



I L L I N O I S

---

UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

PRODUCTION NOTE

University of Illinois at  
Urbana-Champaign Library  
Large-scale Digitization Project, 2007.



370.152

T2261

211-177

**T  
E  
C  
H  
N  
I  
C  
A  
L** | **R  
E  
P  
O  
R  
T  
S**

Technical Report No. 180

EFFECT OF SITUATION ON THE VERBALIZATION  
OF BLACK INNER-CITY CHILDREN

Margaret S. Steffensen and Larry F. Guthrie  
University of Illinois at Urbana-Champaign

September 1980

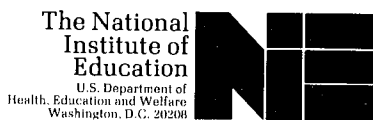
# Center for the Study of Reading

THE LIBRARY OF THE

OCT 7 1981

UNIVERSITY OF ILLINOIS  
AT URBANA-CHAMPAIGN

UNIVERSITY OF ILLINOIS  
AT URBANA-CHAMPAIGN  
51 Gerty Drive  
Champaign, Illinois 61820



BOLT BERANEK AND NEWMAN INC.  
50 Moulton Street  
Cambridge, Massachusetts 02138



CENTER FOR THE STUDY OF READING

Technical Report No. 180

EFFECT OF SITUATION ON THE VERBALIZATION  
OF BLACK INNER-CITY CHILDREN

Margaret S. Steffensen and Larry F. Guthrie  
University of Illinois at Urbana-Champaign

September 1980

University of Illinois  
at Urbana-Champaign  
51 Gerty Drive  
Champaign, Illinois 61820

Bolt Beranek and Newman Inc.  
50 Moulton Street  
Cambridge, Massachusetts 02138

The research reported herein was supported in part by the National Institute of Education under Contract No. US-NIE-C-400-76-0116. Larry Guthrie is currently with ARC Associates, Inc., Oakland, California.

## Abstract

Inner-city black children have often been labeled nonverbal. This study varied a formal testing situation to encourage verbalization in these children. Subjects were asked to identify items from the Peabody Picture Vocabulary Test in either a test situation (looking at the stimulus jointly with the experimenter) or a "need to know" situation (looking at the stimulus alone). It was predicted that subjects would give longer, more linguistically adequate responses in the sole perception condition than in the joint perception condition. Results supported this hypothesis. Sole-perception subjects produced more words and utterances than did joint-perception subjects, as well as more well-formed short answers and full-sentence responses. They also directed more non-task-related verbalizations to the experimenter. Joint perception subjects produced more highly elliptical responses (predicate phrase, verb, or adjective only), gave more responses in which the tense did not correspond with that of the question, and used pronouns without prior reference more frequently. A result which was not expected was that sole-perception subjects produced more accurate responses. This study suggests that changes in situational features can result in more valid measurements of the child's language ability and knowledge.

Effect of Situation on the Verbalization of  
Black Inner-City Children

In the sixties, a number of educational researchers characterized the speech of black inner-city children as substandard and inadequate (Bereiter & Engelmann, 1966; Deutsch, 1965; Hess & Shipman, 1965). The low achievement of pre-adolescent and adolescent inner-city children was attributed to the cumulative effect of this hypothesized early language deficit, and programs of remediation such as Head Start were developed and implemented. When improved school achievement was not forthcoming, or the gains made were not sustained through even the primary years, remediation of the individual child's language was supplemented by family intervention programs which focused on the mother's language and interactional patterns. (See Baratz & Baratz, 1970, for a discussion of these positions.)

The claim that black inner-city children spoke an inadequate language was vigorously attacked by linguists (e.g., Bailey, 1969; Fasold, 1969; Labov, 1972; Wolfram, 1969). They showed that many of the examples advanced by proponents of the "substandard language" claim were in fact well-documented rule-governed features of either the dialect of black inner-city residents, Black English Vernacular, or were identical to the early stages of the language of children acquiring Standard English (Steffensen, 1974).

A second counterattack centered on differences between the interactional patterns of middle-class white speakers and those of lower-class

black speakers. Hymes (1967) made the point that when children acquire language they also acquire habits governing the use of language, that is, they develop both linguistic and communicative competence. A child without such habits of use could be characterized as a "cultural monstrosity." Cazden (1970) emphasized the importance of the child's categorization of the social world, and his/her beliefs about appropriate ways of speaking in those perceived situations. For Cazden, social class and ethnic differences in the perception of the speech event are a source of differences in the performance of inner-city children: "We observe that a particular child in a particular situation either makes or fails to make a particular utterance. Traditionally, we have related that utterance only to characteristics of this child, such as his social class, while ignoring characteristics of the situation" (1970, p. 42). What is crucial is language use, not language form. Labov (1972) provided a vivid demonstration of how the situation may inhibit the verbal performance of an inner-city 8-year-old and he concluded "that the social situation is the most powerful determinant of verbal behavior and that an adult must enter into the right social relation with a child if he wants to find out what a child can do" (p. 212).

Bernstein (1971) called for greater attention to variables in the school setting which elicit differential performance by lower-class and middle-class children and criticized the assumption underlying intervention programs that the child's parents or home are inadequate. Baratz and Baratz (1970) claimed that it was the failure on the part of the school



to recognize and capitalize upon the different linguistic and cognitive styles of black lower-class children that made them appear uneducable.

The experimental situation itself may be culturally biased against members of a particular group because of differences in the perceptions of the task and the setting (Cazden, 1972; Sroufe, 1970). Houston (1970) has suggested that rural black children perceive a formal situation as one appropriate for their more formal language style, which may convey the appearance of disfluency to the middle-class observer.

The use of "test questions" can be an additional source of interference. Test questions differ from bona fide requests for information in that the interrogator knows the answer and is asking the hearer to display his/her knowledge. Such a speech function is not universal. In the low-income black community that she studied, Ward (1971) found that questions which adults addressed to children were information requests and not a form of "facetious drill." Labov has also provided evidence that black inner-city children are not aware that the adult's question is a demand for a display of knowledge nor do they realize that "the obvious answer is the right one" (Note 1, p. 14). In an experimental study of responding behavior, Hurst and Jones (1967) attempted to elicit verbalization from black Head Start children using techniques successful with white middle-class children, i.e., asking questions about realia and pictures. They found that little spontaneous speech was produced when such methods were used with their subjects. Pasamanick and Knobloch

(1955) categorized language items on the Gesell Developmental Examination into (a) reported language behavior, (b) comprehension of language, and (c) verbal responsiveness. They then analyzed the responses made to these items by black preschool children and found that scores on the verbal responsiveness items were significantly lower than those on the comprehension of language. While Pasamanick and Knobloch suggested that racial difference between the child and examiner was the cause, another interpretation would relate the child's behavior to aspects of the situation, including the use of test questions.

Whether a child is looking at a stimulus that he/she is describing with an adult or alone may affect performance. Working with a population of monolingual native speakers of Polish (mean age 3 years 3 months), Bokus and Shugar (1979) studied descriptions of pictures in two situations: one in which the subject looked at the picture with the experimenter and one in which he/she looked at it alone. The investigators found that in the sole-perception condition, children began by describing the picture, then shifted to their "internal store" and recounted past experiences related to the picture or hypothesized about future outcomes. In the joint-perception condition, children attempted to present new information but were continually pulled back to the perceptually obvious picture to which the experimenter was attending. Only limited verbalization was produced in this condition. Bokus and Shugar concluded that joint perception had a dampening effect on the children's performance. Given the authority

relationship between the adult and the child, and the fact that the adult was in possession of the same visual information as the child, the joint-perception condition led to early closure. The sole-perception condition, on the other hand, did not pit the child's perception against that of the adult, and the verbalizations produced reflected this.

Finally, there is evidence that lower SES black children are sensitive to their listener's communicative needs and modify their verbalizations accordingly. Using trials in which the experimenter was either blindfolded or could see the topic being discussed, Meissner and Apthorp (1976) found that their subjects switched from pointing to verbalization according to the experimenter's condition.

In the present study, it was hypothesized that the sensitivity of inner-city black preschoolers to listener needs might interact with their inexperience with test questions to depress their verbalization and produce the appearance of a low level of verbal fluency. The study was directed to the following questions: Can the testing situation be changed to encourage the verbalization of black inner-city children and thereby provide a more accurate assessment of their verbal ability, present knowledge, and educational potential? Will subjects give longer, more grammatically complete responses when the experimenter seems to need information than when it is clear the experimenter has the same knowledge that the child does? Will prompts stimulate more verbalization when the experimenter needs the information than when he/she already possesses it?

### Method

#### Subjects

Subjects were 31 black inner-city children (13 boys and 18 girls) who were enrolled in nursery school in two parochial schools in Chicago. They ranged in age from 3 years 1 month to 5 years 9 months. For purposes of analysis, they were divided into three groups: (a) youngest group, mean age 3 years 5 months; (b) middle group, mean age 4 years 5 months; (c) oldest group, mean age 5 years 5 months. Subjects were randomly assigned to the experimental or control condition.

#### Materials

Twenty pictures were selected from the Peabody Picture Vocabulary Test (PPVT). A list of the pictures chosen, with their PPVT plate numbers, is given in Table 1. An attempt was made to eliminate items that would be

-----  
Insert Table 1 about here.  
-----

unfamiliar to inner-city children, e.g., a man skiing, a chauffeur holding open the door of a limousine. One judged to be difficult (a castle) was included. Pictures were mounted on 8½ x 11 inch colored cardboard and placed in an office tray.

#### Procedure

Each child was tested individually. The experimenter, who was an adult white female, conducted each child from his/her classroom to a separate room in which the study was conducted. She showed the materials to the

subjects, told them that she thought some of the pictures were missing, and asked them to help complete a list of the pictures. In the sole-perception condition (experimental), the child sat on the floor next to a bookcase where an office tray holding the experimental materials was firmly attached to the bottom shelf. The experimenter sat at a table across the room where she obviously could not see the pictures and noted the subject's responses. In the joint-perception condition (control), the child and experimenter sat together at the table. In this condition, the stimulus materials were in clear view of both. The experimenter took each card out of the tray and showed it to the child. As in the sole-perception condition, she briefly wrote down the child's response.

The experimenter began by asking what the first picture was, then prompted each subsequent response with, "What's on the next picture?" If a child did not respond, he/she was asked only one more time for information about the picture. A limited number of probes were used if the child gave a response that was considered incomplete. In the case of the subject's giving superordinate categories for a noun, he/she was asked, "What kind of X?" In the case of supplying a noun for a picture in which the action was important, the child was asked, "What is X doing?" If only a verb was supplied, the child was prompted with, "Who's X-ing?"

All verbalizations were tape recorded on a Sony TC-520CS Stereo Cassette-Corder.

### Scoring

The tapes were transcribed and the protocols analyzed for amount of verbalization by subjects, accuracy of their responses, and number of experimenter prompts. The amount of verbalization included total number of words and total number of utterances that each subject produced. Contractions ("she's," "they're") were each counted as two words. When words were repeated, they were counted only once. However, if the utterance was expanded, all words were counted ("Bike--a little girl's bike." Five words).

Subjects' responses were rated for accuracy according to the following categories: (a) fully correct; (b) partially correct, leading to a prompt, e.g., "a girl" for the correct response "a girl sweeping"; (c) partially incorrect, leading to a prompt; (d) wrong. The partially incorrect category consisted almost entirely of responses such as "Something" to the experimenter's request, "What's on the next picture?" Experimenter prompts which requested additional information were counted, but those which directed the subject to the next stimulus were not.

### Results

Results showed that subjects in the sole-perception, need-to-know, condition (E) verbalized more and that their responses were more accurate and more syntactically complex than those of subjects in the joint perception, test condition (C). Of interest was whether age correlated with performance in either the sole or joint perception condition, and it was

therefore included as a main factor in all the analyses of variance. It proved nonsignificant in all cases and was not considered further.

Verbalization. Three measures of verbalization were utilized and results show that each supported the original hypothesis. First, the mean number of words per subject in the sole perception condition ( $\bar{X}_E = 100.31$ ) was significantly greater than in the joint-perception condition ( $\bar{X}_C = 79.93$ ),  $F(1,25) = 4.41$ ,  $p < .05$ . Second, the mean number of words per item was calculated. In the experimental condition not all children responded to all the items. This was attributed to the difficulty subjects had manipulating the cards in the tray, but it could also have been caused by their avoiding items they could not label or describe. In an effort to rule out such an interpretation, all eleven items that were omitted one or more times in the experimental condition were compared with responses to those items in the control condition. It was found that the items omitted were not those that the children in the control condition had the most difficulty with, refused to respond to most often, or gave incorrect answers for. Thus there did not seem to be a bias in the experimental condition against certain items. When the omission of items was taken into consideration ( $\bar{X}_E = 5.44$ ,  $\bar{X}_C = 4.01$ ), the difference between the sole- and joint-perception groups in number of words per item attempted is highly significant,  $F(1,25) = 10.06$ ,  $p < .01$ . A third measure of verbalization, the number of utterances per item attempted, also showed a significant difference between the two groups ( $\bar{X}_E = 1.82$ ,  $\bar{X}_C = 1.53$ ),  $F(1,25) = 7.25$ ,  $p < .05$ .

Item accuracy. Although it was not predicted, subjects in the experimental condition also got more items correct. Initially, a wide range of categories was established for the analysis of response accuracy. However, for this analysis, only those items which were correct either on the first response or after one prompt were counted. The response accuracy per item for each group was not significantly different ( $\bar{X}_E = .68$ ,  $\bar{X}_C = .62$ ),  $F(1,25) = .8$ ,  $p < .4$ . When the number of items attempted was considered, the response accuracy per item for the sole-perception group ( $\bar{X}_E = .74$ ) proved to be greater than that for the joint-perception group ( $\bar{X}_C = .62$ ) at a level approaching significance,  $F(1,25) = 3.95$ ,  $p = .0579$ .

Prompts. No significant differences were found either in the mean number of prompts required by subjects ( $\bar{X}_E = 8.00$ ,  $\bar{X}_C = 9.43$ ),  $F(1,25) < 1$ , or in the number of prompts per item attempted ( $\bar{X}_E = .43$ ,  $\bar{X}_C = .47$ ),  $F(1,25) < 1$ .

### Discussion

The present study suggests that by changing the setting of the speech event from a test situation to one requesting information, the responses of black inner-city preschoolers can be changed along a number of dimensions. These include (a) the amount of verbalization, (b) the grammatical adequacy of responses, and (c) the accuracy of responses. Each of these will be discussed.



Amount of Verbalization

Subjects in the sole-perception condition verbalized more than subjects in the joint-perception condition. The mean number of words produced in the two conditions was significant beyond the .05 level, an impressive finding given the omission of items by children in the sole-perception condition. When this fact was corrected for by calculating the number of words per item attempted, the difference for the two groups was significant beyond the .01 level. This provides additional evidence that black lower-class children are not accustomed to test questions, that they do not perceive the context as the adult middle-class speaker does, and that they do not fully understand how they are expected to behave and respond.

Dore (1977) has analyzed in detail the conditions necessary for a child to give information responses to information questions. His seven conditions include (a) that the child recognizes the addresser's expectation in asking the question, (b) that he/she believes the addresser wants the requested information, and (c) that he/she believes the addresser either does not know the requested information or wants the addressee to display his/her knowledge. According to Dore, if any of these conditions is not met, the child will have trouble with the question. In the case of the black lower-class child, it can be argued that all three of these conditions are often violated, with a resulting disruption of communication.

Unfortunately for the child caught in this situation, while the speaker's intent is covert, it is often assumed to be both obvious and shared. The fact that the answer is "crystal-clear" inhibits the child at the same time that it causes the experimenter to drastically lower his/her appraisal of the child's ability just because the child is unable to make such a "simple" response.

Another factor in subjects' greater production in the experimental situation may have been the absence of environmental support. In a study of child-adult interactions in a classroom and a supermarket, Cole, Dore, Hall, and Dowley (1978) found that responses to information questions about events and objects in the supermarket were longer in the classroom setting than in the supermarket itself, an effect that they attributed to displacement of the topic being discussed. Given the evidence that black inner-city children accommodate to their listeners' needs (Meissner & Apthorp, 1976), it is not at all surprising that in the sole-perception condition they had more to say about the stimuli. They were aware that the interactional demands were different in that their listener needed more information. This is also in line with Bokus and Shugar's (1979) finding that the effect of joint perception is to dampen children's production.

An analysis of experimenter prompts showed no difference between the sole- and joint-perception conditions for total number of prompts or number of prompts per item attempted. This suggests that the greater verbalization and accuracy of experimental subjects was due more to features of the situation than to any extra prompting or encouragement.

The Grammatical Adequacy of Responses

There are persistent claims that some poor black children will literally not speak a word in response to questions in a test situation (see, for example, Hurst & Jones, 1967, or Bereiter & Engelmann, 1966). This was not true for any of our subjects. The subject with the lowest rate of verbalization in the experimental condition (45 words total) was a boy, age 4 years, 1 month; in the control condition (48 words total), a girl, age 3 years, 6 months. While this would not be considered unrestrained or fluent speech, it was certainly far from a total failure to verbalize. In an effort to identify a possible basis for such judgments about the level of verbalization of black inner-city children, all responses made by subjects were rated as canonical or non-canonical using a modified version of the Hall and Bartlett (Note 2) scoring system. These researchers classified request-response sequences using three criteria: (a) the syntactic organization of the request-response pairs, (b) the topic of the request and the response, and (c) the sequential organization of the request and response. For example, they considered an answer canonical when it was a sincere response to the question posed, e.g., a response to an information question which supplied the requested WH-element and possibly other information as well.

In the present study, emphasis was placed on the grammatical relationship of the sentence pairs. Responses were considered canonical if they supplied all or part of the information requested by the experimenter. Responses were considered non canonical if they either did not supply the

information requested or answered slightly different questions. Both categories were further broken down to provide more detailed information about the grammatical form of the responses. The following examples refer to three items from the PPVT that showed (a) a girl sweeping, (b) a traffic light, and (c) a light bulb.

Category C1 - Minimal response, e.g., predicate phrase, verb or adjective only. "Sweeping." "Red and green."

C2 - Canonical, elliptical, e.g., article missing. "Girl sweeping floor."

C3 - Canonical, minor grammatical deviations, e.g., definite article substituted for indefinite article. "The girl sweeping the floor."

C4 - Canonical, well-formed short answer. "A girl sweeping the floor."

C5 - Canonical, well-formed sentence. "It's a girl sweeping the floor."

N1 - Non canonical, minor grammatical changes. Response answered a slightly different question than that posed by the experimenter, e.g., a change was made in tense. In addition, there were syntactic irregularities, such as the use of pronouns without prior reference. "She sweeps the floor."

N2 - Non canonical, well-formed sentence, e.g., in response to experimenter's question, "What kind of light?", subject responded, "We put the light up."

R1 - Subject's utterance was related generally to task or setting but not to the identification of a particular experimental item, e.g., subject pointed to tape recorder and asked, "What's that?"

Canonical responses to indirect requests, e.g., experimenter said, "Would you like to put that card down and tell me what's on the next one?" and subject replied, "Yes."

See Dore (1977) for a similar coding system.

The scoring of subjects' responses on the basis of whether or not they were canonical, and details regarding their grammatical structure, provided some insight into the basis for the stereotyped judgments about the speech of black inner-city children (see Table 2). First, it will be noted that

-----  
Insert Table 2 about here.  
-----

joint-perception subjects produced a higher number of responses of category C1--utterances which responded to the topic of the question but which were grammatically odd because they lacked a subject or were produced with some other intrusive truncation--than did sole-perception subjects. They also produced more non-canonical responses that included such irregularities as the use of pronouns without first mentioning the referent (N1). It was felt that such grammatical irregularities would contribute to listener judgments of non-fluency. The sole-perception group, on the other hand, produced more

well-formed short answers, e.g., "a girl sweeping" and more well-formed full sentence responses (of which there were only three for the control group). Short answers are used by virtually all competent speakers of Standard English and full sentence responses are often expected in certain testing situations. For these reasons, both of these utterance types would contribute favorably to adult judgments of linguistic competence in the children being assessed.

It should also be noted that subjects in the experimental condition directed many more verbalizations to the testers that were not directly related to the stimuli than did subjects in the control condition ( $\bar{X}_E = 4.28$  experimental;  $\bar{X}_C = .69$  control). This supports the claim that for these children the sole perception condition was a more natural situation than was the joint perception condition in spite of the fact that it was rather contrived.<sup>1</sup> Children in the experimental condition behaved in a way that made a more realistic assessment of their verbal ability possible.

Houston (1970) found that the black children she studied in rural northern Florida had at least two registers, which she labeled the school register and the non school register. The school register was used by her subjects in formal situations and when speaking to those in authority or to those observing or testing them. Houston found that this register included a number of linguistic characteristics such as foreshortened utterances and simplified syntax which are considered indications of nonfluency. The results of the above grammatical analysis suggest that

besides all the other things working against the children in the testing situation, they may have perceived the joint-perception condition as one in which the school register was appropriate and therefore elected to use their less fluent code.

#### Accuracy of Responses

There was one rather surprising finding in the data that approached significance: Children in the experimental situation gave slightly more answers that were judged correct ( $p < .0579$ ). We know of no sociolinguistic theory that would predict such a finding. If it can be claimed that the sole-perception condition produced less anxiety than the joint-perception condition, then this finding may be an indication of the phenomenon that when subjects are less anxious they do better on a task.

#### Conclusion

This research provides evidence that the speech situation can be manipulated in a way that will provide a more realistic assessment of the linguistic competence and the knowledge base of inner-city children. The conceptual framework for a great deal of the recent research on language variation has been the "different culture" model. However, Ogbu (1979) has suggested that in fact the language patterns of inner-city children do not represent a different culture. Rather, he sees them as a successful adaptation to the roles that will be available to these children as adults in a stratified society that allows them only a limited number of options.

The positions these children will occupy predicate different skills from those required by middle-class children. Far from being an indication of the family's "failure to socialize," the speech of inner-city children is proof of adaptive socialization which produces competent adults in the existing social structure.

Labov (Note 1) has proposed a similar conceptualization. He analyzes testing situations such as the one investigated in this study as resting on several assumptions, including the "goodness of talk" and the "harmlessness of talk." However, these assumptions are not shared by inner-city children, and they put up stiff resistance to the educational socialization which violates their own beliefs until they reject school as a whole.

These viewpoints suggest that in the testing process as it is now usually conducted, the schools are not facing a lack of familiarity with one dialect and culture on the part of inner-city children, but rather are creating a situation which attempts to elicit behavior that runs counter to an adequate response to social realities. The schools most likely will not be successful in a frontal attack on this constrained verbal behavior. However, the present research provides one way in which the situation may be changed to encourage a greater display of the linguistic and world knowledge of inner-city children.



Reference Notes

1. Labov, W. Systematically misleading data from test questions. Transcript of the colloquium held April 1, 1970, sponsored by the School of Social Work and the Department of Linguistics, University of Michigan.
2. Hall, W. S., & Bartlett, E. J. Development of a research agenda on patterns of inquiry in adult-child interactions. Mimeo.

## References

- Bailey, B. L. Language and communicative styles of Afro-American children in the United States. In A. C. Aarons, B. Y. Gordon, & W. A. Stewart (Eds.), Linguistic and cultural differences and American education. Florida Foreign Language Reporter, 1969, 7, 46, 153.
- Baratz, S. S., & Baratz, J. C. Early childhood intervention: The social science base of institutional racism. Harvard Educational Review, 1970, 40, 29-50.
- Bereiter, C., & Engelmann, S. Teaching disadvantaged children in the preschool. Englewood Cliffs, N.J.: Prentice-Hall, 1966.
- Bernstein, B. Class, codes, and control (Vol. 1). London: Routledge & Kegan Paul, 1971.
- Bokus, B., & Shugar, G. W. What will a three-year-old say? An experimental study of situational variation. In O. K. Garnica, & M. L. King (Eds.), Language, children and society: The effect of social factors on children learning to communicate. New York: Pergamon Press, 1979.
- Cazden, C. B. The situation: A neglected source of social class differences in language use. Journal of Social Issues, 1970, 26, 35-59.
- Cazden, C. B. Child language and education. New York: Holt, Rinehart & Winston, 1972.
- Cole, M., Dore, J., Hall, W. S., & Dowley, G. Situational variables in the speech of the preschool child. Annals of the New York Academy of Sciences, Papers in Anthropology and Linguistics, 1978, 318, 65-105.

- Deutsch, M. The role of social class in language development and cognition. American Journal of Orthopsychiatry, 1965, 35, 77-88.
- Dore, J. Oh them sheriff: A pragmatic analysis of children's responses to questions. In S. Ervin-Tripp & C. Mitchell-Kernan (Eds.), Child discourse. New York: Academic Press, 1977.
- Fasold, R. W. Tense and the form 'be' in Black English. Language, 1969, 45, 763-777.
- Hess, R. D., & Shipman, V. C. Early experience and the socialization of cognitive modes in children. Child Development, 1965, 36, 869-886.
- Houston, S. H. A reexamination of some assumptions about the language of the disadvantaged child. Child Development, 1970, 41, 947-963.
- Hurst, C. G., Jr., & Jones, W. L. Generating spontaneous speech in the underprivileged child. Journal of Negro Education, 1967, 36, 362-367.
- Hymes, D. Models of the interaction of language and social setting. Journal of Social Issues, 1967, 23, 8-28.
- Labov, W. Language in the inner city. Philadelphia: University of Pennsylvania Press, 1972.
- Meissner, J. A., & Apthorp, H. Nonegocentrism and communication mode switching in black preschool children. Developmental Psychology, 1976, 12, 245-249.
- Ogbu, J. U. Social stratification and the socialization of competence. Anthropology and Education Quarterly, 1979, 10, 3-20.

- Pasamanick, B., & Knobloch, H. Early language behavior in Negro children and the testing of intelligence. Journal of Abnormal and Social Psychology, 1955, 50, 401-402.
- Sroufe, L. A. A methodological and philosophical critique of intervention-oriented research. Developmental Psychology, 1970, 2, 140-145.
- Steffensen, M. S. The acquisition of Black English. Unpublished doctoral dissertation, University of Illinois, 1974.
- Wolfram, W. A sociolinguistic description of Detroit Negro speech (Urban Language Series, No. 5). Washington, D.C.: Center for Applied Linguistics, 1969.
- Ward, M. C. Them children. New York: Holt, Rinehart & Winston, 1971.

## Footnote

<sup>1</sup>Hall and Bartlett (Note 2) report on the differences in interrogator acknowledgements of answers to requests for information ("I see" or "Un huh") and to test questions ("Yes, that's right" or "That's a good answer"). Bokus and Shugar (1979) report on similar differences in their study which correlated with the sole-and joint-perception situations. In the present study, these experimenter responses were not controlled. In many cases in the sole-perception condition, the experimenter verbalized in a way appropriate for the test question situation, thus making the speech event less natural.

Table 1  
Plates on Which Stimulus Items Occur

Item	PPVT Plate No.
Table	1
Bus	2
Horse	3
Baby shoe	5
Children playing	8
Girl sweeping	11
Girl knocking on a door	15
Girl feeding a cat	23
Ambulance	32
Flowers	37
Broken bowl	85
Boy falling down a hill	13
Traffic light	49
Boy riding a bicycle	55
Woman talking on a telephone	65
Boys fighting	69
Automobile tire	19
Man climbing a mountain	95
Castle	97
Light bulb	101

Table 2  
Responses Made to Stimuli by Experimental  
and Control Groups

Group	Response Types							
	C1	C2	C3	C4	C5	N1	N2	R1
Control								
Number of responses	30	112	20	169	3	33	20	9
Mean/child	2.31 <sup>†</sup>	8.62	1.54	13.0	.23 <sup>*</sup>	2.54 <sup>†</sup>	1.54	.69 <sup>**</sup>
Experimental								
Number of responses	13	100	33	282	28	24	30	77
Mean/child	.72 <sup>†</sup>	5.56	1.83	15.67	1.56 <sup>*</sup>	1.33 <sup>†</sup>	1.67	4.28 <sup>**</sup>

\*  $p < .05$

\*\*  $p < .01$

<sup>†</sup> Approaching significance

## CENTER FOR THE STUDY OF READING

### READING EDUCATION REPORTS

- No. 1: Durkin, D. *Comprehension Instruction—Where are You?*, October 1977. (ERIC Document Reproduction Service No. ED 146 566, 14p., PC-\$1.82, MF-.83)
- No. 2: Asher, S. R. *Sex Differences in Reading Achievement*, October 1977. (ERIC Document Reproduction Service No. ED 145 567, 30p., PC-\$3.32, MF-.83)
- No. 3: Adams, M. J., Anderson, R. C., & Durkin, D. *Beginning Reading: Theory and Practice*, November 1977. (ERIC Document Reproduction Service No. ED 151 722, 15p., PC-\$1.82, MF-.83)
- No. 4: Jenkins, J. R., & Pany, D. *Teaching Reading Comprehension in the Middle Grades*, January 1978. (ERIC Document Reproduction Service No. ED 151 756, 36p., PC-\$3.32, MF-.83)
- No. 5: Bruce, B. *What Makes a Good Story?*, June 1978. (ERIC Document Reproduction Service No. ED 158 222, 16p., PC-\$1.82, MF-.83)
- No. 6: Anderson, T. H. *Another Look at the Self-Questioning Study Technique*, September 1978. (ERIC Document Reproduction Service No. ED 163 441, 19p., PC-\$1.82, MF-.83)
- No. 7: Pearson, P. D., & Kamil, M. L. *Basic Processes and Instructional Practices in Teaching Reading*, December 1978. (ERIC Document Reproduction Service No. ED 165 118, 29p., PC-\$3.32, MF-.83)
- No. 8: Collins, A., & Haviland, S. E. *Children's Reading Problems*, June 1979. (ERIC Document Reproduction Service No. ED 172 188, 19p., PC-\$1.82, MF-.83)
- No. 9: Schallert, D. L., & Kleiman, G. M. *Some Reasons Why Teachers are Easier to Understand than Textbooks*, June 1979. (ERIC Document Reproduction Service No. ED 172 189, 17p., PC-\$1.82, MF-.83)
- No. 10: Baker, L. *Do I Understand or Do I not Understand: That is the Question*, July 1979. (ERIC Document Reproduction Service No. ED 174 948, 27p., PC-\$3.32, MF-.83)
- No. 11: Anderson, R. C., & Freebody, P. *Vocabulary Knowledge and Reading*, August 1979. (ERIC Document Reproduction Service No. ED 177 470, 52p., PC-\$4.82, MF-.83)
- No. 12: Joag-dev, C., & Steffensen, M. S. *Studies of the Bicultural Reader: Implications for Teachers and Librarians*, January 1980. (ERIC Document Reproduction Service No. ED 181 430, 28p., PC-\$3.32, MF-.83)
- No. 13: Adams, M., & Bruce, B. *Background Knowledge and Reading Comprehension*, January 1980. (ERIC Document Reproduction Service No. ED 181 431, 48p., PC-\$3.32, MF-.83)
- No. 14: Rubin, A. *Making Stories, Making Sense* (includes a response by T. Raphael and J. LaZansky), January 1980. (ERIC Document Reproduction Service No. ED 181 432, 42p., PC-\$3.32, MF-.83)
- No. 15: Tierney, R. J., & LaZansky, J. *The Rights and Responsibilities of Readers and Writers: A Contractual Agreement* (includes responses by R. N. Kantor and B. B. Armbruster), January 1980. (ERIC Document Reproduction Service No. ED 181 447, 32p., PC-\$3.32, MF-.83)
- No. 16: Anderson, T. H., Armbruster, B. B., & Kantor, R. N. *How Clearly Written are Children's Textbooks? Or, Of Bladderworts and Alfa* (includes a response by M. Kane, Senior Editor, Ginn and Company), August 1980.
- No. 17: Tierney, R. J., Mosenthal, J., & Kantor, R. N. *Some Classroom Applications of Text Analysis: Toward Improving Text Selection and Use*, August 1980.



## CENTER FOR THE STUDY OF READING

### TECHNICAL REPORTS

- No. 1: Halff, H. M. *Graphical Evaluation of Hierarchical Clustering Schemes*, October 1975. (ERIC Document Reproduction Service No. ED 134 926, 11p., PC-\$1.82, MF-.83)
- No. 2: Spiro, R. J. *Inferential Reconstruction in Memory for Connected Discourse*, October 1975. (ERIC Document Reproduction Service No. ED 136 187, 81p., PC-\$6.32, MF-.83)
- No. 3: Goetz, E. T. *Sentences in Lists and in Connected Discourse*, November 1975. (ERIC Document Reproduction Service No. ED 134 927, 75p., PC-\$4.82, MF-.83)
- No. 4: Alessi, S. M., Anderson, T. H., & Biddle, W. B. *Hardware and Software Considerations in Computer Based Course Management*, November 1975. (ERIC Document Reproduction Service No. ED 134 928, 21p., PC-\$1.82, MF-.83)
- No. 5: Schallert, D. L. *Improving Memory for Prose: The Relationship between Depth of Processing and Context*, November 1975. (ERIC Document Reproduction Service No. ED 134 929, 37p., PC-\$3.32, MF-.83)
- No. 6: Anderson, R. C., Goetz, E. T., Pichert, J. W., & Halff, H. M. *Two Faces of the Conceptual Peg Hypothesis*, January 1976. (ERIC Document Reproduction Service No. ED 134 930, 29p., PC-\$3.32, MF-.83)
- No. 7: Ortony, A. *Names, Descriptions, and Pragmatics*, February 1976. (ERIC Document Reproduction Service No. ED 134 931, 25p., PC-\$1.82, MF-.83)
- No. 8: Mason, J. M. *Questioning the Notion of Independent Processing Stages in Reading*, February 1976. (*Journal of Educational Psychology*, 1977, 69, 288-297)
- No. 9: Siegel, M. A. *Teacher Behaviors and Curriculum Packages: Implications for Research and Teacher Education*, April 1976. (ERIC Document Reproduction Service No. ED 134 932, 42p., PC-\$3.32, MF-.83)
- No. 10: Anderson, R. C., Pichert, J. W., Goetz, E. T., Schallert, D. L., Stevens, K. C., & Trollip, S. R. *Instantiation of General Terms*, March 1976. (ERIC Document Reproduction Service No. ED 134 933, 30p., PC-\$3.32, MF-.83)
- No. 11: Armbruster, B. B. *Learning Principles from Prose: A Cognitive Approach Based on Schema Theory*, July 1976. (ERIC Document Reproduction Service No. ED 134 934, 48p., PC-\$3.32, MF-.83)
- No. 12: Anderson, R. C., Reynolds, R. E., Schallert, D. L., & Goetz, E. T. *Frameworks for Comprehending Discourse*, July 1976. (ERIC Document Reproduction Service No. ED 134 935, 33p., PC-\$3.32, MF-.83)
- No. 13: Rubin, A. D., Bruce, B. C., & Brown, J. S. *A Process-Oriented Language for Describing Aspects of Reading Comprehension*, November 1976. (ERIC Document Reproduction Service No. ED 136 188, 41p., PC-\$3.32, MF-.83)
- No. 14: Pichert, J. W., & Anderson, R. C. *Taking Different Perspectives on a Story*, November 1976. (ERIC Document Reproduction Service No. ED 134 936, 30p., PC-\$3.32, MF-.83)
- No. 15: Schwartz, R. M. *Strategic Processes in Beginning Reading*, November 1976. (ERIC Document Reproduction Service No. ED 134 937, 19p., PC-\$1.82, MF-.83)
- No. 16: Jenkins, J. R., & Pany, D. *Curriculum Biases in Reading Achievement Tests*, November 1976. (ERIC Document Reproduction Service No. ED 134 938, 24p., PC-\$1.82, MF-.83)
- No. 17: Asher, S. R., Hymel, S., & Wigfield, A. *Children's Comprehension of High- and Low-Interest Material and a Comparison of Two Cloze Scoring Methods*, November 1976. (ERIC Document Reproduction Service No. ED 134 939, 32p., PC-\$3.32, MF-.83)
- No. 18: Brown, A. L., Smiley, S. S., Day, J. D., Townsend, M. A. R., & Lawton, S. C. *Intrusion of a Thematic Idea in Children's Comprehension and Retention of Stories*, December 1976. (ERIC Document Reproduction Service No. ED 136 189, 39p., PC-\$3.32, MF-.83)
- No. 19: Kleiman, G. M. *The Prelinguistic Cognitive Basis of Children's Communicative Intentions*, February 1977. (ERIC Document Reproduction Service No. ED 134 940, 51p., PC-\$4.82, MF-.83)
- No. 20: Kleiman, G. M. *The Effect of Previous Context on Reading Individual Words*, February 1977. (ERIC Document Reproduction Service No. ED 134 941, 76p., PC-\$6.32, MF-.83)
- No. 21: Kane, J. H., & Anderson, R. C. *Depth of Processing and Interference Effects in the Learning and Remembering of Sentences*, February 1977. (ERIC Document Reproduction Service No. ED 134 942, 29p., PC-\$3.32, MF-.83)

- No. 22: Brown, A. L., & Campione, J. C. *Memory Strategies in Learning: Training Children to Study Strategically*, March 1977. (ERIC Document Reproduction Service No. ED 136 234, 54p., PC-\$4.82, MF-\$83)
- No. 23: Smiley, S. S., Oakley, D. D., Worthen, D., Campione, J. C., & Brown, A. L. *Recall of Thematically Relevant Material by Adolescent Good and Poor Readers as a Function of Written Versus Oral Presentation*, March 1977. (ERIC Document Reproduction Service No. ED 136 235, 23p., PC-\$1.82, MF-\$83)
- No. 24: Anderson, R. C., Spiro, R. J., & Anderson, M. C. *Schemata as Scaffolding for the Representation of Information in Connected Discourse*, March 1977. (ERIC Document Reproduction Service No. ED 136 236, 18p., PC-\$1.82, MF-\$83)
- No. 25: Pany, D., & Jenkins, J. R. *Learning Word Meanings: A Comparison of Instructional Procedures and Effects on Measures of Reading Comprehension with Learning Disabled Students*, March 1977. (ERIC Document Reproduction Service No. ED 136 237, 34p., PC-\$3.32, MF-\$83)
- No. 26: Armbruster, B. B., Stevens, R. J., & Rosenshine, B. *Analyzing Content Coverage and Emphasis: A Study of Three Curricula and Two Tests*, March 1977. (ERIC Document Reproduction Service No. ED 136 238, 22p., PC-\$1.82, MF-\$83)
- No. 27: Ortony, A., Reynolds, R. E., & Arter, J. A. *Metaphor: Theoretical and Empirical Research*, March 1977. (ERIC Document Reproduction Service No. ED 137 752, 63p., PC-\$4.82, MF-\$83)
- No. 28: Ortony, A. *Remembering and Understanding Jabberwocky and Small-Talk*, March 1977. (ERIC Document Reproduction Service No. ED 137 753, 36p., PC-\$3.32, MF-\$83)
- No. 29: Schallert, D. L., Kleiman, G. M., & Rubin, A. D. *Analysis of Differences between Oral and Written Language*, April 1977. (ERIC Document Reproduction Service No. ED 144 038, 33p., PC-\$3.32, MF-\$83)
- No. 30: Goetz, E. T., & Osborn, J. *Procedures for Sampling Texts and Tasks in Kindergarten through Eighth Grade*, April 1977. (ERIC Document Reproduction Service No. ED 146 565, 80p., PC-\$6.32, MF-\$83)
- No. 31: Nash-Webber, B. *Anaphora: A Cross-Disciplinary Survey*, April 1977. (ERIC Document Reproduction Service No. ED 144 039, 43p., PC-\$3.32, MF-\$83)
- No. 32: Adams, M. J., & Collins, A. *A Schema-Theoretic View of Reading Comprehension*, April 1977. (ERIC Document Reproduction Service No. ED 142 971, 49p., PC-\$3.32, MF-\$83)
- No. 33: Huggins, A. W. F. *Syntactic Aspects of Reading Comprehension*, April 1977. (ERIC Document Reproduction Service No. ED 142 972, 68p., PC-\$4.82, MF-\$83)
- No. 34: Bruce, B. C. *Plans and Social Actions*, April 1977. (ERIC Document Reproduction Service No. ED 149 328, 45p., PC-\$3.32, MF-\$83)
- No. 35: Rubin, A. D. *Comprehension Processes in Oral and Written Language*, April 1977. (ERIC Document Reproduction Service No. ED 150 550, 61p., PC-\$4.82, MF-\$83)
- No. 36: Nash-Webber, B., & Reiter, R. *Anaphora and Logical Form: On Formal Meaning Representation for Natural Language*, April 1977. (ERIC Document Reproduction Service No. ED 142 973, 42p., PC-\$3.32, MF-\$83)
- No. 37: Adams, M. J. *Failures to Comprehend and Levels of Processing in Reading*, April 1977. (ERIC Document Reproduction Service No. ED 145 410, 51p., PC-\$4.82, MF-\$83)
- No. 38: Woods, W. A. *Multiple Theory Formation in High-Level Perception*, April 1977. (ERIC Document Reproduction Service No. ED 144 020, 58p., PC-\$4.82, MF-\$83)
- No. 40: Collins, A., Brown, J. S., & Larkin, K. M. *Inference in Text Understanding*, December 1977. (ERIC Document Reproduction Service No. ED 150 547, 48p., PC-\$3.32, MF-\$83)
- No. 41: Anderson, R. C., & Pichert, J. W. *Recall of Previously Unrecallable Information Following a Shift in Perspective*, April 1977. (ERIC Document Reproduction Service No. ED 142 974, 37p., PC-\$3.32, MF-\$83)
- No. 42: Mason, J., Osborn, J., & Rosenshine, B. *A Consideration of Skill Hierarchy Approaches to the Teaching of Reading*, December 1977. (ERIC Document Reproduction Service No. ED 150 549, 176p., PC-\$12.32, MF-\$83)
- No. 43: Collins, A., Brown, A. L., Morgan, J. L., & Brewer, W. F. *The Analysis of Reading Tasks and Texts*, April 1977. (ERIC Document Reproduction Service No. ED 145 404, 96p., PC-\$6.32, MF-\$83)
- No. 44: McClure, E. *Aspects of Code-Switching in the Discourse of Bilingual Mexican-American Children*, April 1977. (ERIC Document Reproduction Service No. ED 142 975, 38p., PC-\$3.32, MF-\$83)
- No. 45: Schwartz, R. M. *Relation of Context Utilization and Orthographic Automaticity in Word Identification*, May 1977. (ERIC Document Reproduction Service No. ED 137 762, 27p., PC-\$3.32, MF-\$83)

- No. 46: Anderson, R. C., Stevens, K. C., Shifrin, Z., & Osborn, J. *Instantiation of Word Meanings in Children*, May 1977. (ERIC Document Reproduction Service No. ED 142 976, 22p., PC-\$1.82, MF-\$83)
- No. 47: Brown, A. L. *Knowing When, Where, and How to Remember: A Problem of Metacognition*, June 1977. (ERIC Document Reproduction Service No. ED 146 562, 152p., PC-\$10.82, MF-\$83)
- No. 48: Brown, A. L., & DeLoache, J. S. *Skills, Plans, and Self-Regulation*, July 1977. (ERIC Document Reproduction Service No. ED 144 040, 66p., PC-\$4.82, MF-\$83)
- No. 49: Goetz, E. T. *Inferences in the Comprehension of and Memory for Text*, July 1977. (ERIC Document Reproduction Service No. ED 150 548, 97p., PC-\$6.32, MF-\$83)
- No. 50: Anderson, R. C. *Schema-Directed Processes in Language Comprehension*, July 1977. (ERIC Document Reproduction Service No. ED 142 977, 33p., PC-\$3.32, MF-\$83)
- No. 51: Brown, A. L. *Theories of Memory and the Problems of Development: Activity, Growth, and Knowledge*, July 1977. (ERIC Document Reproduction Service No. ED 144 041, 59p., PC-\$4.82, MF-\$83)
- No. 52: Morgan, J. L. *Two Types of Convention in Indirect Speech Acts*, July 1977. (ERIC Document Reproduction Service No. ED 145 405, 40p., PC-\$3.32, MF-\$83)
- No. 53: Brown, A. L., Smiley, S. S., & Lawton, S. C. *The Effects of Experience on the Selection of Suitable Retrieval Cues for Studying from Prose Passages*, July 1977. (ERIC Document Reproduction Service No. ED 144 042, 30p., PC-\$3.32, MF-\$83)
- No. 54: Fleisher, L. S., & Jenkins, J. R. *Effects of Contextualized and Decontextualized Practice Conditions on Word Recognition*, July 1977. (ERIC Document Reproduction Service No. ED 144 043, 37p., PC-\$3.32, MF-\$83)
- No. 55: Jenkins, J. R., & Larson, K. *Evaluating Error Correction Procedures for Oral Reading*, June 1978. (ERIC Document Reproduction Service No. ED 158 224, 34p., PC-\$3.32, MF-\$83)
- No. 56: Anderson, T. H., Standiford, S. N., & Alessi, S. M. *Computer Assisted Problem Solving in an Introductory Statistics Course*, August 1977. (ERIC Document Reproduction Service No. ED 146 563, 26p., PC-\$3.32, MF-\$83)
- No. 57: Barnitz, J. *Interrelationship of Orthography and Phonological Structure in Learning to Read*, August 1977. (ERIC Document Reproduction Service No. ED 150 546, 62p., PC-\$4.82, MF-\$83)
- No. 58: Mason, J. M. *The Role of Strategy in Reading in the Mentally Retarded*, September 1977. (ERIC Document Reproduction Service No. ED 145 406, 28p., PC-\$3.32, MF-\$83)
- No. 59: Mason, J. M. *Reading Readiness: A Definition and Skills Hierarchy from Preschoolers' Developing Conceptions of Print*, September 1977. (ERIC Document Reproduction Service No. ED 145 403, 57p., PC-\$4.82, MF-\$83)
- No. 60: Spiro, R. J., & Esposito, J. J. *Superficial Processing of Explicit Inferences in Text*, December 1977. (ERIC Document Reproduction Service No. ED 150 545, 27p., PC-\$3.32, MF-\$83)
- No. 65: Brewer, W. F. *Memory for the Pragmatic Implications of Sentences*, October 1977. (ERIC Document Reproduction Service No. ED 146 564, 27p., PC-\$3.32, MF-\$83)
- No. 66: Brown, A. L., & Smiley, S. S. *The Development of Strategies for Study Prose Passages*, October 1977. (ERIC Document Reproduction Service No. ED 145 371, 59p., PC-\$4.82, MF-\$83)
- No. 68: Stein, N. L., & Nezworski, T. *The Effects of Organization and Instructional Set on Story Memory*, January 1978. (ERIC Document Reproduction Service No. ED 149 327, 41p., PC-\$3.32, MF-\$83)
- No. 69: Stein, N. L. *How Children Understand Stories: A Developmental Analysis*, March 1978. (ERIC Document Reproduction Service No. ED 153 205, 68p., PC-\$4.82, MF-\$83)
- No. 76: Thieman, T. J., & Brown, A. L. *The Effects of Semantic and Formal Similarity on Recognition Memory for Sentences in Children*, November 1977. (ERIC Document Reproduction Service No. ED 150 551, 26p., PC-\$3.32, MF-\$83)
- No. 77: Nash-Webber, B. L. *Inferences in an Approach to Discourse Anaphora*, January 1978. (ERIC Document Reproduction Service No. ED 150 552, 30p., PC-\$3.32, MF-\$83)
- No. 78: Gentner, D. *On Relational Meaning: The Acquisition of Verb Meaning*, December 1977. (ERIC Document Reproduction Service No. ED 149 325, 46p., PC-\$3.32, MF-\$83)
- No. 79: Royer, J. M. *Theories of Learning Transfer*, January 1978. (ERIC Document Reproduction Service No. ED 149 326, 55p., PC-\$4.82, MF-\$83)
- No. 80: Arter, J. A., & Jenkins, J. R. *Differential Diagnosis-Prescriptive Teaching: A Critical Appraisal*, January 1978. (ERIC Document Reproduction Service No. ED 150 578, 104p., PC-\$7.82, MF-\$83)
- No. 81: Shoben, E. J. *Choosing a Model of Sentence Picture Comparisons: A Reply to Catlin and Jones*, February 1978. (ERIC Document Reproduction Service No. ED 150 577, 30p., PC-\$3.32, MF-\$83)

- No. 82: Steffensen, M. S. *Bereiter and Engelmann Reconsidered: The Evidence from Children Acquiring Black English Vernacular*, March 1978. (ERIC Document Reproduction Service No. ED 153 204, 31p., PC-\$3.32, MF-\$83)
- No. 83: Reynolds, R. E., Standiford, S. N., & Anderson, R. C. *Distribution of Reading Time When Questions are Asked about a Restricted Category of Text Information*, April 1978. (ERIC Document Reproduction Service No. ED 153 206, 34p., PC-\$3.32, MF-\$83)
- No. 84: Baker, L. *Processing Temporal Relationships in Simple Stories: Effects of Input Sequence*, April 1978. (ERIC Document Reproduction Service No. ED 157 016, 54p., PC-\$4.82, MF-\$83)
- No. 85: Mason, J. M., Knisely, E., & Kendall, J. *Effects of Polysemous Words on Sentence Comprehension*, May 1978. (ERIC Document Reproduction Service No. ED 157 015, 34p., PC-\$3.32, MF-\$83)
- No. 86: Anderson, T. H., Wardrop, J. L., Hively W., Muller, K. E., Anderson, R. I., Hastings, C. N., & Fredericksen, J. *Development and Trial of a Model for Developing Domain Referenced Tests of Reading Comprehension*, May 1978. (ERIC Document Reproduction Service No. ED 157 036, 69p., PC-\$4.82, MF-\$83)
- No. 87: Andre, M. E. D. A., & Anderson, T. H. *The Development and Evaluation of a Self-Questioning Study Technique*, June 1978. (ERIC Document Reproduction Service No. ED 157 037, 37p., PC-\$3.32, MF-\$83)
- No. 88: Bruce, B. C., & Newman, D. *Interacting Plans*, June 1978. (ERIC Document Reproduction Service No. ED 157 038, 100p., PC-\$6.32, MF-\$83)
- No. 89: Bruce, B. C., Collins, A., Rubin, A. D., & Gentner, D. *A Cognitive Science Approach to Writing*, June 1978. (ERIC Document Reproduction Service No. ED 157 039, 57p., PC-\$4.82, MF-\$83)
- No. 90: Asher, S. R. *Referential Communication*, June 1978. (ERIC Document Reproduction Service No. ED 159 597, 71p., PC-\$4.82, MF-\$83)
- No. 91: Royer, J. M., & Cunningham, D. J. *On the Theory and Measurement of Reading Comprehension*, June 1978. (ERIC Document Reproduction Service No. ED 157 040, 63p., PC-\$4.82, MF-\$83)
- No. 92: Mason, J. M., Kendall, J. R. *Facilitating Reading Comprehension Through Text Structure Manipulation*, June 1978. (ERIC Document Reproduction Service No. ED 157 041, 36p., PC-\$3.32, MF-\$83)
- No. 93: Ortony, A., Schallert, D. L., Reynolds, R. E., & Antos, S. J. *Interpreting Metaphors and Idioms: Some Effects of Context on Comprehension*, July 1978. (ERIC Document Reproduction Service No. ED 157 042, 41p., PC-\$3.32, MF-\$83)
- No. 94: Brown, A. L., Campione, J. C., & Barclay, C. R. *Training Self-Checking Routines for Estimating Test Readiness: Generalization from List Learning to Prose Recall*, July 1978. (ERIC Document Reproduction Service No. ED 158 226, 41p., PC-\$3.32, MF-\$83)
- No. 95: Reichman, R. *Conversational Coherency*, July 1978. (ERIC Document Reproduction Service No. ED 159 658, 86p., PC-\$6.32, MF-\$83)
- No. 96: Wigfield, A., & Asher, S. R. *Age Differences in Children's Referential Communication Performance: An Investigation of Task Effects*, July 1978. (ERIC Document Reproduction Service No. ED 159 659, 31p., PC-\$3.32, MF-\$83)
- No. 97: Steffensen, M. S., Jogdeo, C., & Anderson, R. C. *A Cross-Cultural Perspective on Reading Comprehension*, July 1978. (ERIC Document Reproduction Service No. ED 159 660, 41p., PC-\$3.32, MF-\$83)
- No. 98: Green, G. M. *Discourse Functions of Inversion Construction*, July 1978. (ERIC Document Reproduction Service No. ED 160 998, 42p., PC-\$3.32, MF-\$83)
- No. 99: Asher, S. R. *Influence of Topic Interest on Black Children and White Children's Reading Comprehension*, July 1978. (ERIC Document Reproduction Service No. ED 159 661, 35p., PC-\$3.32, MF-\$83)
- No. 100: Jenkins, J. R., Pany, D., & Schreck, J. *Vocabulary and Reading Comprehension: Instructional Effects*, August 1978. (ERIC Document Reproduction Service No. ED 160 999, 50p., PC-\$3.32, MF-\$83)
- No. 101: Shoben, E. J., Rips, L. J., & Smith, E. E. *Issues in Semantic Memory: A Response to Glass and Holyoak*, August 1978. (ERIC Document Reproduction Service No. ED 159 662, 85p., PC-\$6.32, MF-\$83)
- No. 102: Baker, L., & Stein, N. L. *The Development of Prose Comprehension Skills*, September 1978. (ERIC Document Reproduction Service No. ED 159 663, 69p., PC-\$4.82, MF-\$83)
- No. 103: Fleisher, L. S., Jenkins, J. R., & Pany, D. *Effects on Poor Readers' Comprehension of Training in Rapid Decoding*, September 1978. (ERIC Document Reproduction Service No. ED 159 664, 39p., PC-\$3.32, MF-\$83)

- No. 104: Anderson, T. H. *Study Skills and Learning Strategies*, September 1978. (ERIC Document Reproduction Service No. ED 161 000, 41p., PC-\$3.32, MF-\$83)
- No. 105: Ortony, A. *Beyond Literal Similarity*, October 1978. (ERIC Document Reproduction Service No. ED 166 635, 58p., PC-\$4.82, MF-\$83)
- No. 106: Durkin, D. *What Classroom Observations Reveal about Reading Comprehension Instruction*, October 1978. (ERIC Document Reproduction Service No. ED 162 259, 94p., PC-\$6.32, MF-\$83)
- No. 107: Adams, M. J. *Models of Word Recognition*, October 1978. (ERIC Document Reproduction Service No. ED 163 431, 93p., PC-\$6.32, MF-\$83)
- No. 108: Reder, L. M. *Comprehension and Retention of Prose: A Literature Review*, November 1978. (ERIC Document Reproduction Service No. ED 165 114, 116p., PC-\$7.82, MF-\$83)
- No. 109: Wardrop, J. L., Anderson, T. H., Hively, W., Anderson, R. I., Hastings, C. N., & Muller, K. E. *A Framework for Analyzing Reading Test Characteristics*, December 1978. (ERIC Document Reproduction Service No. ED 165 117, 65p., PC-\$4.82, MF-\$83)
- No. 110: Tirre, W. C., Manelis, L., & Leicht, K. L. *The Effects of Imaginal and Verbal Strategies on Prose Comprehension in Adults*, December 1978. (ERIC Document Reproduction Service No. ED 165 116, 27p., PC-\$3.32, MF-\$83)
- No. 111: Spiro, R. J., & Tirre, W. C. *Individual Differences in Schema Utilization During Discourse Processing*, January 1979. (ERIC Document Reproduction Service No. ED 166 651, 29p., PC-\$3.32, MF-\$83)
- No. 112: Ortony, A. *Some Psycholinguistic Aspects of Metaphor*, January 1979. (ERIC Document Reproduction Service No. ED 165 115, 38p., PC-\$3.32, MF-\$83)
- No. 113: Antos, S. J. *Processing Facilitation in a Lexical Decision Task*, January 1979. (ERIC Document Reproduction Service No. ED 165 129, 84p., PC-\$6.32, MF-\$83)
- No. 114: Gentner D. *Semantic Integration at the Level of Verb Meaning*, February 1979. (ERIC Document Reproduction Service No. ED 165 130, 39p., PC-\$3.32, MF-\$83)
- No. 115: Gearhart, M., & Hall, W. S. *Internal State Words: Cultural and Situational Variation in Vocabulary Usage*, February 1979. (ERIC Document Reproduction Service No. ED 165 131, 66p., PC-\$4.82, MF-\$83)
- No. 116: Pearson, P. D., Hansen, J., & Gordon, C. *The Effect of Background Knowledge on Young Children's Comprehension of Explicit and Implicit Information*, March 1979. (ERIC Document Reproduction Service No. ED 169 521, 26p., PC-\$3.32, MF-\$83)
- No. 117: Barnitz, J. G. *Reading Comprehension of Pronoun-Referent Structures by Children in Grades Two, Four, and Six*, March 1979. (ERIC Document Reproduction Service No. ED 170 731, 51p., PC-\$4.82, MF-\$83)
- No. 118: Nicholson, T., Pearson, P. D., & Dykstra, R. *Effects of Embedded Anomalies and Oral Reading Errors on Children's Understanding of Stories*, March 1979. (ERIC Document Reproduction Service No. ED 169 524, 43p., PC-\$3.32, MF-\$83)
- No. 119: Anderson, R. C., Pichert, J. W., & Shirey, L. L. *Effects of the Reader's Schema at Different Points in Time*, April 1979. (ERIC Document Reproduction Service No. ED 169 523, 36p., PC-\$3.32, MF-\$83)
- No. 120: Canney, G., & Winograd, P. *Schemata for Reading and Reading Comprehension Performance*, April 1979. (ERIC Document Reproduction Service No. ED 169 520, 99p., PC-\$6.32, MF-\$83)
- No. 121: Hall, W. S., & Guthrie, L. F. *On the Dialect Question and Reading*, May 1979. (ERIC Document Reproduction Service No. ED 169 522, 32p., PC-\$3.32, MF-\$83)
- No. 122: McClure, E., Mason, J., & Barnitz, J. *Story Structure and Age Effects on Children's Ability to Sequence Stories*, May 1979. (ERIC Document Reproduction Service No. ED 170 732, 75p., PC-\$4.82, MF-\$83)
- No. 123: Kleiman, G. M., Winograd, P. N., & Humphrey, M. M. *Prosody and Children's Parsing of Sentences*, May 1979. (ERIC Document Reproduction Service No. ED 170 733, 28p., PC-\$3.32, MF-\$83)
- No. 124: Spiro, R. J. *Etiology of Reading Comprehension Style*, May 1979. (ERIC Document Reproduction Service No. ED 170 734, 21p., PC-\$1.82, MF-\$83)
- No. 125: Hall, W. S., & Tirre, W. C. *The Communicative Environment of Young Children: Social Class, Ethnic, and Situational Differences*, May 1979. (ERIC Document Reproduction Service No. ED 170 788, 30p., PC-\$3.32, MF-\$83)
- No. 126: Mason, J., & McCormick, C. *Testing the Development of Reading and Linguistic Awareness*, May 1979. (ERIC Document Reproduction Service No. ED 170 735, 50p., PC-\$3.32, MF-\$83)

- No. 127: Brown, A. L., & Campione, J. C. *Permissible Inferences from the Outcome of Training Studies in Cognitive Development Research*, May 1979. (ERIC Document Reproduction Service No. ED 170 736, 34p., PC-\$3.32, MF-.83)
- No. 128: Brown, A. L., & French, L. A. *The Zone of Potential Development: Implications for Intelligence Testing in the Year 2000*, May 1979. (ERIC Document Reproduction Service No. ED 170 737, 46p., PC-\$3.32, MF-.83)
- No. 129: Nezworski, T., Stein, N. L., & Trabasso, T. *Story Structure Versus Content Effects on Children's Recall and Evaluative Inferences*, June 1979. (ERIC Document Reproduction Service No. ED 172 187, 49p., PC-\$3.32, MF-.83)
- No. 130: Bruce, B. *Analysis of Interacting Plans as a Guide to the Understanding of Story Structure*, June 1979. (ERIC Document Reproduction Service No. ED 174 951, 43p., PC-\$3.32, MF-.83)
- No. 131: Pearson, P. D., Raphael, T., TePaske, N., & Hyser, C. *The Function of Metaphor in Children's Recall of Expository Passages*, July 1979. (ERIC Document Reproduction Service No. ED 174 950, 41p., PC-\$3.32, MF-.83)
- No. 132: Green, G. M. *Organization, Goals, and Comprehensibility in Narratives: Newswriting, a Case Study*, July 1979. (ERIC Document Reproduction Service No. ED 174 949, 66p., PC-\$4.82, MF-.83)
- No. 133: Kleiman, G. M. *The Scope of Facilitation of Word Recognition from Single Word and Sentence Frame Contexts*, July 1979. (ERIC Document Reproduction Service No. ED 174 947, 61p., PC-\$4.82, MF-.83)
- No. 134: McConkie, G. W., Hogaboam, T. W., Wolverton, G. S., Zola, D., & Lucas, P. A. *Toward the Use of Eye Movements in the Study of Language Processing*, August 1979. (ERIC Document Reproduction Service No. ED 174 968, 48p., PC-\$3.32, MF-.83)
- No. 135: Schwartz, R. M. *Levels of Processing: The Strategic Demands of Reading Comprehension*, August 1979. (ERIC Document Reproduction Service No. ED 177 471, 45p., PC-\$3.32, MF-.83)
- No. 136: Anderson, R. C., & Freebody, P. *Vocabulary Knowledge*, August 1979. (ERIC Document Reproduction Service No. ED 177 480, 71p., PC-\$4.82, MF-.83)
- No. 137: Royer, J. M., Hastings, C. N., & Hook, C. *A Sentence Verification Technique for Measuring Reading Comprehension*, August 1979. (ERIC Document Reproduction Service No. ED 176 234, 34p., PC-\$3.32, MF-.83)
- No. 138: Spiro, R. J. *Prior Knowledge and Story Processing: Integration, Selection, and Variation*, August 1979. (ERIC Document Reproduction Service No. ED 176 235, 41p., PC-\$3.32, MF-.83)
- No. 139: Asher, S. R., & Wigfield, A. *Influence of Comparison Training on Children's Referential Communication*, August 1979. (ERIC Document Reproduction Service No. ED 177 493, 42p., PC-\$3.32, MF-.83)
- No. 140: Alessi, S. M., Anderson, T. H., & Goetz, E. T. *An Investigation of Lookbacks During Studying*, September 1979. (ERIC Document Reproduction Service No. ED 177 494, 40p., PC-\$3.32, MF-.83)
- No. 141: Cohen, P. R., & Perrault, C. R. *Elements of a Plan-Based Theory of Speech Acts*, September 1979. (ERIC Document Reproduction Service No. ED 177 497, 76p., PC-\$6.32, MF-.83)
- No. 142: Grueneich, R., & Trabasso, T. *The Story as Social Environment: Children's Comprehension and Evaluation of Intentions and Consequences*, September 1979. (ERIC Document Reproduction Service No. ED 177 496, 56p., PC-\$4.82, MF-.83)
- No. 143: Hermon, G. *On the Discourse Structure of Direct Quotation*, September 1979. (ERIC Document Reproduction Service No. ED 177 495, 46p., PC-\$3.32, MF-.83)
- No. 144: Goetz, E. T., Anderson, R. C., & Schallert, D. L. *The Representation of Sentences in Memory*, September 1979. (ERIC Document Reproduction Service No. ED 177 527, 71p., PC-\$4.82, MF-.83)
- No. 145: Baker, L. *Comprehension Monitoring: Identifying and Coping with Text Confusions*, September 1979. (ERIC Document Reproduction Service No. ED 177 525, 62p., PC-\$4.82, MF-.83)
- No. 146: Hall, W. S., & Nagy, W. E. *Theoretical Issues in the Investigation of Words of Internal Report*, October 1979. (ERIC Document Reproduction Service No. ED 177 526, 108p., PC-\$7.82, MF-.83)
- No. 147: Stein, N. L., & Goldman, S. *Children's Knowledge about Social Situations: From Causes to Consequences*, October 1979. (ERIC Document Reproduction Service No. ED 177 524, 54p., PC-\$4.82, MF-.83)
- No. 148: Hall, W. S., & Guthrie, L. F. *Cultural and Situational Variation in Language Function and Use: Methods and Procedures for Research*, October 1979. (ERIC Document Reproduction Service No. ED 179 944, 49p., PC-\$3.32, MF-.83)
- No. 149: Pichert, J. W. *Sensitivity to What is Important in Prose*, November 1979. (ERIC Document Reproduction Service No. ED 179 946, 64p., PC-\$4.82, MF-.83)

- No. 150: Dunn, B. R., Mathews, S. R., II, & Bieger, G. *Individual Differences in the Recall of Lower-Level Textual Information*, December 1979. (ERIC Document Reproduction Service No. ED 181 448, 37p., PC-\$3.32, MF-\$0.83)
- No. 151: Gentner, D. *Verb Semantic Structures in Memory for Sentences: Evidence for Componential Representation*, December 1979. (ERIC Document Reproduction Service No. ED 181 424, 75p., PC-\$4.82, MF-\$0.83)
- No. 152: Tierney, R. J., & Mosenthal, J. *Discourse Comprehension and Production: Analyzing Text Structure and Cohesion*, January 1980. (ERIC Document Reproduction Service No. ED 179 945, 84p., PC-\$6.32, MF-\$0.83)
- No. 153: Winograd, P., & Johnston, P. *Comprehension Monitoring and the Error Detection Paradigm*, January 1980. (ERIC Document Reproduction Service No. ED 181 425, 57p., PC-\$4.82, MF-\$0.83)
- No. 154: Ortony, A. *Understanding Metaphors*, January 1980. (ERIC Document Reproduction Service No. ED 181 426, 52p., PC-\$4.82, MF-\$0.83)
- No. 155: Anderson, T. H., & Armbruster, B. B. *Studying*, January 1980. (ERIC Document Reproduction Service No. ED 181 427, 48p., PC-\$3.32, MF-\$0.83)
- No. 156: Brown, A. L., & Campione, J. C. *Inducing Flexible Thinking: The Problem of Access*, January 1980. (ERIC Document Reproduction Service No. ED 181 428, 44p., PC-\$3.32, MF-\$0.83)
- No. 157: Trabasso, T. *On the Making of Inferences During Reading and Their Assessment*, January 1980. (ERIC Document Reproduction Service No. ED 181 429, 38p., PC-\$3.32, MF-\$0.83)
- No. 158: McClure, E., & Steffensen, M. S. *A Study of the Use of Conjunctions across Grades and Ethnic Groups*, January 1980. (ERIC Document Reproduction Service No. ED 182 688, 43p., PC-\$3.32, MF-\$0.83)
- No. 159: Iran-Nejad, A. *The Schema: A Structural or a Functional Pattern*, February 1980. (ERIC Document Reproduction Service No. ED 181 449, 46p., PC-\$3.32, MF-\$0.83)
- No. 160: Armbruster, B. B., & Anderson, T. H. *The Effect of Mapping on the Free Recall of Expository Text*, February 1980. (ERIC Document Reproduction Service No. ED 182 735, 49p., PC-\$3.32, MF-\$0.83)
- No. 161: Hall, W. S., & Dore, J. *Lexical Sharing in Mother-Child Interaction*, March 1980. (ERIC Document Reproduction Service No. ED 184 066, 39p., PC-\$3.32, MF-\$0.83)
- No. 162: Davison, A., Kantor, R. N., Hannah, J., Hermon, G., Lutz, R., Salzillo, R. *Limitations of Readability Formulas in Guiding Adaptations of Texts*, March 1980. (ERIC Document Reproduction Service No. ED 184 090, 157p., PC-\$10.82, MF-\$0.83)
- No. 163: Linn, R. L., Levine, M. V., Hastings, C. N., & Wardrop, J. L. *An Investigation of Item Bias in a Test of Reading Comprehension*, March 1980. (ERIC Document Reproduction Service No. ED 184 091, 97p., PC-\$6.32, MF-\$0.83)
- No. 164: Seidenberg, M. S., Tanenhaus, M. K., & Leiman, J. M. *The Time Course of Lexical Ambiguity Resolution in Context*, March 1980. (ERIC Document Reproduction Service No. ED 184 092, 58p., PC-\$4.82, MF-\$0.83)
- No. 165: Brown, A. L. *Learning and Development: The Problems of Compatibility, Access, and Induction*, March 1980. (ERIC Document Reproduction Service No. ED 184 093, 76p., PC-\$6.32, MF-\$0.83)
- No. 166: Hansen, J., & Pearson, P. D. *The Effects of Inference Training and Practice on Young Children's Comprehension*, April 1980.
- No. 167: Straker, D. Y. *Situational Variables in Language Use*, April 1980.
- No. 168: Green, G. M., Kantor, R. N., Morgan, J. L., Stein, N. L., Hermon, G., Salzillo, R., Sellner, M. B., Bruce, B. C., Gentner, D., & Webber, B. L. *Problems and Techniques of Text Analysis*, April 1980. (ERIC Document Reproduction Service No. ED 185 513, 173p., PC-\$10.82, MF-\$0.83)
- No. 169: Green, G. M., Kantor, R. N., Morgan, J. L., Stein, N. L., Hermon, G., Salzillo, R., & Sellner, M. B. *Analysis of Babar Loses His Crown*, April 1980. (ERIC Document Reproduction Service No. ED 185 514, 89p., PC-\$6.32, MF-\$0.83)
- No. 170: Green, G. M., Kantor, R. N., Morgan, J. L., Stein, N. L., Hermon, G., Salzillo, R., & Sellner, M. B. *Analysis of "The Wonderful Desert,"* April 1980. (ERIC Document Reproduction Service No. ED 185 515, 47p., PC-\$3.32, MF-\$0.83)
- No. 171: Zehler, A. M., & Brewer, W. F. *Acquisition of the Article System in English*, May 1980.
- No. 172: Reynolds, R. E., & Ortony, A. *Some Issues in the Measurement of Children's Comprehension of Metaphorical Language*, May 1980. (ERIC Document Reproduction Service No. ED 185 542, 42p., PC-\$3.32, MF-\$0.83)
- No. 173: Davison, A. *Linguistics and the Measurement of Syntactic Complexity: The Case of Raising*, May 1980.

- No. 174: Tirre, W. C., Freebody, P., & Kaufman, K. *Achievement Outcomes of Two Reading Programs: An Instance of Aptitude-Treatment Interaction*, June 1980.
- No. 175: Asher, S. R., & Wigfield, A. *Training Referential Communication Skills*, July 1980.
- No. 176: Tanenhaus, M. K., & Seidenberg, M. S. *Discourse Context and Sentence Perception*, July 1980.
- No. 177: Hall, W. S., Linn, R. L., & Nagy, W. E. *Spoken Words*, August 1980.
- No. 178: Tanenhaus, M. K., Flanigan, H., & Seidenberg, M. S. *Orthographic and Phonological Activation in Auditory and Visual Word Recognition*, August 1980.
- No. 179: Green, G. M. *Linguistics and the Pragmatics of Language Use: What You Know When You Know a Language . . . and What Else You Know*, August 1980.
- No. 180: Steffensen, M. S., & Guthrie, L. F. *Effect of Situation on the Verbalization of Black Inner-City Children*, September 1980.





