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**INSTITUTE FOR  
RESEARCH ON  
POVERTY**

ON THE FUNCTIONAL ANALYSES OF SOCIAL CLASS DIFFERENCES  
IN MODES OF SPEECH

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**DISCUSSION PAPERS**

THE UNIVERSITY OF WISCONSIN, MADISON, WISCONSIN

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October, 1968

Authors' Note

This is one of three papers to emanate from our studies of social class differences in language samples of children's speech obtained from the Detroit Dialect Study.

The research reported here concerns the analyses of the children's speech in the attempt to use functional contrasts in the identification of so-called "modes of speech." This concept is currently being applied in many discussions pertaining to language and socialization, in general, and to the linguistic distinctions of poverty populations, in particular.

A separate paper will report in some detail upon a series of syntactic analyses which were undertaken to augment the functional analyses reported here. The reasoning was that modes of speech reflect the intersection of function and form in language behavior; thus the second series of analyses was designed to assess characteristics of form.

A final paper, planned as a contribution for the book, Language and Poverty: Perspectives on a Theme, will concentrate upon implications drawn from foregoing studies for dealing with the language of the disadvantaged child.

October 1968

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r.c.n.

Abstract

The present research centered upon the analysis of functional contrasts and social class differences in such contrasts in speech samples of fifth and sixth grade children selected from socioeconomic extremes in the Detroit area. The aim was to map such contrasts onto some of the contemporary speculations about social class differences in modes of speech and implications concerning the language problems of the disadvantaged. Results indicated that the lower class children, as compared with higher class children, tended: (1) to avoid elaboration in their responses to fieldworker probes unless specifically prompted to elaborate, (2) to have some tendency to speak more in the first person or else without any explicit grammatical perspective, (3) to employ a lesser degree of organization among their remarks when engaged in elaboration, and (4) to employ interjections presumably more directed to their role in the interview than to topical elaboration. The foregoing contrasts were interpreted in terms of more generic descriptions of modes of speech and the application of this concept to the language distinctions of the socioeconomically disadvantaged. In the main was the implication that social class differences in language development might best be researched by the more careful study of differences in the functional demands placed upon the development of children's communication behaviors.

# ON THE FUNCTIONAL ANALYSIS OF SOCIAL CLASS DIFFERENCES

## IN MODES OF SPEECH

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### INTRODUCTION

Within the burgeoning amount of research and speculation centered upon the language problems of the so-called "disadvantaged" in the United States, a concept currently referred to as modes of speech is beginning to receive considerable attention. Although this concept reflects a coalescence of theoretical and practical interests held by persons in a variety of fields, much of the current interest has been stimulated by the recent writings of the British sociologist, Basil Bernstein.<sup>1</sup> His thesis can be stated generally as follows: Social structures place characteristic demands upon their members for particular modes of language behavior. These modes serve in the regulation of the cognitive and social development of children within given structures, and this, in turn, serves in the perpetuation of the parent social structures. This thesis is not just another way of explaining language differences in children, nor is it simply another version of the Whorfian hypothesis. It is a theory of socialization which places speech in the role of mediating the linkage between the characteristics of social structures and the development of children reared within those structures.

Little space need be devoted at this point to arguing the pertinence of the foregoing thesis to the study of the disadvantaged in the United States. In The Disadvantaged Child, a recently published collection of research papers by Martin Deutsch and his associates, there are frequent references to Bernstein's thesis in interpretations of language distinctions found in children from poverty populations.<sup>2</sup> Moreover, the results of the investigation by Robert Hess and his colleagues of social class differences in maternal language styles and regulatory strategies have been interpreted as being in accord with what would be predicted upon the basis of the Bernstein thesis.<sup>3</sup> The question is no longer one of pertinence; it has become one of inquiring about how best to research the theory, both for purposes of furthering its own development and for purposes of studying social class differences in the United States.

In the present investigation the argument was advanced that modes of speech could be differentiated in terms of functional contrasts of language usage within well-defined speech situations. A strategy was first developed for the assessment of these functional aspects, then employed in the analysis of mode of speech characteristics and their correlations with social class differences in a language sample obtained from tapes of the Detroit Dialect Study.<sup>4</sup> The sample, totaling some 25,000 words, represented the speech of 40 fifth and sixth grade school children (informants) selected from relatively high and low socioeconomic strata in Detroit. Within this group of 40 children were subsamples balanced by race (Negro, white) and by sex. Results of the analyses were interpreted along two lines: What implications did they hold for a theory of modes of speech? What implications did they hold for the

application of this theory to the study of disadvantaged populations in the United States?

PRELIMINARIES TO THE ANALYSES

Background

Most of the speculations about modes of speech and their relations to social structures have been attempts to study the role of language in the socialization process, particularly as it applies to the socialization of subcultural differences within a speech community. In a number of papers, Bernstein has placed major emphasis upon the distinction between two modes of speech, called the restricted and elaborated language codes, and the different uses of these two codes by lower and middle classes in Great Britain.<sup>5</sup> The social structures of the lower classes, according to Bernstein, reinforce the development of a restricted style of language which among other features, is more socially than conceptually oriented, requires its users to share a range of implicit meanings, and appears limited and stereotyped in its expressive alternatives. If this mode of language usage is emphasized over a more concept-oriented form of language during a child's preschool years, it may eventually inhibit his progress in school where the latter form of language is the primary mode for instruction. The consequence may be a limit upon the child's long range potential for upward social mobility into the mainstream of socioeconomic life. Although the child reared within middle class social structures also learns a restricted style of language, he additionally learns a language of a more elaborated style--

one which is conceptually oriented, which does not rely heavily upon implicit meanings, and which is potentially rich in the alternatives for expression.

Despite the attention devoted to this theory in the current research literature, most persons interested in it would probably agree that it remains in a relatively early stage of development. A comparison of Bernstein's papers across time can provide good evidence of this point; it will reveal substantial modification in what has been given emphasis in both the theoretical and empirical considerations of modes of speech.<sup>6</sup> It is in the empirical consideration, particularly, where most of the problems have arisen in advancing the theory. How, given a language sample, are modes of speech to be identified? Too frequently, the strategy has been to identify and to count the incidence of a great variety of detailed linguistic and production characteristics, ranging across such items as "uncommon" words, various types of hesitations, deviations from standard grammatical form, sentence complexity, use of pronouns, and the like. An obvious problem raised in such studies is that they became unwieldy inventories of detailed characteristics, where if the balance of items tipped one way or another, a label of the mode was assigned. Much of the criticism of the empirical research into modes of speech rests on this problem.<sup>7</sup>

If it is not appropriate, then, to identify modes of speech in this manner, what might be an alternative strategy? In the present research it was reasoned that the focus for assessment should be upon functional contrasts in how and what language was brought to bear to meet the demands

of a speech situation. Much of this reasoning was stimulated by a recent series of essays in which the anthropologist, Dell Hymes, has advocated the need for more study of the distinctive uses of speech within cultures and subcultures.<sup>8</sup> He has pressed the argument for the development of what he terms an ethnography of speaking:

In one sense this area fills the gap between what is usually described in grammars, and what is usually described in ethnographies. Both use speech as evidence of other patterns; neither brings it into focus in terms of its own patterns. In another sense, this is a question of what a child internalizes about speaking, beyond rules of grammar and a dictionary, while becoming a full-fledged member of its speech community. Or, it is a question of what a foreigner must learn about a group's verbal behavior in order to participate appropriately and effectively in its activities. The ethnography of speaking is concerned with the situations and uses, the patterns and functions, of speaking as an activity in its own right.<sup>9</sup>

Basic to an ethnography of speaking, according to Hymes, is a theoretical perspective, as well as a research strategy, which employs the paradigmatic approach. Essentially, this involves defining relevant frames or contexts, identifying and contrasting phenomena within these contexts, then attempting to draw generalizations about the dimensions of such contrasts. The contexts are the speech events or the settings within which spoken communication occurs. These events are defined in

terms of their constituent factors, and the functions of speech refer to how language behavior has focused upon a given factor (e.g., upon the speaker) or upon a relation among factors (e.g., a topic as adapted to a listener). Members of a group, a social stratum, or whatever the population under study, may be distinguished by the range of speech events which they encounter, the definitions of constituent factors within those events, and how their language has functioned relative to these factors.

Speech events can be defined in an ad hoc manner (e.g., my lecture this morning), but presumably most can be subsumed into classes of events such as lectures, conversations and public address. The constituent factors include the setting, sender, receiver, message forms, language code, modality (channel), and topic. What is particularly useful in Hymes' speculations is the concept of speech function--that is, how language relates to, or interrelates, factors of the speech event. It was this concept that served as the basis for the functional analyses in the present research.<sup>10</sup>

#### The General Strategy

As has been mentioned, the language samples in the present analyses were obtained from prior field study where the purpose was to investigate, using traditional linguistic techniques, selected linguistic correlates of social stratification. For this reason, the tapes from this earlier study presented a particularly opportune basis for the present research. The selection of informants was guided by adequate sociological sampling procedures. This provided not only a definition of the populations represented in the original samples, but a socioeconomic index for each informant. This index was used as a

basis for selecting tapes for the present investigation. The interviews were conducted by trained linguistic fieldworkers in the children's homes, and portions of each interview involved the use of topical questions where the aim was to elicit continuous speech from the child. These carefully controlled interviews allowed the definition of a paradigm for a series of comparative analyses of the children from different social strata.

As described in subsequent sections of this paper, the functional analyses first involved successive segmentation of the language samples down to the level of syntactic units. Given these units, a series of classification schemes was imposed, such that each unit was described in terms of functional contrasts which could be entered into an interpretation along the lines mentioned earlier. On the basis of these contrasts and their interpretations, the aim was to attempt a description of social class differences in modes of speech.

#### The Language Sample

The Detroit Study. Although the details of the Detroit study are presented elsewhere,<sup>11</sup> a few of its features were particularly pertinent to the present research. One of these features was the sampling procedure. The main sample in the Detroit study was developed on the assumption that geographical boundaries in Detroit were applicable in the definition of social boundaries. Based on definitions from a prior study, ten geographical areas were defined as sampling strata.<sup>12</sup> To sample within these units, one public and one parochial school (20 schools in all) were randomly selected as sampling units. Within each base sample school, the names of 30 children were randomly drawn to

reflect proportionate selection from the fourth, fifth, and sixth grades. Eventually, ten children and their families from each list of 30 were defined as informants for the study. This final reduction was based upon random selection as much as was possible; however, at this stage some of the reduction reflected the availability and willingness of families to be interviewed.

A second pertinent feature of the original study was the interview situation which was generally as follows: There were at least two interviews in each family, one with the child who had been selected from the school sampling unit and one with a parent or acting-parent. In many cases, to these were added interviews with a grandparent and teen-aged siblings, and in some cases other family members. Altogether, the base sample contained 545 interviews, representing 202 families, and the anticipated 200 children. Each interview was guided in terms of a predetermined schedule, approximately 40 minutes of which was devoted to free responses to questions within the topical areas of games and leisure, school, job aspirations, group structure, and fighting-accidents-illness. The interviews were conducted in the child's home, and undertaken simultaneously with designated family members by a team of field workers. The fieldwork was done during the summer of 1966.

Selection of Tapes. A number of criteria, as well as compromises, were employed in selecting the tapes (informants) for the present investigation. First, it was desired to maintain some of the basic sampling focus of the original investigation. Thus, the children from the base sample, rather than family members from this sample were used as a starting point. Second, for present purposes, the main

criterion for selection of the subsample was to identify two socioeconomic groups, hereafter designated as the high and low status samples. The third requirement was that balanced subsamples by sex and race be included within the status samples.

As previously mentioned, each informant's family had been given a calculated value on a socioeconomic index. This index, based upon a procedure outlined by Hollingshead, entails the weighted combination of ratings on education, occupation, and residence.<sup>13</sup> The lower the value of the index, the higher the status of the family. Beforehand, and based upon a compromise between what was available in the Detroit tapes and what would be the requirements for anticipated statistical analyses, it had been decided to draw a total of 40 tapes from the base sample, and these tapes were to include the high and low status groups as well as subsamples of Negro and white children and males and females. As a partial control for grade level, only fifth and sixth grade informants were scheduled for selection. Essentially, the selection procedure involved drawing pairs of Negro and white informants, matched for sex and, as closely as possible, socioeconomic index, beginning first at the upper end of the socioeconomic distribution until ten pairs were obtained, then beginning at the bottom of the distribution and selecting ten pairs. This selection procedure, of course, resulted in subsamples no longer representative of what was reflected in the original base sample. It did, however, provide a relatively rigorous criterion for defining the high and low status groups; moreover, there was some degree of concentration of the high and low status, Negro and white, subsamples from particular areas in Detroit.<sup>14</sup> Table 1 lists the

40 informants and selected information on each. As expected as a result

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Table 1 near here

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of the selection procedure, the mean socioeconomic indexes of the Negro and white subsamples were nearly equal (Negro = 89.8, white = 89.2). This equality also generally prevailed where anticipated within the further subdivisions of the informants; for example:

Negro, high status (male = 58.4, female = 60.8) = 59.6

white, high status (male = 57.2, female = 60.8) = 59.0

Negro, low status (male = 117.8, female = 122.2) = 120.0

white, low status (male = 121.6, female = 117.2) = 119.4

Selection of language samples. Roughly half of each interview involved free responses to a number of questions. These portions of the tapes were the richest in interaction between the fieldworker and the informant, making it possible to assess segments of continuous speech from each informant, and to examine further the types of fieldworker remarks which prompted these segments. Based upon a preliminary review of the tapes, the responses to three questions were selected for analysis. All informants had responded more than minimally to each of these questions and, as subsequently discussed, these three questions involved quite different topics, each of which was thought to have some potential effect upon an informant's modes of speech. The three topics, hereafter designated by their abbreviated labels, were as follows:

Games: "What kinds of games do you play around here?" As noted in the interview questionnaire, the fieldworker was supposed to note each game, to ask how it was played, and

TABLE 1

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## INFORMANT INFORMATION

Status-Race	Tape #	Sex	Age	Grade	Socioeconomic Index
White-high	0459	M	11	6	81
	0647	F	9	6	60
	0306	M	11	5	37
	0287	F	11	6	54
	0092	F	11	5	78
	0345	F	11	5	80
	0686	M	10	5	63
	0291	M	11	6	74
	0172	M	10	5	31
	0097	F	11	5	32
Negro-high	0070	F	11	5	80
	0547	M	10	5	79
	0228	F	11	5	69
	0364	F	10	5	32
	0666	F	12	6	46
	0152	M	11	5	80
	0008	F	11	6	77
	0288	M	10	5	46
	0060	M	10	5	32
	0149	M	11	6	55
White-low	0609	F	11	5	110
	0299	M	11	6	114
	0682	F	11	5	122
	0423	F	10	5	114
	0563	M	10	6	124
	0379	M	11	5	134
	0475	M	10	5	117
	0557	M	11	6	119
	0491	F	10	5	120
	0263	F	11	6	120
Negro-low	0614	M	11	6	115
	0486	M	11	6	119
	0153	F	11	5	120
	0220	F	10	5	120
	0604	F	11	6	122
	0120	M	9	5	125
	0517	F	12	6	134
	0688	M	11	6	119
	0290	F	9	5	115
	0495	M	11	5	111

to get descriptions for such items as the "goal," "how to decide who is it," what to do "when a new person comes," etc.

TV: "What are your favorite TV programs?" Here the fieldworker would try to elicit the description of a recent episode.

Aspirations: "What do you want to be when you finish school?"

Follow-up remarks were to center upon such questions as "How long does it take to become a \_\_\_\_\_?" "What does a \_\_\_\_\_ do?"

Transcripts of these portions of the tapes were prepared by typists using regular English spelling. Remarks of both the informant and the fieldworker were included. In addition to the typist, at least two other staff members reviewed the transcripts for corrections and attempted to represent, as much as was possible in conventional spelling, slang and deviations from standard usage. Although it had been easiest for the typist to include punctuation in her transcripts, it was not checked nor included in any of the analyses. Altogether there were 120 transcripts, representing the language samples of the 40 informants (and the fieldworkers) on each of the three topics.

#### Coding Procedures

Initial segmentation. An individual transcript contained continuous text divided into segments separating the fieldworker's and the informant's remarks. Each of the informant segments was considered an utterance unit, and each fieldworker unit, a probe. An informant's utterance units taken together for a given topic were considered to comprise a message.

One initial decision was to select language segments which would serve as the basic units to be subjected to analyses. Utterance units were unsuitable for this purpose since in the messages of most informants they ranged from simple "yes" or "no" responses to lengthy segments of continuous discourse often serving a variety of communicative functions. In some prior studies, researchers have attempted the segmentation of sequences considered as "communication units," presumably units expressing a complete thought, or more-or-less basic expressive units contributing to the overall message.<sup>15</sup> After a brief trial application, this unit was found to be too subjective to be of value. For one thing, it required almost an exclusive appeal to the apparent and detailed meaning of the discourse in order to be defined. Also, estimates of intercoder reliability barely exceeded 50 to 60 percent. An alternative, and one which proved useful throughout the study, was to divide each utterance unit into structural segments, based upon apparent syntactic patterning. These were called utterance segments. In brief, the procedure was as follows:

1. In order to omit certain words from further consideration, four types of hesitation phenomena, based upon a classification scheme employed by Maclay and Osgood, were identified where they had occurred in the utterances.<sup>16</sup> The words involved in two of these types--repeats (nonsemantic repetition of a word fragment, a word, or sequence of words) and false starts (self-interrupted and revised or restarted sequences)--were marked for omission from the syntactic analyses.<sup>17</sup>

2. Double cross-junctures (#) were identified and their locations marked on the transcripts. (In some cases, the identification of #-junctures was facilitated by also coding //-junctures, although the latter did not enter into any of the present analyses.)

3. Syntactic patterns relating the words within each utterance unit were then examined. The beginning and end of an utterance unit and the occurrences of #-junctures within units were taken as two of the bases for locating the beginnings and ends of syntactic patterns. Within such patterns, further divisions were placed between adjacent words or groups of words which did not come under a common syntactic hierarchy.<sup>18</sup>

Those simple unrelated words and groups of related words were identified as utterance segments and were classified as units into one of three categories. These included:

- a. Sentences: groups of two or more related words patterning syntactically with a verb.
- b. Fragments: a word or group of words which did not include or pattern with a verb (with the exception of single words such as "Listen," which although verbs, were treated as fragments).
- c. Syntactic-interjections: any word or related group of words included within a larger syntactic unit, but syntactically unrelated to that unit (primarily items such as "you know," "well," "see," etc.).

Utterance classification. The main goal in planning the utterance coding was to develop sets of categories for the functional differentiation of segments according to the child's fashion or manner of responding in the interview situation. A first important consideration in developing categories arose when it was recognized how the nature of the fieldworker probes seemed to affect the informant's responses. On the surface, such a relation seemed obvious. After all, the fieldworker's task was to guide the interview, and it would be expected that the informant would be responding to what was said. In this case, however, the relation between fieldworker and informant was more one of constraint imposed by the former's remarks, and this relation seemed highly applicable to the present concern with modes of speech. Given trial and error experience, it was found that the informant's utterances could be classified as occurring under one of three conditions of what was characterized as probe-constraint. This identification was based upon an examination of the fieldworker's remarks which directly preceded an informant's utterance unit. Accordingly, each informant's utterance segments were first coded for the type of fieldworker constraint under which they had occurred, and this classification was independent of how the child had actually responded. The categories were defined as follows:

1. Probe-constraint

- A. simple: where the fieldworker's (FW) probe could be minimally answered with a simple negative or affirmative reply (e.g., FW: "Do you play baseball?").
- B. naming: where the probe could be minimally answered by providing the name or names of something (FW: "What television programs do you watch?").

- C. elaboration: where the probe required more than a simple negative or affirmative reply or naming; it was meant to prompt an explanation, a description, or some type of story-telling (FW: "How do you play kick-the-can?").

With very few exceptions (described at a later point), all utterance segments in the sample could be assigned to a condition of probe-constraint. The next series of categories, by contrast, centered upon how the child had actually responded. Roughly 83 percent of the utterance segments could be classified into response categories defined in the same way as the probe classifications; these were identified as response-styles. The remaining 17 percent of the segments mainly represented remarks which were not direct responses to fieldworker probes, but were interjections of various types--such as to say "well" in introducing an utterance; to say "you know" at the end or in the midst of an utterance; to ask the fieldworker a question, etc. Also included among these latter remarks, all called response-interjections, were occasional quotations of game rhymes or brief limericks. Response classifications, then, included two sets of categories. The first was:

2. Response-style

- A. simple: a very brief negative or affirmative reply (typically, "yeah," or "uh huh").
- B. naming: a single name or series of names not given in a sentence form. (e.g., "baseball," or "marbles and kick-ball").

- C. qualified-naming: where the response provided a name or names but these were incorporated into a sentence form ("I usually watch The Avengers and lots of cartoons.")
- D. elaboration: usually in sentence form, this included descriptions, explanations, stories, and the like ("Last night the Penguin had Batman trapped on top of this tower . . .").

Response-interjections were not always syntactic interjections. Sometimes they occurred alone as utterance units, other times they appeared in the midst of an elaborated sequence. They included:

### 3. Response-interjections

- A. requests: usually a simple question or implied question asking for clarification or further information (e.g., "Huh?" "You want to know all about it?" "What for?").
- B. introducer-interjections: words such as "now," "anyhow," "well," and "oh" which typically appeared at the beginning of utterance segments when they occurred.
- C. attention-interjections: mainly the phrase "you know," which was embedded in larger units or else appeared at the end of units. Other such items included an occasional "listen" or "look."
- D. qualifier-interjections: brief segments like "I mean," "its somethin' like that," "I'm not sure," or "I couldn't tell, but . . .").

- E. quotes: not truly an interjection, but the use of a rhyme or limerick ("Bubble gum, bubble gum in a dish; how many pieces do you wish? One-two-three . . .").

Again, response-styles and response-interjections represented a range of mutually exclusive categories. It was thought that these categories could lend themselves to functional interpretation, yet at the same time be meaningful in describing the units themselves. To augment such interpretations a further set of categories was developed upon the basis of the grammatical-perspective determined in utterance segments which were sentences. The following categories were developed for the data:

4. Grammatical-perspective

- A. self-singular: referral to self by use of "I," or "me."  
 B. self-group: use of "we," "us."  
 C. generalized-you: the use of implication of "you" in the subject or predicate.  
 D. third-person: use of "he," "she," "it," "them," and nouns.

There was an intent in the foregoing order of the categories to represent a range of referential focus beginning with the sender (as in self-singular), then moving to a focus upon receiver (generalized-you), then a topical focus (third-person). The bias in coding was to assign a unit to category A if the appropriate pronouns occurred at all, even if others from another category also occurred. Similarly, in the cases of categories B, C, and D, the bias was toward assignment to categories earlier in the foregoing list. Without this bias, many units would have

merited dual classification; moreover, the self-singular and generalized-you categories would have been largely subsumed into a combination with the third-person category. At best, when a unit was coded as, say, self-singular, this indicated that the speaker himself was directly referred to in his sentence; or when coded as generalized-you, there was a referential focus in the sentence upon the receiver.

One final set of categories centered upon the assessment of the degree of organization among an informant's utterance segments. In many of the papers cited earlier in this report, one of the most consistent social class differences in modes of speech was the degree of organization which united the segments of a message.<sup>19</sup> Classification in the present analyses was defined as follows:

5. Response-organization

- A. isolated: the utterance segment served as an entire utterance unit, or as a unit semantically independent of surrounding context.
- B. slight-relation: the unit dealt with the same semantic topic as the surrounding context, but could be omitted without affecting the organization or overall meaning of the larger context; its omission would probably not be noticed by a listener.
- C. moderate-relation: the omission of the unit would leave a noticeable gap in the semantic and organizational context, but would not seriously affect the meaning of what remained.

- D. marked-relation: units serving as rhetorical devices in an organizational sense, or units strongly constrained by the presence of such devices; their omission would seriously affect the organization and meaning of the remaining context.

Obviously, there was a major appeal to subjectivity in assigning units to the foregoing categories, except for Category A which mainly included single segment utterance units. Coding in the remaining categories emphasized what was often referred to by the coders as the "loss-test." To what degree could the unit be omitted without "leaving a noticeable gap," so to speak, in the utterance context, and "what would be the effect upon the remaining context?"

Procedures. Coding of the functional classifications was undertaken by a staff of three persons in addition to the directors (fw and rcn) of the project. Hesitation and juncture coding were done by staff members trained in phonetic transcription. Coding of each of the functional classification types (e.g., utterance segments, probe constraint, response style, etc.) was undertaken by separate teams of two coders each. The teams who coded probe constraint and the various response styles were unaware of each other's classification procedures. This was done to reduce as much as possible the influence of seeing the fieldworker's remarks when coding response styles, and vice versa. After various practice runs, reliability on all coding phases except response organization was usually better than 95 percent. Coding on the latter phase was seldom better than about 80 percent reliability, and was even less before the authors assumed the task themselves.

All coded information was initially transcribed onto tabulation sheets where entries were numerically identified as to informant, topic, and location within the message. These data were subsequently key-punched and transferred to magnetic tape in a form suitable for use in various computerized tabulation and statistical programs.<sup>20</sup>

### ANALYSES AND INTERPRETATIONS

#### Initial Analyses of Unit Types

A first question pertained to the frequency of occurrence of different syntactic types of utterance segments in the data. Table 2 presents a summary of the overall frequency counts of these units, as well as a division of the data according to the two status groups.

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About two-thirds of the 4534 utterance segments in the overall sample had been classified as being of a sentence-type. Most of the remaining one-third were fragments, with only about four percent classified as syntactic-interjections. As indicated in Table 2, there were differences between the two status groups. The sample from children of high status families had approximately 400 more segments than the lower status sample. Additionally, in terms of relative percentages, the messages from the high status informants had about 10 percent more sentences relative to fragments. Although they were not considered to be particularly pertinent to the present investigation, word counts had also been obtained in the course of preparing the transcripts. The average number of words brought to bear on a topic by a high status

TABLE 2  
 FREQUENCIES OF SEGMENT TYPES

Unit Type	Status		
	High	Low	Both
sentences	1683 (69%) <sup>a</sup>	1257 (60%)	2940 (65%)
fragments	653 (27%)	739 (35%)	1392 (31%)
syntactic-interjections	112 (4%)	90 (5%)	202 (4%)
TOTALS	2448	2086	4534

<sup>a</sup>Percentage of column totals (rounded).

child was 311, as against a mean of 235 for the low status children. These averages, however, varied considerably across message topics. On the Games question, the two status groups had nearly equal message lengths (high = 382 words; low = 391), while on the Aspirations question the messages of the high status children were slightly longer (high = 150; low = 130). Where the greatest discrepancy between the two groups occurred was on the TV topic. Here the average of the high status informants greatly exceeded (401 words) that of the low status group (183) in word count.

#### Probe Constraint and Response Classifications

Of the 4534 units identified in the preceding analysis, 119 were not classifiable either in terms of fieldworker constraint, response type, or both. The remaining 4415 units, then, fell into categories representing dual classification by constraint and response type. These categories and the relative frequencies of units within each are presented in Table 3. As can be seen in this table, there was a definite

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relation between the constraint conditions and the types of responses which occurred under these conditions. This relation, as would be expected, is almost exclusively with the response-style categories (simple, naming, qualified naming, elaboration) rather than with the interjection classifications. The former categories accounted for some 83 percent of the segments coded in the language sample.

As discussed earlier, in a preliminary examination of the messages it was thought that the manner in which a child responded to a probe

TABLE 3

RELATIVE PERCENTAGES OF DIFFERENT RESPONSE TYPES UNDER  
EACH CONSTRAINT CONDITION

Response Type	Probe Constraint			Total
	Simple	Naming	Elaboration	
Simple	36% <sup>a</sup>	1%	<1%	(13%)
Naming	4	25	<1	(10)
Qualified naming	7	28	2	(12)
Elaboration	40	25	79	(48)
Request	3	3	2	(3)
Introducer-intj.	2	5	7	(5)
Attention-intj.	2	4	4	(3)
Qualifier-intj.	5	8	3	(5)
Quotes	1	1	2	(1)
(Col. frequencies)	(1275)	(897)	(2243)	(4415)

<sup>a</sup>Percentages of column frequency.

often seemed related to the style of that probe. The data in Table 3 bore this out, but at the same time raised the question: would the relation between probe constraint and response-style vary between the language samples of the two status groups? To answer this question, comparisons between the samples were made separately under each of the three constraint conditions. The focus in each was upon the relative incidence of response-styles. For these comparisons it was useful to make certain combinations of the response categories when one or more categories had only negligible frequencies of utterance segments within them.

Results summary. Figure 1 presents a summary of the initial division of the constraint-by-response data according to the two status groups. What seems clear from this figure is that under the conditions

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Figure 1 near here

---

of probes classified as simple or naming in constraint, the lower status children had somewhat more of a tendency to supply the minimally acceptable response whereas their higher status counterparts had a greater tendency to elaborate their remarks. What was striking by contrast was the lack of differences between the two groups under the condition of constraint for elaboration. Here the relative incidence of elaborated segments was nearly equal for the two groups of children.

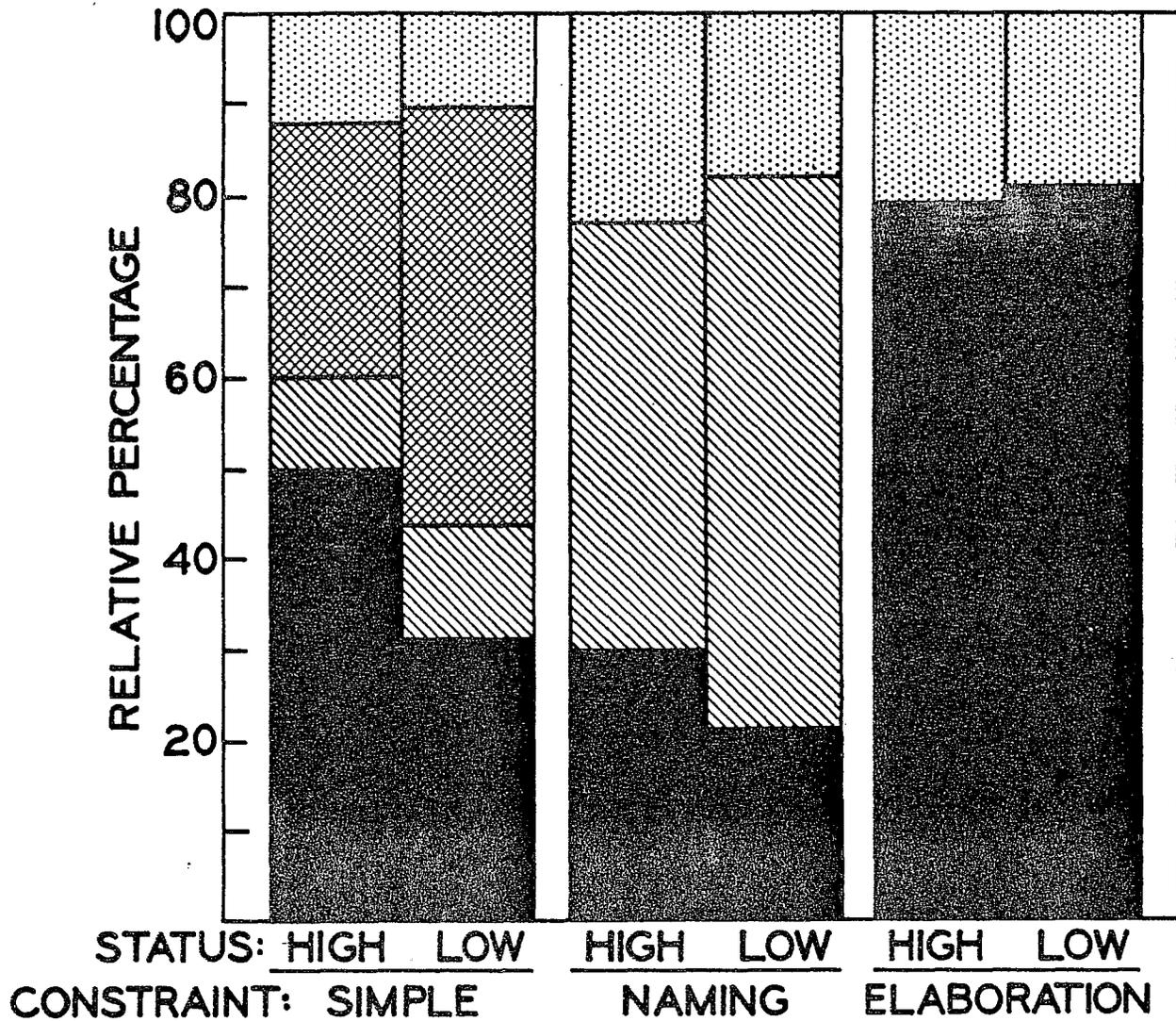
Since the data in Figure 1 comprised only overall relative frequencies of the different response styles for the two groups without regard for individual differences among the children within these groups nor regard for status differences when controlling for race, sex, or topic,

FIGURE I

Relative percentages of  
response types according  
to constraint conditions.

RESPONSE TYPES

ELABORATION
  SIMPLE
   
 NAMING
  OTHER



a series of statistical tests on various subdivisions of the data was undertaken. An elaboration index was calculated for each informant on each topic and under each constraint condition; this was the proportion of segments which had been classified within the elaborative category. The mean differences between status subgroups within subsets of the data were then tested for their statistical significance by use of the t test, using the individual informants as replicates. A probability of .05 (two-tailed) was set as the level required for significance. The comparisons of the proportions and the results of the t tests are presented in Table 4.

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Table 4 near here

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As one would expect, the differences between the two status groups that were noted in Figure 1 were statistically significant when assessed in terms of the elaboration index. However, as is shown in Table 4, this difference seemed due to responses only on the TV topic. Status differences were not statistically significant on the Games and Aspirations topics. Table 4 also indicates some limitations upon the generality of status differences across the race and sex subsamples of the data. The pattern of differences found in the overall comparison held for the conditions of simple and naming constraint only in the cases of the Negro and the male subsamples. Further differences on the elaboration index were statistically significant only under the condition of simple constraint for the white subsample and under the condition of naming constraint for the female subsample.

TABLE 4

## STATUS COMPARISONS ON THE ELABORATION INDEX

Constraint	Samples							
	<u>Overall</u>		<u>Games</u>		<u>TV</u>		<u>Aspirations</u>	
Status:	high	low	high	low	high	low	high	low
Simple	.50	.31*	.31	.26	.75	.42*	.20	.26
Naming (comb.)	.30	.21*	.22	.20	.41	.16*	.31	.26
Elaboration	.79	.81	.79	.83	.84	.83	.66	.69

Constraint	Samples							
	<u>Negro</u>		<u>White</u>		<u>Male</u>		<u>Female</u>	
Status:	high	low	high	low	high	low	high	low
Simple	.53	.23*	.45	.37*	.59	.32*	.32	.29
Naming (comb.)	.36	.18*	.22	.24	.21	.11*	.38	.30
Elaboration	.81	.82	.76	.81	.82	.87	.77	.77

\*status difference significant ( $p < .05$ ).

Interpretations. In a broad sense, the various response styles could be interpreted in terms of how they reflected the child's functional engagement in the interview event. The most minimal response, a simple "yes" or "no," focuses most upon the sender himself. Topical reference, if any, is implicit. Unless one takes into account the various means for nonverbal expression of "yes" or "no," this response style would seem to be about the purest sender role that a child could assume in the context of the present interviews. As such, it is a passive role, one where what is said is highly constrained by the interviewer's probes. A similar interpretation could be advanced for the naming style of response. Here there is again a sender focus and an appeal to implicit meaning. Although what is named may bear upon the topic of the discourse, it reflects more upon the sender than upon the verbal elaboration of a topical factor in the event. Like the simple response style, it casts the sender into a passive role in the interview. Note, for example, the role of the child in the following verbatim selection (tape 0517, TV topic):

FW: Do you watch TV?

IN: Yeh.

FW: What's your favorite program?

IN: Dennis the Menace

FW: Huh?

IN: Dennis the Menace

FW: Dennis the Menace, huh. How come you like  
Dennis the Menace?

IN: It's funny

FW: What did he do last week?

IN: I didn't look at it last week.

FW: Did you watch him this week?

IN: Yesterday

FW: Tell me what he did.

IN: Um

FW: Did he give Mr. Wilson a rough time again?

IN: Uh huh. It was a dog running after, Dennis made  
a dog run after a man, a man stole Mr. Wilson's  
um money or somethin'.

FW: Uh huh

IN: And so, you know, I forgot.

FW: What happened to Mr. Wilson?

IN: He got bit in the butt by a dog.

FW: Did it hurt?

By contrast, the response styles of qualified-naming and elaboration offer more in the way of functional interrelations among the further factors of the speech event. For example, qualification of the naming may vary from a sender focus ("I play baseball, marbles, and kick-ball."), to a perspective apart from the sender ("They play . . . ." "The girls in my sister's grade like to watch Gunsmoke, Hogan's Heroes, and Batman."). Elaboration, of course, offers the greatest range of alternatives in perspective and topical development. The following narrative sequence went on for some 700 words and included a variety of perspectives (tape 0149, TV topic):

FW: Tell me about it. I saw only a part of it. I couldn't  
see all of it. How did it go?

IN: Um, well, see, Jerry, this man at the first beginning he, he, he robbed this man and shot him. It had a, he had a jewel and so it was this other man, Dean Martin, well, he didn't wanna get caught because he was well known by the police so he stuck it in his p--, in his, um, Dean Martin's coat and so, um, then the lieutenant came and got him and then Dean Martin went to get this treatment, some kind of treatment at, um, Frenz, or something like that and Jerry Lewis he was supposed to be sweeping the floor and, and he, he tried to act as Frenz and um so Dean Martin came in to get that treatment and then he said, "May I have a treatment?" And, um, Jerry Lewis said, "Frenz isn't in." And then he said, "I don't care who does it . . . ."

In overall terms, the mark of the lower status child was a relatively greater incidence of the more minimal response styles. Or the converse could be stated--that the higher status child had a greater tendency to employ the maximal response style. But what the present series of analyses made particularly clear was that status differences in response styles were highly tied to the types of interviewer probes. This effect was best summarized in Figure 1. Here the comparison of the three conditions of probe constraint made it clear that while the lower status children had a tendency to provide a relatively greater percentage of the minimal response styles, these styles varied according

to the constraint imposed by the fieldworker. In short, the lower status children had a greater tendency to employ the minimal allowable response style.

Considering the foregoing, what, then, if the lower status child were constrained to go beyond a sender-focused, passive role in the interview situation? Would there be further distinguishing characteristics of his utterance segments? The next series of analyses was aimed at considering these questions in terms of the classifications according to grammatical perspective.

#### Grammatical Perspective

Coding of grammatical perspective had applied only to utterance segments previously classified as either sentences or syntactic-interjections. Of the 3142 segments which fell into these categories, 3108 were classifiable for grammatical perspective; of these, about 75 per cent had been classified as elaboration, 20 per cent as qualified naming, and the remaining in the interjection categories.

Results summary. Figure 2 illustrates status group differences

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Figure 2 near here

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in terms of the relative incidence of utterance classifications in the four categories of grammatical perspective, and how this varied according to the two main response types. In both qualified naming and in elaboration, the sample from the lower status children had a relatively greater incidence of self-singular segments, as against a relatively greater incidence of third-person segments in the sample from the higher status children. The groups were much the same in terms of

FIGURE II

Relative percentages of  
perspective classifications.

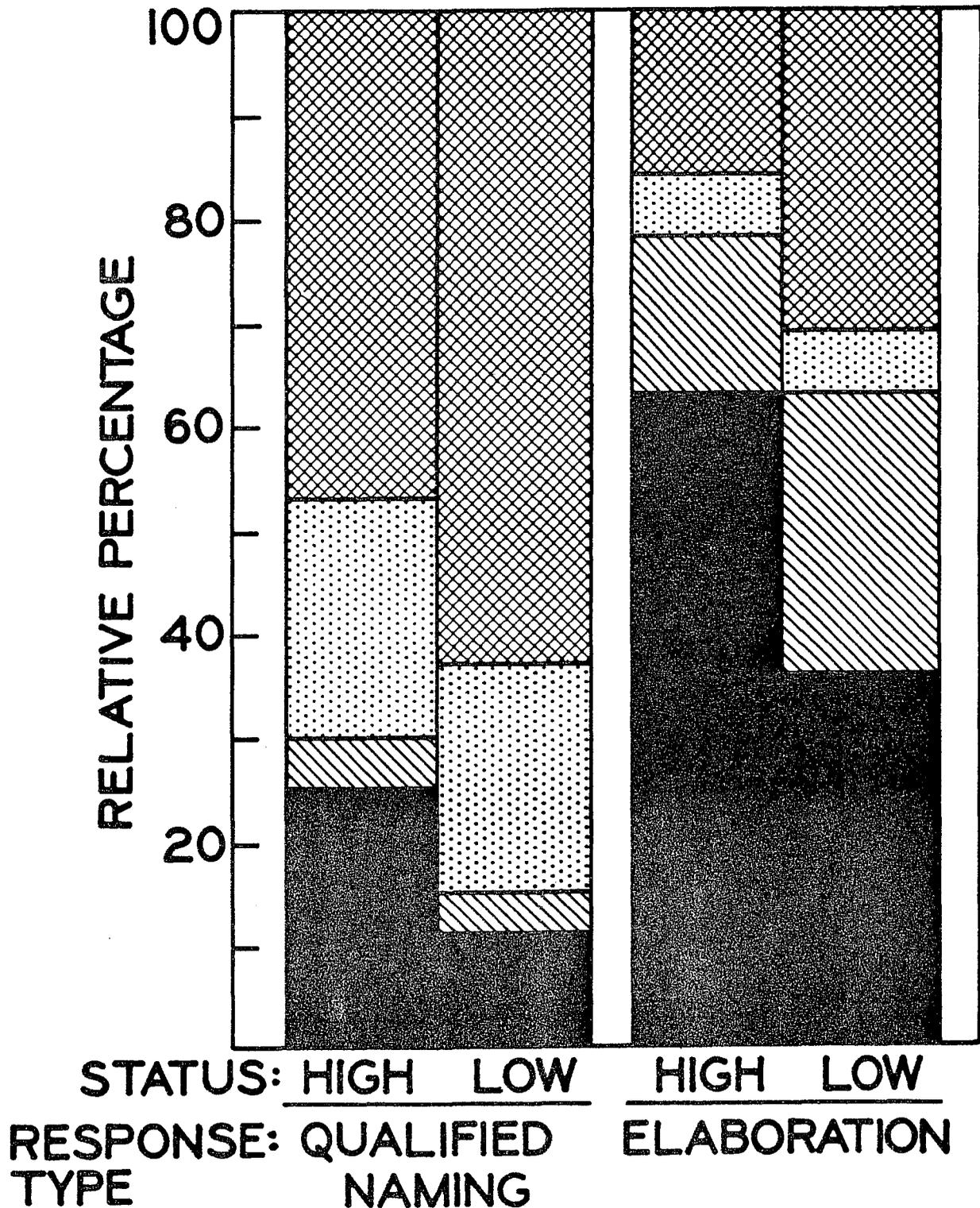
PERSPECTIVE

THIRD-PERSON

YOU

SELF-GROUP

SELF-SINGULAR



the other categories of perspective, except for a slightly greater relative frequency of second-person perspective in the elaborative segments of the lower status sample. As might be expected, the overall use of the third person was substantially greater in elaborative segments as compared with segments classified as self-singular.

Again it was desirable to make a series of statistical tests between the status groups within the overall language sample (incorporating individual differences) as well as in the various subsamples. Within each informant's message the relative frequency of segments in each of the four perspective categories was calculated. The statistical test deemed most apropos in these status comparisons was the Mann-Whitney U. Results of the comparisons are summarized in Table 5; the values entered in the table are the proportions of the total (sentence) segments in each of the categories. Apart from variations due to the

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Table 5 near here

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topical variable, the general pattern of significant differences again indicated a greater relative use of the self-singular perspective in the lower status groups, as against a greater relative use of the third-person by their higher status counterparts. This pattern of differences generally prevailed across the subsamples of race and sex.

The relative frequencies in particular perspective categories varied appreciably across the three topical divisions of the language sample, although in each, the aforementioned pattern of status differences in relative use of the first and third person perspectives obtained.

Apart from these, status difference on the Games question indicated that the lower status children had a greater tendency to use the generalized-you perspective. As seen on the original transcripts, this was the reflection of directive or imperative style in explaining how to play a given game (e.g., "Get yourself a bat and ball . . . you have about five guys . . . you try to stay up at bat . . ."). Although the higher status children had also employed this style more so than on the other topics, their use of the third person accounted for almost half of their sentence-type segments.

Both groups mainly employed a third-person perspective on the TV topic and this reflected cases where the children had been prompted to describe what they had seen on a recent program. Of the three topics, television was the one which seemed most to lead a child into elaborated sequences. The interviewer typically began by asking the child to name his favorite TV program. As can be seen from the earlier analyses of responses styles, the lower status children had some tendency simply to name a program or two and let the fieldworker respond to that. The fieldworker then usually asked if he had watched some particular show. This reduced the probe to one of simple constraint, and as discussed earlier, this was a situation where the low status child many times simply answered "yes" or "no," as his total response to the probe. These differences were evidence of the lower status child's reluctance to engage in elaboration unless specifically prompted to do so. The data under the TV topic in Table 5 indicate that when the lower status

child did elaborate in his responses, he had a slightly greater tendency than the higher status child to comment from his personal (self-singular) perspective.

It may be recalled also from the earlier series of analyses, that the lower status child had a tendency to provide simpler responses on the aspirations questioning than his higher status counterpart, thus having more segments where no grammatical perspective would be coded. When a perspective was present, the mark of the lower status children on this topic was again greater tendency for the first person, combined with a slight tendency to use the second-person. The most salient distinction, however, was his lesser tendency, as compared with his higher status counterpart, to use the third-person.

Interpretations. Like response style, grammatical perspective provides some bases for contrasting modes of speech in terms of the type of functional interrelations discussed at the outset of this paper. A self-singular perspective indicates a sender-focus, although depending upon what is expressed in the predicate, it may also be a sender-topic focus. In the analysis of the response styles found in the samples, the relatively greater percentages of simple and naming type responses in the low status sample were interpreted as sender-focus. What the present analyses of grammatical perspectives indicated was that even when the lower status children did employ sentences (e.g., qualified naming and elaborative segments), there was further evidence of a sender-focus. Note, for example, the sender-focused segments in the following selection (tape 0495, television topic):

FW: Tell me, do you watch TV?

IN: Yes

FW: What, what programs do you like on TV?

IN: Um, Marshall Dillon and a, I like, um, Bill Kennedy  
and I like, um Hawkeye and I like, a, Gunsmoke and,  
um Big Valley and, um I like the Detective.

FW: The Detectives, huh

IN: Uh huh, and um Arrest and Trial

FW: Have you seen any of these this summer? Are you  
still watching them?

IN: Uh huh

FW: What one did you see last?

IN: Um last I saw Marshall Dillon.

Note, by contrast, the variety of perspectives in the following  
selection (tape 0459; Games topic):

FW: What do you call that game?

IN: Hide-and-go-seek.

FW: Oh, how do you play it?

IN: Well, one person hides his eyes so that he can't  
see anything and all, all the other people go out and  
he counts to a certain, he counts so many, up to about  
a hundred or so, then he says, "ready or not, here I  
I come." Then he runs out and he looks for 'em.  
Then if the people get back over on base, that's the  
place where the person hid his eyes, they go back over  
there.

The use of the second person, or the generalized-you perspective, also provides some basis for functional interpretation. As mentioned earlier, this marked an imperative style, one which was most often brought to bear on the Games topic when a child was providing the description for playing a certain game. This is a concrete style of directive speech that seems much akin to the directive language style described in research by Hess and Shipman.<sup>21</sup> Little of what is said characterizes topical elaboration; it is more of a case of direction (or prescription) for the receiver's behavior; for example (tape 0547, Games topic):

FW: How do you play that?

IN: Frozen tag?

FW: No, the other one.

IN: Helping tag?

FW: Yes

IN: You catch one person and they got to help you catch the other one.

FW: Um, that's pretty wild. Do you play any other kinds of tag?

IN: Well, we play, um cigarette tag. You sit down and you, you sit down and then you stand back up and you got to say cigarette before another person tag you.

Even though Hess and Shipman likened the language of the directive style to Bernstein's description of a restricted code, this style both as identified by them as well as identified in the present data does

not entirely fit the criteria for the restricted code. Instead, it is an atypical style used not for the maintenance of social relationships but for directing the receiver's behavior. Topical elaboration and the reasons for direction are not found in this mode. One line of interpretation would hold that the present children, when pressed for a description of a game, would have three broad perspectives that could be employed. The child could describe his own behavior (self-singular); he could describe the necessary receiver's behavior for the game (generalized-you), or he could describe the game in a more abstract fashion, apart from his own or the receiver's behavior (third-person). The present results indicated that the tendency of the lower-class child was to use either a personal or directive perspective (almost two-thirds of their segments fell into these categories), whereas the higher status child used the directive or more abstract perspective. If, as Hess and Shipman have reasoned, a directive style of speech prevails in the lower class child's home, this could be one reason for the child's own use of this style under the appropriate constraints of the interview event.

#### Response Organization

During the planning of the organization coding procedures, it was decided to code only those utterance segments of a type which could conceivably enter into some type of message structure in an utterance unit. This led to the coding of only the following types of units: naming, qualified naming, and elaboration--all which were units that could be uttered in isolation from other units, or could be variously linked within the organization of an overall utterance unit. This restriction

reduced the number of units coded to 3208 or approximately 71 percent of all utterance segments.

Results summary. Figure 3 provides the most general picture of the findings for the organizational classifications. It can be seen

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Figure 3

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that the relative incidence of items within the different categories varied substantially across the topic conditions. The two most salient bases for status comparisons were in terms of the "isolated" and the "markedly" related categories. The relative frequency of items classified as isolated in the low status sample slightly exceeded the occurrence in the high status samples. The major difference on the markedly-related items was on the TV topic where the relative frequency of these items in the sample from the higher status children was nearly twice that observed in the lower status sample. There was a reversal of this difference on the Games topic, although the magnitude of status differences was small.

Statistical comparisons of the organization ratings involved the assumption that the scaled quantification (isolated = 1, loosely = 2, etc.) and the mean values of such scaling for a given informant on a given message would be a sufficiently valid index of the degree of organization among utterance segments. These individual means were calculated, then entered as scores into a series of status group comparisons. Again, the Mann-Whitney U test was employed. Results of these tests are summarized in Table 6.

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Table 6 near here

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FIGURE III

Relative percentages of  
organizational classifications  
according to topic.

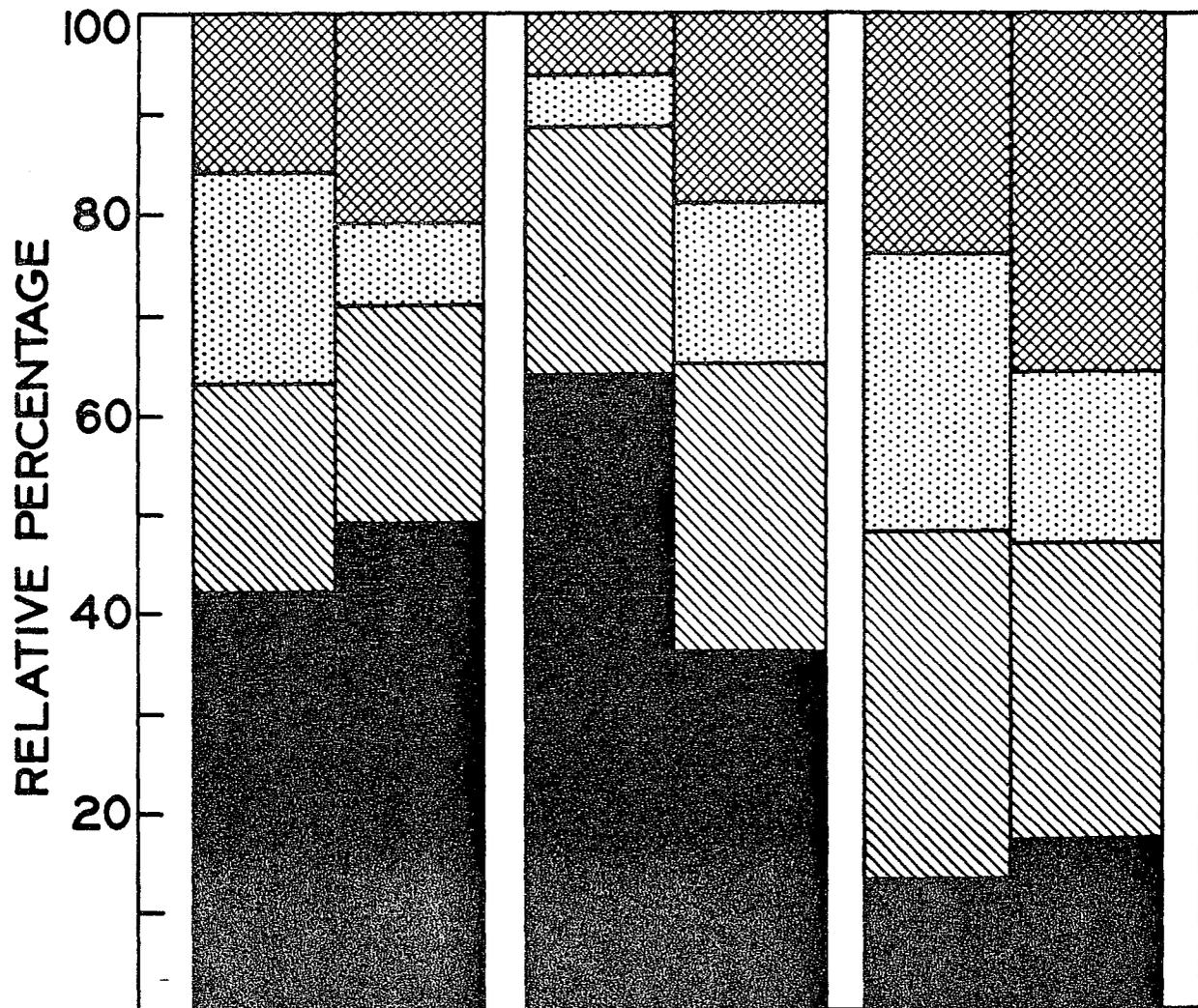
### ORGANIZATION

MARKED

LOOSELY

MODERATE

ISOLATED



STATUS: HIGH LOW

STATUS: HIGH LOW

STATUS: HIGH LOW

TOPIC: GAMES

TOPIC: TV

TOPIC: ASPIRATIONS

TABLE 6  
 MEANS OF ORGANIZATIONAL INDICES

Sample	Status Group	
	high	low
Overall	2.25	1.98*
Games topic	1.90	2.01
TV topic	2.65	1.78*
Aspirations topic	2.20	2.15
Negro	2.37	1.79*
White	2.12	2.18
Male	2.25	2.03
Female	2.25	1.94*

\*status differences significant ( $p < .05$ )

As could be expected upon the basis of Figure 3, the status groups had significantly different organizational indices in the overall comparison and in the comparison restricted to messages on the TV topic. Differences, however, were not significant on the Games and Aspirations topics. There were additional restrictions on the generality of these differences, too, in that significant differences were found only in the Negro and in the female subsamples.

Interpretations. Although the simple and naming response styles were typically those which contributed to the "isolated" category in the present analyses, elaborative segments often varied substantially in the degree to which they were related in context. When considering the "loss test" described earlier, there were often quite different characteristics that could contribute to the integration of a particular elaborative segment in its given context. On the Games topic, for example, the simple naming or qualified naming of games almost without exception resulted in segments which fell into the isolated or loosely-related organizational categories. But as soon as a child began to describe a game, no matter whether it was in a personal, directive, or abstract style, each utterance segment typically represented a key point in a narrative sequence, thus was classified in the markedly-related organizational category. In short, when either status group engaged in narration on games, the topic itself seemed to require a high degree of interrelation among the utterance segments. Thus both groups had similar percentages of segments in the highest organizational category on this topic.

On the TV topic, the children probably had the greatest freedom for employing a variety of stylistic alternatives. Elaboration in this case was often a task of undertaking "story telling." As at other points of analysis, the TV topic discriminated most between the two status groups in terms of the organizational measures. The lower status children not only were reluctant to engage in narration (or story telling), but when they did, they used substantially fewer devices for organizing their remarks. Many of the organization differences on this question seemed symptomatic of a child's capability to employ a mainly topical focus or a receiver-topic focus in his narrative. In the higher status sample, children sometimes went so far as to "set the stage," so to speak, in describing what took place in a given episode of a dramatic program. Characters were sometimes described as if the child were trying to insure that the fieldworker knew the particular roles of the characters in the sequence. In the main, the higher status children provided more fully elaborated and well-organized accounts of programs than did their lower status counterparts; thus they had relatively long utterance units where each segment was classified into the highest organizational category. They simply seemed to be better "story tellers." The higher status children were more capable of engaging not only in narrative sequences, but in ones which had a topic-receiver focus. The following narrative, for example, went on for some 1000 words (and through three chapters) in the description of "Flash Gordon" (tape 0152, television topic):

IN: . . . in chapter 13 I saw, I remember a man on a throne, he had um sort of a hat like, like this and

um he had, he was keeping them prisoner for awhile and his daughter wanted to marry um Flash Gordon and um I think they gave him a um serum that made him an umnes-, an amnesia serum. And um and he couldn't remember anybody and this girl that he knew was called Dale. And this, and the princess of that man, of the uh king, said um she wanted to marry Flash Gordon, but he didn't know who she was or um anybody, and so that lady started talking to him and kept on, and made him remember, sort of, that she was on the good side . . . .

Neither status sample provided much evidence of highly organized sequences on the aspirations topic. Perhaps this was due to the nature of the topic. Both groups were equally capable of naming various desired occupations. Although the higher status children could often list more reasons (usually classified as loosely related in organization) for desiring a given occupation, neither group seemed superior in engaging in any type of highly organized narrative sequences.

In all, the organizational coding might be taken as a crude index of the degree of topical or topic-receiver orientation in a child's remarks. As such, the higher status children appeared to have a relatively greater incidence of utterance segments which reflected markedly-related organizational sequences, but this was highly tied to the topics of their messages. The language samples of the higher status children indicated the most evident topic-receiver focus on the television question, and this was when children had engaged in telling the story portrayed on a recent program. The lower status children were not only

more reluctant to engage in such narration, but when they did, it was less well organized. In more interpretative terms, the lower status children seemed less able to exercise a receiver-topic orientation in their remarks.

#### Response Interjections

While the preceding analyses focused upon the bulk of the utterance segments in the language samples and the interpretations represented attempts to characterize the modes of speech reflected in these segments, about 17 per cent (see Table 3) of the utterance segments had been classified as response-interjections. As such, they did not represent the central aspects of what had occurred in the interview situation, that is, the types of utterances that could be related in a meaningful fashion to the probes of the fieldworkers, or could be meaningfully assessed in terms of grammatical perspective and organization. Instead, the various types of interjections were considered as peripheral to the main dynamics of the interview. But as particularly pointed out in the work of Bernstein, such remarks are often salient cues which may serve in interpreting how a person is reacting in a given speech situation.<sup>22</sup> In short, they may serve a complementary role in considering modes of speech.

For purposes of analysis, the utterance segments which had been classified as response-interjections were divided into the five sub-categories described earlier. Since quotes were found to be of negligible frequency in the samples, they were omitted from any further consideration, thus reducing the data to four categories. These included:

requests (where an utterance segment had been interjected as a question or a request for information); introducer-interjections (such items as "now" or "anyhow" which typically appeared at the beginning of utterance units); attention-interjections (mostly the phrase, "you know"), and qualifier-interjections (such items as, "I think," "I mean," "I know.>"). Table 7 presents a summary of the relative frequencies of the foregoing items in the status comparisons in the various subsets of the sample. Statistical comparisons were again made between status groups, using the Mann-Whitney U test, and item frequencies in the messages of individual informants as replicates. Results of these tests are also presented in Table 7.

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Table 7 near here

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Results summary. Unlike the results of the preceding analyses, the patterns of status differences were not consistent across the subsets of the data. A few differences, however, did stand out. In every comparison, the relative percentage of request-type interjections was greater for the low status than the high status samples, although this difference was statistically significant in comparisons only on the Games topic and in only three of the four additional subsamples of race and sex. Status differences in the relative usage of introducer-interjections were more consistent. Again, in every comparison the status mean differences were in the same direction, this time indicating a greater relative usage of introducer-interjections by the high status children. These differences were statistically significant across the three topics and in all but the female subsample. A relatively greater use of attention-interjections was indicated for the lower status group on the Games and

TABLE 7

Williams &amp; Naremore-47

## STATUS COMPARISONS OF RESPONSE INTERJECTIONS

Types	Samples							
	<u>Overall</u>		<u>Games</u>		<u>TV</u>		<u>Aspirations</u>	
	high	low	high	low	high	low	high	low
Request	.09	.19*	.13	.24*	.06	.14	.08	.16
Introducer-interj.	.41	.28*	.42	.27*	.36	.25*	.44	.31*
Attention-interj.	.20	.26	.15	.25*	.29	.24	.17	.31*
Qualify-interj.	.30	.27	.30	.24	.29	.37	.31	.22*

Type	Samples							
	<u>Negro</u>		<u>White</u>		<u>Male</u>		<u>Female</u>	
	high	low	high	low	high	low	high	low
Request	.10	.29*	.10	.13	.10	.21*	.09	.19*
Introducer-interj.	.38	.20*	.43	.32*	.49	.29*	.35	.27
Attention-interj.	.23	.22	.16	.29*	.14	.16	.24	.30
Qualify-interj.	.29	.29	.31	.26	.27	.34	.32	.24

\*status difference statistically significant ( $p < .05$ )

Aspirations topics, but this difference seemed restricted to the white subsample. Least consistent across the status comparisons was the use of utterance segments classified as qualifier-interjections. The status difference was significant only in the case of messages on the Aspirations topic, but this pattern showed no consistency across the other subsets of the data.

Interpretations. Differences in the use of request-interjections seemed susceptible to the least ambiguous interpretation. For the most part, these indicated a possible lack of understanding of the fieldworker's remarks ("What?" "Pardon?") or a lack of understanding of what the fieldworker wanted the child to do ("You mean, how do we play kick-ball?"). As mentioned earlier, the status differences were small but consistent for request-interjections, indicating a greater frequency in the low status sample. Reflecting some of the problems discussed by Strauss and Schatzman in a study of cross-class communication, the present results indicated that the lower status child may have needed particularly explicit prompting in order to know how he was to respond in the interview.<sup>23</sup> His questions apparently arose under such circumstances. This reflects, too, upon Bernstein's speculations that speakers of the lower social classes depend upon implicit meaning. Presumably in a cross-class situation--that is, a middle-class interviewer and a low-class child-- the lack of agreement on implicit meanings could lead to more questions from the respondent himself.

Introducer-interjections are more of a problem to interpret. A number of subjective interpretations might be advanced. As Maclay and Osgood speculate concerning hesitation behavior, an introducer-interjection may have functioned as a type of "verbal filler."<sup>24</sup> That

is, the child maintained some type of vocalization so as to keep his listener engaged while he was planning his response. This type of interjection did typically occur at the beginning of utterance units where, presumably, the demand for verbal planning is greatest. Although the use of such interjections seemed almost habitual in the speech of some children, it could signify a concern for the listener in the foregoing sense. Another interpretation is that such items are signaling devices which mark the onset of a statement ("now"), or a transition when a theme is reintroduced ("Anyhow . . .") into a series of remarks.

Bernstein has called such remarks as "you know," instances of sympathetic circularity in speech behavior.<sup>25</sup> Presumably, they indicate that the speaker wants reinforcement (or acknowledgement) from the listener for his ongoing remarks. Or reflecting a consideration of speech functions, such remarks may serve a contact function--that is, they are used by the speaker to "test" the contact (or linkage) between himself and his listener. Although it is sheer speculation at best, the present status differences in introducer-interjections and attention-interjections might be explained as follows. Introducer-interjections typically involve a greater variety of word types, and each of these types (e.g., "anyhow," "now," "well") usually has some relevance to the state of the ongoing discourse. The word "now," for example, may signal a temporal relation among remarks; or, "well," may signify reflection prior to making some statement; or, "anyhow," may signal a transition back to some previous theme. In all, introducer-interjections seem to have more of a topical relation (or even topic-receiver focus) than do attention-interjections, which seem to indicate a simple sender-receiver (atopical) linkage.

Qualifying-interjections, nearly without exception, seemed sender-oriented. They almost always involved the first person pronoun ("I mean," "I think,"). But as described earlier, there were no consistent status differences in their relative occurrence.

#### CONCLUSIONS AND IMPLICATIONS

As was described at the outset of this report, two major questions were raised concerning the results of the analyses reported in the preceding sections: What implications do they hold for a theory of modes of speech? What implications do they hold for the application of this theory to the study of disadvantaged populations in the United States? The aim in this final section is to develop some tentative answers to these two questions.

#### Toward the Description of Modes of Speech

Functional contrasts. It may be recalled that the present strategy represents an attempt to employ some of the ideas expressed by Hymes concerning the identification of speech functions. In the analyses of the Detroit tapes, four major functional contrasts were identified, including:

1. Sender-focus. The child's remarks--typically syntactic fragments--reflected an immediate, and minimal reply to the fieldworker's probe. Language represented more than anything the child's reaction to the probe. With this focus there was little constraint upon who the listener was, nor how he was to respond, if at all.

2. Sender-receiver-(directive) focus. Topical elaboration (if it could be called that) was via communication of a "recipe" for action. The typical grammatical perspective was a you-imperative or implication of it. Organization was more dependent upon the consistency among the directions for action than through the use of stylistic devices. Topical reference was through the designation of concrete action.

3. Sender-topic focus. Here, topical reference was explicit, but was through reference to concrete and particularistic experiences of the sender. Almost everything said was expressed from the structure of experiences (of the sender) rather than upon stylistic devices that would detach the communication from such experiences.

4. Topic-receiver focus. Elaboration of topic and its orientation to the individuated listener was the mark of this contrast. A key grammatical feature was the typical use of the third person, which provided the expressive basis for elaboration and variety in the perspective of statements. Organization was typically through stylistic devices, and was not dependent upon reference to the concrete.

Contrasts in the Detroit sample. It was not so much the case that status differences in the preceding analyses were revealed by a set of detailed and consistent characteristics; differences were more in terms of tendencies for certain contrasts to obtain. The most major of these could be defined as the tendency for the lower status child's responses

to show a sender-focus, as against the responses of the higher status children which seemed to range over more of the contrasts and to show some particular tendency toward a topic-receiver focus.

Illustrative of the foregoing major contrast was the assessment of response styles relative to the three conditions of probe constraint. When a fieldworker's probe could be satisfied with a simple "yes" or "no," nearly one-half of all of the lower status children's utterance segments were of the minimal, sender-focused, response style, as against slightly less than one-third of the higher status children's segments. Or considering the elaborated responses under this same condition of probe constraint, exactly half of the higher status children's utterances were of this style, as compared with slightly less than one-third for the lower status children. It may be recalled that this status difference, although varying in magnitude, prevailed across all three topics and across the subsamples of race and sex.

If the interviews had been entirely conducted with probes which imposed minimal constraint, it might have been concluded that the lower status child's language typically reflected substantially fewer elaborative segments than that of his higher status counterpart. However, as shown in the analyses of response styles relative to the elaborative-level of probe constraint, this was not the case. When the fieldworker's probe called for elaboration, the relative incidence of elaborative segments in the two status samples differed by only two percentage points. In other words, when the necessity for elaboration was imposed upon him, the lower status child was just as likely to respond in this style as was the higher status child. It may be recalled, too, that this lack

of difference between the two groups obtained across all topics and subsamples of race and sex. But even though both groups engaged in elaboration, there were further contrasts in the language that they brought to bear.

To some degree the lower status child's elaborative segments favored use of the first and second person grammatical perspectives, as against third person on the part of the higher status children. A first person perspective, as discussed earlier, was interpreted as a sender or sender-topic focus. That is, what is described is incorporated into sentences which include reference to the sender himself.<sup>26</sup> Also as discussed earlier, the use of the second person occurred primarily in segments where the child was using a directive or imperative style in giving the "recipe" for playing a game. This same style was characteristic of the lower class samples of mothers in the Hess and Shipman research, who employed primarily imperative remarks when directing the behavior of their children.<sup>27</sup>

Nearly two-thirds of the elaborative segments in the higher status sample showed use of the third person perspective. In the present classification system, these included sentences where a substantial variety of semantic perspectives were encountered. The subjects and objects referred to in sentences were not constrained to a sender (as in first person) or to a direct receiver reference (as in second person), but themselves often became the focus for elaboration. The richest use of the third person perspective was on the television topic, where, for example, the description of a character was sometimes an interim focus for remarks prior to including that character in a story sequence.

Organizational criteria also showed contrasts between the two status groups' elaborative segments, although this was mainly on the television topic. The higher status children often engaged in lengthy narrative sequences, where the overall organization of the remarks, together with the third person perspective, characterized a topic-receiver focus. That is, rather than describing what he saw in a given program, the higher status child often "told the story" to the field-worker.

Taken together, the status differences and functional contrasts, seem to come close to what Bernstein has described as the degree to which language itself becomes the special object of behavior in discourse.<sup>28</sup> Progression from the sender-focused to the topic-receiver focused contrast is paralleled by an increasing reliance upon language as the object of behavior. Sender-focused remarks (as in "yes" or "no" or simple naming) reflect a nearly passive linguistic response on the part of the speaker. It is language characteristic of simple reaction-like behavior. The range of linguistic forms is minimal. There is a substantial reliance upon implicit meaning. On the other hand, topic-receiver orientation in the remarks reflects the active engagement of language by the speaker. The child in the interview "took his turn to talk," so to speak, when remarks were of this type. His message was not a simple reaction, but a means for taking momentary control of the interview. The range of linguistic forms was relatively rich; meaning was explicit. Considering this type of contrast, the social class distinction in the present study could be generalized as one of the children's tendencies

to actively engage in the interview situation. The lower status children had a tendency to be reticent, to respond minimally relative to what was allowed by the fieldworker's probes. They had less tendency than their higher status counterparts to assume a role of active linguistic engagement in the interview. Their language was often more reaction-like than it was an object of behavior directed toward communicative ends.

Subsamples of sex and race were included in the present design as a basis for studying the generality of status differences. For the most part, the major patterns of status differences in functional contrasts prevailed across the foregoing subsamples. Where interactions were found, there was some evidence of greater status differences in the Negro than in the white subsample, and in the males as compared with the female subsample. What seemed striking was that status differences were usually more salient, or at least more consistently evident, than other comparisons which could have been made in the course of the interpretations. In a general sense, this indicated that what had been assessed as functional contrasts were more apt to vary according to social class differences than according to race or sex.

Generality of the contrasts. To go beyond the data of the present study, a key question is how the aforementioned functional contrasts might be generalized to a greater variety of speech situations. Table 8 summarizes an attempt at such an extension. Six relatively generic terms have been employed to identify types of speech. Each of these is distinguished by functional contrasts, and each is also described in

terms of the demands placed upon the use of linguistic forms. One might go so far as to consider these an attempt to devise a more detailed outline of different modes of speech.

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Table 8 near here

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One way to explore the generality of the modes described in Table 8 is to consider their applicability to other studies of social class differences. Thus, for example, it could be speculated that Bernstein's stereotype of a restricted code would generally subsume the conversative, contactive, and impulsive modes listed in the table. His conception of the elaborated code would be closely akin to what is defined as elaborative speech in the present list.

In an earlier cited study (footnotes 19 and 26) by Schatzman and Strauss, it was reported that lower class interviewees tended to describe experiences from a fixed and personal perspective (like the lower class children in the present study), whereas higher class interviewees employed a variety of perspectives. This distinction, according to the present scheme, would be best defined as a difference between the descriptive and elaborative modes. It could be speculated that the lower class interviewees, again like the children in the present study, when pressed for topical discourse, would sometimes employ a descriptive (or directive) mode, rather than an elaborative one. Or in terms of Bernstein's descriptions, this might be one way to describe what happens when a speaker tied to the restricted code is placed in a communication situation requiring an elaborated one.

TABLE 8

## AN OUTLINE OF MODES OF SPEECH

Modes	Function	Form	Examples
IMPULSIVE	Utterance reflects solely upon the state of the sender as his immediate response to a stimulus. Receiver and topic are irrelevant.	Typically very minimal forms, even those which are vocal and nonverbal (e.g., a scream). Single words, no syntactic requirements. Many forms could be expressed non-vocally through facial and gestural expressions.	"ouch," "wow," "oh," "ah," screaming, laughter, crying, swearing etc.
CONTACTIVE	Utterances reflect upon the sender's attempt to initiate, evaluate, or maintain linkage with a receiver or receivers. Topic is irrelevant.	Minimal word forms, even where meaning is insignificant. Minimal phrase constructs, stereotyped in structure, syntactic distinctions insignificant. Some forms could be expressed nonverbally (hand waving).	"hello," "hey," "John?" "waiter!" "How do you do?" "you know," "do you hear me?"
CONVERSATIVE	Utterances reinforce and maintain social linkage with receiver. Topic may be implicitly relevant, but is not the object of discourse.	Minimal word forms and syntactic fragments allowable, but can range to relatively developed syntactic sequences. Typically complemented by nonverbal forms.	cocktail party chatter, language exchanged between persons just introduced, elaborated greetings and farewells

TABLE 8 (cont.) Williams &amp; Naremore-50

Modes	Function	Form	Examples
DESCRIPTIVE DIRECTIVE	Topic is relevant as the object of discourse, but is not necessarily explicitly expressed. Topical elaboration, if any, is through reference to concrete and particularistic experiences. Description reveals such experience from a sender-focused perspective, whereas direction prescribes an experience for the receiver's actions.	Minimal word forms and syntactic fragments are allowable for naming or commands, but syntactic elaboration is required to verbally symbolize the structure of the experience. Illustrative gesturing may serve as rudimentary forms or to complement verbal elaborations.	Recounting some event which has been experienced; delineating in verbal terms a "picture" of something; telling a person how to play a game, step-by-step; giving instructions to a traveller; commanding some action.
ELABORATIVE	Topic is explicitly relevant as the object of discourse, and such discourse may be adapted to the perceptions of the receiver, including distinctions among either individual receivers or groups of receivers. Explicit topical elaboration reaches to levels which can only be obtained through verbal symbolism. Primarily a topic-receiver mode.	Demands are imposed for maximal lexical and syntactic alternatives. The structure of discourse is achieved through syntactic and compositional features which are organizing devices in themselves and are not dependent upon the reference to concrete experience. Nonverbal forms are minimally relevant at this level.	Interpretation, or explaining one's understanding of the meaning of some event which has been experienced, or of some concept or idea (e.g., what "freedom" means) Narration, or developing a topic in story form (e.g., retelling the story of a movie or TV show) Persuasion, or inducing direction in thinking or behavior by overt verbal appeal (e.g., a mother reasoning with her child.

Finally, as mentioned previously, Hess and Shipman described their findings of social class differences in maternal language style in terms of Bernstein's code distinction. The lower class mothers typically employed an imperative style, seldom accompanied by any type of elaboration of reason or appeal to the child. Relative to the present scheme, this style could be classed as the directive mode and thus alleviate some of the conflicting characteristics raised when identifying it with the restricted code.

#### Modes of Speech and the Disadvantaged

Causal factors. It should be remembered that the disadvantaged in the United States are far from being a homogeneous population in terms of their general attributes, let alone in terms of their language characteristics. What makes this rather obvious point worth stating is that most of the empirical research on modes of speech has been undertaken in Great Britain, where the lack of homogeneity has evidently been less of a concern. In considering the language of poverty groups in the United States, problems more evident than mode of speech differences are those stemming from bilingualism (e.g., the Mexican-American), major cultural differences (e.g., the American Indian), and extremes in sub-cultural isolation (some segments of the Negro populations). Other pertinent considerations include developmental problems identified with nutritional deficiencies, general problems of health, and the occasional question of heredity.<sup>29</sup>

Setting aside by assumption all of the foregoing factors as potential causes or aspects of social class differences in modes of speech, what does the current evidence suggest? Most of the evidence points to

distinctions in the lower status child's early life, particularly when he is undergoing what appear to be the basic stages in language development. Most of the generalizations could be paraphrased as follows:<sup>30</sup>

1. There is less in the home to talk about. Environmental stimulation is often unstructured and disruptive (e.g., noisy streets). There are fewer items (e.g., toys) to interest the child. The physical environment offers little variety or change.

2. There is less linguistic interaction with the child. This refers mainly to a paucity of continuous speech between parent and child, the lack of conversation. The child may be frequently spoken to, or may frequently speak, but such speech does not typically take place as an extended interaction.

3. The parents' language styles are stereotyped; they fail to provide varied and rich linguistic experiences for the child.

These factors set the stage for the development and reinforcement of only certain modes of speech--say, impulsive, contactive, conversative, directive-- in the child. Such modes may be sufficient for the communicative demands placed upon the child until he reaches school age, where such demands are drastically shifted. In school, he must spend far more time as a listener. The predominant language mode tends toward the elaborative. Also, there is the experience with new language forms (as in learning new words, the alphabet, learning to spell and to read) where the stress is upon form rather than upon function.

The overriding generalization is that the language environment of the lower class home often leads to the development of language modes in the child which in some respects are different from the modes

demande in the school environment, and in other respects are deficiencies when they are identified as factors which inhibit the child's progress in school. This generalization, of course, has not depended upon the development of mode of speech research. It has come from other lines of research including that now being undertaken with the mode of speech concept in mind. Where the mode of speech concept may pay some early dividends is in the focus it prompts when one considers ways to research and eventually to deal with the language problems of the disadvantaged child.

As stressed throughout this paper, the mode of speech concept can center upon the functional aspects of language behavior. When this concern is exercised in considering the language development of the child, it raises the question: What is known about the functional development of speech in children? Is it the case that the lower class child lacks experience with certain forms of more elaborated language (e.g., complex sentences); or is it more the case that he is seldom within communication situations which impose the demand for such forms? Although the answer is probably both, the latter alternative has seldom been stressed in research and theory. Perhaps the environmental restrictions imposed upon these children are not so much those of a lack of experience in witnessing a range of linguistic forms, as they are a lack of experience within a range of situations which require the active use of such forms. It is often assumed that as language develops, it in turn enables the child to widen his communication experiences. Conceivably, some emphasis should be placed upon reversing this statement: that as a child's early communication experiences widen and place more demands upon him, his language develops to accomodate these demands.

That such demands may impose the need for active linguistic engagement with others rather than simply exposure to language, prompts a reconsideration of one finding in the analyses of the Detroit samples. Not one child in either status group had failed to watch television; in fact, all could name more than one program which they had recently viewed. Recall, however, that there were major status differences not only in how much the children had to say about programs that they had watched, but also in how they said it. Television viewing, or the types of programs, or both, may have little impact as a stimulator of language behavior or perhaps even of language development in the disadvantaged child.

To return to the main issue: What would be a viable perspective for studying the functional development of language in the child, and, in particular, the distinctions of the disadvantaged child? Here it is proposed that the mode of speech distinctions presented in Table 8 be considered as a first approximation to an outline of the functional development of speech. One argument in support of this proposal is that there are some obvious overlaps between what is outlined as modes of speech and what others have described as stages of language development. The fit is not altogether exact, but it is supportive of the proposal. For example, the contrasts of focus upon the sender as against topic and receiver have a strong overlap with Piaget's developmental distinctions between ego-centric and socialized speech.<sup>31</sup> Without going into detail, there is an even greater overlap with more recent interpretations of Piaget's position as described in a book by Lewis.<sup>32</sup> The comparison with Bernstein's codes has already been discussed; however, it can be further pointed out that what he has written about these two

codes relative to language development can be roughly interpreted within the outline in Table 8. Also, there is the previously discussed theoretical position taken by Hess and Shipman. A question prompting a final line of speculation would be whether the developmental data on children's acquisition of linguistic forms, such as presented in studies by McCarthy, Templin, or Loban, could be interpreted relative to the demands made by the functional distinctions proposed for the modes of speech.<sup>33</sup>

In the main, the suggestion is that the linguistic problems of the disadvantaged child, where they pertain to the mode of speech thesis, be assessed by considering the functional aspects of language development. Thus, much as Hymes has inquired on a more general level: What are the speech events encountered by this child? What are the definitions of the constituent factors of those events? What are the demands for, and what are realized as, the functional aspects of language behavior within these events? The speculation is that the social structure within which the lower class child is reared is characterized by a restriction in the variety of speech events; this imposes a restriction upon the demands for linguistic development, and this in turn results in restrictions upon what language does develop. The problem is to ferret out and to modify this linkage in the populations of children who even at the age before they are eligible for remedial or interventional programs are indelibly marked by their language as candidates for poverty.

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FOOTNOTES

<sup>1</sup>An overview of Bernstein's current thinking is contained in "A Socio-Linguistic Approach to Socialization: with Some References to Educability," in J. Gumperz and D. Hymes, eds., Directions in Socio-Linguistics (New York, in prep.). Another version of this paper as well as a guide to Bernstein's prior publications will appear in Frederick Williams, ed., Language and Poverty: Perspectives on a Theme (in prep.). The papers which most influenced the present research were: "Social Class and Linguistic Development: A Theory of Social Learning," in A. H. Halsey, J. Floud, and A. Anderson, eds., Economy, Education, and Society (New York, 1961), pp. 288-313; "Social Class, Linguistic Codes and Grammatical Elements," Language and Speech, V (Oct.-Dec., 1962), 221-240; "Linguistic Codes, Hesitation Phenomena and Intelligence," Language and Speech, V (Jan.-March, 1962), 31-46. "Elaborated and Restricted Codes: Their Social Origins and Some Consequences," in J. Gumperz and D. Hymes, eds., The Ethnography of Communication, American Anthropologist Special Publication, LXVI, Part 2, 55-69.

<sup>2</sup>(New York, 1967).

<sup>3</sup>Robert D. Hess and Virginia Shipman, "Material Influences upon Early Learning." in Robert D. Hess and Roberta Meyer Bear, eds., Early Education (Chicago, 1968), pp. 91-103.

<sup>4</sup>We owe a note of gratitude to Dr. Roger Shuy who was director of the Detroit study and who aided us in obtaining tapes from that study.

A brief published paper concerning the study is: Roger W. Shuy, "Detroit Speech: Careless, Awkward, and Inconsistent, or Systematic, Graceful, and Regular?" Elementary English, XLV (May, 1968), 565-569. The technical report of the research is contained in: Roger W. Shuy, Walter A. Wolfram, and William K. Riley, "Linguistic Correlates of Social Stratification in Detroit Speech," Final Report, Cooperative Research Project 6-1347, U. S. Office of Education (mimeo, 1967).

<sup>5</sup>See, in particular, "Elaborated and Restricted Codes: Their Social Origins and Some Consequences."

<sup>6</sup>For example: "A Socio\_Linguistic Approach to Socialization: with Some References to Educability" (in prep.), as against, "Social Class and Linguistic Development: A Theory of Social Learning" (1961).

<sup>7</sup>A good example of this is the thoughtful review of Bernstein's research presented in: Denis Lawton, Social Class, Language and Education (New York, 1968).

<sup>8</sup>The paper most influential to the present research was: Dell Hymes, "The Ethnography of Speaking," in T. Gladwin and W. C. Sturtevant, eds., Anthropology and Human Behavior (Washington, D. C., 1962), pp. 12-53. A more general overview and one adapted to the communications field is presented in: "The Anthropology of Communication," in F. E. X. Dance, ed., Human Communication Theory (New York, 1967), pp. 1-39.

<sup>9</sup>Hymes, "The Ethnography of Speaking," p. 16.

<sup>10</sup>Obviously, there is substantial overlap in terminology and concept between what is defined here and what appears in the literature of rhetorical theory and communication theory. This, of course, could

be the topic of a substantial discussion. However, what is important is that Hymes's approach maps the basis for research strategies for dealing with the functional aspects of speech. Whether these strategies could emanate as well from other theoretical approaches is an interesting point, but not a crucial one relative to the purpose of the present research.

<sup>11</sup>Shuy, Wolfram, and Riley, "Linguistic Correlates of Social Stratification in Detroit Speech."

<sup>12</sup>The prior study is reported in: G. E. Lenski, The Religious Factor (New York, 1961).

<sup>13</sup>A. Hollingshead, Social Class and Mental Illness (New York, 1958).

<sup>14</sup>Further information on the informants including their residential area, school, et., can be obtained by using the tape numbers presented in Table 1 and referring to the technical report of the study (footnote 4).

<sup>15</sup>This technique is described in: W. D. Loban, The Language of Elementary School Children (Champaign, Ill., 1963).

<sup>16</sup>Howard Maclay and C. E. Osgood, "Hesitation Phenomena in Spontaneous English Speech," Word, XV (April, 1959), 19-44.

<sup>17</sup>The frequency and distribution of the hesitation phenomena are the focus of a current series of separate analyses.

<sup>18</sup>For the most part this could be reliably accomplished by recognizing common syntactic patterns of English. Another phase of our investigation with the Detroit samples involved some direct analyses

of syntactic patterns using a method based upon a modification of immediate constituents analysis. Results of this phase were sometimes used as a basis for coding relatively difficult or uncommon constructions. Admittedly, some subjectivity was involved where the syntactic pattern was either ambiguous or deviated substantially from Standard English. But since the present coding only involved decisions about independence among units, the most troublesome cases (about 400 of some 4,500 units) usually could be arbitrarily resolved without the fear of generating some consistent type of error. The bias was to segment to minimal units.

<sup>19</sup>In addition to the Bernstein papers (footnote 1) and the Hess and Shipman research (footnote 3), see: L. Schatzman and A. Strauss, "Social Class and Modes of Communication," American Journal of Sociology, LX (January, 1955), 329-338.

<sup>20</sup>All summary arrays the data were obtained by the use of a cross-tabulation program package and the CDC-3600 computer at the University of Wisconsin.

<sup>21</sup>"Maternal Influences upon Early Learning."

<sup>22</sup>See, in particular, "Social Class, Linguistic Codes and Grammatical Elements."

<sup>23</sup>A. Strauss and L. Schatzman, "Cross-Class Interviewing: An Analysis of Interaction and Communicative Styles," Human Organization, XIV (Summer, 1955), 28-31.

<sup>24</sup>"Hesitation Phenomena in Spontaneous English Speech."

<sup>25</sup>"Social Class, Linguistic Codes and Grammatical Elements."

<sup>26</sup>A very similar conclusion was advanced by Schatzman and Strauss ("Social Class and Modes of Communication") pertaining to the speech of lower class interviewees who are describing their experiences in a recent tornado.

<sup>27</sup>"Maternal Influences upon Early Learning."

<sup>28</sup>See especially, "Elaborated and Restricted Codes: Their Social Origins and Some Consequences."

<sup>29</sup>For a guide to literature on these topics, see: Frederick Williams and Rita C. Naremore, "Language and Poverty: An Annotated Bibliography," Special Report Series, Institute for Research on Poverty, University of Wisconsin (Madison, Wis., 1967).

<sup>30</sup>Other than the papers by Bernstein (footnote 1) and by Hess and Shipman (footnote 3), major sources of information for these generalizations include: Courtney B. Cazden, "Subcultural Differences in Child Language: An Inter-disciplinary Review," Merrill-Palmer Quarterly, XII (July, 1966), 185-219; Vera P. John and L. S. Goldstein, "The Social Context of Language Acquisition," Merrill-Palmer Quarterly, X (July, 1964).

<sup>31</sup>Jean Piaget, The Language and Thought of the Child, Marjorie Gabain, trans. (Cleveland, 1955).

<sup>32</sup>M. M. Lewis, Language, Thought and Personality (London, 1963).

<sup>33</sup>Dorothea McCarthy, The Language Development of the Preschool Child, The Institute of Child Welfare Monograph Series (Minneapolis, 1930); Mildred Templin, Certain Language Skills in Children, The Institute of Child Welfare Monograph Series (Minneapolis, 1957); W. D. Loban, The Language of Elementary School Children (Champaign, 1963).

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