pronunciation:

"Let's see; they don't usually pronounce the last part of a word or letter. They slur over everything. They just pick it up at home".

"The children seem to run the words together; they mumble and don't speak clearly. I had great difficulty understanding some children who were in the program, not many, just a few".

It is only to be expected that the inner-city children "slur" everything together. This is what language is supposed to do. There is an unfortunate myth in English teaching which says that words should not slur together. Believers of this myth

fail to realize that our language would sound like television robot talk if this
were true. Slurring words together is a sign of linguistic sophistication. The
teacher, of course, meant something else. We can even assume that there is some
validity to the criticism, perhaps related to the fact that the children are from
the inner city and perhaps not.

As for specific kinds of pronunciation problems, the teachers agreed rather
clearly that disadvantaged children delete word final consonant sounds:

> "They leave off last sounds, leave off beginning sounds some times.
> But then I have that trouble now even with the older children. I
> keep saying to them to put in all the letters for that's why they're .
> there".

> "Some of the children had problems with their consonants, particularly
> at the ends of words".

> "They leave off the endings of words; instead of 'going' it's
> 'goin'. (Also the d's and t's give them trouble.) Even at the
> beginning of words you often cannot hear the beginning letter".

> "I think that they're in the habit of not saying the things as
> clearly as we do and they say a word such as 'looking' by
> leaving the g off".

The teachers' confusion of sounds and orthography is perhaps to be expected (for
it seems widespread in the country) but it can only be confusing to a first grade
child to be told to put a g when it really means an $[\eta]$ This confusion of
sounds and letters (or speaking versus reading) is further illustrated by this
observation:

> "The children confuse the digraphs, for example: 'th' and the
> 'wh', too. They are not able to hear the sounds and other
> consonant blends".

It is unfair to postulate that because a child does not relate his sound system to
printed symbols, he cannot hear these sounds. Yet such is the state of the pro-
fession.

Even more confusing are the following miscellaneous comments on pronunciation:

> "They do have trouble with pronunciation for they fail to use their
> teeth and tongue and their lips. This is necessary for getting
> the correct sound".

> "Their trouble was the use of dialect for they said hal for how.
> It was southern dialect among some of the children which caused
> them to use the wrong words".

> "Pronunciation is poor. Things like, 'I wanna go', or 'punkin'
> for 'pumpkin' and things like that. Their dialect is just hard
> to understand for most teachers. We were born and raised in
> the Midwest, for the most part".

It is indeed difficult to imagine a speaker of understandable English who fails

to use his teeth and tongue and lips. The supposed substitution of hal for how

runs exactly counter to the evidence of $[l]$ deletion observed by the Detroit Dialect

Study staff. The parochialism of the last quotation is anthropologically unsound

and it is an easy matter to cite pronunciations of wanna for want to in the speech

of any prestigous American.

On the other hand, Detroit teachers came a bit closer to some of the signifi-

cant problems of disadvantaged pronunciation than they did for vocabulary or

grammar. 17% cited the $\gamma_j \to /\Lambda/$ substitution, for example. In general, however, the

analyses were too vague to be diagnostically useful. A major point to be learned

here is that there is a pattern in inner-city speech--just as there is pattern in

most every kind of speech. Secondly, the teacher neither described the problem

accurately nor understood its pattern.

As a step toward solution of the problem of teacher unfamiliarity with lower

status speech, the Detroit Dialect Study has prepared a "sampler tape" of Detroit

speech. It contains a selection of relatively uninterrupted narrative of 36

representative Detroit residents. This tape is intended to be used by Detroit

teachers, or future teachers, simply to help them get used to hearing the varieties

of speech in that city, to enable them to develop objectivity about the different

systems used by different groups, and to aid them to understand that there are

relative, not absolute standards in English.

One of the most important aspects of problems of language development among

disadvantaged children, therefore, centers on imprecise descriptions of the

problem, large scale ignorance of how to make such a description and extant

folk-lore which passes as knowledge about a vastly neglected and underprivileged group of human beings. Having said this, it is no difficult matter to say that the current linguistic sophistication of teachers has little correlation with the problem. What is needed, instead, is a total rethinking of such questions as:

1) Should English teaching focus on erradicating non-standard speech or give its full attention to teaching a repetoire of "oral language styles" with which a child of less privileged socio-economic status may choose for himself when to use one style and when to use another?

2) What are the linguistic correlates of social stratification? That is, how do upper socio-economic groups differ from middle and lower groups? How does the speech of elementary school children differ from high school students? How different are both of these from that of their parents? Do different ethnic or racial enclaves have characteristic language features which set them off from the larger demography?

3) Exactly how different is so-called non-standard English from the recognized standard? Current research in Detroit, for example, shows striking overlapping between the speech of supposedly divergent social, racial, age and ethnic groups. We are coming to realize that the really significant social markers of language are not so much a matter of total usage by one group and total avoidance by the other. Instead we find that a large number of features of social stratification are used to varying degrees by all groups. The difference, then, is quantitative, not qualitative. On the surface this would seem to make the problem simpler. But the fact that the contrast between social dialects is frequently not quantitatively great may only dull our sensitivities to the social significance of this quantitatively minor contrast. That is, though differences may be small, attitudes toward these minute differences

are great and we should guard against being lulled into thinking otherwise.

4) What are the linguistic correlates of the various styles of oral language in which English speakers normally engage? That is, can we expect people to use the same features of pronunciation and grammar when engaging in narrative, casual conversation, oral reading, short classroom responses, description, and intimate peer group speech? If we do not expect this (few seriously would), what characterizes their differences? How do these stylistic variations intersect with linguistic correlates of social stratification?[2]

American education is not yet ready to give answers to all of these questions. But, as the preceeding data clearly illustrate, the teachers are also a long way from being ready for them.

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[2]

See Roger W. Shuy, "Studying the Language Problems of Inner-City Youth," Education and the Urban Poor (ed., Robert L. Green) Follett (in preparation).

Conscious Control of the Indices and Pedagogical Sequencing

There are at least two major areas of pedagogy in which current sociolinguistics has a legitimate role: 1) in pointing out the indices of social stratification (what should be taught), and 2) in deciding what is the best order for sequencing instruction with regard to a given index of social stratification. In Part III of this research report, several linguistic correlates of social stratification have been described in detail. To English teachers it may seem presumptuous that linguists maintain that they can know, better than classroom teachers, just exactly what language features set off one group from another. But, as the preceding section on the teachers' concept of the problem indicates, this presumptuousness must be seen in light of the teachers' failure to spot the more obvious problems, their inability to describe accurately the problems they do observe, and the stereotypes of the "disadvantaged" which are in vogue.

The data of Part III well illustrate a growing need in American education—that of thoroughly describing the problem to be taught in the classroom. It is apparent that multiple negation, for example, is more of a problem for males than females, more obvious among negroes than whites and more characteristic of adults than children.

Several aspects of findings of this sort suggest clear pedagogical directions. If linguistic indices of social stratification point out quantitative differences based on age, race, sex and status, why not adapt teaching materials for each appropriate group? Further analysis may show that multiple negation is more characteristic of certain ethnic groups, such as the Detroit Polish population or, perhaps, of certain school districts for whatever reason. If so, it would be infinitely wiser pedagogy to teach to the problem of a specific area or group and ignore the multiple negative where it presents no challenge.

It is necessary to realize, furthermore, that educators are not the only people qualified to make pedagogical suggestions. Even in the area of sequencing,

long held to be the private domain of the professional educator, the sociolin-
guist can make an important contribution. The following examples from the re-
search of the Detroit Dialect Study may illustrate this point.

Nasal Consonants

One phonological index of social stratification in Detroit involves the
realization of syllable final nasal consonants. All classes of Detroit speakers,
high to low, substitute /m/, /n/ and / ŋ / for each other at some time or other.
That is, each nasal consonant may be realized normatively (m → m, n → n, ŋ → ŋ)
or alternately (m → n, ŋ, n → m, ŋ , ŋ → m, n). Sometimes this substitution
is conditioned by phonetic environment; some times it is not. But of all of these
various substitutions, one stands out most sharply: the realization of /n/ for /ŋ/,
particularly in the -ing morpheme (in words like running, saying, laughing,
etc.) Though this pronunciation is produced by all classes, stratification
operates more sharply for it than for other nasal consonant substitutions. Upper
class speakers produce runnin'and sayin' with much less frequency than the lower
social groups as is shown below:

Upper	19.4%
Upper-middle	39.1%
Lower-middle	50.5%
Lower	78.9%

This sharp stratification suggests what most English teachers know intuitively
anyway--people recognize that ŋ → n in -ing is a low prestige rule. We can
hypothesize, then, that Detroit speakers have more conscious control over the
realization of the final nasal in -ing morphemes than in any other position or
structure. If this is true, then we have arrived at the beginning point in
pedagogy for this matter. Anthropologists call this common ground, or beginning
at the point where there is greatest mutual understanding.

The morpheme final consonant is also quite frequently deleted in the speech
of Detroiters, particularly by negroes. Thus man may be pronounced /m æ̃ / with
a rather high degree of nasalization concurring with the vowel. If Detroit

teachers wish to point out that this deletion will prevent upward mobility, they may do well to begin instruction with the -ing construction, where common ground can be most easily achieved rather than by first teaching the less consciously controlled aspects of this index.

Final Alveolar Stop Consonants

In addition to final nasal consonants, final alveolar stop consonants also appear to have natural pedagogical starting points. Certain Detroit speakers, for example, delete the final normative /d/ and /t/ in morpheme final position. After the population is divided by well defined sociological precedures into upper, middle and lower social types, the following percentages of zero realization of normative /d/ in final position (except for past tense morphemes) obtain:

	upper	middle	lower
d in word final consonant cluster as in hound, cold	19%	41%	62%
t in word final consonant cluster as in fast, left	36%	34%	53%

If clarity of social stratification suggests conscious control of the linguistic phenomenon and if conscious control suggests a beginning point for the classroom, the zero realization of /t/ in final consonant clusters is clearly not the best beginning point. The data here suggest that instruction begin instead with /d/ in cons. ant clusters, where a sharper social stratification exists.

Pronominal Apposition

The same analytical procedure may tell us something about how to approach the problem of pronominal apposition. From the Detroit research, three reasons can be hypothesized why speakers might use pronominal apposition:

1. Re-establishment. To indicate that the main subject of
   the sentence is being referred to following an embedded or
   parenthetical sentence (The boy who I don't like, he hit me).

2. Emphasis. To emphasize the head noun when it is qualified in some
   way (<u>My sister, she always hits me</u>).

3. Introduction. To indicate the entry or re-entry for a participant
   in a discourse (<u>So the other guy, he hit him back</u>).

If one of these three types of pronominal apposition stratifies more sharply
than the other, we can suggest that it is the form which is more consciously
controlled and, therefore, the point of common ground for beginning pedagogy.
Although such stratification has not yet been quantified, it is clear to the
Detroit Dialect Study researchers that conscious control of the types of pronoun
apposition is greatest in the participant introducers (<u>So the other guy, he hit him
back</u>), somewhat less consciously controlled in the emphasizers (<u>My sister she
always hits me</u>) and least consciously controlled in the re-establishers (<u>The boy
who I didn't like, he hit me</u>). This, in itself, would suggest that pedagogy
should begin with the participant introducers in which the pronominal apposition
is contiguous to the noun to which it is apposed.

Contiguity, in fact, seems to be a major criterion for a speaker's conscious-
ness of the index. That is, the closer the noun and pronoun, the more conscious
the speaker will be of them. Conversely, the further the pronoun is from the
apposed noun, the more functional or necessary its usage becomes. Dependent
clauses which occur after the subject and before the verb tend to create a memory
gap of the sort which would permit (perhaps even require) the re-establishment of
the subject by means of pronominal apposition, especially in oral language. Thus
the less contiguous the pronominal apposition becomes, the more important is
its function.

<u>Multiple Negation</u>

Even in negative concord, an index which shows rather clear stratification by
status, race, age and sex, the linguist can suggest a feasible beginning point
for pedagogy, based on the way this stratification operates. Four types of

negative concord may be cited as matrices for this analysis:

1. Multiple negatives with an indefinite pronoun.

   (He can't hit anybody — He can't hit nobody)

2. Multiple negatives derived from negativization of indefinite articles.

   (I don't have a dog — I don't have no dog)

3. Multiple negatives with adverbial negation.

   (I can hardly ever do it — I can't hardly ever do it)

4. Multiple negatives with negative prepositions

   (Coffee without any cream — Coffee without no cream)

Of these types, those involving indefinite pronouns and indefinite articles stratify more clearly than do those with adverbial or prepositional negation. This suggests, of course, that classroom teaching should begin with negatives of the indefinite type (He can't hit nobody) rather than with those of the adverbial type (can't hardly ever) since indefinite negation appears to be more subject to the conscious control of English speakers.

Whereas contiguity seems to be one of the factors in the speaker's consciousness of pronominal apposition, this is not necessarily true of multiple negatives, probably because of the unlikelihood that embedding of any sort will appear between negative elements (*He can't, unless he wants to, hit nobody or *I don't have, you understand, no dog). Pronominal apposition, in fact, appears more and more functional in oral language as the distance between pronoun and apposed noun increases while increasing functionality leads to a kind of unconsciousness of its presence. Nothing quite like this is at work with multiple negation, perhaps because multiple negation and embedding are almost contrary poles as social factors in language.

Ambiguous Indices

Phonological and grammatical indices of social stratification are not always

so clearly isolatable, however, for in certain kinds of linguistic behavior it is
difficult to determine whether grammatical or phonological consciousness pre-
dominates. The past tense morpheme is a case in point. The final segment of the
consonant cluster achieved by adding /d/ to a verb form ending in a consonant
(such as grabbed or pulled) is deleted in a way which stratifies upper, middle and
lower status groups even more than the deletion of /d/ in non-past tense word final
consonant clusters such as hound and cold. Since we are dealing with the entire
presence or absense of the /d/, whether it be a deleted sound or grammatical
marker, it is difficult to determine whether this is a grammatical or phonological
matter. It is quite likely, in fact, that the deleted word final /d/ is really
both kinds of deletion. A closer examination of the speech of middle status
negroes, for example, reveals that they delete 47% of all past tense /d/ markers
in clusters. Middle status whites delete only 4% of these markers in the same
environments. On the other hand, middle class whites delete 6% of the final /d/
in word final consonant clusters which do not include past tense morphemes
(such as hound and cold). This suggests that for whites, the final /d/ deletion
is primarily a phonological deletion and for negroes that it is heavily grammatical.
It seems reasonable to suggest that for negroes the pedagogical applications should
be presented as matters of grammar and for whites that they be handled as matters
of phonology.

Conclusions

Within any linguistic index of social stratification, then, is something like
a continuum of speaker awareness ranging from relative conscious control to a
degree of unconsciousness. A major key to this conscious control is the sharpness
of the social stratification displayed within the index. The most reasonable
point at which pedagogical applications can be made will be the aspect of the
index for which the speakers have relatively strong conscious control.

Likewise, of all the various indices of social stratification, a continuum

of relative speaker consciousness can be observed. Multiple negation, for example, stratifies quite neatly into four separable social groups. Pronominal apposition, on the other hand, stratifies into no more than three contrastive social groups. This suggests that English speakers have more conscious control over multiple negation than over pronominal apposition and that negative concord is more crucial for classroom engineering.

A great many responsibilities remain with the teacher, not the least of which is the need for teaching the student the appropriate contexts in which the normative phonological and grammatical forms should be should not occur. Students should be taught the biloquial principle--that home speech and social upward mobility speech, for example, might be inappropriate in each other's contexts.

It should be apparent, however, that the long cherished notion of the mutually exclusive tasks of linguist and educator is in serious question. Linguists cannot divorce themselves from matters of educational sequencing for their work yields very clear implications for the classroom. If this relationship has not been clear in the past it is primarily the faul. of the linguist, for he has viewed his task in a somewhat parochial light. His clear responsibility is to identify the indices of social stratification, particularly with regard to age, race, sex and status, and to determine the best sequencing of instruction through the discovery of the speaker's conscious control of these features.

BILOQUIALISM AND APPROPRITENESS[1]

One of the constantly embarrassing aspects of a new concept in education is that we always wish we had only thought of it sooner. Of the attention given to social dialects in the elementary and secondary curriculum these days we can only say, it's about time. It is not our purpose to agonize about why it has taken us so long to give consideration to the factors which affect the oral language of our students. Rather it is to begin with the assumption that it is good for some students to command at least two social dialects, then discuss the ways we can help them switch from one to the other.

But first, the assumption. The term, functional bi-dialectalism, was proposed at the Indiana University Conference on Social Dialects and Lanugage Learning[2] as a way of identifying a person's legitimate right to continue speaking a "home dialect" (one which might be called non-standard) even after he has learned a "school dialect" (one which might be called standard). As is evident from the way definitions of standard and non-standard have been sidestepped in the preceding sentence, these terms are very difficult to pin point once society is seen as a whole. Graduate students who have held summer jobs as laborers know full well the need to switch from one social identity to another if they seriously wish to get along with their peers. And this identity switching is frequently accompanied also by switches in linguistic performance. Recently this language switching has been called biloquiolism.

Although it may be true that a conflict still exists between some educators

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1

    Parts of this section are adapted from a paper by Roger W. Shuy, "Locating the Switching Devices of Oral Language," presented at The National Council of Teachers of English Spring Conference at Sacramento, California in April, 1967.

2

    The proceedings of this conference have been published by NCTE in a book called Social Dialects and Language Learning (ed. Roger W. Shuy), 1965.

and linguists concerning bioquialism, there seems to be little conflict among the
linguists. Some teachers still feel that it is their job to erradicate non-
standard speech. On the surface, this assumption seems sound—even humane. But
a closer look will demonstrate that communication requires an effective relation-
ship between hearer and speaker within a clearly defined social framework. In some
cases, the social framework has linguistic requirements which vary from the lin-
quistic requirements of a different social framework. If the speaker uses the
wrong linguistic requirements, he runs the risk of communication breakdown or,
worse, social breakdown. At any rate, most linguists agree that a speaker of any
language will make linguistic adjustments to specific social situations. These
adjustments may be in pronunciation, vocabulary and grammar. They may range
anywhere from the obvious adjustments between adults and four year olds to more
complicated sociolinguistic switching between school to home and playground to
school. At any rate, the job of the teacher is not simply to erradicate play-
ground English or home dialect.

Recent work in sociolinguistics has added further dimensions to the notion
of biloquialism. We now know, for example, that people engage in style shifts
within or crossing social dialects. A sudden shift in subject matter, for
example, may bring about emotional overtones causing phonological or grammatical
shifts. The following example will illustrate this principle. The speaker is
a twelve year old Negro Detroit boy whose father has overcome tremendous obstacles
to become a successful police administrator. The family is upwardly mobile even
though they live in a lower middle class community (a fact which is not surprising
in terms of current residential segregation patterns in America). The boy's
speech is neither noticeably lower class nor negro throughout most of the interview,
suggesting that his home language and, perhaps, his friendship group language is
somewhat similar. When we asked him a question which involved him emotionally
with school, however, he shifted social dialects quite vividly, as the following

will indicate:

> ". . .But sometimes when I want to do some procrastinating, I go out
> to the playground and swing around the swings or walk down to
> Hamilton and get an ice cream cone. Nothing much.
> <u>Fieldworker</u>: Did you ever have a teacher who hollered a lot?
> <u>Informant</u>: Gosh, I have have one that always hollers at me.
> <u>Fieldworker</u>: About what?
> <u>Informant</u>: Sometimes we think she's absolutely crazy. She <u>come</u> in the
> classroom <u>she</u> <u>be</u> nice and happy,...the next minute <u>she</u> <u>be</u> <u>hollering</u> at
> at us for no reason, she'd be giving us a lectures on something
> that happened twenty years ago. And we have another one that will,
> that's not like that, she at least wears a smile some of the times
> but she does holler."

At no other time during the ninety minutes our fieldworker spent with this boy

were these grammatical forms used again. Whether his use of <u>she come</u>, <u>she be nice</u>,

<u>she never have a smile</u>, <u>she be nice</u>, and <u>she be hollering</u>, are considered a

lapse or a systematic shift, the fact remains that there is an associated social

situation which apparently correlates with certain linguistic features which can

be identified with a known social dialect.

There are clear implications of this information for English teachers.

First is that there are a number of different social dialects, each of which has

acceptability within the sphere of its influence. Secondly, one speaker may use

several different social dialects (or parts of these dialects) on different

occasions, dependent on such non-linguistic phenomena as his emotional involvment,

his real or conceptualized audience, his intention, and his understanding of

stylistic requirements.

If we are willing to accept the speaker's need to switch social dialects for

different social involvements and stylistic requirements, then we must discover

not just the items which characterize social differences but also the processes

by which this switching takes place. They are described linguistically in terms

of rules which convert one system into another. They are highly complex in terms

of the social matrices which give birth to them. The following three dimensional

matrix may be illustrative of part of their complexity.

CHART 1

ORAL STYLE · narrative · descriptive · emotional · reading · listing · exposition   AGE · Pre-teen · Teen-age · Adult

Home

School/
Adminis-
tration

Recrea-
tional

Adult
Acquaint-
ances

Peers

LINGUISTIC FEATURES · phonology · grammar · lexicon
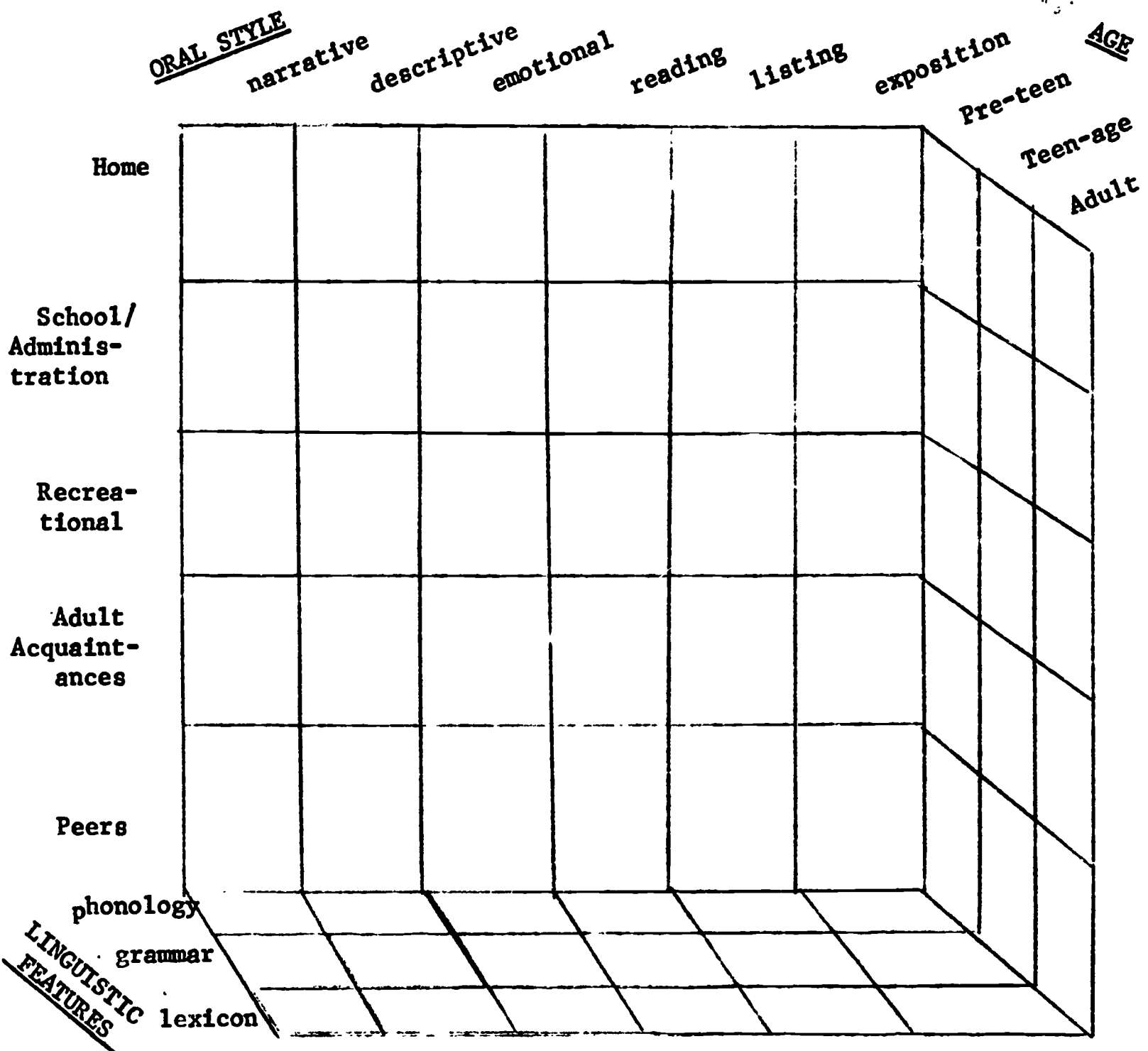
Each cell in the diagram is to contain a well defined set of rules governing
pronunciation, grammar, and vocabulary for that cell. There will be considerable
overlap among the rule sets of the cells. The differences, however, are of major
importance for, though they may appear minute in quantity, they are important in
quality. It must be noted, further, that the differences may be matters of
degree rather than inclusion or exclusion. The preceding figure might be labelled
with further social and geographical identifiers such as "Detroit Inner City

Southern White In-Migrant" or "Detroit Foster School Area Negro." At this stage, however, labels often are capricious, if not dangerous, for identifications such as "negro speech" or "lower-class speech" assume that such phenomena exist before they are identified. To illustrate the different parameters which are operative in the choice of a particular feature, consider the use of the be or deleted form of the copula (e.g. He be busy, He nice) a widespread feature among working class negroes in Detroit. The following chart reveals the differences in oral style and social dialect which might determine whether the be and deleted form of the copula will occur among biloquial teen-age negro working class children.

SOCIAL DIALECT	Narrative	Description	Emotional	Reading	Listing	Exposition
Home	+	+	+	+/-	+/-	+
School/Administration	-	-	+/-	-	-	-
Recreational	+	+	+	-	-	+
Adult Acquaintances	+/-	+/-	+	-	-	+/-
Peers	+	+	+	+/-	+/-	+

Key + relative presence
  - relative absence
  +/- considerable fluctuation

In the above chart the variation of usage according to the intersection of style and social dialect is delimited. For example, in the emotional style (e.g. when a baserunner is declared out in a close play, "you out") all but the school dialect may be expected to retain the be and deleted form of the copula. On the other hand in no situation can one consistantly expect the presence of these features in reading and listing style (an obvious influence from the association of these styles with school).

It should be clear by now that it is no simple job to locate the switching devices of oral language. The rules which enable a speaker to shift from one social dialect to another or from one style to another must be discovered by means of a painstaking analysis of data, whether empirical or intuitive. We know far too little about oral language to pontificate on what is good or bad--or even on what is same or different--without a much more rigorous analysis of the sort outlined in this report.

The English teaching profession has been handicapped by a monolithic view of its task and an inadequate analysis of its problem. Its responsibility is not to erradicate the social dialects which are inappropriate in the classroom. On the one hand it is uneconomical of their time to approach their job as classroom manifestations of the Al Capone syndrome; on the other hand it is dangerous to deprive their students of a channel (perhaps the only channel) of communication with people with whom they live. Perhaps no other profession has spent as much time on negatives (spelling demons, jargon, triteness and seven deadly grammatical sins) and as little time on positives (alternate styles, alternate appropriate social dialects) as the profession of English. It has seldom occurred to English teachers that their customers may want or need to switch from schoolroom English to playground English as well from playground to schoolroom. Indentification of appropriate variants may be the best identifiers of the substance of good teaching. The ultimate choice of when to use certain variants and when not to use them will

have to be made by the speaker. Teachers can't legislate virtue, no matter how
they define it. But they can, and must, provide the linguistic alternatives.

Detroit School Sample

St. John Berchmans

St. Philip Neri

Keating

Base Sample

Ethnic Sample

Hutchinson

Hillger

Our Lady of Sorrows

Chrysler

Atkinson

Koscuiszko

St. Florian

Foster

St. Benedict

Barber

St. Dominic

Estabrook

Chaney

St. Theresa

Higginbotham

Hampton

Gesu

St. John Vianney

Willard

Sill

St. Johns

Priest

Higgins

Boynton

Winship

St. Francis de Sales

Koscuisko

Burgess

AREA

Inner City West
Chaney
Estabrook
St. Dominic

Inner City East
Chrysler
Our Lady of Sorrows
Foster

Middle City West
Boynton
Higgins
Priest
Sill
St. Theresa

Outer City East
Atkinson
St. John Berchmans

Highland Park West
St. John Vianney
Willard

Highland Park East
Barber
St. Benedict

Hamtramck
Koscuiszko
St. Florian

Middle City East
Hillger
Hutchinson
Keating
St. Philip Neri

Outer City West
Burgess
Koscuisko
St. Francis de Sales
St. Johns

Outer City Central
Gesu
Hampton
Higginbotham
Winship

Foster School Area

Family	Tape No.	Sex, Age, Race	Highest Educational Level	Occupation	Spouse's Occupation	Social Status	Religion	Field-worker
A	0545	F 38 N	12		(divorced)	119	Baptist	JL
	*0486	M 11 N	6					CMW
	**0520	M 14 N	8					EAA
B	0481	F 37 N	12		laborer	129	Methodist	CMW
	*0408	M 10 N	6				Catholic	WAW
				(Mother)	(Father)			
C	*0495	M 11 N	5	social worker	car repairman	111	Baptist	JWN
	**0565	F 14 N	9					DD
D	0510	F 33 N	9		painter	92	Baptist	WAW
	*0530	M 12 N	5					JWN
E	0600	F 44 N	9		post office	129	Salvation	VHL
	*0691	M 13 N	6		(separated)		Army	WKR
F	0531	F 30 N	12		laborer	115	Apostolic	JWN
	*0614	M 11 N	6					WAW
G	0505	F 43 N	6		maintenance	134	Jehovah	WAW
	*0380	M 13 N	6		worker		Witness	REC
	**0488	F 15 N	9					VHL
H	0595	F 36 N	12	laborer (sews)	lab technician	87	Church of	VHL
	*0494	M 12 N	5		(separated)		Covenant	JWN
	**0526	M 16 N	10					EAA
I	0506	M 48 N	3	repairman		134	Methodist	WAW
	*0396	M 10 N	4					DD
J	0542	F 45 N	9	(welfare)	(separated or	129	Baptist	JL
	*0555	M 10 N	6		divorced)			WKR
	**0485	F 14 N	8					CMW
K	0602	F 42 N	8		unemployed	134	Baptist	RKS
	*0517	F 12 N	6					EAA
	**0507	F 13 N	8					WAW

Code: ___ Parent
         *   Base
         ** Older sibling

Our Lady of Sorrows School Area

Family	Tape No.	Sex, Age, Race	Highest Educational Level	Occupation	Spouse's Occupation	Social Status	Religion	Field-worker
A	0180	M 55 W	11	Mgr. Kerchaval		100	Catholic	CWJ
	*0216	F 9 W	4	VanDyke Service				RKS
	**Chris	M 13 W	8	Stations				EAA
B	0201	F 40 N	11	nurse's aide	laborer	100	Catholic	REC
	*0190	F 10 N	5					VHL
C	0355	F 38 N	12+	beautician	food handler	129	Catholic	EAA
	*Freda	F 9 N	4		Henry Ford			WAW
	(gm)0273	F 51 N	10		Hospital			DD
D	0349	M 47 N	10	foreman-DPW	credit dept.	109	Catholic	EAA
	*0338	F 10 N	4		Hudson's			RKS
	**0302	M 13 N	8					CWJ
E	0241	M 41 N	9	guard--Dawn		120	Catholic	JWN
	*0229	M 11 N	5	Patrol				WAW
F	0477	F 44 W	8		clerk--Ford	105	Catholic	CMW
	*0376	M 10 W	5		Tractor			REC
	**0441	F 17 W	12					VHL
G	0215	M 37 N	12	laborer	nurse's aide	104	Catholic	RKS
	*0198	M 10 N	4					JWN
	**0193	F 12 N	6					CMW
H	0218	M 41 N	11	laborer		115	Catholic	REC
	*0290	F 9 N	5					WKR
	**0280	F 12 N	6					VHL
I	0232	M 55 N	12	laborer--		104	Catholic	WAW
	*0267	F 10 N	5	inspector				DD
J	0350	F 45 N	9	laborer	laborer	134	Baptist	EAA
	*0340	F 10 N	4					RKS

Code: ____Parent
      *   Base
      **   Older sibling

Base Sample Population   Inner City West

                            Estabrook School Area

Family	Tape No.	Sex, Age, Race	Highest Educa-tional Level	Occupation	Spouse's Occupation	Social Status	Religion	Field-worker
A	0601	M 44 N	5	truck lift op.	cashier--Kroger	119	Baptist	RKS
	*0489	M 11 N	5					VHL
	**0381	M 14 N	8					REC
B	0662	F 41 N	7		laborer	119	Church of Our Prayer	JL
	*0688	M 11 N	6					DD
	**0583	M 14 N	12					CWJ
C	0217	F 41 N		church pianist (deceased)		63	Baptist	REC
	*0289	M 10 N	4					WKR
	**0230	F 13 N	8					WAW
D	*0315	M 12 N	6	(Mother) cleaner presser	(Father) cleaner presser	109	Baptist	JL
	**0351	M 14 N	7					EAA
E	0337	F 46 N	12		factory worker	119	Pentecostal	RKS
	*0301	F 12 N	6					CWJ
	**0211	F 15 N	10					EAA
F	0154	F 43 N	10		factory worker	125	Baptist	CWJ
	*0120	M 9 N	5					WKR
	**0036	F 12 N	6					RKS
G	0203	F 44 N	11		factory worker	112		REC
	*0206	M 10 N	5					WKR
H	0663	F 33 N	12	laundry worker	factory worker	108	Baptist	JL
	*0584	F 11 N	6					CWJ
I	*0224	F 12 N	6					REC
	0285	F 31 N	12		railroad	98	Baptist	VHL
	(gm)0645	F 63 N	6		carpenter			CMW
J	0214	F 32 N	10		factory worker	113	Lutheran	JL
	*0352	F 10 N	4					EAA
	**0233	M 14 N	8					WAW
K	*0204	F 11 N	6		(Father) car mechanic	95		WKR
	**0186	M 13 N	7					WAW
	(uncle)0196	M 25 N	6					DD

Code: ___ Parent
       *   Base
       ** Older sibling

St. Dominic School Area

Family	Tape No.	Sex, Age, Race	Highest Educational Level	Occupation	Spouse's Occupation	Social Status	Religion	Field-worker
A	0501	F 32 W	9		concession stand man	81	Catholic	CWJ VHL
	*0490	F 11 W	5					
B	0509	F 32 Y	12		factory worker	99	Catholic	WAW VHL
	*0613	F 11 N	5					
C	0508	M 42 W	12+	hotel manager	room clerk	83	Catholic	EAA RKS
	*0603	M 10 W	4					
D	0606	F 34 W	C, 1½	office work-- Checker Cab Co.	tool & die maker	92	Catholic	RKS RKS
	*0605	F 11 W						
E	0334	F 43 N	11	cleaning woman	utility man	97	Catholic	CWJ VHL
	*0487	F 12 N	6					
F	0438	F 33 W	12		construction worker	120	Catholic	VHL JWN CMW
	*0450	M 11 W	4					
	**0474	M 13 W	6					
G	0654	F 40 W	12		city employee-- DPW.	110	Catholic	WKR WKR
	*0653	M 12 W	6					
H	*0655	M 12 W	6			95		VHL VHL
	0656	F 50 W	4					
I	0637	F 33 W	12	office work- Checker Cab	manager--apt. building	97	Catholic	REC EAA
	*0524	M 10 W	4					
J	0502	F 41 W	6	punch press	metal finisher	120	Catholic	CWJ VHL JWN DD
	*0491	F 10 W	5					
	**0496	M 14 W	8					
	(gm)0567	F 60 W						

Code: ___ Parent
* Base
** Older Sibling

Hutchinson School Area

Family	Tape No.	Sex, Age, Race	Highest Educational Level	Occupation	Spouse's Occupation	Social Status	Religion	Field-worker
A	<u>0626</u>	F 36 N	C, 3	teacher's aide	tailor	79	Jehovah	CMW
	*0547	M 10 N	5				Witness	JL
	**0522	M 14 N	8				Catholic	EAA
B	<u>0556</u>	F 29 W	12		laborer	103	Lather	WKR
	*0543	F 11 W	5				Day Saints	JL
C	<u>0497</u>	F 40 N	5		veteran	122	Baptist	JWN
	*0604	F 11 N	6		pensioner			RKS
	**0498	M 14 N	8					JWN
D	<u>0566</u>	F 32 N	10		welder	98	Baptist	DD
	*0382	M 10 N	5					REC
E	<u>0569</u>	F 30 N	12		machine oper.	103	Baptist	DD
	*0504	F 9 N	4					CWJ
	**0570	F 12 N	6					DD
	(gm) 0699	F 47 N	8					CWJ
F	<u>0582</u>	F 34 N	12		pipe fitter-	92	Baptist	CWJ
	*0661	F 9 N	4		gas company			JL
	**0536	F 11 N	6					JWN
G	<u>0590</u>	F 40 N	12	hospital	asst. foreman	93	Baptist	VHL
	*0607	M 10 N	4	kitchen				RKS
	**0529	M 15 N	9					JWN
H	<u>0546</u>	F 32 N	12	bank teller	press operator	92	Presbyterian	JL
	*0521	M 10 N	5					EAA
	**0625	M 15 N	10					CMW
I	*0503	M 12 N	6			102	Baptist	CWJ
	<u>0568</u>	F 54 N	7	cleaner				DD
J	<u>0544</u>	F 45 W	8		factory worker	119	Catholic	JL
	*0557	M 11 W	6					WKR

Code: <u>   </u> Parent
* Base
** Older sibling

St. Philip Keri School Area

Family	Tape No.	Sex, Age, Race	Highest Educational Level	Occupation	Spouse's Occupation	Social Status	Religion	Field-worker
A	0202	F 33 W	12+3yrs.	nurse training	butcher	82	Catholic	REC
	*0194	F 10 W	5					CMW
B	0622	F 33 W	12	helps husband	grocery store owner	60	Catholic	VHL
	*0647	F 9 W	6					CMW
C	0209	F 32 W	12		real estate broker	102	Catholic	EAA
	*0205	F 9 W	5					WKR
	**0212	F 12 W	7					JL
D	0078	F 32 W	C, 4		immigration officer	60	Methodist	CMW
	*0006	F 10 W	5					JWN
	**0101	F 15 W	10					JL
E	0627	F 41 W	12		meat manager	82	Catholic	CMW
	*0560	F 9 W	5					WKR
F	0231	M 39 W	12	clerk, P.O.		74	Catholic	WAW
	*242	M 10 W	5					JWN
G	0561	F 50 W	8		gas station manager	75	Catholic	WKR
	*0629	F 10 W	5					CMW
H	0017	F 47 W	12		night watchman	98	Catholic	CWJ
	*0066	F 10 W	5					VHL
	**0024	F 16 W	11					RWS
(gm)	0090	F 81 W	12					DD
I	0125	F 35 W	7		laborer-- assembly line	108	Catholic	WAW
	*0065	F 12 W	6					EAA
J	0126	M 32 W	12		drafting engr.	71	Catholic	WAW
	*0053	M 10 W	4					EAA

Code: ____ Parent
       *   Base
       **   Older sibling

Base Sample Population

Middle City West

Higgins School Area

Family	Tape No.	Sex, Age, Race	Highest Educational Level	Occupation	Spouse's Occupation	Social Status	Religion	Field-worker
A	0439	F 34 W	12		factory worker	117	Lutheran	VHL
	*0475	M 10 W	5					CMW
B	0462	F 38 W	7		unemployed	122		WKR
	*0403	F 11 W	4		(dock worker)			WAW
C	0468	F 48 W	9	beautician	laborer	112	Catholic	WKR
	*0553	M 11 W	6					WKR
D	0456	M 45 W	10	repairman	waitress	88	Methodist	JWN
	*0405	F 10 W	5				Baptist	WAW
	(gm)0427	F 65 W	4				Baptist	JL
E	0591	F 35 W	9	press operator	bun baker-	100	Lutheran	VHL
	*0207	M 9 W	4		bakery			WAW
	**0608	F 15 W	9					RKS
F	0404	M 49 W	5	laborer	(gone)	107	Catholic	WAW
	*0426	F 14 W	5					JL
	**0453	M 14 W	7					JWN
G	0375	M 48 W	11	NY Cen. RR-	sales woman	85	Catholic	REC
	*0463	F 11 W	6	weight & freight				WKR
	**0402	F 15 W	10					WAW
H	0406	F 43 W	8		diamond	95	Catholic	WAW
	*0454	F 9 W	4		grinder			JWN
	**0425	F 25 W	12					JL
I	0634	F 29 W	11		laborer	122	Lutheran	CMW
	*0682	F 11 W	5					RKS
J	0476	F 37 W	C, 1½		wrecker	89	Baptist	CMW
	*0440	M 11 W	5					VHL

Code: ____ Parent
       *   Base
       **   Older sibling

Base Sample Population

Middle City West

St. Theresa School Area

Family	Tape No.	Sex, Age, Race	Highest Educational Level	Occupation	Spouse's Occupation	Social Status	Religion	Field-worker
A	0159	M 43 N	12	mail clerk	waitress	80	Catholic	EAA
	*0152	M 11 N	5					VHL
	**0141	F 16 N	10					WAW
B	0424	F 39 N	12		sanitation department	109	Catholic	JL
	*0410	F 12 N	5					JL
	**0366	M 16 N	10					EAA
C	0388	M 42 N	M.E.	mech. engr.		32	Catholic	DD
	*0364	F 10 N	5					EAA
	**0328	M 14 N	11					CWJ
D	0324	F 38 W	7	welder		99	Catholic	JL
	*0457	F 11 W	6					WKR
	**0200	M 19 W	C, 1					RKS
E	0365	F 32 N	12		factory worker	104	Catholic	EAA
	*0409	F 9 N	4					JL
F	0134	M 42 N	1½ bus. col.	printer	(key operator)	74	Catholic	CMW
	*0084	M 9 N	4					DD
	**0108	F 13 N	8					JL
G	0386	F 37 N	12	postal clerk	postal clerk	69	Catholic	DD
	*0228	F 11 N	5					REC
	**0327	F 13 N	8					CWJ
H	0166	M 38 N	7	cleaner & ground maintenance	cleaning woman	55	Catholic	WKR
	*0149	M 11 N	6					VHL
	**0143	M 16 N	10					WAW
	(gm)0169	F 71 N	4					REC
I	0358	M 48 N	C, 4+	supervisor-- urban renewal	social worker	46	Catholic	WKR
	*0288	M 10 N	5					CWJ
	**0240	M 20 N	C,2					RKS
J	0119	F 36 N	12		factory worker		Catholic	WKR
	*0153	F 11 N	5					CWJ
	**0035	F 13 N	7					RKS

Code: ____ Parent
      *   Base
      **   Older sibling

Atkinson School Area

Family	Tape No.	Sex, Age, Race	Highest Educational Level	Occupation	Spouse's Occupation	Social Status	Religion	Fie wor
A	0636	F 38 N	12		Factory worker	103	Catholic	CM
	*0621	M 12 N	6					VH
	**0586	M 17 N	11					CW
B	*0341	M 12 N	9			111	Church of	RK
	0384	F 36 N	6		(divorced)		God in	RE
	**0304	M 17 N	12				Christ	CW
	(gm)0269	F 69 N	10					DD
C	0331	F 41 N	9		metal worker	102	Baptist	CW
	*0442	F 12 N	6					VH
	**0377	M 15 N	9					RE
	**0478	F 15 N	9					CM
D	0342	F 36 N	11		porter	106	Baptist	RK
	*0282	F 9 N	4					VH
E	0479	F 28 N	12	nurse	laborer	111	Baptist	CM
	*0332	F 12 N	6					CW
	(gm)0391	F 49 N	11					DD
F	0234	M 40 N	12	Import-Export		98	Interdenom.	WA
	*0294	M 11 N	6	barber shop				WK
G	0330	M 49 N	10	janitor	postal clerk	97	Baptist	CW
								DD
H	0293	M 37 N	Bus. Col	post office	nurse's aide	74	Interdenom.	WK
	*0221	F 9 N	3					RE
I	0305	M 35 N	10	laborer	college student	97	Baptist	CW
	*0270	F 11 N	6					DD
J	0245	F 32 N	9		gas station	102	Baptist	JW
	*0256	F 12 N	6		attendant			CM

Code: ____Parent
     *   Base
     ** Older sibling

St. John Berchmans School Area

Family	Tape No.	Sex, Age, Race	Highest Educational Level	Occupation	Spouse's Occupation	Social Status	Religion	Field-worker
A	0157	F 34 W	11		carpenter	84	Catholic	JL
	*0139	F 11 W	6					CMW
	**0135	F 15 W	10					DD
B	0170	F 30 W	10		laborer	109	Catholic	REC
	*0110	F 11 W	6					WKR
	**0002	F 16 W	11					JWN
C	0219	M 56 W	12	estimator		74	Catholic	REC
	*0291	M 11 W	6					WKR
	**0281	F 20 W	12					JWN
D	0483	F 34 W	12	(secretary)	Bar owner	54	Catholic	CMW
	*0430	F 9 W	4					JL
	**0499	F 12 W	6					CWJ
E	0142	M 47 W	12+	fireman		98	Catholic	CMW
	*0158	F 11 W	5					JL
	**0140	M 17 W	12					WAW
F	0325	F 38 W	12		toolmaker	89	Catholic	RWS
	*0265	F 11 W	5					DD
	(gm)0698	F 59 W	6					CWJ
G	0187	M 57 W	C, 1	salesman-- Crawford Door		63	Catholic	REC
	*0184	F 12 W	6					DD
H	0079	F 37 W	12		construction worker	107	Catholic	CMW
	*0067	F 12 W	6					VHL
I	0183	F 41 W	12		butcher	96	Catholic	DD
	*0164	M 11 W	6					CWJ
J	0339	F 40 W	12		design engr.	65	Catholic	RKS
	*0314	F 9 W	4					JL
	**0303	M 14 W	9					CWJ

Code: ___ Parent
 * Base
 ** Older sibling

Burgess School Area

Family	Tape No.	Sex, Age, Race	Highest Educational Level	Occupation	Spouse's Occupation	Social Status	Religion	Field-worker
A	0040	M 48 W	VS, 1	tool maker		83	Catholic	REC
	*0004	M 12 W	6					JWN
B	0014	M 32 W	12	milkman	teletype oper.	74	Presbyterian	CWT
	*0086	F 12 W	6					DD
	(gm) 0089	F 65 W	8					DD
C	0115	M 41 W	B.A.	Arch. Engr.	MD's reception.	37	Jewish	WKR
	*0306	M 11 W	5					CWJ
	**0129	F 15 W	10					WAW
D	0046	M 46 W	12	factory worker	(manicurist)	88	Catholic	REC
	*0117	F 10 W	5				Lutheran	WKR
	**0021	F 16 W	11				Lutheran	CWJ
E	0279	M 46 W	12	life insurance salesman		74	Jewish	VHL
	*0243	M 9 W	4					JWN
	**0254	M 11 W	5					CMW
F	0213	F 47 W	12		factory worker	88	Catholic	JL
	*0277	M 12 W	5		tool & die		Catholic	VHL
	**0253	F 14 W	9				Catholic	CMW
	(gm) 0266	F 75 W	10				Lutheran	DD
G	0052	F 34 W	C, 3		computer install.	73	Catholic	EAA
	*0112	F 11 W	5					WKR
H	0020	F 33 W	VS, 2½		die maker	9?	Presbyterian	CWJ
	*0118	M 9 W	4					WKR
	(gm)0105	F 61 W	7					JL
	(gm)0010	F 60 W						JWN
I	0038	F 36 W	10		tool & die	83	Catholic	REC
	*0013	M 11 W	5					CWJ
J	0085	F 40 W	12		shoe salesman	74	Jewish	DD
	*0074	F 9 W	4					CMW
	**0028	F 12 W	6					RKS

Code: _____ Parent
    *   Base
    **   Older sibling

Base Sample Population

Outer City West

St. Francis de Sales School Area

Family	Tape No.	Sex, Age, Race	Highest Educational Level	Occupation	Spouse's Occupation	Social Status	Religion	Field-worker
A	0639	M 33 W	12	insurance man		74	Catholic	REC
	*0640	M 9 W	4					RKS
				(Spouse)	(Child's father)			
B	0037	F 70 W	10	attorney	fireman	32	Catholic	REC
	*0097	F 11 W	5					JL
	**0001	F 15 W	10					JWN
C	0073	F 35 W	12		salesman--	63	Catholic	CMW
	*0109	M 10 W	4		Continental			WKR
	**0050	F 11 W			Screw Co.			EAA
D	0088	F 40 W	C, 4		college	41	Catholic	DD
	*0016	F 9 W	4		administrator			CWJ
	**0124	M 17 W	11					WAW
	(gm)0646	F 65 W	9					CMW
E	0061	F 43 W	11	seamstress	inspector,	87	Catholic	VHL
	*0027	M 10 W	5		Essex Wire			RKS
	**0121	F 15 W	11					WAW
F	0042	F 50 W	C,2	interview work	repairman--	78	Catholic	REC
	*0092	F 11 W	5		Det. Str. Car			DD
	**0054	M 13 W	8		& RR.			EAA
G	0039	F 51 W	Nurse's training (nurse)		55	Catholic	REC
	0048	F 51+ W	C,4	Director, police				REC
	*0075	F 10 W	5	academy				CMW
H	0005	F 36 W	R.N.	(nurse)	banker--asst.	46	Catholic	JWN
	*0100	F 11 W	4		vice pres.			JL
	**0077	F 13 W	7					CMW
I	0003	F 60 W	12		salesman	79	Catholic	JWN
	*0063	F 10 W	4					VHL
	**0025	F 14 W	9					RKS
J	0018	M 37 W	9	inspector--	factory worker	102	Catholic	CWJ
	*0102	F 10 W	5	factory				JL
	**0030	F 14 W	8					RKS

Code: ____ Parent
  * Base
  ** Older sibling

ERIC

Winship School Area

Family	Tape No.	Sex, Age, Race	Highest Educa-tional Level	Occupation	Spouse's Occupation	Social Status	Religion	Field-worker
A	0308	F 45 W	Bus. Col. 1		milkman	68	Catholic	CWJ
	*0259	M 11 W	6					CMW
B	0274	F 36 W	12		designer--	59	Presbyterian	DD
	*0356	M 11 W	8		Ford Engr. Dept.			RKS
	**0346	F 14 W	5					EAA
C	0575	F 42 W	12		salesman	59	Jewish	DD
	*0533	F 12 W	6					JWN
D	0515	F 37 W	C,2	volunteer work	manufacture's representative	63	Jewish	WKS
	*0670	M 12 W	6					JL
	**0693	M 15 W	10					WKR
E	0687	F 51 W	M.A.	teacher	advertiser	63	Jewish	DD
	*0686	M 10 W	5					DD
	**0618	M 14 W	10					WAW
F	0262	F 44 W	C,2		owns tube co.	54	Methodist	CMW
	*0287	F 11 W	6					VHL
	**0322	F 15 W	9					JL
G	0664	F 46 W	12	receptionist-- attorney	bus driver	91	Catholic	JL
	*0598	F 11 W	5					VHL
	**0500	M 16 W	10					CWJ
H	0599	F 38 W	3yrs. nurse's training	Nurse nurse's training	draftsman	52	Episcop.	VHL
	*0695	M 11 W	4					EAA
I	0677	F 48 W	12		sells to dealers Chrysler	59	Presbyterian	WKR
	*0683	F 11 W	5					RKS
	**0678	M 17 W	12					WKR
J	0354	F 43 W	12		contractor	54	Congreg.	EAA
	*0284	F 10 W	5					VHL
K	0685	F 36 W	12		carpet cleaner	64	Jewish	DD
	*0535	F 10 W	5					JWN

Code: ____Parent
        *   Base
        ** Older Sibling

Gesu School Area

Family	Tape No.	Sex, Age, Race	Highest Educational Level	Occupation	Spouse's Occupation	Social Status	Religion	Field-worker
A	0161	M 48 W	LLD	lawyer		20	Catholic	JWN
	*0147	M 12 W	6					EAA
	**0173	F 16 W	11					RKS
B	0258	F 51 W	BA		doctor--MD	20	Catholic	' CMW
	*0068	M 11 W	5					VHL
	**0247	M 17 W	11					JWN
C	0132	M 42 W	C,1	pipe worker--		75	Catholic	WAW
	*0034	F 10 W	4	construction				RKS
D	0056	M 41 W	12	grocer		53	Catholic	EAA
	*0009	M 10 W	4					JWN
	**0131	M 14 W	9					WAW
E	0072	M 41 N	DDS	dentist		32	Episcopalian	VHL
	*0060	M 10 N	5				Catholic	EAA
	**0146	F 12 N	7				Catholic	JWN
F	0022	F 38 W	C,1		lawyer	20	Catholic	RWS
	*0130	M 11 W	6					WAW
G	0632	F 40 W	12		financial con-	39	Catholic	CMW
	*0633	F 11 W	6		sultant--public			CMW
	**0528				relations			EAA
H	0043	F 41 W	C,1		lawyer	26	Catholic	REC
	*0094	F 10 W	4					DD
	**0104	F 15 W	9					JL
I	0161	F 49 W	C,4	(nurse)	lawyer	20	Catholic	REC
	*0057	F 10 W	4					EAA
	**0095	F 13 W	8					DD
	(gm)0133	F 50+W	12					DD
J	0594	F 38 W	C,4		lawyer	20	Catholic	VHL
	*0525	M 12 W	6					EAA

Code: ____ Parent
* Base
** Older sibling

Base Sample Population

Barber School Area

Family	Tape No.	Sex, Age, Race	Highest Educa- tional Level	Occupation	Spouse's Occupation	Social Status	Religion	Field- worker
A	0167	F 42 W	C,4	volunteer work	pastor	26	Methodist	REC
	*0171	F 10 W	4					RKS
	**0148	F 15 W	11					JWN
B	0667	M 38 W	12+		engineer	72	Lutheran	JL
	*0512	M 9 W	4					RKS
C	0178	M 42 W	M.A.	teacher-air conditioning	teacher	44	Methodist	JWN
	*0179	F 9 W	4					CWJ
	**0192	F 13 W	8					VHL
D	0225	M 37 N	11+USAF 1	factory worker		104	Methodist	REC
	*0239	M 12 N	6					WAW
	**0261	F 14 N	7					CMW
E	0353	F 32 W	12		bar & res- taurant owner	74	Moslem Catholic	EAA
	*0283	F 11 W	5					VHL
F	0222	M 43 W	C,2	restaurant & hotel owner		54	Episcopalian	REC
	*0295	F 12 W	6					WKR
	(gm)0344	F 64 W	12				Catholic	RKS
G	0577	F 34 W	10	monitor-school lunch line	janitor	86	Lutheran	CWJ
	*0548	F 11 W	5			,		JL
	*0574	M 11 W	5					DD
H	0138	F 42 N	8	house cleaner	pullman	105	Baptist	CMW
	*0156	F 10 N	5					JL
	(gm)0135	F 54 N	11					DD
I	0320	F 49 W	10		mechanic & garage owner	74	Russian Orthodox	JL
	*0297	M 10 W	6					WKR
J	0249	F 30 W	C,2½		minister	43	Methodist	JWN
	*0310	M 10 W	4					CWJ

Code: ____ Parent
  * Base
  ** Older sibling

St. Benedict School Area

Family	Tape No.	Sex, Age, Race	Highest Educa-tional Level	Occupation	Spouse's Occupation	Social Status	Religion	Field-worker
A	0226	M 34 W	10	General Motors		92	Catholic	REC
	*0250	M 10 W	5					JWN
B	0268	F 36 W	Bus Col 1½	secretary	fireman	92	Catholic	DD
	*0244	M 11 W	5					JWN
C	0316	F 45 W	12		stock broker	69	Catholic	JL
	*0246	M 10 W	5					JWN
	**0257	F 16 W	11					CMW
D	0150	F 36 W	B.A.+	(teacher)	mechanic	104	Catholic	VHL
	*0162	F 9 W	4					EAA
	**0296	M 12 W	6					WKR
	(gm)0182	F 72 W	6					WKR
	(g.aunt)0174	F 80 W	12					CMW
E	0168	F 35 W	12		chemical engr.	31	Catholic	REC
	*0172	M 10 W	5					RKS
F	0151	F 37 W	12		electrical	26	Catholic	VHL
	*0163	M 10 W	5		engineer			WAW
	**0144	M 13 W	7					WAW
	**0160	M 12 W	6					EAA
	**0165	M 12 W	6					WKR
G	0309	F 44 W	11		restautanteur	82	Catholic	CWJ
	*0319	F 10 W	5					JL
	**0248	F 16 W	10					JWN
H	0083	F 38 W	JC,2		policeman	89	Catholic	CMW
	*0012	M 11 W	5					JWN
	**0107	F 15 W	9					JL
	(gm)0047	F 71 W	4					REC
I	*0175	F 9 W	4	(Mother) (secretary)	(Father) lawyer		Catholic	JL
	**0176	F 11 W	6					RKS
	(uncle)0177	M 45 W	12	laborer				JWN
J	0155	F 23 N	10		fireman	97	Catholic	JL
	*0137	F 10 W	5					CMW

Code: ＿＿＿ Parent
　　　* 　Base
　　 ** 　Older sibling

Base Sample Population

Willard School Area

Family	Tape No.	Sex, Age, Race	Highest Educational Level	Occupation	Spouse's Occupation	Social Status	Religion	Field-worker
A	0387	F 29 N	11		steel worker	102	Catholic	DD
	*0374	F 10 N	4					REC
	**0461	M 11 N	6					WKR
B	0571	F 66 N	4		army	107	Baptist	DD
	*0558	F 10 N	5					WKR
C	0373	F 33 N	10		welder	100	Baptist	REC
	*0437	F 12 N	4					VHL
	**0473	F 14 N	8					CMW
D	*0470	F 10 N	4			134	Church of Christ	CMW
foster m.	0326	F 49 N	2		factory worker			CWJ
foster aunt	0385	F 65 N	3					DD
E	0255	F 36 N	11		truck driver	120	Baptist	CMW
	*0220	F 10 N	5					REC
	**0292	M 15 N	8					WKR
F	0471	F 34 N	12		laborer	109	Baptist	CMW
	*0362	M 11 N	5					EAA
	**0435	M 13 N	7					VHL
G	0421	F 38 N	10		delivery man	92	Baptist	JL
	*0432	F 10 N	4					RKS
	**0458	F 15 N	10					WKR
H	0399	M 39 N	11	grinder		97	Baptist	WAW
	*0434	F 12 N	5					VHL
	**0361	M 16 N	9					EAA
I	0336	F 36 N	7		machine oper.	102	Baptist	RWS
	*0335	M 9 N	4					RWS
J	0363	F 40 N	12		factory worker	102	Baptist	EAA
	*0472	F 10 N	4					CMW
	**0436	M 15 N	9					VHL

Code: ____ Parent
      *   Base
      ** Older sibling

Base Sample Population   Highland Park West

<div align="center">St. John Vianney School Area</div>

Family	Tape No.	Sex, Age, Race	Highest Educational Level	Occupation	Spouse's Occupation	Social Status	Religion	Field-worker
A	0032	F 40 W	12		printer	100	Catholic	RKS
	*0081	F 10 W	5					CMW
	**0069	M 12 W	6					VHL
B	0539	F 38 W	12	beautician	fireman	86	Catholic	DD
	*0540	F 10 W	5					DD
C	0041	F 43 W	C,4		process engr.	37	Catholic	REC
	*0059	F 10 W	4					WKR
	**0029	F 14 W	8					RKS
D	0071	F 39 W	12		insurance man	86	Catholic	VHL
	*0059	M 12 W	6					EAA
	**0145	M 14 W	8					JWN
E	0011	M 38 W	Tech. 3	mechanic		89	Catholic	JWN
	*0106	F 10 W	4					JL
	**0082	F 15 W	8					CMW
F	0045	F 36 N	C,1		mechanic	97	Catholic	REC
	*0033	M 10 N	4					RKS
	(gm)0096	M 63 N	8					DD
G	0579	F 48 W	8	clerical-- part time	upholsterer	89	Catholic	CWJ
	*0628	F 10 W	5					CMW
	**0550	F 14 W	8					JL
H	0690	F 38 N	12+nurse (nurse)		direct., social 46 work, county welfare dept.		Catholic	WKR
	*0666	F 12 N	6					JL
	**0587	F 13 N	8					CWJ
I	0058	M 37 N	½yr. C	post office-- clerical		80	Catholic	EAA
	*0070	F 11 N	5					VHL
J	0093	M 54 N	12+police	Pinkerton-- detective trainer	post office-- 77 clerical		Catholic	DD
	*0008	F 11 N	6					JWN
	**0128	M 13 N	9					EAA
	(gm) 0055	F 52 N	12					WAW
	(gm) 0195	F 78 N	12				Baptist	DD

Base Sample Population

Koscuiszko School Area

Family	Tape No.	Sex, Age, Race	Highest Educa-tional Level	Occupation	Spouse's Occupation	Social Status	Religion	Field-worker
A	0307	F 37 W	8		shoe repairman	108	Catholic	CWJ
	*0317	F 11 W	5					JL
B	0286	F 36 W	10	baker's asst.	mechanic	106	Catholic	VHL
	*0238	M 10 N	5					WAW
C	0422	F 52 W	12+nurse's training		photographer	81	Catholic	JL
	*0459	M 11 W	6					WKR
	**0431	F 16 W	11					RKS
					(Father)			
D	*0263	F 11 W	6		factory worker		Catholic	CMW
	**0251	M 13 W	6					JWN
E	0610	F 29 W	12	Dodge	factory worker	124	Russian Orthodox	RKS
	*0563	M 10 W	6					WKR
F	0223	M 44 W	12	post office		80	Catholic	REC
	*0345	F 11 W	5					RKS
G	0564	F 31 W	12		Hudson's--assembler	110	Baptist	WK
	*0609	F 11 W	5					RKS
H	0260	F 53 W	4+trade school		(separated)	134	Catholic	CMW
	*0379	M 11 W	5					REC
I	0236	M 42 W	Seminary	priest		43	Polish Nat'l Catholic	WAW
	*0347	F 10 W	5					RKS
J	0343	F 48 W	12		gas station owner	88	Catholic	RKS
	*0271	F 10 W	5					DD

Code: ___Parent
     *   Base
    ** Older sibling

Base Sample Population

Hamtramck

St. Florian School Area

Family	Tape No.	Sex, Age, Race	Highest Educational Level	Occupation	Spouse's Occupation	Social Status	Religion	Field-worker
A	0227	F 42 W	12	admitting clerk--hospital	truck driver	103	Catholic	REC
	*0433	F 10 W	4					VHL
	**0445	M 13 W	7					JWN
B	0516	F 45 W	12		fireman	99	Methodist	RKS
	*0672	M 9 W	4				Catholic	RKS
	**0648	F 11 W	5					CMW
C	0420	F 43 W	9		pipe fitter	99	Catholic	RKS
	*0395	F 11 W	5					DD
	**0493	M 13 W	7					JWN
D	0357	M 42 W	C,4	laborer	cleaning woman	104	Catholic	EAA
	*0321	F 10 W	5					JL
	**0298	M 15 W	10					WKR
E	0612	F 43 W	9		factory worker	114	Catholic	RKS
	*0299	M 11 W	6					WKR
F	0578	F 40 W	10	factory worker	policeman	99	Catholic	CWJ
	*0549	F 11 W	5					JL
	**0611	F 13 W	8					RKS
G	0276	F 38 W	12			71	Catholic	DD
	0300	M 38 W	12	draftsman				WKR
	*0311	F 10 W	4					CWJ
	**0264	F 12 W	7					CMW
H	0348	F 46 W	12	clerical-- bookkeeper	clerk	86	Catholic	RKS
	*0323	F 11 W	5					JL
	**0252	M 15 W	10					JWN
I	0469	F 37 W	12		plastic moulder	103	Catholic	CMW
	*0275	F 10 W	4					DD
	**0312	F 14 W	8					CWJ
J	0411	F 43 W	9	cleaning woman	factory worker	114	Catholic	RKS
	*0423	F 10 W	5					JL
	**0460	F 16 W	12					WKR

Code: _____ Parent
         * Base
         ** Older sibling

Ethnic Sample Population

Inner City East

Chaney School Area

Family	Tape No.	Sex, Age, Race	Highest Educational Level	Occupation	Spouse's Occupation	Religion	Field-worker
A	0416	F 39 N	3 yrs. bible col.	maid	plasterer	Baptist	RKS
	*0466	M 10 N	6				WKR
B	0368	F 47 N	6	waitress	utility man Cadillac	Baptist	EAA
	*0465	M 11 N	5				WKR
	**0415	F 15 N	10				RKS
C	0585	F 43 N	12		welder	Baptist	EAA
	*0333	M 11 N	5				CWJ
	**0443	F 16 N	11				VHL
D	0414	F 35 N	12		chef	Catholic	RKS=
	*0464	M 11 N	6				WKR
	**0367	F 13 N	7				EAA
E	0642	F 30 N	11		factory worker	Baptist	REC
	*0467	M 10 N	4				WKR
	**0444	F 12 N					VHL

Code: ____Parent
         *   Base
         **   Older Sibling

Chrysler School Area

Family	Tape No.	Sex, Age, Race	Highest Educa- tional Level	Occupation	Spouse's Occupation	Religion	Field- worker
A	0534	F 32 W	M.A.+		hospital admin.	Methodist	JWN
	*0617	M 9 W	5		Wayne State		WAW
B	0643	F 47 W	B.A.+	teacher	dentist		EAA
	*0635	F 11 W	6				CMW
C	0652	M 56 W	A.B.	reporter		Congrega.	EAA
	*0624	M 10 W	5				VHL
D	0538	F 45 N	R.N.	nurse	export-import	Presbyterian	JWN
	*0681	F 10 W	4		business		RKS
E	0675	F 39 N	11	model		Presbyterian	WKR
	*0676	F 10 W	5				WKR
	**0680	F 15 W	8				RKS

Code: ____ Parent
          *   Base
          **   Older Sibling

Ethnic Sample Population   Middle City East

Hillger School Area

Family	Tape No.	Sex, Age, Race	Highest Educational Level	Occupation	Spouse's Occupation	Religion	Field-worker
A	0580	F 40 N	11		laborer	Baptist	CWJ
	*0551	M 11 N	6				JL
B	0308	F 31 N	10		pattern maker	Baptist	EAA
	*0191	F 10 N	4		utility man		VHL
	**0199	M 12 N	6				JWN
C	0272	F 35 N	Bus. Col.		factory	Baptist	DD
	*0235	M 10 N	5		worker		WAW
	**0318	F 15 N	9				JL
D	0185	F 32 N	11		mechanic--	Baptist	WAW
	*0188	F 11 N	6		owns tire shop		RKS
	**0181	M 16 N	11				WKR
(gm)	0189	F 62 N	4			Lutheran	EAA
E	0644	F 45 W	C,1		sanitation	Interdomin.	CMW
	*0649	M 13 N	5		inspector		EAA
	**0696	M 19 N	12				EAA
F	*0313	F 12 N	5	(mother) cleaning woman		Baptist	JL
	**0278	F 16 N	11				VHL

Code: ____ Parent
       *   Base
       **   Older Sibling

Ethnic Sample Population   Middle City East

Keating School Area

Family	Tape No.	Sex, Age, Race	Highest Educational Level	Occupation	Spouse's Occupation	Religion	Fieldworker
A	0592	F 42 W	11	saleswoman	mechanic	Baptist	VHL
	*0532	M 13 W	6				JWN
	**0523	M 15 W	9				EAA
	(gm)0615	F 64 W	8			Christian Science	WAW
	(g.gm)0573	F 89 W	8			Church of Christ	DD
B	0552	F 38 N	C,2	maid	chauffeur	Church of Christ	JL
	*0641	F 11 N	6				REC
	**0581	M 14 N	9				JWN
C	0428	F 43 N	4		(divorced)	Baptist	JL
	*0480	M 10 N	5				CMW
	**0378	M 15 N	10				REC
D	0429	F 43 N	11	waitress	(divorced)	Baptist	JL
	*0482	F 11 N	6				CMW
	**0372	M 15 N	9				EAA
E	0394	F 29 N	11	nurse's aide	factory worker	Baptist	DD
	*0371	F 10 N	4				EAA
	**0419	F 14 N	9				RKS

Code: ___Parent
         *   Base
         ** Older Sibling

　　　　　　　　　　　　　　　　　　Middle City West

Priest School Area

Family	Tape No.	Sex, Age, Race	Highest Educa- tional Level	Occupation	Spouse's Occupation	Religion	Field- worker
A	0484	F 41 W	6	waitress	steel worker	Methodist	CMW
	*0541	F 10 W	5				JL
	**0554	F 13 W	9				WKR
B	0576	F 47 W	9	bank clerk	job setter-- screen factory	Catholic	DD
	*0638	F 10 W	5				REC
C	0389	F 39 W	11		parts polisher Cadillac	Catholic	DD
	*0329	M 12 W	6				CWJ
D	0519	F 48 W	C,2	cleaning woman		Catholic	EAA
	*0518	M 13 W	7				EAA
	**0383	F .. W	10				REC
E	0572	F 40 W	8		laborer	Catholic	DD
	*0559	M 12 W	7				WKR

Code:　___Parent
　　　*　Base
　　　** Older Sibling

Boynton School Area

Family	Tape No.	Sex, Age, Race	Highest Educational Level	Occupation	Spouse's Occupation	Religion	Field-worker
A	<u>0449</u>	M 49 N	12	machinist	typist	Baptist	JWN
	*0401	M 10 N	6				WAW
B	<u>0398</u>	F 45 N	11		factory	Baptist	WAW
	*0446	M 12 N	6		worker		JWN
	**0359	M 15 N	10				EAA
C	<u>0452</u>	F 43 N	9	Avon sales-	laborer	Methodist	JWN
	*0451	M 10 N	4	lady			JWN
	**0412	M 15 N	9				RKS
	**0413	M 12 N	6				RKS
D	<u>0447</u>	M 53 N	6	laborer--Great	street cross	Baptist	JWN
	*0360	M 12 N	6	Lakes Steel	guard		EAA
	**0397	F 21 N	11				WAW
E	<u>0400</u>	M 32 N	5	factory worker		Baptist	WAW
	*0448	M 11 N	5				JWN

Code: <u>   </u>Parent
         *   Base
         **   Older Sibling

Ethnic Sample Population   Middle City West

Sill School Area

Family	Tape NO.	Sex, Age, Race	Highest Educa-tional Level	Occupation	Spouse's Occupation	Religion	Field-worker
A	0492	F 26 N	10		(separated or divorced)	Baptist	VHL
	*0589	M 9 N	4				WAW
B	0407	F 29 N	12		employed	Baptist	WAW
	*0455	F 9 N	4				JWN
C (g.gm)	0393	F 65 N	2	cook, motel		Baptist	DD
(gf)	0418	M 48 N	12	supermarket			EAA
	*0370	F 10 N	4				RKS
D	0392	F 45 N	8		factory worker	Baptist	DD
	*0417	F 9 N	4				RKS
	**0369	M 12 N	6				
E	0593	F 36 N	8		(separated)	Baptist	WAW
	*0616	F 9 N	4				WAW

Code: ___ Parent
        *   Base
        ** Older sibling

Ethnic Sample Population

Outer City West

St. Johns School Area

Family	Tape No.	Sex, Age, Race	Highest Educa- tional Level	Occupation	Spouse's Occupation	Religion	Field- worker
A	0705	M 41 N	B.A.	school teacher	principal	Methodist	CMW
	*0704	M 9 N	4				VHL
B	0588	M 39 W	12		printer	Lutheran	CWJ
	*0668	M 9 W	4				JL
	**0513	M 12 W	7				RKS
C	0651	F 42 N	C,2		postman	Lutheran	EAA
	*0692	F 11 N	6				WKR
	**0623	F 18 N	12				VHL
D	0703	M 36 W	B.A.	working on M.A.	teacher	Lutheran	VHL
	*0671	F 10 W	4				JL
E	0537	M 35 N	10	bank teller		Baptist	JWN
	*0620	F 9 N	3				DD

Code: ____ Parent
       *   Base
       **   Older Sibling

Koscuisko School Area

Family	Tape No.	Sex, Age, Race	Highest Educa- tional Level	Occupation	Spouse's Occupation	Religion	Field- worker
A	<u>0527</u>	F 40 W	12	secretary	barber	Catholic	EAA
	*0679	M 11 W	6				RKS
	**0596	M 15 W	9				VHL
B	<u>0674</u>	M 50 W	8	bar owner		Catholic	WKR
	*0631	F 9 W	5	bowl alley			CMW
C	<u>0630</u>	F 43 W	12		tool maker	Catholic	CMW
	*0562	M 10 W	6				WKR
	**0673	M 17 W	12				WKR
D	<u>0697</u>	F ? W	9		tool grinder	Catholic	CWJ
	*0669	F 10 W	4				JL
	**0514	F 15 W	10				RKS
E	<u>0706</u>	F 34 W	12		boiler oper.	Catholic	VHL
	*0700	M 11 W	4		stationery engr.		CWJ

Code: ___Parent
*   Base
**   Older Sibling

Higginbotham School Area

Family	Tape No.	Sex, Age, Race	Highest Educational Level	Occupation	Spouse's Occupation	Religion	Fieldworker
A	0103	F 33 N	C,2		delivery man	Baptist	JL
	*0031	M 10 N	5		and cleaner		RKS
	**0080	M 12 N	7				CMW
B	0087	F 42 N	12	(beautician)	truck driver	Baptist	DD
	*0015	M 10 N	5				CWJ
	**0064	F 14 N	9				VHL
				(mother)	(father)		
C	*0007	F 10 N	5	nurse's aide	factory	Church of	JWN
	**0091	F 14 N	8		worker	God	DD
D	0114	M 37 N	9	press operator	nurse	Baptist	WKR
	*0127	M 12 N	7				WAW
E	0049	M 40 N	12	press operator		Baptist	EAA
	*0023	M 9 N	4				RWS
F	0111	F ? N	12	ward clerk--	bus starter--	Lutheran	WKR
	*0051	F 10 N	5	Henry Ford Hos.	Det. Str.		EAA
	**0076	F 12 N	5		Car & RR.		CMW
	**0026	F 13 N	8				RKS

Code: _____ Parent
       *   Base
       **   Older Sibling

Ethnic Sample Population   Outer City Central

Hampton School Area

Family	Tape No.	Sex, Age, Race	Highest Educa- tional Level	Occupation	Spouse's Occupation	Religion	Field- worker
A	<u>0597</u>	F 40 W	B.A.+		Pres. Kent Ind.	Jewish	VHL
	*0619	F 11 W					DD
	**0650	M 17 W	12				EAA
B	<u>0099</u>	F 51 W	C,2	artist	lawyer	Jewish	JL
	*0123	F 11 W	6				WAW
C	<u>0098</u>	F 44 W	B.A.		dentist	Jewish	JL
	*0062	F 9 W	4				VHL
	**0122	F 15 W	10				WAW
D	<u>0665</u>	F 57 W	M.A.		architect	Jewish	JL
	*0689	M 10 W	5				WKR
	**0684	F 12 W	7				RKS
E	<u>0116</u>	M 43 W	C,4	pest control	(physio- therapist)	Jewish	WKR
	*0019	M 11 W	6				CWJ

Code: <u>   </u>Parent
         *   Base
         **   Older Sibling