Perhaps the most intriguing problem in American education today is teaching the children of the poor to read. Children in urban communities usually speak a different dialect of the English language. They bring to school a language containing all of the components of the informal standard dialects (syntax, structures, form, style and lexicon), a language that has deep-rooted emotional and cultural ties for the child. Linguistic studies have given rise to the emergence of a psycholinguistic and sociolinguistic perspective in reading-language arts teaching. This work is intended as a review of recent research underlying this perspective with special reference to language in the innercity and classroom implications for teaching Black children to read. (Author)
TEACHING BLACK CHILDREN TO READ: A REVIEW OF PSYCHO- AND
SOCIOLINGUISTIC THEORIES AND MODELS

by

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October 1974
ABSTRACT

Perhaps the most intriguing problem in American education today is teaching the children of the poor to read. Children in urban communities usually speak a different dialect of the English language. They bring to school a language containing all of the components of the informal standard dialects (syntax, structures, form, style and lexicon) and one that has deep-rooted emotional and cultural ties for the child. Linguistic studies have given rise to the emergence of a psycholinguistic and sociolinguistic perspective in reading-language arts teaching. This work is intended as a review of recent research underlying this perspective with special reference to language in the inner-city and classroom implications for teaching Black children to read.
INTRODUCTION

It is a very remarkable fact that there are none so depraved and stupid, without even excepting idiots, that they cannot arrange different words together forming of them a statement by which they make known their thoughts; while, on the other hand, there is no other animal, however perfect and fortunately circumstanced it may be, which can do the same.

(Descartes, Discourse on Method)

... the ignorance of standard English rules on the part of the speakers of non-standard English and the ignorance of nonstandard English rules on the part of teachers and text writers may well be the cause for the reading failures that occur in the schools.

(William Labov and Joan Baratz)

The impact of current linguistic theory on the teaching of reading-language arts has been significant. The emergence of the psycholinguistic and sociolinguistic perspective in language teaching has forced educators to rethink the nature of language and how it operates, and to reformulate the philosophical and methodological foundations of reading-language arts curricula in the light of new evidence from the study of language.

This work is intended as a review of current developments in psycholinguistic and sociolinguistic research and a critical evaluation of these findings as they relate to the teaching of reading-language arts. The acquisition of language and the acquisition of reading are discussed as major
issues in the psycholinguistic research and sociolinguistic investigations of the Black English Vernacular are considered from the perspective of implications for teaching Black children to read. In a sense, the research described in Part 1 forms a theoretical prerequisite to the analysis of language behavior under varied conditions of speech community discussed in Part 2.
PART I: PSYCHOLINGUISTICS AND THE TEACHING OF READING-LANGUAGE ARTS

THE ACQUISITION OF LANGUAGE IN RELATION TO READING

Recent summaries of research in language acquisition exist:
Dale (1972); Huxley and Ingram (1971); Hayes (1970); D'Arcia and Levelt (1970); Bar-Adon and Leopold (1970); and Bloom (1970). Athey (1971) presents a comprehensive review of recent research in language acquisition in relation to reading. Important recent developments in language acquisition and their implications for classroom practice are reviewed below. For convenience, the models of language acquisition have been categorized and discussed in groups according to the classification first proposed by Athey (1971). The reader should note that many of these categories overlap.

DEVELOPMENTAL THEORIES

Behaviorist Models - Behaviorist theories of learning include a consideration of such concepts as excitation, imitation, discrimination, and generalization. Together with the conditioning paradigm, these concepts are said to explain all learning, including language learning.

Skinner (1957) proposed a comprehensive theory of language acquisition and language behavior in which language learning was explained in terms of operant conditioning and the reinforcement of imitative behavior.
Braine (1963) examined the possibility that grammatical structure is acquired by "contextual generalization" -- a type of generalization which results from a subject learning the position of a unit in a sequence. The theory attempts to explain how the child acquires the hierarchical grammatical structures of sentences by making generalizations about positions that themselves may be hierarchical.

Staats (1968) advanced the notion that the child learns a finite set of responses according to certain probabilities of occurrence. Mediation, derived from simple S-R associations, was held to account for much complex linguistic and cognitive behavior.

Critique of Behavior Models. Chomsky (1959) remains a most comprehensive attack on behaviorism as an explanation for language learning. Chomsky observes that it is impossible to predict and control verbal behavior by manipulating the physical environment. He argues that concepts of stimulus, response, and other Pavlovian constructs are inappropriate and vague terms that are irrelevant to the description of verbal behavior.

Inherent in any behaviorist theory of learning is the notion that the most frequently occurring words and structures in language should be acquired first by the child. McNeil (1966) observed that his Japanese subject selected the descriptive use of postposition "ga" as the principal concept to be encoded despite the fact that the subject's mother used the
postposition "wa" twice as much as "ga."

Weir (1962) found that although children do practice language and repeat some of the utterances heard in their environment, they do not imitate indiscriminately.

Nativist Models. Lenneberg (1967) proposes that language is a function of anatomical, biological, motor, neural and cognitive developments. The ability to learn language is said to be innate and part of the biological endowment of the organism. The critical period for language acquisition is set between the ages of two and twelve, and the maturation of language is largely unaffected by intelligence, parental attitudes or the effectiveness of communication.

Critique of Nativist Models. Wardaugh (1971) concludes that an evaluation of frequency of stimuli, place of imitation, role of expansion and function of meaning as factors in language acquisition indicates the necessity of crediting the child with some kind of innate predisposition to language. One difficulty, however, with the nativist model is that Lenneberg and others have had little to say about the specific mechanisms through which that innate knowledge manifests itself and the relationship of language learning to other kinds of learning, not exclusively behaviorist laws of learning.

Cognitive Models. Vygotsky (1962); Piaget and Inhelder (1969); and Bruner (1966) have discussed language acquisition in the light of cognition and the interplay of language and thought
which enables the child to conceptualize the world around him.

Bloom (1970) argues that the emergence of the child as a grammarian depends upon an underlying cognitive base which results from the child having perceived and organized his experience in terms of conceptual representations that are not linguistic. An examination of successive single-word utterances of selected two-year-old children revealed that the utterances accompanied the development of a schema implying the relational aspects of a given experience. Children were able to talk about objects and events that went together in their environment before they were able to use a linguistic code to map these conceptual notions onto semantic-syntactic relations in sentences. The children were said to have learned syntax as a coding of their underlying cognitive representations.

Bever (1970) asks how the instinct to communicate integrates the distinct components of perception, cognition and motor behavior into human language? He concludes that the child learns a series of perceptual strategies and that these strategies form the basis for those grammatical structures with which they are most consistent or those which are perceptually simple. These perceptual strategies appear to affect those grammatical structures in cases where the child acquires the strategies before he acquires certain grammatical structures.
Critique of Cognitive Models. Cognitive theories fail to specifically account for the facts of language development. Linguistic facts seem irrelevant to cognitive theories despite the fact that cognitive and language functions are interdependent and their developmental paths are intertwined.

Bever appears to overlook the fact that these perceptual strategies are actually a set of transformational rules and that transformational rules do not explain the actual process of talking. Perhaps these perceptual strategies become based on transformational rules once the child becomes a fluent speaker and serve as shortcuts.

Shipley, Smith and Gleitman (1969) argue that surface structure analysis provides a limited and biased source of information from which to access linguistic competence. Their data indicate that children prefer to respond to speech at or just above their level of production; hence, comprehension seems to precede production of well-formed sentences. Children are more 'competent' with language than a single surface structure analysis would indicate.

Huttenlocher (in press) underscores the necessity to look at what a child understands (comprehension) as well as what he says (production). She concludes that there is an asymmetrical relationship between comprehension and production; the child can understand many more words than he can produce.
PSYCHOLINGUISTIC THEORIES

Phonological Models. Jakobson (1968) proposed what is a widely held view among linguists and psycholinguists in suggesting that the phonology of a child's speech at any stage during the acquisition process is structured. All children pass through the same steps although the rate of development may vary and there is a striking similarity between phonemic and syntactic development. Speech begins with front consonants and back vowels regardless of the mother tongue to which the child is exposed.

Moskowitz (1970) studied the acquisition of phonology in two year olds and found that children have an incipient rule structure that, although markedly different from the rule structure of the adult grammar, may be viewed as a reflection of the child's ability to handle rules in phonology and perhaps may be used to justify an innate capacity to process phonological information in a rule-structured way.

Read (1971) analyzed selected children's created spellings and concluded that they are the result of a systematic categorization of English vowels which correspond to certain articulatory properties.

Critique of Phonological Models. Recent evidence from psychoacoustics suggests that Jakobson can be criticized for his tacit assumption that phonemes serve the child as operational psychological units. However, the application of the concept
of linguistic features to issues of language development strengthens the notion of linguistic universals advanced by Lenneberg, McNeil and Chomsky. Furthermore, the concept of linguistic universals lends theoretical support to Labov (1972a) who argues that the Black English Vernacular is a highly developed, rule governed phonological and grammatical subsystem of the larger body of English grammar.

Syntactic Models. Chomsky's theory is based on the proposed existence of universals in the human mind which are manifested in language in the grammatical forms of sentences. These linguistic universals reflect an underlying, biologically based structure which is shared by all members of the species. Chomsky's basic model is concerned with syntactic structure and contains the following components (Chomsky, 1965: 31):

1. a universal phonetic theory that defines the notion "possible sentence."
2. a definition of "structural description."
3. a definition of "generative grammar."
4. a method for determining the structural description of a sentence, given a grammar.
5. a way of evaluating alternative proposed grammars.

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1 John Lyons (1970) presents perhaps the most "readable" account of Noam Chomsky's theoretical statements and classroom teachers should find this a useful reference.
A theory of syntax, Chomsky argues, is also a theory of language acquisition. A child capable of learning must have (Chomsky, 1965: 30):

1. a technique for representing input signals
2. a way of representing structural information about these signals
3. some initial delimitation of a class of possible hypotheses about language structure
4. a method for selecting one of the (presumably, infinitely many) hypotheses that are allowed by (3) and are compatible with the given primary linguistic data

Chomsky (1965) has postulated a Language Acquisition System (LAS) to explain how the child constructs a transformational grammar. Each child is presumed to come equipped biologically with an LAS -- a basic ability to formulate systems for generating sentences. The child samples the environment around him for examples of his native language. He formulates some ideas or hypotheses about the nature of this language. He then "outputs," or expresses, examples of his ideas. These examples are tested and are sometimes corrected by a tutor (a peer or an adult, often a parent). On the basis of his tests, the child may revise his hypotheses. He formulates new ones and tests them again. He gradually builds up a mature inner language-generating system, one that fits his linguistic environment -- that is, he learns to speak his native lan-
Critique of Syntactic Models. Syntactic research of the last few years, much of it inspired directly by Chomsky's work, seems to me to lend a fair amount of support to the adherents of "universal grammar," but the results that have been obtained thus far must be regarded as very tentative.

Gleitman, Gleitman and Shipley (1972) believe that the ability to recognize paraphrases, laugh at puns and reject deviant though meaningful sentences represent insights into the question of linguistic competence. They demonstrate that some children under three have a capacity to contemplate the structure of language and to handle rather discreet questions of syntax and semantics. They conclude that it is precisely this kind of language activity that can be explained by transformational theory because it forms a "methodological prerequisite for grammar construction."

Brown and Hanlon (1970) have offered tentative evidence in support of the psychological reality of the syntactic model (usually referred to as "the correspondence hypothesis"). The hypothesis states that the relative difficulty a subject experiences in understanding a sentence (i.e., translating it into deep structure) should be correlated with the number of grammatical rules necessary for its deviation. The growth of grammatical knowledge can be described in terms of a succession of generative grammars. Brown and Hanlon offer evidence that the
order of emergence of some eight types of well-formed adult sentences reflects the derivational complexity of the eight types in terms of the adult grammar. They conclude that the only force toward grammaticality operating on the child is an occasional mismatch between the child's innate knowledge of language and the data he receives from the environment. Their conclusion is impractical on the grounds of plausibility. The child derives hypotheses and arrives at language with the aid of little data from the environment. Data from the environment is too random to suggest a perfect model of "grammaticalness."

It should be noted that Chomsky has given good reason to believe that the behaviorist model is incapable of accounting for all the facts of language behavior, but he has not shown that it cannot explain any of them. What Chomsky has demonstrated is that the behaviorist account of language acquisition, if it is not entirely abandoned, must be supplemented with something more substantial than empty appeals to "analogy" (Lyons, 1970: 125).

Semantic Models. Goodman (1970a) argues that total comprehension involves reactions to several signal cores: 1) order of words (syntax pattern); 2) intonation; 3) inflection; and 4) certain key functions that words play (pattern markers). These systems operate in the perceptual process of knowing language and are, therefore,
known by the child when he encounters reading. Knowledge of the phonological and syntactic systems used in speech sets up certain expectations that strongly influence the child's perception and forms the linguistic basis of perception in reading. Reading, then, becomes a "psycholinguistic guessing game" in which the proficient reader decodes directly from graphic stimuli and encodes from deep structure.

Ruddell (1970) proposes a comprehensive systems of communication model based on grapheme-phoneme correspondence, short and long-term memory, linguistic and non-linguistic meaning, transformational and rewrite rules, feedback mechanisms, affective mobilizers and cognitive strategies. He argues that a child's linguistic development must be carefully appraised and, if necessary, specifically improved before he can be expected to master effective oral and written communication.

Huttenlocher (in press) sees words as devices enabling the child to recall the properties of objects. Together with syntax, words formulate for the listener mental representations of "status of affairs." Meaning is attached to sound-schemas as a result of sound-schemas being mapped onto previously existing object-schemas that are systematically organized into distinct semantic categories on the basis of their perceptual or functional similarity.
Clark (1973) postulates that the acquisition of semantic knowledge results from adding more features of meaning to the lexical entry of a word until the child's combination of features in the entry for that word equals that of the adult.

Finally, Bowerman (1973) argues that the structural relationships in children's utterances are primarily semantic. The child's initial efforts at word combination result from his discovery of ways to express various semantic relationships in his new language.

Critique of Semantic Models. The advantage of semantic models is that they refer directly to the reading process and as such integrate considerations of language into a more comprehensive model of the reading process. We will consider models of reading acquisition in the next section.

Goodman's work, a model of reading acquisition as much as it is a semantic model of language acquisition, when interpreted in the light of Chomsky's surface structure vs. deep structure dichotomy, suggests that the linguistically-different Black child is fully capable of understanding standard English by equating grammatical structures from his own dialect with those in the reading materials and assigning a deep structure that he can decode. Ruddell attributes comprehension as a function of the child's ability to see relationships among elements in a sentence. The element of meaning, so often lost sight of in
perceptual or component-skills models, is further clarified by Huttenlocher and Clark. Some type of overlap between semantic and syntactic systems appears plausible in light of evidence offered by Fodor and Garrett (1967) which suggests that syntactic and semantic systems are, in fact, not independent.

Information-Processing Theories

The reader is referred to Norman (1970) for a general view of models of information-processing. Bever (1970), for example, represents the overlap between cognitive models and information-processing models of language acquisition.

Critique of Information-Processing Models. These models allow psychological assumptions to be tested empirically in computer programs that are detailed and rigorously specified, and they provide a psychological account of human behavior, showing that no one explanation is any more basic or correct than any other. Computers remain limited by storage capacity, speed of access and retrieval systems, and problems are encountered in comparing machine models of memory and humans.

Implications for Classroom Practice

It is important at this point to review the significant differences between the acquisition of language and the acquisition of reading so that implications for classroom practice deriving from studies of language development may
be placed in proper perspective (Wardaugh, 1971).

Language is acquired gradually and the acquisition process is probably never completed. Chomsky (1969) counters the common assumption among students of child language that children have mastered the syntax of their native language by about age five. In a study of children's acquisition of four syntactic structures, considered candidates for late acquisition according to criteria of syntactic complexity, she found active syntactic acquisition taking place up to the age of nine and perhaps even beyond. Reading, on the other hand, has a sudden onset for the child who is often required to put cognitive and motor skills all together rather abruptly in learning to read in school.

Little anxiety accompanies the process of learning to talk. The occasionally anxious parent seems to have little influence on the child's language development. The level of anxiety in the context in which learning to read takes place may be quite high. The child may be blamed for failure that occurs in beginning reading instruction.

Language is informally and unconsciously learned from a wide range of stimuli whereas reading instruction is formal and deliberate. The usual reinforcements expressed by literate adults for reading may be irrelevant for many children in the beginning stages of reading.
Learning to read depends on the acquisition of special skills in visual discrimination and the meanings conveyed in the two language systems are different. Furthermore, little is known about the extent of overlap between the latter stages of language acquisition and reading acquisition. More than one additional language acquisition stage may depend on the acquisition of specific reading abilities.

It does not follow, however, that language models are irrelevant to reading. Athey (1971) suggests a number of classroom implications resulting from a comprehensive review of linguistic models. Several of these implications, many of which have been reinterpreted in the light of current sociolinguistic findings, are included in the respective categories below. A note of caution. Language models remain in a state of "becoming" and are incomplete and subject to momentary change. It is premature at this point to attempt an integration of the language models reviewed in this section, much less a synthesis of one or more linguistic models with models of the reading process itself.

DEVELOPMENTAL THEORIES

Behaviorist Models. Advocates of the social pathology interpretation of the speech of lower-class Black children often point to the work of Bereiter and Engelmann as indicative of the effectiveness of the behaviorist approach in language
learning. Engelmann (1970) cites the importance of precise behavioral objectives in the construction of effective language programs for the poverty child. Engelmann views teaching as based on the assumption that desired concepts can be taught and desired behavior induced through the manipulation of environmental variables. The aim of the educational process is said to be conformity, achieved through the modification of behavior to meet specific standards, and not necessarily standards that the child selects. The Bereiter-Engelmann approach is a "language substitution model" based on a totally spurious notion of the linguistic competence of Black children. Operant conditioning principles and the almost total reliance on rote drill have been used, in this context, to impose a system of behavior without recognizing the existence of a functionally adequate system of behavior already in place.

Nativist Models. The ability to learn language is part of the biological endowment of the organism and is relatively unaffected by such factors as intelligence, parental attitudes and the effectiveness of communication. It follows, then, that the phenomena of the "nonverbal child" is untenable when considered in the light of current linguistic data. The Black child who speaks a different dialect of English can construct a knowledge of standard English (SE) if he meets
it in meaningful situations and is given time to assimilate it into his own structures, without the denigration of the linguistic system the child brings to the situation.

**Cognitive Models.** Language competency must be developed in parallel to cognitive competency so that the child will view reading as a mechanism to further his own objectives of acquiring and communicating information. Marion Blank (1970: 74-75) outlines an intervention program for pre-school culturally/linguistically different children "focused on developing a repertoire of cognitive skills which would help the child acquire strategies of thinking and information processing... that would transfer to later, more complex learning situations."

**PSYCHOLINGUISTIC THEORIES**

**Phonological Models.** The Black dialect interference hypothesis to be discussed in Part 2 suggests that authors of beginning reading texts for speakers of Black English Vernacular (BEV) should postpone the introduction of difficult or non-existent phonemes until the child has grasped the idea of what reading is all about. This should not be interpreted as an advocacy dialect readers, but rather as a possible solution to an empirical question.

**Syntactic Models.** Reading methods should not emphasize word and letter identification to the exculsion of reading for meaning. Black children in the early grades should be en-
couraged to use their own BEV, helped to understand SE by having experience in hearing and interpreting speech cast in the SE mold and helped to expand their symbolic system.

Semantic Models. Word games involving the use of cues and meanings to enumerate and predict alternatives should be developed and teachers must strive to stimulate a lifetime interest in reading for information and enjoyment.

Information-Processing Theories

Children should be encouraged to look for semantic and syntactic patterns in reading material and to recognize that such patterns vary with the purpose for reading, type of material and writing style. Syntactic and semantic patterns along with visual and auditory cues must serve the child as sources of feedback to check the accuracy of decoding and comprehension processes. Sentence combining activities should be helpful in enabling the child to induce the functions of various constraints in his language.
THE ACQUISITION OF READING

Until very recently, reading research concentrated on just those psycholinguistic processes that are peculiar to reading: the visual identification of graphemes and the translation of graphemes to sound. Given that these processes play no part in the perception and comprehension of spoken language, reading appeared to be a topic quite removed from the rest of psycholinguistic research. Levin and Williams (1970) give a reasonably complete picture of current theory and research that focuses on problems that are not specific to reading but common to the processing of both speech and text. Williams (1973) and Singer and Ruddell (1969) describe and discuss a wide variety of theories and models of reading acquisition and suggest a view of reading as both a complex cognitive skill, the goal of which is to obtain information, and a complex language system. This section of the monograph will review such matters as the role of orthographic constraints in word recognition, the identification of perceptual strategies for sampling the text, the size of the syntactic unit that is processed in reading and the issue of metalinguistic awareness. \(^2\) Much of what is reviewed in this section would be as true of speech perception as of reading.

\(^2\)It should be noted that with the exception of Gibson (1970) and Cazden (1973), the studies reviewed in this section are about mature, skilled readers.
Word Recognition

Eleanor Gibson's work is aimed at discovering the unit-forming principles in reading activity and, when they are determined, the training methods that will promote effective strategies of perceptual search and detection of structure.

Gibson (1965) outlines three phases of learning which must be considered when the child begins the progression from spoken language to written language. Reading begins with the child's acquisition of spoken language and his ability to extract information from the three aspects of language: phonological, semantic and syntactic. Later the child comes to differentiate graphemes by detecting their distinctive features and to decode these to familiar speech sounds. As he learns the code, he must progressively utilize the structural constraints which are built into it. For the English language, single graphemes map consistently into speech only as morphemes and perception normally takes in bigger "chunks" of graphic stimuli in a single fixation. The smallest component units in written English are functional units of one or more letters (spelling patterns), in a given position within the word, which have an invariant correspondence with pronunciation. Skilled readers more easily perceive as a unit pseudo words which follow the rules of English spelling-to-sound correspondence and facilitate the decoding
process (see Gibson and others, 1962). The child, then, must learn the rules of unit formation; he must learn to utilize constraints in letter strings (spelling and morphemic patterns) and word strings (syntactic and semantic patterns).

Gibson (1970) reports the results of an experiment in which deaf and hearing subjects were compared for the ability to read, under tachistoscopic presentation, letter strings (pseudo words) that did, or did not, follow rules of orthography that rendered them pronounceable or relatively unpronounceable. Results showed that deaf as well as hearing readers were more successful in reading the pronounceable ones. This finding seriously weakens Gibson's earlier hypothesis that spellings that map with invariance to sound become chunks or larger units because of the one-to-one mapping rule. Orthographic rules are rules in their own right and presumably can be learned as such, quite aside from the fact that any word they produce maps predictably to speech sounds. It is conceivable, however, that redundancy contributed by invariant mapping to speech sounds may well make it easier for the hearing child to pick up the common spelling patterns and regularities as he learns to read, but clearly this is not a sine qua non.

Kolers (1970) argues that any theory that attempts to account for reading in terms of translating graphemes into phonemes, in terms of the discrimination of individual letters,
or in terms of a sensitivity to the morphemic structure of single words, is hopelessly insensitive to even the most fundamental kind of linguistic processing the reader engages in. He argues, first, that word recognition is only incidentally visual. Kolers found that "miscues" made by his subjects were consistent both semantically and syntactically with the antecedent text in approximately 90 to 100% of the cases studied and concluded that the skilled reader is more sensitive to the grammatical regularities of the code he is reading than to the physical appearance of the code. He argues, further, that the skilled reader treats words as symbols and operates on them in terms of their meanings and their relations to other symbols.

Frank Smith (1971a, 1971b) proposes a provocative and carefully elaborated version of the information-processing point of view. He proposes a feature-analytic model which suggests that letter, word and meaning identification are three distinct tasks that can be performed independently on the same visual information. The identification of single letters results from testing a sufficient number of features so that alternative responses are eliminated and uncertainty is reduced. Words can be identified with only half the featural information that would be required if prior letter identification were necessary, provided that the features
sampled are taken from different locations within the configuration. Meaning-identification is viewed as a prior operation to word-identification because it reduces word uncertainty and permits word-identification on minimal visual information.

The information-processing capacities of the novice reader are taxed to a much greater extent than are those of the mature reader. Mediated-meaning-identification, which involves mapping the word onto its sound pattern, is required at the initial stages of reading acquisition. The beginning reader must learn to overcome this restriction -- translating from the visual configuration to the acoustic configuration -- by utilizing redundancies in the written language. The beginning reader must be provided with feedback as he tests his hypotheses of what the distinctive features might be and what categories are to be used for letter and word identification.

Shankweiler and Liberman (1972) conclude that the problems of the beginning reader have more to do with the synthesis of syllables than with the scanning of larger chunks of connected texts. Experiments indicate that medial and final segments in the word are more often misread than

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3 Feature redundancy in individual letters; orthographic redundancy (Gibson's spelling patterns); and redundancy across sequences of words (syntactic and semantic constraints).
initial ones and vowels more often than consonants. This phenomena may be explained by the beginning reader's lack of conscious awareness of phonemic segmentation. Embedded placement within the syllable and orthographic complexity were found to combine in making the reading of vowels particularly difficult.

**Strategies for Perceptual Search**

Hochberg (1970) defines the main task in skilled, literate reading as the ability to extract information about some subject from an array of redundant and often irrelevant graphic systems and argues that this ability is different in goal, method and mechanism from the task of translating graphemes into speech. Guidance of the search pattern is said to be of two kinds: peripheral search guidance (PSG) and cognitive search guidance (CSG). It is known that beginning readers make short, less systematically sequential saccades while the advanced reader makes fewer fixations and longer eye movements. What does the skilled reader have at his disposal that makes this possible?

Hochberg (1970: 78-9) suggests three response systems that are most important to conceptual sampling rate:

1. The experienced reader must respond with a readiness to emit one or another spoken word or phrase, as a preplanned motor unit, that is, with an articulatory program (merely preparatory set to vocalize initial
sounds -- not actual verbal response] appropriate both to some features of the printed word that falls within clear vision where he happens to be fixated and to the various meaningful expectations that his previous fixations have built up with respect to that text.

2. The experienced reader must treat each important printed cue, each distinctive visual feature of word or phrase, as a confirmation or disconfirmation of some class of expectations and must respond with a set of expectations concerning what should follow the particular material he's reading.

3. The experienced reader must respond to the contents of one fixation by making plans as to where he will look next.

Expectancy is clearly dominated by CGS and PSG. Allows the reader to look at or near letters that immediately follow any blank space; detect the position of functors (on, in, to, up); and decide either to look at the word, or, if it is likely to be redundant, to look at the word after it. It is also possible that PSG processes text in terms of the features of length and terminal letters, thereby optimizing the use of redundancy by processing from the ends toward the middles.

Accessibility of phoneme and syllable

Liberman and others (1967) conclude from a study of
spectrographic patterns that the acoustic signal is not segmented into phonemes and that successive phonemes are most commonly merged in the sound stream. Speech is a special code that requires a special perceptual mechanism to serve as its decoder. Most phonemes cannot be perceived by a direct comparison of the incoming signal with a set of stored phonemic patterns and to perceive without decoding, one must look to the syllable level or higher.

Savin and Bever (1970) report that adult subjects are able to identify syllabic targets more rapidly than single phoneme targets. Phonemes are neither perceptual nor articulatory entities but rather are psychological entities of a nonsensory, nonmotor type, related by complex rules to stimuli and to articulatory movements.

Liberman (1970) argues that one and the same acoustic cue serves more than one phonetic segment. The sounds of speech are related to the phonetic message by a complex and efficient code that bears formal resemblances to the grammatical codes we know as syntax and phonology. Each of these codes speeds communication by delivering information in parallel but the segments in the acoustic signal do not correspond to the segments in the phonetic message, either in structure or in number.

**Metalinguistic Awareness**

Cazden (1973: 3) defines metalinguistic awareness as
"the ability to make language forms opaque and attend to them in and for themselves, ... a special kind of language performance, one which makes special cognitive demands, and seems to be less easily and less universally acquired than the language performances of speaking and listening." It is hypothesized that the child can engage in play with the elements of language for the delight of self-expression and mastery. It is further hypothesized that the child's play with language makes literacy easier to achieve because the child's attention is focused on the forms of language and not only on the end product.

**Implications for Classwork Practice**

It is indeed difficult to produce a set of principles and generalizations, that would be genuinely and immediately helpful in preparing instructional materials and methods, from a review of basic studies of the reading process. Clearly, there is a critical distinction between the acquisition stage in reading and the mature reading stage. Chall (1967) has warned against the wholehearted acceptance of assumptions made by theorists and publishers without critical appraisal and the analysis of research data. It is the view of this writer that instructional materials and methods must be suited to the cultural and cognitive styles of the student population in question and that the knowledgeable and experienced classroom teacher is perhaps best suited to draw from research on the reading process,
those principles and generalizations which would be most effective in the design and evaluation of instructional programs and procedures. What follows, therefore, should be interpreted as a starting point for further refinement and development by classroom teachers.

Word Recognition

Evidence from research on word recognition clearly substantiates the claim that it is possible to learn to read words without learning the component letter-sound correspondences. Yet, the fluent reader can, in fact, do phonological analysis when faced with rare or new words. The relatively high frequency of rare words in ordinary text suggests that phonological analysis is a common component of the fluent reader's repertoire of skills. The opportunity for utilizing constraints in spelling and morphemic patterns may well be enhanced in the early stages of reading acquisition by pupils exploring spelling patterns based on the best available description of the English language (see Venezky, 1967). At the same time, children should see words as components of larger, more meaningful units so that they can use the correspondence between written and oral English within the semantic and syntactic contexts. Phrases should be seen by children as subdivisions of sentences and words as recurrent elements within them.
Chomsky (1970) observes that conventional English orthography is much closer to an optimal orthography, one which presents no redundant information and that indicates directly, by a direct letter-to-segment correspondence, the underlying lexical form of the language. Early attention given to vocabulary enrichment may be successful in helping children intuit the deeper representations of sound that so closely correspond to the orthographic forms. As proficiency develops in reading, silent reading should predominate so that the child will learn to go from print directly to meaning with no need to resort to oral language.

Finally, a note on syllabication. Focusing on syllabication as a tool for word-attack seems to have less to do with initial reading skill than it does with general skill in the language arts, since the ability to properly recognize syllable divisions presupposes that the child already knows the things he needs to know to be a successful reader. Furthermore, Shuy (1969a) concludes that syllabication principles must satisfy the criteria of the language, and he offers a proposed series of semi-ordered syllabication rules that fit these criteria.

**Strategies for Perceptual Search**

Reading is, primarily, in information-gathering activity and the teaching of reading should emphasize somewhat more the clue-searching and information-extracting characteristics
of reading. Guessing strategies may be promoted by word
games that involve the use of cues and meanings to enumerate
alternatives and to predict those which are most likely
from the context.

**Accessibility of phoneme and syllable**

Gleitman and Rozin (1973a) make the claim that the
fundamental conceptual problem in reading acquisition is
psychoacoustic: it has to do with awareness of phonological
segmentation and is virtually unrelated to the visual input.
Faced with evidence developed by researchers at the Haskins
Laboratory as to the non-perceptual reality of the phoneme,
the authors propose to ignore the phonemic unit during the
initial stages of teaching and begin reading instruction with
a more readily accessible phonological unit: the syllable.
The point of the syllabary approach is to dissect the
conceptual problems of alphabetic reading for the child,
rather than presenting all of them together, as is usually
done:

1. The child is first shown that the relation between
   sound and meaning can be represented visually; this
   is accomplished with sequences of pictographs.

2. A syllabic segmentation of normal English ortho-
   graphy is then introduced, using both the mono-
   syllabic pictographs of [l] and some further
   syllables written as arrays of English letter.
3. Employing a rebus approach, we next show the child that these syllabic units can be combined on the basis of their sound values to yield further meaningful words, thus emphasizing that the orthography tracks the sound system.

4. Very much later, we will try to show the learner that the abstract unit represented by the alphabetic sign is an efficient mnemonic for the inconveniently large set of syllables. Traditional phonics or linguistic methods will putatively be more useful at this stage, when the insights of the first three steps have been acquired. (Gleitman and Rozin, 1973a: 464-46.

The authors report the results of teaching some children to read a syllabary. After 5-7 hours of instruction, twelve kindergarten children learned to recognize the meanings of new words on the basis of their phonological relation to known words. Several inner-city children, who had received 8 months of instruction with a phonics program, though with little success, successfully learned the principle of syllabic reading in a brief span of time. Three possible ways in which this accomplishment may be applicable for further reading instruction are suggested:

1. syllabary may serve as an introduction to an explicit phonemic program

2. syllabary may serve as a substitute for such a program in case the phonemic concepts can be induced spontaneously from the syllabic pattern
3. syllabary may serve as a remedial approach in case some learners cannot grasp the phonemic principle.

Goodman (1973) responds rather caustically to the notion of a syllabary as a means to initial reading acquisition. A very clear divergence in viewpoint exists between Goodman's model of reading as a psycholinguistic guessing game with minimal input from the graphic symbol and the necessity for phonological processing as a stage in the process of reading acquisition suggested by Gleitman and Rozin. One issue in Goodman's argument deserves closer scrutiny and this concerns the point that the syllable is subject to complex relations between morphology and dialect and, therefore, is not constant across dialects.

Gleitman and Rozin (1973b) report that they did control for dialect variations, both in the design of the syllabary curriculum and in the experimental comparisons of syllable and phoneme and rhyme and meaning. What implications do these results suggest to the teacher of Black children who speak a variety of English known as Black English Vernacular (BEV)?

Clearly, there are syllables in BEV. In the absence of explosive political overtones, a possible solution would be to have something like ITA and a corresponding syllabary matched to the phonemic system of BEV. Given, however, the political implications of Black English in the classroom, it
is perhaps best to proceed with the traditional syllabary curriculum and an acceptance on the part of classroom teachers of linguistic diversity and language divergence.

**Metalinguistic Awareness**

Evidence exists to suggest that environments differ with respect to children playing linguistic games. Verbal play should be encouraged in addition to the stimulation of language for communication. The ability to make puns and other types of games may have merit in eliciting linguistic awareness.
Hymes (1974) holds that the foundations of sociolinguistics are to be found in the recognition of three points:

1. that the language is organized, not only in terms of grammar, but also as part of the communicative conduct of communities;

2. that the study of language is a multidisciplinary field to which not only linguistics but also other disciplines are indispensable; and,

3. that the bases of linguistics itself have taken for granted notions that are in fact problematic and must be examined.

A particularly provocative consequence of the emerging sociolinguistic perspective in education has been the issue of nonstandard English dialects. At the forefront of linguistic research on dialectology is the language of the Black community, the Black English Vernacular. Linguists would argue that given the evidence that many inner-city children use consistent forms of nonstandard English, focusing on language differences as one source of poor performance will help to clarify some steps in improving the education of Black children.

The Structure of Black English

William Labov is credited with establishing the field of sociolinguistic investigation of the Black English Vernacular
(BEV) in America.

Labov (1965) identified the socially significant variables which differentiate Black and Puerto Rican speakers from the rest of the New York City speech community and defined those structural and functional conflicts of Black and Puerto Rican vernaculars with standard English (SE) which may cause difficulties in the acquisition of reading skills. Labov concluded that lower-class Black children speak a well-ordered, highly structured, but different, dialect from that of SE. This conclusion is counter to a social pathology model that has figured prominently in the educational and psychological literature (see Table 1 and Table 2).

Language Difference vs. Language Deficit Hypotheses

Advocates of the deficit model have asserted that lower-class Black children have no language at all. Instead of objectively criticizing the school, these theorists contend that problems intrinsic to the student and to his culture prevent the schools from educating them. This frame of reference, which attributes dysfunction to the individual or to his SES or race and not to the school system, is a clear case of institutionalized racism.

Table 1. Phonological Differences Between SE and BEV

<table>
<thead>
<tr>
<th>Variable</th>
<th>SE</th>
<th>Homonymy</th>
<th>BEV</th>
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<tbody>
<tr>
<td>R-lessness</td>
<td>guard</td>
<td>god</td>
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<td></td>
<td>nor</td>
<td>gnaw</td>
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<td></td>
<td>sore</td>
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<td></td>
<td>Carol</td>
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<td></td>
<td>Paris</td>
<td>pass</td>
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<td></td>
<td>terrace</td>
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<td>court</td>
<td>caught</td>
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<td></td>
<td>trial</td>
<td>child</td>
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<td></td>
<td>trolley</td>
<td>Charlie</td>
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<td></td>
<td>true</td>
<td>chew</td>
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<td>l-lessness</td>
<td>tall</td>
<td>toe</td>
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<td>help</td>
<td>hep</td>
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<td>tool</td>
<td>too</td>
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<td></td>
<td>all</td>
<td>awe</td>
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<td></td>
<td>Saul</td>
<td>saw</td>
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<td></td>
<td>fault</td>
<td>fought</td>
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<tr>
<td>Simplication of</td>
<td>past</td>
<td>pass</td>
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<tr>
<td>Consonant Clusters</td>
<td>rift</td>
<td>riff</td>
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<td></td>
<td>meant</td>
<td>men</td>
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<td>best</td>
<td>Bess</td>
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<td>guest</td>
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<td></td>
<td>asks</td>
<td>ask, ass</td>
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<td>mend</td>
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<td>wind</td>
<td>wine</td>
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<td>hold</td>
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<td>six</td>
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<td>box</td>
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<td></td>
<td>Max</td>
<td>Mack</td>
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<td></td>
<td>mix</td>
<td>Mick</td>
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<td>Variable</td>
<td>SE</td>
<td>Homonymy</td>
<td>BEV</td>
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<tr>
<td>Weakening of Final Consonants</td>
<td>boot</td>
<td>boo</td>
<td>row</td>
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<td></td>
<td>road</td>
<td>row</td>
<td>feet</td>
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<td>seat</td>
<td>seed, see</td>
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<td></td>
<td>poor</td>
<td>poke, pope</td>
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<td></td>
<td>bit</td>
<td>bid, big</td>
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<tr>
<td>Other Phonological Variables</td>
<td>pin</td>
<td>pen</td>
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<td>tin</td>
<td>ten</td>
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<td>since</td>
<td>cents</td>
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<td></td>
<td>find</td>
<td>round, fond</td>
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<td></td>
<td>time</td>
<td>Tom</td>
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<td>Ruth</td>
<td>roof</td>
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<td>death</td>
<td>deaf</td>
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<td>beer</td>
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<td>cheer</td>
<td>chair</td>
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<td>steer</td>
<td>stair</td>
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<td>peel</td>
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<td></td>
<td>boil</td>
<td>ball</td>
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<td></td>
<td>oil</td>
<td>all</td>
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<td></td>
<td>stream</td>
<td>scream</td>
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<td></td>
<td>strap</td>
<td>scrap</td>
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<td>poor</td>
<td>pour</td>
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<td></td>
<td>sure</td>
<td>shore</td>
<td></td>
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<tr>
<td></td>
<td>moor</td>
<td>more</td>
<td></td>
</tr>
</tbody>
</table>

Source:
### Table 2. Syntactic Differences Between SE and BEV

<table>
<thead>
<tr>
<th>Variable</th>
<th>SE</th>
<th>BEV</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Linking verb</td>
<td>He is going.</td>
<td>He -- goin.</td>
</tr>
<tr>
<td>3. Plural marker</td>
<td>I have five cents.</td>
<td>I got five cent --.</td>
</tr>
<tr>
<td>5. Verb form</td>
<td>I drank the milk.</td>
<td>I drunk the milk.</td>
</tr>
<tr>
<td>6. Past marker</td>
<td>Yesterday he walked home.</td>
<td>Yesterday he walk -- home.</td>
</tr>
<tr>
<td>7. Verb agreement</td>
<td>He runs home.</td>
<td>He run -- home.</td>
</tr>
<tr>
<td>8. Future form</td>
<td>I will go home.</td>
<td>I'ma go home.</td>
</tr>
<tr>
<td>9. &quot;If&quot; Construction</td>
<td>I asked if he did it.</td>
<td>I ask did he do it.</td>
</tr>
<tr>
<td>10. Negation</td>
<td>I don't have any.</td>
<td>I don't got none.</td>
</tr>
<tr>
<td>11. Indefinite article</td>
<td>I want an apple.</td>
<td>I want a apple.</td>
</tr>
<tr>
<td>12. Pronoun form</td>
<td>We have to do it.</td>
<td>Us got to do it.</td>
</tr>
<tr>
<td>13. Preposition</td>
<td>He is over at his friend's house.</td>
<td>He over to his house.</td>
</tr>
<tr>
<td>14. Be</td>
<td>Statement: He is here all the time</td>
<td>Statement: He be here.</td>
</tr>
<tr>
<td>15. Do</td>
<td>Contradiction: No, he isn't.</td>
<td>Contradiction: No, he don't.</td>
</tr>
</tbody>
</table>

Source:
The Restricted Code is said to arise among the lower working-class social strata, and the net effect of the constraint imposed on children from these respective social strata by the Restricted Code will be to depress potential linguistic ability, raise the relevance of the concrete and descriptive level of response and inhibit generalizing ability at the higher ranges. The Elaborated Code allows the speaker to select from among syntactic alternatives, encourages differentiation of vocabulary and implies the ability to deal with complex, conceptual ideas. Bernstein argues that the value system of the middle class permeates the fiber of the learning context itself in the Elaborated Code.

Whiteman and Deutsch (1968) and Hunt (1966) have pointed to environmental factors such as relatively limited conversation at dinner, limited cultural activities, living under crowded conditions and the lack of verbal stimulation by adult speech models as indicative of cognitive and intellective impairment.

Jensen (1969) argues that although extreme environmental deprivation can keep the lower class Black child from performing up to his genetic potential, it is the genetic inferiority of the Black populace that emerges as the most consistent hypothesis. He further argues that the white middle-class can be distinguished from the white and Black lower-class in terms of the ability for "cognitive or conceptual learning" or Level II intelligence.
Bereiter and Engelmann (1966: 32) have interpreted Bernstein's theories to mean "that the speech of lower class people follows a linguistic code ... that is inadequate for expressing personal or original opinions, for analysis and careful reasoning, for dealing with anything hypothetical or beyond the present, and for explaining anything very complex." In support of the notion that Black children have no language, they make the following points (Bereiter and Engelmann, 1966: 34-35, 39):

1. The speech of the severely deprived children seems to consist not of distinct words, but rather of whole phrases or sentences that function like giant words ...  

2. ... the child's faulty pronunciation arises from his inability to deal with sentences as sequences of meaningful parts.  

3. Many disadvantaged children of preschool age come very close to the total lack of ability to use language as a device for acquiring and processing information.

Malcolm Coulthard (1969) has outlined a number of inconsistencies in the data which Bernstein uses to support his theory. Moreover, current linguistic data cannot support one of the classic arguments for language intervention programs, linguistic and cognitive deficits which must be remedied if the Black child is to succeed in school.

The supporting data used to justify the social pathology model consists largely of: 1) responses to sociological survey-
type questionnaires or 2) interaction situations contrived in educational laboratories. No evidence derived from anthropologically-oriented field work in the Black home is offered in support of these absurd speculations on the linguistic competence of the Black child.

Labov (1972c) observes that interviews taken in contrived settings by adults are invalid because they simply measure the child's ability to cope with a threatening situation. The social context is the most significant variable determining language behavior for speakers of BEV; an adult must enter into the proper social relation with a child in order to accurately assess his capacity for verbal functioning or his responses to researcher's questions.

Cazden (1970) has rejected both the language difference and language deficit views of child language as applied to lower-class Black children on two grounds: 1) they ignore patterns of use in actual speech events and 2) they ignore the child's communicative competence. "At any one moment, a child decides to speak or be silent, to adopt communicative intent A or communicative intent B, to express idea X or idea Y, in form 1 or 2." The options that the child selects will be a function of the characteristics of the speech situation as he perceives it on the basis of his past experience.
Erickson (1969) found that both groups of inner-city young people and suburban young people shifted back and forth between relatively restricted and relatively elaborated codes, depending on context, in discussing the significance of popular song lyrics.

Chomsky (1964) and his work in generative-transformational grammar add new dimensions to the problem of dialect differentiation. He has suggested that dialects differ from each other not in the underlying (deep) representation, which is actually the same for each dialect, but in some of the phonetic rules employed to realize utterances in that system, or even in the different ordering among dialects of what is actually the same set of phonetic rules.

Finally, Kiparsky (1968) notes that grammars are subject to two kinds of changes: 1) addition of new rules and 2) simplification of complex and general rules. The thesis that rule addition is the only form of linguistic change is incapable of explaining, for example, the simplification of grammatical markers in BEV. Multiple negation may well be an example of hypercorrection that resulted from linguistic change via rule borrowing. The negative concord in BEV may be a simpler more general rule.
The Black English Vernacular in its Social Context

A rich oral tradition is an inherent part of the Black cultural aesthetic and prestige norms within the culture of the Black community place a high premium on the ability to use words. The stimulus for most verbal play is the presence of the peer group; Black speech events involve active participation on the part of the Black audience (see also Kernan, 1973).

Labov and Robins (1969) found that the great majority of boys involved with street gangs in S. Central Harlem were three or more years behind grade level in reading and concluded that the major problem responsible for reading failure is a cultural conflict. The urban teacher has little ability to reward or punish members of street culture or to motivate learning by any means (see also Meyers, 1974).

The Question of Dialect Interference and Reading

A particularly provocative issue in the literature on psycholinguistics and reading as it effects speakers of BEV is the question of dialect interference and reading.

Goodman (1965) observed that the more divergence there is between the dialect of the learner and the dialect of learning, the more difficult will be the task of learning to read. He suggested that sound divergence (intonation and phonemes) and grammar divergence (suffixes and lexicon) may provide for interference in reading.
Labov (1972b) has argued that two cases must be distinguished. 1) Deviation in reading may be only a difference in pronunciation on the part of a child who possesses a different set of homonymous from the teacher and 2) the child has no concept of grammatical markers. Much more time must be spent on grammatical differences and teachers should be aware of the homonymous in BEV that separate their speech from that of the child.

Empirical tests of the dialect interference hypothesis have left the question largely unresolved.

Baratz (1969) concluded from a Sentence Repetition Task that there is evidence of interference from BEV when Black children attempt to use SE. A major weakness in this experiment was the use of only one measure of performance: proportion correct.

Hall and Freedle (1973) found that although Blacks lag behind whites in absolute performance in SE at each age level, they are in another sense superior to whites in that they had to acquire a much larger piece of 'the linguistic pie' in order to earn identical rate of improvement parameters from ages 8 to 10.

Hagerman and Sarrio (1969) tested the hypothesis that given a Sentence Recognition Test consisting of 76 SE sentences,
each buried among 3 BEV sentences and presented as multiple-choice items, an SE speaker would recognize only 1 of 4 sentences as familiar to him while a BEV speaker might recognize 2-4 sentences as correct, thus leading to interference in his choice which is demonstrably dialect based. The authors concluded that dialect interference does exist at recognition level for Black subjects tested. It is apparent that the basic question of dialect interference in reading still remains.

Melmed (1973) showed that Black subjects have difficulty discriminating word-pairs which are homonyms in BEV but separate words in SE; however, Black subjects showed no inability to comprehend written word-pairs while reading orally or silently. Homonyms unique to BEV cause reading comprehension interference only when the sentence lacks syntactic or context clues.

Torrey (1970) rejoins that the personal and cultural functions of language and language differences might affect the social relations between the child and school and lead to restraints on effective learning. She cites evidence that some BEV speakers can understand SE forms and read SE forms aloud without changing them and concludes that reading retardation among Black children can't be due, primarily, to
structural difference between BEV and SE, since learning to
read requires only a passive understanding of SE. Intolerance
of linguistic diversity has led to a void in the classroom,
making it impossible to learn to read or to learn anything else.

Implications for Classroom Practice

Linguists and educators, having considered the totality
of psycholinguistic and sociolinguistic data available to
describe the language structure and behavior of speakers of
BEV, have suggested four sociolinguistic approaches to
the teaching of reading:

1. dialect readers in beginning reading instruction
2. teaching SE before the teaching of reading
3. allowing a dialectally appropriate reading of
   extant materials
4. the Language Experience Approach

Dialect Readers

Joan Baratz (1970) and William Stewart (1970a) have
been advocates of the use of dialect readers in beginning
reading instruction. They have argued that because of
differences between the Black child's linguistic system and
that of printed materials, beginning reading materials must
be presented in the child's system.

Roger Shuy (1969b) has suggested that dialect readers
conform to three general principles: 1) grammatical choices
should not provide extraneous data; 2) grammatical choices should provide adequate data; and 3) grammatical choices should provide sequentially relevant data. First the child must be taught to read and then he can be taught to read SE. Baratz suggests that "transition texts" be provided to move the child from BEV to SE. However, empirical tests of dialect texts have shown, rather conclusively, that they are both impractical and politically explosive.

Nolen (1972) and Johnson and Simons (1973) have demonstrated that the dialect text leads to reduced comprehension, less effective use of contextual and graphophonic information and greater dialect-related miscues than the SE text. These findings appear to support Conrad (1972) who observes that the fact that for perhaps two years or so a child may have been quite fluent in using and comprehending spoken language is possibly irrelevant when it comes to language visually perceived. The importance of phonological coding in reading leads one to question the introduction of written patterns which will not remain constant.

Wiggins (1971) and Mathewson (1973) have concluded that Black children are significantly more interested in SE reading materials than in those written in BEV.

De Stefano (1971) investigated the views of Black adults toward BEV. All subjects expressed total opposition to the use
of BEV in beginning reading texts.

Teach SE Before the Teaching of Reading

Richard Rystrom (1968, 1970) has twice concluded that mastery of SE is not a necessary prerequisite to learning to read. In each case, a Grammatical Training Program was not effective in improving the scores on word reading tests in which the relationship between letters and sounds was controlled. Subjects in both studies were Black first graders.

Goodman (1970) has questioned the assumptions and not the results of Rystrom's research. If materials are meaningful and relevant, and if pupils are encouraged to constantly seek for meaning as they read, problems of grammar will diminish in importance. Children will tend to equate grammatical structures from their own dialect with those in the reading materials and assign a deep structure that they can decode. Goodman observes that to equate "white" in language with standard and "Black" with nonstandard confuses the linguistic utility of different dialects with the social values placed on them.

Dialectally Appropriate Reading of Extant Materials

Both Goodman (1965) and Wolfram (1970a) have endorsed the alternative of allowing speakers of BEV to render a dialectally appropriate reading of extant materials. Psycholinguistic research has indicated that Black children have a receptive competence in SE (research by Hall and Freedle (1973) in-
dicate a productive competence as well); however, this does not preclude the possibility that some information loss may occur because of dialect differences. What to do about features unfamiliar to the Black child poses an empirical question which must be faced directly if no change in traditional reading materials is advocated. Acceptance of this alternative will require a knowledge on the part of teachers of the structural patterns of BEV and the legitimacy of Black language patterns.

**Language Experience Approach**

Cramer (1971: 34) argues that to "whatever degree reading achievement appears to be negatively influenced by dialect differences, to that some degree these negative influences could be ameliorated or eliminated by providing a closer match between the language of initial reading materials and the language of the child." The best way to insure that beginning reading materials reflect this linguistic ideal is to provide the child with an opportunity to dictate his own beginning reading material. The Language Experience Approach (LEA) rests on the assumption that reading can be most meaningfully taught when the reading materials accurately reflect the child's own experience as described by his language.

Teaching methodology appropriate to LEA is extensively described in Ashton-Warner (1963); Hall (1970); Lee and Allen (1963); and Stauffer (1970). The reader is referred to
these references for further information.

Hall (1972a) outlines the linguistic rationale for LEA. Beginning readers are taught to view reading as a communication process and as a process of consciously relating print to oral language. The learning of writing is incorporated with the learning of reading so that processes of encoding and decoding may be mutually reinforced. Teachers record syntactic patterns of the children as spoken (see Table 2) but using standard orthography; phonological differences (see Table 1) are not recorded, i.e., phonological differences are not represented in the orthography. Finally, the child learns to read meaningful language units read in a smooth, fluent, natural expression.

Hall (1972b) presents a comprehensive summary and synthesis of existing research literature on LEA for the culturally and linguistically different Black child. General findings on achievement reveal that the overall effectiveness of LEA is neither overwhelmingly supported nor convincingly rejected. However, the potential of LEA for speakers of 3EV has not been thoroughly explored through research. Evidence suggests that urban Black children can be taught to read successfully when programs are appropriate to their needs. LEA can be one effective methodological approach to teaching Black children to read. A major question for future
research concerns the analysis of dialect divergence in connection with LEA instruction.

It is the view of this writer that Black children must ultimately master standard English syntax for purposes of survival in a highly competitive society whose standards for literacy are based on standard English. However, the natural and legitimate language system of the Black community must not be eradicated in favor of the more socially acceptable SE. Clearly, there must be an acceptance of the biloquialist perspective in language learning, and Black children must be prepared to "live in two worlds simultaneously."

Recent sociolinguistic research has investigated the critical issue of teaching language arts to speakers of BEV.

Teaching the Language Arts to Speakers of BEV

The fact that all features of BEV do not have equal social connotations; the fact that the precedence of minor rather than major differences between dialects may discourage students at an early stage in their acquisition of SE; and the realization that any course in SE will probably not cover as much material as would be desirable means that some features should be given priority over others in teaching SE to speakers of BEV.

Wolfram (1970) has suggested five criteria as useful in determining the relative order of SE lessons: 1) social
diagnosticity of linguistic variables; 2) generality of rules; 3) phonological versus grammatical variables; 4) regional versus general social significance; and 5) relative frequency of items. Each BEV feature must be considered in terms of the total configuration of sociolinguistic principles.

Stewart (1970b) and Feigenbaum (1969) have suggested the use of foreign language teaching methodology to teach SE. Structural dissimilarities in grammar have led to language learning problems of a type which are similar to foreign language learning problems.

Johnson (1969) has outlined several pedagogical problems involved in using foreign language methodology to teach SE to speakers of BEV. The first problem is the teacher’s attitude toward BEV. The teacher must accept it and refrain from extending negative attitudes toward language to children. Black children must learn to accept their language; yet, even if they do accept it, the problem of "functional interference" may arise since SE is not necessarily reinforced in the child’s social environment. The problem of motivation poses a serious question since society seems determined to deny Black people the social, political and economic opportunities in which SE is operable. Pedagogically, drills and exercises must contain sentences that should be kept short and move at a fast pace. It is difficult to have Black children sustain
SE for long periods of time in role-playing situations. The children must also be able to understand the nature of dialects, causes of their development, various types of American dialects and their social implications.

A rather provocative issue in the consideration of sociolinguistic implications for teaching SE is the question of when SE should be taught to speakers of BEV.

Johnson (1970) has argued that Black children cannot be expected to learn and, more importantly, to use - SE until they reach adolescence or the secondary grades. He offers the following reasons to support his argument: 1) it is unreasonable to expect kindergarten or primary grade children to learn to speak another dialect of English so closely related to BEV that many of the conflict points cannot be perceived by these young children; 2) young Black children lack facility with their own dialect and the maturation necessary for second language techniques to be effective; 3) Black children are not a part of a cultural environment where SE is used and where communication demands of the environment require SE; and 4) Black children don't recognize a need for SE and without this recognition, they will lack motivation to learn it. Johnson suggests that children in the primary and intermediate grades should be encouraged to use their own BEV, helped to increase their ability to understand SE and helped to expand
their vocabulary and concept development. During the ages of 12-18, children become aware of differences in the kinds of English spoken by different groups and the social significance of these differences. Their social sphere and communication needs are broadened and it is possible that they can be motivated to learn SE. Though consistent with Labov's Stages of Language Acquisition, Johnson's model is contrary to Lenneberg's notion of a Critical Period. In Lenneberg's view, the ability to acquire language declines with age; capacities for learning and recovering become atrophied approximately at puberty. The critical biological concomitant of language emergence is lateralization of cerebral function and when this process is completed at puberty, the critical period is over. This writer is not convinced that Black children cannot appreciate the importance of learning SE and, in fact, learn to use SE, provided linguistically sound materials and good teaching.

Empirical tests of these assumptions have attempted to clarify the issues involved in language arts instruction for speakers of BEV.

Torrey (1972) attempted to show specific effect of BEV upon various linguistic performances likely to affect educational achievement, particularly upon understanding of SE grammatical forms that differ from those used by the child. Comparing effects of a Grammatical Training Program on
different types of language performance, Torrey concluded that grammatical training had an influence on explicit grammatical knowledge but there was no evidence that it affected oral language in either speaking or reading aloud.

Gladney and Leaverton (1971) designed an instructional model providing: 1) rhymed pattern practice; 2) various activities designed to help the child make the transition, at a conscious level, from established dialect form to corresponding dialect form; and 3) pre-written sentences and stories in "Everyday Talk" and dialogues in "School Talk" which included verb forms being studied. Subjects were Black children in kindergarten, first, second and third grade. Similar children with respect to age, grade, IQ and SES, who had been given traditional speech lessons, were selected as controls. Results revealed a significant difference between experimental group and controls with respect to same two verb forms; conditional with "be" and the regular present. Findings with respect to other verb forms showed positive trends favoring experimental group but were not statistically significant. The model encourages teachers to respect and accept children's established dialect and provides a framework to help children recognize, learn and hopefully begin to use SE.
The Teacher Variable

The First Grade Studies in the 1960's sponsored by the U.S. Office of Education compared the effectiveness of various approaches in teaching reading and concluded that teacher effectiveness may be more important than which method and materials should be used.

Harris (1969) suggests that the effective teacher of reading should: 1) motivate the child; 2) praise with a purpose; 3) provide for high interchange between pupil and teacher; 4) entertain varied, open-ended questions; 5) allow for self-criticism and analysis; 6) become involved in curriculum planning, selection of materials and classroom organization; and 7) be cognizant of the attention and awareness of the children.

Piestrup (1973) investigated the effects of dialect interference on learning to read and the ways teachers accommodate reading instruction for first grade Black children. Six teaching styles were defined: Vocabulary Approach, Decoding Approach, Standard Pronunciation Approach, White Liberal Approach, Black Artful Approach and Interrupting Approach. Reading scores of children taught by the Black Artful teachers were significantly higher than those of children taught by other groups, the Interrupting and White Liberal teachers. The Black dialect scores of children in the Black Artful group were also signi-
significantly lower than those of children in the Interrupting or Vocabulary Emphasis group. The results suggest that the ways teachers communicate in the classroom are crucial to children's success in beginning reading instruction. Black Artful teachers were able to involve children in learning to read in a manner that capitalized on their rhythmic and lively speech. More research is needed to determine what made these teachers so effective.

This writer is convinced that teachers who wish to become practitioners in urban schools must receive a specially designed and rigorous program of preservice education and internship teaching, with continuing in-service training. The urban teacher must be trained in the historical, political, social and economic dimensions of Black culture and the community in which he teaches. The cognitive and language development of the Black child must be studied intensively from the interdisciplinary perspectives of psychology, sociology, linguistics, psycholinguistics and sociolinguistics. Thorough training in reading-language arts methodology appropriate to Black children and reading research methodology are necessary prerequisites. Furthermore, the urban teacher must be skilled in counseling and social work techniques and must have the willingness and ability to stimulate Black parents and community leaders to
become involved in the school program. The teacher of Black children must understand the nature of language and how it operates. Finally, the urban teacher must love and respect Black children and preserve the integrity of the Black child, his language, culture, history and future.
CONCLUSION

Significant differences exist between the acquisition of language and the acquisition of reading. Models of language acquisition remain in a state of "becoming" and it is premature at this point to attempt an integration of the various models of language acquisition. Furthermore, it is premature to attempt a synthesis of one or more linguistic models with models of the reading process itself. The skilled and experienced teacher is perhaps best suited to extrapolate from research on language acquisition those principles and generalizations which may have some applicability in the classroom situation. Language models are, clearly, not irrelevant to reading.

It is difficult to generate a set of principles and generalizations from studies of reading acquisition that would be genuinely and immediately helpful in preparing instructional materials and methods. It does not follow, however, that models of reading acquisition are irrelevant to the design and evaluation of beginning reading instruction. Again, the experienced and knowledgeable classroom teacher must draw from basic studies of the reading process those principles and generalizations which would be most effective
in the design and evaluation of instructional programs and procedures. There seems to be a growing rapprochement among theorists toward a view of reading as both a complex cognitive skill, the goal of which is to obtain information, and a complex language system (Williams, 1973: 121).

The Black English Vernacular (BEV) is a regular, complex linguistic system and is not very different from standard English (SE), either in the cognitive abilities necessary for its acquisition or the intellectual processes necessary for its skillful use. It contains all of the grammatical categories which are essential parts of any logical system and is capable of expressing abstract, conceptual ideas at the higher ranges.

The social context in which BEV functions emerges as the most important determinant of verbal behavior. Black language patterns are ensconced in a rich oral tradition with the peer group occupying a crucial position in the natural speech community.

The hypothesis of dialect interference in reading remains largely unresolved. No significant empirical or sociological data exists to warrant the endorsement of dialect readers in beginning reading instruction for speakers of BEV.
No empirical data exists to support the hypothesis that SE can be extensively taught at the initial stages of education or that competence in SE is a necessary prerequisite for reading. Pedagogical techniques developed for teaching English as a foreign language, provided proper educational sequencing, are effective in teaching SE to speakers of BEV.

By permitting the child to read traditional materials or experience stories in his own dialect, the teacher can focus on the essentials of the reading process and the child will not be confused about reading problems which may result from dialect interference and legitimate types of reading errors arising during course of acquisition of reading skills.

Teachers must be thoroughly acquainted with the description of dialect features and points of possible dialect interference. Teachers must be convinced of the legitimacy of BEV as a highly developed language system.
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