LANGUAGE samples of 20 Negro Head Start children in Washington, D.C., were analyzed using Lee's (1966) developmental sentence types model. The transformations and restricted forms of these children were then compared with the results that Menyuk (1964) obtained for middle class preschoolers. Results indicate that the economically deprived child is not delayed in language acquisition although he uses a qualitatively different language system than that of his middle class age mate. His language contains many forms that are identical to standard English (this accounts for the presence of all the response types of the developmental sentence types model), but his language also contains many structures which are considered to be restricted forms when compared to standard English. However, these forms are not only acceptable in lower class Negro dialect but also indicate a level of syntactic development where transformations are being used appropriately. The lower class Negro child is using the same forms as the lower class Negro adult and therefore indicating that he has learned the forms of his linguistic environment. (Author/DO)
GRAMMATICAL CONSTRUCTIONS IN THE LANGUAGE OF THE NEGRO PRESCHOOL CHILD

by

Joan C. Baratz
Center for Applied Linguistics
and
Edna Povich
Montgomery County Public Schools

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Grammatical Constructions in the Language of the Negro Preschool Child

Joan C. Baratz

Center for Applied Linguistics

Edna Povich

Montgomery County Public Schools

Language samples of a group of economically disadvantaged children were analyzed using Lee's Developmental Sentence Types model. The transformations and restricted forms of these children were then compared with the results that Menyuk obtained for middle class preschoolers.

Results indicate that the economically deprived child is not delayed in language acquisition. The majority of his utterances are on the kernel and transformation levels of Lee's developmental model. The transformations and restricted forms that he uses are different from those used by middle class children. Although the Negro economically impoverished child has many forms in his language that resemble standard English, results indicate that he has a highly developed, highly structured linguistic system that is different from that of his middle class white agemate.
In the literature concerning the language of socio-economically disadvantaged children, their problems have been variously described as: 1) verbal destitution (i.e., they have not learned language), or 2) verbal underdevelopment (i.e., they have learned language incompletely, or 3) linguistically different (i.e., they have acquired a language system that is fully developed but different from standard English).

The purpose of the present study was to determine the language development of a group of Head Start children, using Lee's (1966) Developmental Sentence Types and Menyuk's (1963) research on normal language acquisition as tools for language analyses. It was hoped that these tools would determine whether these children were deficient (i.e., verbally destitute or underdeveloped), or if their language was proficient (i.e., if they had acquired a well-formed language system).

Lee (1966) proposed a method of analyzing language samples that was based upon the work of Braine, Brown and Bellugi, McNeill and Chomsky. The Developmental Sentence Types model was an attempt to illustrate the progression that the child might go through from his early two-word combinations, to the use of the noun phrase, verb
Menyuk (1963, 1964) used Chomsky's transformation analysis to describe language acquisition of normal and language delayed children. Her data revealed that children not only used transformations regularly by four and a half and five, but that they also used "restricted phrases" in a predictive lawful manner. This study attempted to compare the types and frequency of the transformations and restricted forms found in the speech of five year old Head Start children with those constructions that Menyuk found present in the speech of five year old white middle class children.

Procedure

Subjects. The subjects were twenty Negro children, ten boys and ten girls, who attended the Southwest Head Start Program in Washington, D.C. during the summer of 1966. The requirements for admission to this program were: 1) that the children's parents had an income of not more than $3,500 per year, 2) that the children lived in the southwest area of Washington, D.C., and 3) that the children would be five years old by November 1, 1966. All subjects had normal hearing, and were judged to be of at least normal intelligence by their classroom teacher. All had regularly attended the spring program and were between the ages of 5.0 and 5.6 with a mean age of 5.3 years.
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Materials. The materials for this experiment consisted of two sets of pictures. Task I involved the ten pictures in the Children's Apperception Test --(CAT) (Bellak and Bellak, 1964). This test was originally designed to be used in psychological testing, however, the pictures have also been used as a means of eliciting language samples (Winitz, 1959, Minifie, et.al., 1963, Menyuk, 1964a). Task II involved a new test which was more specifically related to the experiences of the subjects. It was composed of a series of 8 x 10 black and white photographs of the subjects, the school and the project environment. Snapshots of the children at play, in their classrooms, and on the playground were taken by the experimenters. Activities within the school environment were also photographed, and at least one photograph included the picture of each subject.

Test administration. Before any testing was done or any photographs taken the examiner spent five days in the classrooms. It was hoped that by participating in all of the children's activities that the examiner would become more familiar to the children.

All testing was done in a separate room on the same hall as the classrooms. This was a quiet, bright room approximately 12' by 12'. It was furnished with a table and chairs. The tape recorder, a Wollensak 300, was on a chair in front of the table, with the microphone resting on the table.

The tasks were administered individually to all subjects. No subject received both tasks on the same day. Each subject was brought into the testing room by the examiner, who showed him the tape
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recorder, explained what it was, and asked if the subject would like to hear himself on it. The tape recorder was then turned on and the following questions asked: 1) What is your name? 2) Where do you live? 3) How do you get to school every day? and 4) Do you have lots of brothers and sisters? This discussion was played back for the subject to hear. The purpose of this initial period was to establish rapport and to establish hearing oneself on the tape recorder as a reward for completing the experimental task. After this initial period, the examiner said: "Wasn't that fun? Would you like to hear yourself some more on this machine? I'm going to show you some pictures and I want you to tell me all about them. Then, when we're all finished, we can listen to you on the machine. O.K.? Good. Here's the first picture. What's happening in this picture?" The tape recorder was then turned on the timing begun. The experimental time was limited to five minutes per task. When the child stopped responding to the stimulus, the next picture was presented. Thus any one subject could have been asked to talk about from three to ten pictures depending upon how long he continued to respond to each picture.

Results

Responses. A total of 1403 responses were elicited from the twenty subjects under the two conditions. 750 of these were responses to the CAT cards and 653 were in response to the photographs. The mean number of responses per child was 70.2; the median was 75.
Lee's Developmental Sentence Types Model. In order to perform a qualitative analysis of the data, each subject's responses were analyzed according to Lee's Developmental Sentence Types (Lee, 1966). Lee's rules for using this construct were followed. Because this data differed somewhat from Lee’s it was necessary to set up an additional analytical step. Many responses in this sample contained transformational forms that were not grammatically acceptable sentences in standard English. In her analysis, Lee placed all responses that were not grammatically acceptable on Level IV. Her sample, however, did not include a large percentage of "ungrammatical" responses with transformational modifications, as did the data in the present study. In the present study, responses that showed transformational modifications but which were not grammatically correct in terms of standard English, were not listed as complete sentences on the Emerging Transformational Level (Level V) but as Transformational Fragments which were incorporated into transformations.

Table 2 presents examples of each response type in the Developmental Sentence Types model as well as the percentage of occurrence of each type for all subjects. Level V, Emerging Transformations, represents the bulk of the data, with a preponderance of the utterances on this level being classified as transformational Fragments incorporated into transformations.

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Insert Table 2 about here
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Table 3 represents the percentage of subjects that used each response type. On Level I Two-Word Noun Phrases were used by 80% of the subjects: Two-Word Verbs by 65% and Fragments by 50% of the subjects. On Level II, no response type was used by 50% or more of the population studied. Level III Predicative Constructions and Verb Phrase Constructions were used by 75% of the subjects and Fragments by 70% of the subjects. Fifty-five percent of the subjects used Stereotyped Phrases on this level. The Actor-Action Sentence Transformations were used by 95% of the sample and Transformational Fragments by 100%. One word responses were made by 100% of the subjects.

Transformations and Restricted Forms. All of the responses on the Emerging Transformational level of the Developmental Sentence Type were analyzed according to Menyuk's (1964a) list of transformation types and restricted forms.

Examples of all of the structures described by Menyuk that were found in the responses of the subjects studied in this experiment are presented in Table 4. All of the examples were taken from the responses of the subjects in this study. Menyuk does not always elaborate on the precise definition of some of the restricted and transformational categories that are found in her study: classification of the responses in this study were made on the basis of the experimenters' interpretation of her categories.
Table 5 presents the transformations found in this study as compared with Menyuk's (1964a) study. There were several transformation types that were used solely by the white upper middle class kindergarten children tested with CAT cards by Menyuk. These were Passive, Separation, Auxiliary-Have, If, Participial Complement, Nominalization and Nominal Compound. Nominal Compound, Passive and Separation were used by almost all of the kindergarten children. However, Auxiliary-Have was used by only 19%, If by 21%, Participial Complement by 40% and Nominalization by only 28% of the kindergartners. Only two transformation types were identified that were used solely by the Head Start children. These were Auxiliary-Do and Adverb. Nineteen transformation types were used by at least 85% of the kindergartners, and only 8 transformations were not used by at least 50% of the children tested by Menyuk. In contrast, only 5 transformation types (Adverb, Auxiliary-Be, Contraction, Negation and Infinitival Complement) were used by more than 50% of the Head Start children.

Thus while the Head Start children used most of the transformation rules used by the kindergarten children, the percentage of Head Starters who used them is quite small as compared with the percentage of middle class white children who used these forms.
Table 6 presents the percentage of occurrence of each restricted form. The restricted forms used by the kindergarten children and not by the Head Start children were: Article Redundancy and Substitution, Particle Omission, Inversion Restriction-Subject-Object, There Substitution, No Separation, Verb Form Redundancy and Noun Form Redundancy. However, the percentage of kindergartners who use these restricted forms was small. Restricted forms used by the Head Start sample were: Possessive, Pronoun First Person, Adverb Restriction, Auxiliary Restriction, Because and So Substitution and If Omission. All of these were used by a small percentage of the subjects except for Auxiliary Omission which was used by 95% of the Head Start children, and was the most frequently occurring restricted form for this group.

The most frequently occurring restricted form for the kindergarten children was Contraction Deletion which was used by 49% of Menyuk's subjects. The next most frequently occurring restricted form was Inversion Restriction Verb Number. These restricted forms were used by a very small percentage of the Head Start children. The remaining restricted forms found for the kindergarten children occurred very infrequently.

In contrast there were 7 restricted forms that were used by 50% or more of the Head Start children. These were Auxiliary Omission (95%), Noun Phrase-Omission (90%), Article Omission (70%),
Conjunction Restriction (65%), Verb Phrase Substitution (55%), Pre-
position Omission (50%) and Verb Phrase Omission (65%). All of
these restricted forms were used by very few of the kindergarten chil-
dren, while Auxiliary Omission and Conjunction Restriction were not
found at all in the kindergarten transcripts.

Discussion

Developmental Sentence Types. Lee's Sentence Types appears to be
an adequate framework for analyzing language samples of this type,
since it was possible to classify all utterances of the Head Start
children within the Developmental Sentence Types model.

While all response types were found, the frequency of the Noun
Phrase Predicative Construction, Designative Construction as well as
the sentences and transformations that develop from them was a small
percentage of the total number of responses. The Verb Phrase Construc-
tion and its successive forms were the most frequent fully "grammatical"
in the sense of standard English forms. This could be due to the
phenomenon that Bernstein (1959) observed in lower class language, i.e.
"the use of grammatically simple, often unfinished sentences stressing
the active voice." However, a more likely explanation may be found
in the nature of the stimuli. The pictures used were all action pic-
tures and the children naturally talked about what was going on in them.

The small percentage of Noun Phrases that occurred was not con-
sidered to be significant because the majority of constructions and
sentences on other levels included the Noun Phrase or a pronoun to stand
for a Noun Phrase. The small number of Noun Phrases, Designative Sen-
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tences, Predicative Sentences and their Emerging Transformations seems to indicate that while these children are using what appear to be standard English forms, these forms represent only a small percentage of their language structure; the majority being a different kind of structure that could only be classified as transformational fragments when one uses Lee's model which is based on standard English.

If one accepts the assumptions of some of the earlier research that there is linguistic underdevelopment in lower class Negro speech, then one would expect to find the majority of responses of the children in this study to be on the first three levels. But this was not the case. Rather, 59.7% of the responses occurred on Levels IV and V, 47.3% of which were on Level V, the Emerging Transformation level. In addition, 100% of the subjects used responses on Level V. These results indicate that the lower class child is not functioning at an "under-developed" or "retarded" level of syntactic development, but that he is operating on a level appropriate to his age.

Analysis of Emerging Transformations. The largest number of responses occurred on Level V, the Emerging Transformational level which would indicate that the children are operating on a high level of syntactic development. When one examines the responses on Level V, however, it appears that the largest percentage of responses on this level (and for the total of all responses) was Transformational Fragments incorporated into transformations. The fact that these Transformational Fragments are not randomly distributed; 95% of the children use the Auxiliary Omission, 65% of the children use the Conjunction
Restriction and 40% of the children use Auxiliary Restriction supports the view of some linguists (Stewart, 1964; Dillard, 1966) that the language used by these children is well-formed, but is simply different from middle class standard English. Thus, many Head Start utterances will be quantified incorrectly as "Fragments" because they are not "well-formed" in terms of middle class standard English patterns. However, if adult Negro dialect were used as the basis for judgment (and the Negro dialect is the language in the child's environment, and the language that he is developing) then many "restricted" forms would have to be reclassified. For example, Verb Form Omission as in *When your sister come home, don't let her see nothin' would have to be reclassified as being an adult transformation in Negro Non-Standard speech, since in that code the rules governing addition or deletion of the third person verbal ending -s do not match those of the standard English, where the use of this verbal ending is obligatory. From the point of view of the Negro dialect, both *she come and *she comes are equally "normal", grammatical forms. In addition, the double negative in the example, *don't let her see nothin', is a typical Negro Non-Standard usage (as it is in many languages such as French and Spanish), and as such should also be classified as an adult transformation rather than as a restricted form.

Comparison of the transformations used showed that the Head Start children used most of the types that the kindergarten children did, but that there were some transformations that the Head Start children did not use at all. The difference between the Head Starters and the kindergartners did not appear to be one of developmental level, but
rather one involving the nature of the responses to be categorized as transformations or as restricted forms. The majority of the kindergarten responses were examples of transformation types, whereas the majority of the Head Start responses contained "restricted transformations" when standard English was the criterion upon which judgments were based. Only two transformations (Adverb and Auxiliary-Do) were used solely by the Head Start children.

The fact that the largest number of responses occurred at Level V would indicate that the children were operating on a high level of syntactic development. However, when one examines the responses on Level V, it appears that the largest percentage of responses on this level were Transformational Fragments incorporated into transformations. Comparisons of the restricted forms used by the Head Start children and Menyuk's subjects showed the greatest difference between the two groups. Those restricted forms used by the kindergartners were rarely used by Head Starters and the most frequently used forms of the Head Start children occurred rarely if at all in the kindergarten transcripts. Head Start children used different restricted forms than did the kindergarten children.

Albright and Albright (1953) suggested the adaptation of the techniques of descriptive linguistics in order to identify the specific nature and features of children's language. Lee's Developmental Sentence Types and the transformations and restricted forms listed by Menyuk are based on information that linguists have provided, but like previous analyses of language, they are based almost exclusively on the structure of standard English dialect. Language studies of the economically de-
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prived child have used as their criterion of language development measurements based on the standard dialect because of an implicit assumption that non-standard dialect represents, at most, mere low-level modifications of standard English. Since it is most likely that the economically deprived Negro child is learning a different dialect from that of standard English, we must discern the competence in the language that these children are learning -- the language which is in their social environment -- if we wish to assess their language development. When we assess their language development by how well they have learned standard English, we are merely testing their abilities in a dialect that may be at most peripheral to their experience and linguistic environment. Therefore, we must first identify the characteristics of lower class Negro speech which the disadvantaged Negro child is learning.

Stewart (1965, 1967) and Dillard (1966) described some features of lower class Negro dialect: 1) It does not necessarily inflect the verb to show the grammatical difference between the simple present and the past tense. I see it could mean 'I see it' or I saw it', even though these tenses do exist as grammatical entities in the dialect; 2) It negates the present and past tenses differently. The negative for the present would be I don't see it, while the negative for the past would be I ain't see it; 3) It forms the possessive differently, so that his brother is the equivalent form for 'his brother', and the man hat is equivalent to 'the man's hat'; 4) The double negative is found in many constructions; 5) Structures like be good and day over dere are normal forms in adult Negro dialect.
Stewart (1965) has pointed out that because there are similarities between the white and lower class Negro non-standard dialect, the two have been assumed to have the same deep structure. The differences were interpreted as errors, and many researchers have thus assumed that the lower class child was using a deficient form of standard English, rather than a different, highly structured language of his own.

If we take the research on Negro Non-standard that linguists have done, we see that the structures that they have described as typical structures of Negro adults speech have been classified via Menyuk's categories as restricted forms. The Double Negative, Possessive Restriction, Verb Phrase Omission, Verb Phrase Substitution, Tense Restriction and Auxiliary Restriction all can be seen as characteristic forms of adults Negro dialect rather than as restricted forms in standard English. These forms together represent 76% of all the restricted forms identified in this study. It is necessary for us to remember that although the Negro child's usage of the Double Negative (or for that matter the French child's use of the Double Negative) is to be regarded as evidence for language acquisition of a form that is present in the adult speech of his community, the middle class child who uses the Double Negative must have such a usage classified as a restricted form since the adults in his environment do not use that particular form.

If the Level V Fragment responses are to be considered as transformation types in Negro dialect as Stewart's work would suggest, then the number of transformation type responses is greatly increased for
the Head Start children, and the number of restricted forms greatly decreased. The proportion of transformations and restricted forms is then very similar to that for the kindergarten population, but the kind of transformations for each population is different.

Cutts (1963), Smiley (1964) and Green (1965) have pointed out that the values, attitudes and culture of the lower class are different from those of the middle class, and that the lower class has developed a different language. Thus, it is not valid to evaluate the language of one culture with the norms from the language of a different culture; only comparisons as to the similarities and differences between them can be made. For in turning the tables, if we retained the method of judging one system by another system's rules (a procedure which represents the "fatal flaw" in a great deal of the research on language of the economically disadvantaged), we would have to say that middle class children are "verbally destitute" or "underdeveloped" in language acquisition because there are nine forms (Auxiliary Omission, Preposition Restriction, etc.) which are used by Head Start children but that are not within the verbal repertoire of the middle class kindergartner! A linguistic analysis of the lower class language patterns which simply asks "What forms are being used to generate structures?" rather than one that asks "What forms look like standard English?" allows the researcher to view variations between lower class and middle class language structure as differences rather than as deficiencies.

Summary

Having analyzed the language samples of Negro Head Start children via Lee's (1966) Developmental Sentence Types and Menyuk's (1964) lin-
guistic classifications, this study has indicated that the lower class child is using a qualitatively different language system than that of his middle class age mate. His language contains many forms that are identical to standard English. This accounts for the presence of all the response types of the Developmental Sentence Types model. However, his language also contains many structures which are considered to be restricted forms when compared to standard English. These forms are not only acceptable in lower class Negro dialect, but also indicate a level of syntactic development where transformations are being used appropriately. The lower class Negro child is using the same forms as the lower class Negro adult, and therefore indicating that he has learned the forms of his linguistic environment.
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Bibliography


---------- Syntactic rules used by children from preschool through first grade. Child Develp., 1964a, 35, 533-546.


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<td>(Noun Phrase</td>
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<td>Predicative</td>
<td>Verb Phrase</td>
<td>(Phrase Structure Fragments Stereotyped Phrases)</td>
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<td></td>
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<td>Negative Conjunction</td>
<td>&quot;Do&quot; plus Negative Complement</td>
<td>(Transformational Fragments incorporated into Transformations)</td>
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### Examples and Percentage of Occurrence of Each Response Type

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<th>Noun</th>
<th>Designative</th>
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<th>Verbal</th>
<th>Fragments</th>
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<td>a monkey</td>
<td>cat lion</td>
<td>walks in</td>
<td>by the wolf</td>
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<td></td>
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<td>a baby in a crib</td>
<td>open door</td>
<td>so he got</td>
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<td>7.5</td>
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<td>.4</td>
<td>.2</td>
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<td>Level IV</td>
<td>cat is dad ovah class</td>
<td>his name is Vensley</td>
<td>a lady walk to see thas's 3 little</td>
<td>that's all I know</td>
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<td>who's this</td>
<td>dat's not my cat's De'orah</td>
<td>as! Debby the don't know it was called</td>
<td>as tiger going in the house</td>
<td>I done go</td>
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<td>Question</td>
<td>don't you know about it?</td>
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<tr>
<td>Imperative</td>
<td>an' kins Rush said: get yr on uh table</td>
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<tr>
<td>Pronounalization</td>
<td>there were two little girls in uh room</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>one was washin' clothes an' ironin' an'</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>one was washin' dishes</td>
<td></td>
<td></td>
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<tr>
<td>Got</td>
<td>duh ghost is gonna get duh children</td>
<td></td>
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<tr>
<td>Auxiliary — Be</td>
<td>I'm gonna knock everything down</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Do</td>
<td>yeah but I don't know her name</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do</td>
<td>he wasn't doin' it</td>
<td></td>
<td></td>
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<tr>
<td>Possessive</td>
<td>dat's he youver's high heels</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Reflexive</td>
<td>I read duh book den I play vid duh house den I go by myself</td>
<td></td>
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<tr>
<td>Conjunction</td>
<td>den Janis got in hers an' Darrel got in his an' I was goin' to leave 'em</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conjunction Deletion</td>
<td>I would take duh slates away an' put 'em in duh closet</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>So</td>
<td>so she said: &quot;good, good&quot;</td>
<td></td>
<td></td>
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<tr>
<td>Because-causal</td>
<td>they couldn't even eat the bottles</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>'cause the bottles were glass</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Pronoun in Conjunction</td>
<td>I tol' duh odder lady an' she should uh told you</td>
<td></td>
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<td></td>
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<tr>
<td>Adjective</td>
<td>uh fever got him a new car</td>
<td></td>
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<tr>
<td>Relative Clause</td>
<td>I don't know what's here</td>
<td></td>
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<tr>
<td>Conjugate-Infinitival</td>
<td>I want hold it</td>
<td></td>
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<tr>
<td>Iteration</td>
<td>an' one girl was goin' over dere uh tell he uh put the flag now.</td>
<td></td>
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</tr>
<tr>
<td>Nounverb</td>
<td>when it's rainin' on side come back in duh house</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Table 4</td>
<td>Restricted form</td>
<td>Example</td>
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<tr>
<td>Verb Phrase - Omission</td>
<td>Redundancy</td>
<td>duh big bear an' duh liddle bear he was being mad</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Substitution</td>
<td></td>
<td>they sittin' down lookin' at T.V. ain' got day no more</td>
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<td></td>
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</tr>
<tr>
<td>Four Phrase - Omission</td>
<td>Redundancy</td>
<td>an' maver and faver they went to bed tiger go in duh house and tiger got all burned up</td>
<td></td>
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<td></td>
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<tr>
<td>Preposition - Omission</td>
<td>Redundancy</td>
<td>he playin' duh hat</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Substitution</td>
<td></td>
<td>I climb up on the tree</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Article Omission</td>
<td></td>
<td>tiger runnin' at duh monkey</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Double Negative</td>
<td></td>
<td>dey were playin' game</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contraction Deletion</td>
<td></td>
<td>he don' ha' no coat at school</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inversion Restriction</td>
<td></td>
<td>he play like he a real gorilla</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>No Question</td>
<td></td>
<td>dere's three bears pullin' on uh rope</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reflexive Third Person</td>
<td></td>
<td>who do' people are</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tense Restriction</td>
<td></td>
<td>dey gonna fall down hurt dereseif</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pronoun Restriction:</td>
<td></td>
<td>Royal Jones a ' uh braver an' Dan was in duh drawer rockin' uh chair while Miss Rush was fixin' uh box</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Adjective Restriction</td>
<td></td>
<td>don' den. gonna fall</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relative Clause Restriction</td>
<td></td>
<td>one of duh girls is ironing</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Verb Form - Omission</td>
<td></td>
<td>an' Debby didn't know it was darktine</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Substitution:</td>
<td></td>
<td>when your sista come in uh house, don' let her see nurtin'</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Four Form - Omission</td>
<td></td>
<td>I knows who dat is</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Substitution</td>
<td></td>
<td>dere dis wo bunny rabbit duh ghost gonna get duh bunny rabbit an' eat' em all up</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Possessive</td>
<td></td>
<td>thre playin' balls an' wo playin' cowboys an' one playin'ul' duh puzzle</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pronoun, First Person</td>
<td></td>
<td>uh king sittin' down in uh king chair where we at?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adverb Restriction</td>
<td></td>
<td>she doin' nufin'</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Auxiliary Restriction</td>
<td></td>
<td>an' we was lookin' at duh movies an' Darrel was lookin' at duh movies an' I was laughin'</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conjunction Restriction</td>
<td></td>
<td>climb up duh tree try uh get dib</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Auxiliary Omission</td>
<td></td>
<td>dey pullin' uh rope</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Possessive Restriction</td>
<td></td>
<td>dey gotta fall back</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>dey got dem things an' day got dem brudder an' its all gone</td>
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</tbody>
</table>
Table 4 (cont.)

Possessive Restriction: 

Because or So Substitution:

If Omission:

the monkey fall on he head
he gonna get up in uh tree to the
tiger won' eat him up
he stay in house an nuver was beat
him for he didn' go outside
dey go way up dere dey go fall
Table 5
PERCENTAGE OF KINDERGARTEN AND HEAD START CHILDREN USING EACH TRANSFORMATION TYPE

<table>
<thead>
<tr>
<th>Transformation</th>
<th>Kindergarten</th>
<th>Head Start</th>
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</thead>
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<tr>
<td>Passive</td>
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<tr>
<td>Negation</td>
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<td>55</td>
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<td>Question</td>
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<td>Contraction</td>
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<td>Inversion</td>
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<td>Relative Question</td>
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<td>Imperative</td>
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<td>25</td>
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<td>Pronominalization</td>
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<td>5</td>
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<td>Separation</td>
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<td>Got</td>
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<td>Auxiliary - Be</td>
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<td>85</td>
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<tr>
<td>Have</td>
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<tr>
<td>Do</td>
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<td>25</td>
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<tr>
<td>Do</td>
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<td>Possessive</td>
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<td>Reflexive</td>
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<td>10</td>
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<tr>
<td>Conjunction</td>
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<td>25</td>
</tr>
<tr>
<td>Conjunction Deletion</td>
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<tr>
<td>If</td>
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<tr>
<td>So</td>
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Table 5 - continued

<table>
<thead>
<tr>
<th>Transformation</th>
<th>Kindergarten n = 48</th>
<th>Head Start n = 20</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cause</td>
<td>97</td>
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<tr>
<td>Pronoun in Conjunction</td>
<td>100</td>
<td>15</td>
</tr>
<tr>
<td>Adjective</td>
<td>100</td>
<td>45</td>
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<tr>
<td>Relative Clause</td>
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<tr>
<td>Complement</td>
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<tr>
<td>Infinitival</td>
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<td>Participal</td>
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<td>Iteration</td>
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<td>Nominal Compound</td>
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<td>Adverb</td>
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Table 6
PERCENTAGE OF KINDERGARTEN AND HEAD START CHILDREN USING EACH RESTRICTED FORM

<table>
<thead>
<tr>
<th>Restricted Form</th>
<th>Kindergarten</th>
<th>Head Start</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n = 48</td>
<td>n = 20</td>
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</table>

**Verb Phrase**
- Omission: 13, 65
- Redundancy: 15, 5
- Substitution: 35, 55

**Noun Phrase**
- Omission: 21, 90
- Redundancy: 17, 15

**Preposition**
- Omission: 15, 50
- Redundancy: 17, 10
- Substitution: 23, 20

**Article**
- Omission: 8, 70
- Redundancy: 13
- Substitution: 2

**Particle Omission**
- 9

**Double Negative**
- 2

**Contraction Deletion**
- 48
Table 6 - continued

<table>
<thead>
<tr>
<th>Restricted Form</th>
<th>Kindergarten</th>
<th>Head Start</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n = 48</td>
<td>n = 20</td>
</tr>
</tbody>
</table>

Inversion Restriction

| Subject-Object           | 8            |            |
|                         |              |            |
| Verb Number             | 40           | 5          |
| No Question             | 2            | 15         |
| There Substitution      | 4            |            |
| No Separation           | 2            |            |
| Reflexive Third Person  | 29           | 15         |
| Tense Restriction       | 4            |            |
| Pronoun Restriction     | 35           | 40         |
| Adjective Restriction   | 13           | 15         |
| Relative Clause Restriction | 21       | 10         |

Verb Form

| Omission                | 29           | 45         |
| Redundancy              | 19           |            |
| Substitution            | 13           | 15         |

Noun Form

<p>| Omission                | 25           | 15         |
| Redundancy              | 13           |            |
| Substitution            | 4            | 10         |</p>
<table>
<thead>
<tr>
<th>Restricted Form</th>
<th>Kindergarten n = 48</th>
<th>Head Start n = 20</th>
</tr>
</thead>
<tbody>
<tr>
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<tr>
<td>Pronoun First Person</td>
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<tr>
<td>Adverb Restriction</td>
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<td></td>
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<tr>
<td>Auxiliary Restriction</td>
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<td>Conjunction Restriction</td>
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<tr>
<td>Auxiliary Omission</td>
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<td>Possessive Restriction</td>
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<tr>
<td>Because of So Substitution</td>
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<tr>
<td>If Omission</td>
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