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DIALECT DIFFERENCES IN STATEMENT VERIFICATION AMONG CHILDREN

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A DISSERTATION

SUBMITTED TO THE GRADUATE FACULTY

in partial fulfillment of the requirements for the

degree of

DOCTOR OF PHILOSOPHY

By

BELINDA M. BISCOE

Norman, Oklahoma

1982

DIALECT DIFFERENCES IN STATEMENT VERIFICATION

AMONG CHILDREN

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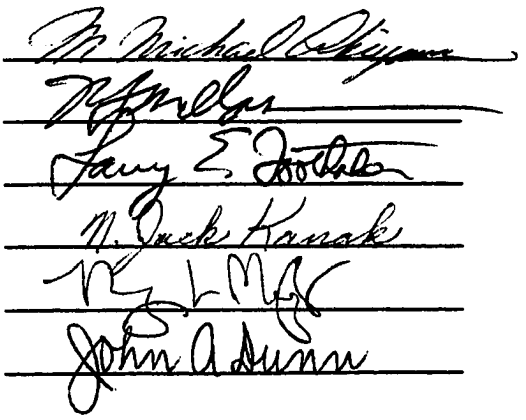

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DIALECT DIFFERENCES IN STATEMENT VERIFICATION AMONG CHILDREN

University of Oklahoma

Belinda M. Biscoe

Abstract

This study addresses the issue of how the rule of negative concord in Black English (multiple negation, e.g., You ain't no baby, which is equivalent to the Standard English statement You aren't a baby) would affect the verification process. BE sentences with negative concord have more negatives in their sentence structure than SE negative sentences and BE negatives can appear in a variety of locations within a sentence. Thus, I hypothesize that a BE sentence with negative concord should be more salient to a listener than a SE sentence with a single negative. BE negative statements should be retained more easily than SE negative statements. Given two tasks, one in BE and the other in SE, children should perform better on negatives in the BE task than on negatives in the SE task, but equally well on affirmatives. Younger children should benefit more from negatives in the BE task than older children.

The sample consisted of 48 BE speakers and 48 SE

speakers, ages 5-10.

Two verification tasks were designed, one in SE, Task 1 (e.g., You aren't a baby) and the other in BE, Task 2 (e.g., You ain't no baby). All subjects received both tasks. The two tasks consisted of true affirmative, false affirmative, true negative and false negative statements. All tasks were presented orally. The children were instructed to say "right" or "wrong" in response to each statement. Only verbal responses were scored.

An analysis of variance was performed on the number of errors for the four types of statements in each task. The most important aspect of these results was that the SE task was more difficult than the BE task. SE true negatives were more difficult for children to verify than BE true negative statements, but true and false affirmatives in SE and BE were equally difficult.

These results are discussed in terms of how specific aspects of a language affect the way in which children understand sentences.

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DIALECT DIFFERENCES IN STATEMENT VERIFICATION AMONG CHILDREN

INTRODUCTION

Researchers studying developmental psycholinguistics place a great deal of emphasis on the universal aspects of language acquisition (McNeill, 1966; McNeill, 1975; Bever, 1970; Slobin, 1970). In the area of statement verification most researchers (Trabasso, Rollins and Shaughnessy, 1971; Clark and Chase, 1972; Carpenter and Just, 1975) have assumed that a theory based upon English data can also account for the way in which speakers of other languages and dialects verify sentences. As a result, little attention has been given to how specific aspects of a language or variations within a language might affect the verification process. In the present paper, one major American dialect is analyzed and examined to determine whether dialectical differences affect the verification process. Although underlying meaning for a given sentence is the same for both the dialect and the standard form, surface structural differences between the

standard form and the dialect may in fact affect the way in which sentences are verified.

The present study compares verification processes in Black English and Standard English. BE negation structures are of primary interest, since they differ from SE negation structures in two fundamental ways. First, negative sentences in BE have more negatives in their sentence structure than negative sentences in SE. The use of multiple negatives is referred to as negative concord. Secondly, the temporal location of negatives in BE can vary within a sentence, since the BE rule of negation requires that a negative be attached to all negatable elements within the same simple sentence (Burling, 1973; Haskins and Butts, 1973).

To illustrate dialectical differences, the following two statements in SE and BE are compared.

1. You aren't a baby.
2. You ain't no baby.

Both of these statements are negative and their truth value is true (most adults would respond "true" or "right" to these statements). Although both of these statements express the same meaning, there is a difference in the negation structure of each sentence. The first sentence has only a single negative and the second has two negatives. The issue is whether this difference significantly affects the way in which children understand the two sentences.

Akiyama and Guillory (in press) have shown that young

SE speaking children have enormous difficulty verifying a simple negative sentence and hypothesized that these children interpret a statement as a question and verify the statement incorrectly. According to this model, upon hearing the statement You aren't a baby, children interpret it as the question Aren't you a baby?, implicitly produce no which is a correct response to a question, and finally translate no into wrong because they remember that the task dictates a response of right and wrong and they feel that no is more consistent with wrong. However, their final response of wrong is incorrect. This hypothesis is consistent with another argument that children tend to forget the presence of negation in SE and fail to process the negation.

In contrast to this, negative statements in BE do not appear to evoke this question-answer type processing. Burling (1973) notes that there is a characteristic in BE which distinguishes negative statements from yes-no negative questions. In BE, the corresponding question to the negative statement, You ain't no baby is Ain't you a baby? Negative concord is not used in simple yes-no negative questions in BE. Why questions in BE, on the other hand, do permit this kind of structure (e.g., Why I don't need no grease?) (Burling, 1973, p. 65). Given these differences, children are less likely to interpret a BE negative statement as a negative question. In addition, two negatives to express a negative idea may help children to remember negation.

The aforementioned arguments support the hypothesis that negatives in BE are better understood than negatives in SE. Given two verification tasks, one in BE and the other in SE, children should perform better on negatives in the BE task than on negatives in the SE task. Since there are few differences between SE affirmatives and BE affirmatives, children should perform equally well on affirmatives across the two tasks. Thus, a Task x Polarity (affirmative vs. negative) interaction is predicted. This prediction is made as an alternative to an implicit prediction derived from universal theories.

Additional predictions are concerned with a developmental trend in verifying negative statements. Since younger children find it more difficult than older children to verify negative statements, an Age x Polarity interaction is predicted. Furthermore, younger children are expected to benefit more from BE negatives than older children, since negative concord is more salient for younger children than for older children. Thus, an Age x Task interaction is predicted. Given this two way interaction, an Age x Task x Polarity interaction is also predicted.

EXPERIMENTAL METHOD

Subjects

Previous research (Stokes, 1976) suggests that certain guidelines are useful in determining which children are likely to be BE speakers. These guidelines are based primarily on social factors such as occupation, income and education of the parents. To this extent, it is claimed that certain socio-economic classes would be more likely to be dialect speakers. While this information is not conclusive, it is the best available tool prior to direct research. For these reasons, the BE speakers were selected from an all Black town in the Southwest. The SE speakers were selected from an urban school in the same area. The sample of BE speakers consisted of sixteen kindergartners, sixteen 2nd graders and sixteen 4th graders. The SE sample also consisted of sixteen kindergartners, sixteen 2nd graders, and sixteen 4th graders. There were approximately equal numbers of boys and girls.

Materials

Two verification tasks were prepared, one in SE and the other in BE. For each task, two equivalent sets of statements were prepared. For these equivalent sets of sentences, a variety of topics were chosen to generate affirmative statements. Most of the topics were related to actions, or general knowledge. For example an action topic was about writing. This topic generated two true affirmative and two false affirmative statements. For example, the true affirmative statements were You can write with a pencil and You can write with a crayon. These sentences were considered equivalent. The two false affirmative statements were You can write with a chair and You can write with a shoe. These statements were also considered equivalent. Consequently, each topic generated four affirmative statements.

In each set, the affirmative was constructed from one member of the equivalent pairs and the negative from the other member of the equivalent pairs so that an identical topic only appears once in each of the two equivalent sets. Thus, the two affirmative statements from each topic generated two sets of the four types of statements. For example, Set 1 contained You can write with a pencil (true affirmative), You can write with a chair (false affirmative), You can't write with a shoe (true negative), and You can't write with a crayon (false negative). Set 2 statements were You can write with a crayon (true affirmative), You can write

with a shoe (false affirmative), You can't write with a chair (true negative), and You can't write with a pencil (false negative). Set 2 statements were generated by transforming all affirmative statements in Set 1 into negative statements and all the negative statements into affirmative statements.

Twelve topics were selected to generate these sentence types. The procedure used in the illustration was applied to the other 11 topics, and generated two sets of 12 true affirmatives, 12 false affirmatives, 12 true negatives and 12 false negatives. The total number of Standard English statements in Task 1 was 2 (Sets) x 4 (Sentence Types) x 12 (Topics) = 96.

The two sets of statements in Black English were generated in the same manner as the Standard English statements. The same topics were used for the sentences in Black English and Standard English, thus the total number of statements in Task 2 was also 2 x 4 x 12. The BE negative statements were generated by adding no to all negatable elements in the affirmative statements and replacing the auxiliary verbs is or are with ain't. (Tasks appear in the Appendix).

Procedure

Children were tested individually in a separate room in their grade school. Each session was tape recorded. Prior to the administration of the verification tasks, each student was given a sample of 15 items, specifically for his or her age group, from form L of the revised version of the

Peabody Picture Vocabulary Test. This test was administered in order to determine the correlation between vocabulary and the dependent measure. After establishing rapport, the experimenter instructed the child to say right or wrong in response to each statement. All tasks were presented orally by two experimenters. Each experimenter rehearsed all statements until they were presented with the same intonations. No special emphases were added to any of the statements. The experimenter presented the statements in as even and as rapid a pace as possible.

Half of the subjects received Set 1 and the other half Set 2. All subjects received both the BE task and the SE task. The order of the two tasks was counterbalanced across subjects. Finally, the order of items within a task was randomized, and presented in one order for half of the subjects and in the reversed order for the other half. Some subjects corrected their responses soon after their initial response. However, scoring does not reflect these corrections.

RESULTS

The verbal responses to statements were scored as either correct or incorrect, a correct response being an expected response. For example, the correct response to the statement You have two noses is wrong, even though a few subjects might respond right. Only verbal responses were scored. Subjects were given one point for each correct response on the Peabody Picture Vocabulary Test. A maximum score was 15 for the sample of words given.

An analysis of variance was performed on the number of errors for the four types of statements in each task. The factors were grade (Kindergarten, 2nd, and 4th), Set (two equivalent sets), Task (1, Standard English, 2, Black English), Order (Task 1 first or Task 2 first), Polarity (affirmative and negative), Truth value (true or false) and Language (Black English or Standard English). Between subject factors were grade, set, order and language. Task, polarity, and truth value were all within subject factors. Both the subject factor and item factor were treated as random (Clark, 1973). F_1 is used to refer to test statistics

appropriate to the design with subjects as random effects, and F_2 to test statistics with items as random effects. The notation min F' refers to the test statistics for the design with the two effects combined. The emphasis of this study is placed on how English speaking children understand BE statements and SE statements rather than on the direct main effect of the performances across the two language groups. The main effect comparison might be problematic, since the main effect of the BE speakers and SE speakers can probably be attributed to a variety of socio-cultural and socio-economic differences that are confounded with language type, consequently the main effect comparison is not included.

The results are shown in Tables 1 and 2. The percentage of errors is used with the number of errors in parenthesis. The most interesting aspect of the results is that the SE task was more difficult than the BE task [min F' (1, 194) = 7.92 $p < .01$]. This same pattern was also observed when only negative statements were compared between the two tasks [min F' (1, 174) = 10.74, $p < .005$], and in particular when true negative statements were considered [min F' (1, 163) = 11.68, $p < .001$]. Children performed equally well on affirmatives across the two tasks but better on negatives in the BE task than in the SE task, and as a result Task X Polarity was highly significant [min F' (1, 164) = 9.66, $p < .005$]. Significant min F' values clearly support the hypothesis that negatives in BE are better understood

than negatives in SE.

Insert Tables 1 and 2 about here

The age effect was also highly significant [min F' (2, 84) = 18.76, $p < .001$]. This suggests that children's ability to accurately judge statements continues to develop during late childhood. The two way interaction of age by task was marginally significant [F_1 (2, 72) = 2.86, $p < .06$, F_2 (2, 264) = 3.73, $p < .02$], [min F' (2, 197) = 1.62, $p < .20$]. This indicates that overall performance across the two tasks tends to differ between age groups. The two way interaction of age x polarity was very significant [min F' (2, 105) = 8.72, $p < .001$]. The younger groups (5 and 7 year olds) find negative statements more difficult than the older age group (9 year olds). Age x task x polarity was also clearly significant [min F' (2, 164) = 5.47, $p < .005$] which indicates that younger children find negatives more difficult than affirmatives, and at the same time find the SE task more difficult than the BE task within negatives.

The overall effect of the two-way interaction of polarity by truth value was significant across subjects [min F' (1, 162) = 44.19, $p < .001$]. This two way interaction was significant for both the SE task [min F' (1, 180) = 38.72, $p < .001$] and the BE task [min F' (1, 168) = 19.94, $p < .001$].

The potent effect of truth x polarity was also significant for each age group on both tasks: 5 year olds, SE

task [min F' (1, 53) = 22.15, p < .001]; 5 year olds, BE task [min F' (1, 45) = 5.99, p < .025]; 7 year olds, SE task [min F' (1, 65) = 20.11, p < .001]; 7 year olds, BE task [min F' (1, 91) = 7.47, p < .01]; 9 year olds, SE task [min F' (1, 68) = 7.30, p < .01]; 9 year olds, BE task [min F' (1, 93) = 8.46, p < .01]. It is interesting to note that while the truth x polarity interaction was significant for all age groups on each task, in general, it was much more potent for the SE task, especially for the younger age groups. It was not as potent for the BE task, simply because performance on this task was better. No significant differences were found between true affirmatives, false affirmatives or false negatives across the two tasks.

Finally, performance on the Peabody Picture Vocabulary test (PPVT) was correlated with performance on negatives. The correlation between vocabulary and performance on negatives was as follows for each age and language group: BE kindergartners, -.20; BE 2nd graders, .11; BE 4th graders, .72, df = 14. For the BE speaking 4th graders, high performance on the PPVT was significantly correlated with performance on negatives, p < .01. Subjects who had high vocabulary scores also made fewer errors when verifying negative statements. For the SE sample, there were no significant correlations for any of the age groups. The correlations were as follows: SE kindergartners, .34; SE 2nd graders, .18; SE 4th graders, -.27. All of the SE 4th graders

performed well on the PPVT regardless of their performance on negatives, although in general most of these 4th graders performed quite well on negatives.

DISCUSSION

Although the prevailing view in language acquisition has been that dialectical differences do not produce a difference in either language acquisition processes or language comprehension processes (Slobin, 1979), this study has shown that specific aspects of a dialect in fact affect the way in which children understand sentences. The results reported in this study clearly demonstrate that both BE and SE speaking children find it more difficult to respond to negative statements in SE than to negative statements in BE. However, they find it equally easy to respond to BE and SE affirmative statements.

There seem to be four plausible explanations as to why English speaking children find BE negatives easier to understand than SE negatives. The first explanation focuses on the different relationship between statements and questions in BE and SE. The second explanation is based on the more significant role of negative concord in retaining a negative idea. The third explanation focuses on the naturalness of negative concord to young children, and the fourth

explanation focuses on the meaning that ain't conveys in a sentence as compared to isn't, haven't or aren't.

First, BE negative statements and BE simple yes-no negative statements are more clearly distinguished, whereas SE negative statements and SE yes-no negative questions are less clearly distinguished. The corresponding question to the BE negative statement You ain't no baby is Ain't you a baby? Note that, negative concord is not used in simple yes-no negative questions. Given this difference, children are unlikely to interpret a BE negative statement as a BE negative question. On the other hand, the only difference between SE statements and SE yes-no questions is the ordering of the subject and the verb. For example, the corresponding question to the statement You aren't a baby is Aren't you a baby? Statements are sometimes used instead of questions, consequently, children appear to interpret SE statements such as these into questions and as a result, they verify the statement incorrectly. The hypothesis that BE negatives are better retained can be contrasted with the finding of Akiyama and Guillory (in press) that children confuse SE negative statements with SE questions. They hypothesized that children had difficulty verifying negative statements because they interpreted a SE negative statement as a SE negative question. On the other hand, children in the present study seem to have adopted this strategy less frequently in the BE task than in the SE task.

Second, negative concord in BE seems to play a more significant role in retaining the negative meaning than a single negative in SE. Slobin (1979) notes that listeners pay special attention to the beginnings and ends of temporal units and that languages often favor these positions in order to convey special messages. Language structure appears to play a vital role in determining the ease with which certain information is conveyed. Since the BE negatives used in this study were located in the middle and near the end of the sentence, they acquired a special significance. On the other hand, SE negatives appeared in the middle of the sentence and since the middle position is less salient, young children hearing a SE negative seemed to forget the presence of the negation and consequently failed to process it. As a result, once children heard a SE negative sentence, they may have initially put the negation not aside and then later brought it back into the sentence in order that truth value be assessed. The younger children in this study may have forgotten to replace not after having initially put it aside.

Third, negative concord may be a more natural form for expressing negative ideas. The data of Stokes (1976), Bellugi (1967) and the unpublished data of Claudia Kernan from an Oakland sample and Roger Brown from a Harvard sample have shown that at the acquisitional levels, both SE speakers and BE speakers all employ negative concord, regardless of whether it is used in the home. The fact that negative

concord is used by young English speaking children may indicate that it is more natural to them than a single negative, thus the youngest BE and SE speaking children find BE negatives easier to understand than SE negatives. However, older SE speaking children who are no longer using negative concord find BE negative statements easier than SE negative statements. This fact may be better accounted for by the structure of negative concord, rather than the naturalness argument.

Fourth, the use of the word ain't which frequently accompanies sentences with negative concord, may express more meaning than haven't, isn't or aren't. The word ain't may capture the attention of listeners because for many it conveys an additional message about the social class of the person using it. The added attention that the word ain't receives may have the advantage of reinforcing the negative meaning of a sentence. Words such as haven't, isn't or aren't lose this advantage because they don't serve any function other than that of being negative auxiliaries. In addition, the word ain't appears to convey an inherently negative meaning, whereas auxiliary verbs such as have, is or are even when contracted with not seem to have a more implicit affirmative meaning. Also, phonologically ain't is a more salient form than contracted negatives.

Three other aspects of the results that need to be discussed are the relative performance on BE and SE false

negatives, better performance on false negatives than on true negatives, and the significant main effect for age on verification performance. First, despite the fact that false negatives in BE have the same multiple negatives as true negatives in BE, false negative statements across the two tasks seem to elicit a mixed pattern of responding. Although BE false negatives should be better retained than SE false negatives, only the data for the older children are consistent with this prediction. Younger children's performance on false negatives was not significantly different across the two tasks. However, both groups of older children performed significantly better on BE false negatives than SE false negatives. These mixed results are not predictive from the above hypothesis and are difficult to explain.

Second, better performance on false negatives than on true negatives can easily be accounted for a traditional verification model such as that of Carpenter and Just (1975). According to this model, when children verify a statement, they first develop a statement representation in a propositional form (i.e., NEG [I, BABY]), (2) derive a dominant knowledge representation in an affirmative form (i.e., AFF [I, CHILD]), and compare the statement representation with the knowledge representation, and (4) respond "right" or "wrong" as indicated. In general, the more comparison steps involved, the more complex the verification process. Carpenter and Just (1975) formulate that during the comparison

process, there are two mismatches for true negative statements and only one mismatch for false negatives. As a result, false negatives are easier to process. Wason (1972) and Givón (1978) offer another explanation for the performance difference which exists between true and false negatives. They suggest that using false negative statements is more natural than using true negative statements. In the everyday use of language, negatives are usually false rather than true. Thus, since children probably have more practice responding to negative statements which are false rather than true, they perform better on false negative statements than true negative statements.

Third, the fact that younger children have more difficulty than older children in verifying negative statements seems to be a direct consequence of the linguistic demands that the English language places on its children. English speaking children are rarely asked to verify statements, but are frequently asked to respond to questions. As a result, the developmental differences which emerge seem to interact with the amount of experience that children have in verifying statements. Older children have had a little more experience in verifying negative statements and this may account for their better performance. This performance difference also seems consistent with the results of Hunt, Lunneborg, and Lewis (1975). They compared two groups of subjects, some of whom had high verbal scores and others who had low verbal

scores, as determined by psychometric tests. They found that low verbal students had more difficulty than high verbal students only in verifying negative statements. Since older children have a few more years of experience with verbal materials, it seems only natural that they should outperform younger children on these tasks.

At a more general level, the argument that language structures affect language acquisition is consistent with the findings of Slobin (1982), Akiyama, Saito and Takei (1982), MacWhinney and Bates (1978) and Nelson (1975; 1981).

Slobin (1982) found that word order rules and the various types of inflectional systems which are used to express grammatical relations in English, Italian, Turkish and Serbo-Croatian affected children's acquisition rate of causative constructions (e.g., The horse makes the camel run.). Turkish, a pure inflecting system, in which word order (subject, object, verb) can vary was found to be an almost ideal language for the early acquisition of linguistic structures.

Akiyama, Saito and Takei (1982) have shown that structural differences between English and Japanese affect the way in which young children acquire the verification system in these two languages. English is a S (subject), V (verb), O (object) language and Japanese is a SOV language. As a result of this difference, a negative in English appears in the middle of the sentence, whereas in Japanese it appears at the end. These researchers hypothesized that because of

location, negatives in Japanese would be more salient than negatives in English. Their results indicated that English speaking children acquire the verification of negatives later than Japanese children. Another important finding was that English speaking children show later acquisition of true negatives than false negatives whereas Japanese children's rate of acquisition for these sentence types was just the reverse.

A cross-cultural developmental study conducted by MacWhinney and Bates (1978) also supports the claim that specific aspects of language affect processing. They found that English, Hungarian and Italian speakers used different sentential devices when describing pictures which varied along two dimensions: 1) whether the picture contained given information which did not alter a listener's "conscious knowledge" or 2) whether the materials contained new information which would alter a listener's "conscious knowledge." In addition, specific aspects of these languages determined which sentential devices (ellipsis, pronominalization, emphatic stress, the indefinite article, the definite article and initialization) persons used to describe these pictures. An interesting finding was that in both English and Italian, emphatic stress was often used to mark increased newness. The infrequent use of emphatic stress in Hungarian was said to be possibly related to the use of variation in word order to locate elements in places receiving primary stress.

Research by Nelson (1975) and a review of recent studies by Nelson (1981) suggests that variations within a language community may in fact affect language acquisition among children. In these studies some children were found to emphasize single words, simple productive rules for combining words, nouns and noun phrases and referential functions; others were found to use whole phrases and formulas, pronouns, compressed sentences and expressive or social functions. Nelson suggested that different language acquisition strategies exist even among children learning the same language (English). The findings of these researchers coupled with the findings of this study serve to highlight the importance of how specific aspects of a language affect acquisition.

These results have some implications for education in that they provide some insights about dialect features such as negative concord and how young children use these features to better understand sentences. It is not enough to simply acknowledge the differences which exist between BE and SE, rather it is also important to demonstrate what function these features serve in helping children acquire and understand their language.

In conclusion, the present paper has shown that both BE and SE speaking children have more difficulty verifying SE negative statements than BE negative statements. This finding supports the hypothesis that the use of multiple

negatives to express a single negative idea, and the location of negatives within a sentence are significant variables which affect the way in which children understand sentences. Finally, I have shown that the ability to process negative statements continues to develop during the latter part of childhood.

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Table 1

The number of incorrect responses (percentages of errors in parentheses) on two tasks of statement verification among kindergarten, 2nd, and 4th grade Standard English speakers[a]

Grade	Task	Statement Type			
		True affirmative	False affirmative	False negative	True negative
K	Task 1 (SE)	.44 (3.7)	.68 (5.8)	4.0 (33.3)	7.1 (59.2)
	Task 2 (BE)	.38 (3.2)	.56 (4.7)	3.9 (32.5)	5.3 (44.2)
2nd	Task 1	.56 (4.7)	.44 (3.7)	3.1 (25.8)	5.4 (45.0)
	Task 2	.44 (3.7)	.56 (4.7)	2.5 (20.8)	3.8 (31.7)
4th	Task 1	.44 (3.7)	.56 (4.7)	1.3 (10.8)	2.2 (18.3)
	Task 2	.19 (1.6)	.44 (3.7)	.69 (5.8)	1.8 (15.0)

[a]maximum score is 12

Table 2

The number of incorrect responses (percentages of errors in parentheses) on two tasks of statement verification among kindergarten, 2nd and 4th grade Black English speakers[a]

Grade	Task	Statement Type			
		True affirmative	False affirmative	False negative	True negative
K	Task 1 (SE)	1.8 (15.0)	2.4 (20.0)	6.4 (53.3)	9.1 (75.8)
	Task 2 (BE)	2.1 (17.5)	2.6 (21.7)	6.4 (53.3)	8.3 (69.2)
2nd	Task 1	.81 (6.8)	1.1 (9.2)	4.8 (40.0)	6.4 (53.3)
	Task 2	1.0 (8.3)	1.8 (15.0)	6.1 (50.8)	6.9 (57.5)
4th	Task 1	.31 (2.6)	.56 (4.7)	3.1 (25.8)	4.6 (38.3)
	Task 2	.06 (.5)	.94 (7.8)	2.1 (17.5)	2.4 (20.0)

[a]maximum score is 12

APPENDIX A

REVIEW OF RELATED LITERATURE

DIALECT DIFFERENCES IN STATEMENT VERIFICATION AMONG CHILDREN

Introduction

Researchers studying developmental psycholinguistics place a great deal of emphasis on the universal aspects of language acquisition (McNeill, 1966; McNeill, 1975; Bever, 1970; Slobin, 1970). This emphasis was catalyzed by the work of Noam Chomsky. Chomsky (1965) argues that universal aspects in the structure of language exist because all humans are innately attuned to understand their language in the same manner. To this extent, one could expect to find the same course of language acquisition for all children and consequently differences among cultures, individuals and language communities could only be very minor and insignificant.

In this move towards universalism, Slobin (1973) calls for a specific language-free model of language acquisition. He claims that such a model is based on the premise that "the child brings certain operating principles to bear on the task of learning to speak regardless of the peculiarities of the particular language he is exposed to" (pp. 176-

177). McNeill (1973) also claims that "children's capacities everywhere in the world impose the same features on language, which therefore appear as linguistic universals" (p. 620).

Recent research, however, is beginning to question universalism in language acquisition. Nelson (1981) notes that important individual differences exist in the speech produced by children during early childhood. Research conducted by Nelson (1973) supports this notion. She followed 19 children longitudinally from approximately 1½ to 2½ years of age. Data were obtained from records kept by the mother as well as tape recordings of language used by mother and child during monthly visits in the home and periodic assessments of such developments as imitation and comprehension. An important finding of this study was that of individual approaches to learning language. For the majority of the children in the study, early vocabularies consisted of a large proportion of object names (i.e., nouns) with some verbs, proper names and adjectives. However, for a large portion of the subjects, vocabularies were more varied, with a number of social routines (such as "stop it") included among the verbs, nouns and adjectives. Nelson makes the argument based on findings such as these that the child learns language in a functional context and that the interaction of the individual and environment may be a factor for different children developing different language acquisition strategies.

Nelson's work on individual differences helps to highlight the fact that even within a given language, such as English, language acquisition and processing may follow various developmental courses (Nelson and Nelson, 1978). If individual differences within a given language affect acquisition, then it seems plausible that language specific aspects may also affect language processing and acquisition. Given that many dialects exist in Standard English whose surface forms differ from Standard English, it may be that specific aspects of English dialects may in fact affect the way young children understand sentences. In general, psycholinguists have not been very successful in relating language specific aspects to psycholinguistic theory (e.g., Clark and Clark, 1977).

Problem

The current study focuses specifically on one American dialect, Black English, and how some of its surface structural differences affect the way in which sentences are verified. Negation structures in Black English are of primary interest since some of its surface structural forms differ from those of Standard English. In particular, this study addresses the issue of how the rule of negative concord (multiple negation--e.g., A robin ain't no rock.) affects the verification process. The paradigm to be put forth is that of statement verification (Carpenter and Just, 1975; Clark and Chase, 1975; Trabasso, et. al., 1971). This

paradigm will be discussed in more detail later in this paper.

Review of Related Literature

American blacks constitute the largest minority group in the United States and many of them speak what most linguists refer to as "Non-Standard Black English." In the past decade, there has been much debate over whether or not "Non-Standard English" is an illogical form of speech. Linguists such as Labov (1971), Loflin (1971) and Stewart (1971) have argued that non-standard dialects are very structured and although similar to English, differ in very systematic ways.

This view is contrasted with that of social scientists such as Krapp (1924; 1925), Ralph (1967) and Jensen (1969) who are proponents of the deficit theory which makes the claim that speakers of Black English are inherently inferior. They believe that Black English is the result of a mental incapability to form certain linguistic constructions, a physiological difference or cultural disadvantages. In addition, educators such as Bereiter and Englemann (1966) make the erroneous claim that the poor academic performance of inner-city black children is a direct result of their dialect. The deficit theory fails to address the fact that Black English is not simply the production of random errors, but rather a rule-governed, predictable linguistic system that has an equivalent way of expressing the same logical thought as Standard English.

Negation Structures in Standard English and Black English

Although a variety of structural differences exists between Black English and Standard English, most are quite superficial (Labov, 1967). However, when comparing negation structures in Standard English and Black English, the differences are more fundamental (Labov, 1967). It is not important for this study to examine all aspects of negation. Only those specific areas which are of interest in this study will be reviewed.

In Standard English, negation is formed by either the addition of not with the auxiliary verb or by the use of an existing negative lexical item (e.g., none, no, nobody) as an indefinite pronoun, adverb or noun modifier. The use of more than one negative lexical item in the same sentence is prohibited in Standard English (except for certain, very limited stylistic reasons). Historical linguists and dialectologists point out that the use of multiple negatives is the traditional pattern and that our current standard form is a result of a rule imposed by grammarians in the 18th century (Labov, 1972). However, in Black English, it is possible for the multiple uses of not to occur in the same sentence to denote a single negative. These additional negative forms are referred to by linguists as instances of negative concord (Labov, 1982). The appearance of negative concord in Black English and the absence of this concord in

Standard English is one of the major differences between Standard English and Black English.

These rules of negation are described by Burling (1973). The basic rule of negation takes into account the most colloquial and natural way of making negations. The first two rules apply to Standard English.

> Rule (1) Basic Rule: To make a sentence negative, introduce the negative into the first possible position in the sentence. If an indefinite is found in the subject position, then that is made negative, otherwise the negative is inserted into the auxiliary position (Burling, 1973: 56).

This rule produces sentences such as:

a. You can't drink anything strong.

b. The girl doesn't know anyone.

c. He didn't buy any peppermints (Burling, 1973: 57).

> Rule (2) Right-Shift Rule: The negative can be shifted from the auxiliary position rightward to the next indefinite that follows (Burling, 1973, 57).

This rule produces sentences such as:

a. You can drink nothing strong.

b. The girl knows no one.

c. He bought no peppermints (Burling, 1973: 57).

The next rules which follow apply to non-standard varieties

of English, such as Black English.

Rule (3) Right-Copy Rule: A negative may be copied from the auxiliary or from an earlier indefinite into a later indefinite (Burling, 1973: 58).

This rule is the fundamental rule of multiple negation or negative concord, but Burling (1973) notes that it does so in just as an orderly a fashion as the rules in Standard English.

This rule produces sentences such as this one:

a. I don't want nothing to do with helping none of those guys get no job.

Rule (4) Right-Copy Rule, Extension One: A negative can be copied from an earlier indefinite into the following auxiliary (Burling, 1973: 59).

This rule produces sentences such as:

a. Well, wasn't much I couldn't do (Burling, 1973: 59).

Rule (5) Right-Copy Rule, Extension Two: A negative can be copied from the main clause of a sentence and introduced into the auxiliary of the subordinate clause (Burling, 1973: 60).

a. Don't nobody want no chicken for dinner.

Rule (6) Subject-Auxiliary Flip-Flop: A negative

subject can exchange positions with a negative auxiliary (Burling, 1973: 63).

This produces the following kinds of sentences:

a. Ain't no book on the table.

b. Ain't nothing you can do.

c. Ain't nothing happening (Burling, 1973: 64).

Rule (6) is summarized by a final rule:

Rule (7) It Deletion: It may be deleted from the phrase it ain't when this comes first in the sentence.

The use of ain't is a common nonstandard form that appears in all nonstandard varieties of English. Ain't is used where Standard English posits am not, isn't, aren't, haven't, and hasn't as illustrated by these sentences:

a. We ain't going. (aren't)

b. He ain't busy. (isn't)

c. They ain't finished. (haven't)

While the use of ain't is very common in nonstandard varieties of English, it is not necessarily categorically used. Wolfram and Fasold (1974) make an interesting observation in this regard when they note that ain't is more prevalent in sentences where negative concord also appears.

In one of the few investigations concerning negation and black children, Stokes (1976) found that children who speak Black English do not totally follow the acquisitional patterns or acquire the same structures as children who

speak Standard English. In particular, her data revealed significant differences between children who speak Black English and children who speak Standard English in terms of when negation structures are acquired or lost. For example, she found that negative concord, which was present in Black English speakers as well as Standard English speakers, at the acquisitional levels, emerged at earlier stages and persisted at later stages for Black English speaking children. In addition, Black English speaking children used negative concord more frequently in their speech than Standard English speaking children. These differences were attributed to environmental influences. She also found that Black English speaking children use the lexical item ain't increasingly with age, while this form was not generally used by the Standard English speaking children.

Verification Paradigm

According to the traditional verification model (Trabasso, Rollins and Shaughnessy, 1971; Clark and Chase, 1972; Carpenter and Just, 1975; Akiyama, Brewer and Shoben, 1979) children learn to verify statements in the following manner. First, upon hearing a statement, they form a psychological representation of the statement in terms of a polarity marker and content string. Second, they retrieve an affirmative knowledge representation about the statement. Third, they compare the statement representation and the knowledge representation. Finally, if the two representations

match semantically, they respond right and if they do not, they respond wrong. Stage 3 has been the most critical in predicting the acquisition order of verifying the four types of statements (true affirmatives, false affirmatives, true negatives and false negatives). In general, the more comparison steps involved, the more complex the verification process, and as a result acquisition occurs later. The order of difficulty is true affirmatives, false affirmatives, false negatives and true negatives.

Given that Black English sentences with negative concord differ significantly from Standard English negative sentences, it is likely that the differences will affect the way in which children understand sentences. The most fundamental differences are that:

a. sentences with negative concord have more negatives in the sentence structure than negative sentences in Standard English.

b. the negatives in sentences with negative concord are positioned differently than the negative in a Standard English sentence.

On the surface, these differences may appear unimportant. However, as Slobin (1979) notes "Beginnings and ends of temporal units seem to have special attention value to human perceivers, and languages are constructed to exploit this tendency by favoring these positions to signal special features of messages. Syntax is used to guide the listener's

attention to the thread of an argument" (p. 71). If this is the case, sentences with negative concord may trigger different psychological processes since the negatives in Black English can appear at the beginning, middle or near the end of a sentence. A negative component in a sentence with negative concord may be more salient to a listener than a negative sentence in Standard English.

Traditional statement verification models (Carpenter and Just, 1975; Clark and Chase, 1972; Trabasso, et. al., 1971) have assumed that the same mental processes are used to verify any negative statement. It is assumed that a negative statement representation is always compared with an affirmative knowledge representation, and that negation is temporarily put aside and brought back towards the end in order to assess truth value. If the negation is not processed as a part of the statement, then it seems apparent that this kind of processing would be more difficult. If negation always functions within the same context, then this argument seems very valid. However, negation may function within other contexts. Unfortunately, little attention has been focused on other contexts within which negation might be examined. Languages or dialects such as BE which utilize negative syntactic structures somewhat differently than Standard English, may serve as a vehicle to determine the other contexts within which negation might function.

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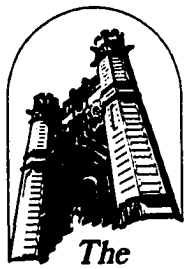
APPENDIX B

PARENTAL CONSENT FORM



The University of Oklahoma at Norman

Department of Psychology

Dear Parents:

Mrs. Belinda Biscoe, a graduate student in the Department of Psychology at OU, would like to have permission for your child to participate in a project which is described below:

We are interested in examining the ways in which young children verify different kinds of negative statements (ex. You don't like cookies or You don't like no cookies). Children will be asked to respond, individually, to these kinds of true, false statements during a 10 minute play situation which is designed to be enjoyable and interesting. Before the play session begins, we will ask your child if she or he would like to participate in our project. If a child seems unwilling to participate, the session will be terminated.

If your child may participate, please fill out the permission slip at the bottom of this sheet and have your child return it to the school.

Thank you for your cooperation.

Mrs. Belinda Biscoe
Graduate Student

Michael Akiyama, Ph.D.
Assistant Professor

My son/daughter, _____ may, or _____may not participate in this project.

_____
Parent's signature

_____ _____
Date Parent's name (please print)

Language Information:

My son/daughter speaks _____ besides English.

455 West Lindsey, Room 705, Norman, Oklahoma 73019 (405) 325-4511

APPENDIX C

INSTRUCTIONS TO THE SUBJECT AND TASKS

INSTRUCTIONS TO THE SUBJECT AND TASKS

Experimental Tasks

These task items have been constructed in both Black English and Standard English. Previous research indicates that test instruments, which have items in Standard English as well as Black English, tend to be more representative of the language world for the child who speaks Black English.

Standard English Verification Tasks

Instructions to the Child

We are going to play a game. I will read several sentences to you. After you have heard the sentence, if you think that what I have said is correct then you simply say right. However, if you think that what I have said is incorrect then you say wrong. Does that sound pretty easy? (Child responds.) Let's do a few sentences for practice. You play with toys. (Child responds.) You don't drink milk. (Child responds.) You don't eat dirt. (Child responds.)

The instructions to the child for the verification tasks which are in Black English will be the same as those

in Standard English, however, the practice sentences which will be used are as follows:

1. You play with toys.
2. You don't drank no milk.
3. You don't eat no dirt.

If the child seems to understand the task, the procedure will continue.

Set 1

Standard English Verification - Task 1

Code - Item #1-20 Task #1 Polarity 1=affirmative 2=negative
Truth Value 1=true 2=false

01 1 1 1 You can write with a pencil.
01 1 1 2 You can write with a chair.
01 1 2 1 You can't write with a shoe.
01 1 2 2 You can't write with a crayon.

02 1 1 1 You sleep on a bed.
02 1 1 2 You sleep on a cup.
02 1 2 1 You don't sleep on a desk.
02 1 2 2 You don't sleep on sheets.

03 1 1 1 You wear shoes on your feet.
03 1 1 2 You wear a hat on your feet.
03 1 2 1 You don't wear gloves on your feet.
03 1 2 2 You don't wear socks on your feet.

04 1 1 1 You can read books.

04 1 1 2 You can read apples.

04 1 2 1 You can't read hats.

04 1 2 2 You can't read magazines.

05 1 1 1 You sit on a chair.

05 1 1 2 You sit on nails.

05 1 2 1 You don't sit on glass.

05 1 2 2 You don't sit on a couch.

06 1 1 1 You can chew gum.

06 1 1 2 You can chew rocks.

06 1 2 1 You can't chew paper.

06 1 2 2 You can't chew food.

07 1 1 1 You eat with a fork.

07 1 1 2 You eat with a shoe.

07 1 2 1 You don't eat with a stick.

07 1 2 2 You don't eat with a spoon.

08 1 1 1 You have two legs.

08 1 1 2 You have two heads.

08 1 2 1 You don't have three feet.

08 1 2 2 You don't have two hands.

09 1 1 1 You dance to music.

09 1 1 2 You dance to talking.

09 1 2 1 You don't dance to screaming.

09 1 2 2 You don't dance to records.

10 1 1 1 You are a child.

10 1 1 2 You are a grown-up

10 1 2 1 You aren't a baby.

10 1 2 2 You aren't a kid.

11 1 1 1 You cut with scissors.

11 1 1 2 You cut with a chair.

11 1 2 1 You don't cut with a key.

11 1 2 2 You don't cut with knives.

12 1 1 1 You have two hands.

12 1 1 2 You have three eyes.

12 1 2 1 You don't have two noses.

12 1 2 2 You don't have a nose.

Set 1

Black English Verification - Task 2

01 2 1 1 You can write with a pencil.

01 2 1 2 You can write with a chair.

01 2 2 1 You can't write with no shoe.

01 2 2 2 You can't write with no crayon.

02 2 1 1 You sleep on a bed.

02 2 1 2 You sleep on a cup.

02 2 2 1 You don't sleep on no desk.

02 2 2 2 You don't sleep on no sheets.

03 2 1 1 You wear shoes on your feet.

03 2 1 2 You wear a hat on your feet.

03 2 2 1 You don't wear no gloves on your feet.

03 2 2 2 You don't wear no socks on your feet.

04 2 1 1 You can read books.

04 2 1 2 You can read apples.

04 2 2 1 You can't read no hats.

04 2 2 2 You can't read no magazines.

05 2 1 1 You sit on a chair.

05 2 1 2 You sit on nails.

05 2 2 1 You don't sit on no glass.

05 2 2 2 You don't sit on no couch.

06 2 1 1 You can chew gum.

06 2 1 2 You can chew rocks.

06 2 2 1 You can't chew no paper.

06 2 2 2 You can't chew no food.

07 2 1 1 You eat with a fork.

07 2 1 2 You eat with a shoe.

07 2 2 1 You don't eat with no stick.

07 2 2 2 You don't eat with no spoon.

08 2 1 1 You got two legs.

08 2 1 2 You got two heads.

08 2 2 1 You ain't got no three feet.

08 2 2 2 You ain't got no two hands.

09 2 1 1 You dance to music.

09 2 1 2 You dance to talking.

09 2 2 1 You don't dance to no screaming.

09 2 2 2 You don't dance to no records.

10 2 1 1 You is a child.

10 2 1 2 You is a grown-up.

10 2 2 1 You ain't no baby.

10 2 2 2 You ain't no kid.

11 2 1 1 You cut with scissors.

11 2 1 2 You cut with a chair.

11 2 2 1 You don't cut with no key.

11 2 2 2 You don't cut with no knives.

12 2 1 1 You got two hands.

12 2 1 2 You got three eyes.

12 2 2 1 You ain't got no two noses.

12 2 2 2 You ain't got no nose.

Set 2

Standard English Verification - Task 1

01 1 1 1 You can write with a crayon.

01 1 1 2 You can write with a shoe.

01 1 2 1 You can't write with a chair.

01 1 2 2 You can't write with a pencil.

02 1 1 1 You sleep on sheets.

02 1 1 2 You sleep on a desk.

02 1 2 1 You don't sleep on a cup.

02 1 2 2 You don't sleep on a bed.

03 1 1 1 You wear socks on your feet.

03 1 1 2 You wear gloves on your feet.

03 1 2 1 You don't wear a hat on your feet.

03 1 2 2 You don't wear shoes on your feet.

04 1 1 1 You can read magazines.

04 1 1 2 You can read hats.

04 1 2 1 You can't read apples.

04 1 2 2 You can't read books.

05 1 1 1 You sit on a couch.

05 1 1 2 You sit on glass.

05 1 2 1 You don't sit on nails.

05 1 2 2 You don't sit on a chair.

06 1 1 1 You can chew food.

06 1 1 2 You can chew paper.

06 1 2 1 You can't chew rocks.

06 1 2 2 You can't chew gum.

07 1 1 1 You eat with a spoon.

07 1 1 2 You eat with a stick.

07 1 2 1 You don't eat with a shoe.

07 1 2 2 You don't eat with a fork.

08 1 1 1 You have two hands.

08 1 1 2 You have three feet.

08 1 2 1 You don't have two heads.

08 1 2 2 You don't have two legs.

09 1 1 1 You dance to records.

09 1 1 2 You dance to screaming.

09 1 2 1 You don't dance to talking.

09 1 2 2 You don't dance to music.

10 1 1 1 You are a kid.

10 1 1 2 You are a baby.

10 1 2 1 You aren't a grown-up.

10 1 2 2 You aren't a child.

11 1 1 1 You cut with knives.

11 1 1 2 You cut with a key.

11 1 2 1 You don't cut with a chair.

11 1 2 2 You don't cut with scissors.

12 1 1 1 You have a nose.

12 1 1 2 You have two noses.

12 1 2 1 You don't have three eyes.

12 1 2 2 You don't have two hands.

Set 2

Black English Verification - Task 2

01 2 1 1 You can write with a crayon.

01 2 1 2 You can write with a shoe.

01 2 2 1 You can't write with no chair.

01 2 2 2 You can't write with no pencil.

02 2 1 1 You sleep on sheets.

02 2 1 2 You sleep on a desk.

02 2 2 1 You don't sleep on no cup.

02 2 2 2 You don't sleep on no bed.

03 2 1 1 You wear socks on your feet.

03 2 1 2 You wear gloves on your feet.

03 2 2 1 You don't wear no hat on your feet.

03 2 2 2 You don't wear no shoes on your feet.

04 2 1 1 You can read magazines.

04 2 1 2 You can read hats.

04 2 2 1 You can't read no apples.

04 2 2 2 You can't read no books.

05 2 1 1 You sit on a couch.

05 2 1 2 You sit on glass.

05 2 2 1 You don't sit on no nails.

05 2 2 2 You don't sit on no chair.

06 2 1 1 You can chew food.

06 2 1 2 You can chew paper.

06 2 2 1 You can't chew no rocks.

06 2 2 2 You can't chew no gum.

07 2 1 1 You eat with a spoon.

07 2 1 2 You eat with a stick.

07 2 2 1 You don't eat with no shoe.

07 2 2 2 You don't eat with no fork.

08 2 1 1 You got two hands.

08 2 1 2 You got three feet.

08 2 2 1 You ain't got no two heads.

08 2 2 2 You ain't got no two legs.

09 2 1 1 You dance to records.

09 2 1 2 You dance to screaming.

09 2 2 1 You don't dance to no talking.

09 2 2 2 You don't dance to no music.

10 2 1 1 You is a kid.

10 2 1 2 You is a baby.

10 2 2 1 You ain't no grown-up.

10 2 2 2 You ain't no child.

11 2 1 1 You cut with knives.

11 2 1 2 You cut with a key.

11 2 2 1 You don't cut with no chair.

11 2 2 2 You don't cut with no scissors.

12 2 1 1 You got a nose.

12 2 1 2 You got two noses.

12 2 2 1 You ain't got no three eyes.

12 2 2 2 You ain't got no two hands.