Oral language is used before written language, according to this paper, which contends that the acquisition of literacy is merely an extension of natural language learning for all children. This view of literacy development as natural is distinguished from the views of those that think language is innate; the naturalness of children learning to read and write comes from their active participation in the communication process—their motivation to comprehend what the printed word is trying to "say."

The paper describes eight essentials of beginning reading instruction based on a natural language thesis, and offers suggestions for the environment, activities, and teaching procedures that should be used in natural language instruction. (The discussion following presentation of the paper is attached.) (RL)
Learning to Read is Natural

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When a human society experiences the need for communication over time and space then written language is developed. Until that time language is used in a face-to-face, here-and-now context and oral/aural language suffices. But when a society is literate, written language is functional for the society and the members in that society must learn the written form. We believe they learn it in a similar fashion as oral/aural language. Written language includes two of the four language processes. Reading is the receptive and writing is the productive form.

Children are born into a family, a community, a society in which language is used. Children are born dependent. Furthermore humans are social animals. They need to interact linguistically and communicate in order to survive and to participate.

Almost all children acquire language easily and naturally. They do so within the "noisy" situations in which they are interacting with parents, siblings, and others. Strongly motivated by the need to understand and be understood they sort out and relate language to non-language, acquire control of symbol and rule systems, use language appropriately for appropriate purposes, build an impressive, even precocious, repertoire of utterances and become able to both understand and produce language they have never heard before.

Their language moves rapidly toward the familiolect and dialect which surrounds them, so rapidly that some scholars have come to view language as innate.
while others have seen it as an example of conditioning through stimulus and response. Our own view is that language is both personal and social invention. Both the individual and the society never lose the ability to create language. It is communicative purpose that motivates language development and which moves children toward the language around them. We believe as does M. Halliday (Halliday, 1975) that function precedes form in language acquisition. The ability to create language makes it possible for individuals to express original thought in original, yet understandable, language and for society to cope with new situations, new circumstances, new insights.

Children growing up in a literate society begin to encounter written language before they personally experience the need to communicate beyond face-to-face situations. All of them become aware of and able to use written language to some extent.

They become aware of books, signs, captions, printed containers, logos, handwriting in the day-to-day experiences they have. They recognize stop signs, read cereal boxes, scribble letters, write their names, follow familiar stories and join in the reading.

For some children their awareness of written language and its uses leads so naturally to participation that they are reading and writing, even inventing their own spelling rules, before they or their parents are even aware that they are becoming literate. The process of acquisition of written language parallels for such children that of acquisition of oral language.

Our contention is that acquisition of literacy is an extension of natural language learning for all children. Instruction which is consistent with this understanding facilitates learning. Instruction which does not build on the process of natural language learning will, in some respects, be at cross purposes with learners’ natural tendencies, will neutralize or blunt the force of
their language learning strengths, and may become counterproductive. Learners may then have to overcome barriers placed in their way in order to become literate.

**Essentials of Instruction for Natural Learning**

We believe that children learn to read and write in the same way and for the same reason that they learn to speak and listen. The way is to encounter language in use as a vehicle of communicating meaning. The reason is need. Language learning whether oral or written is motivated by the need to communicate, to understand and be understood.

The essential process of beginning reading instruction involves these key understandings:

1. Understanding how language functions in conveying meaning.
2. Understanding how communication of meaning functions as the context in which language is used and learned.
3. Understanding the subtle differences and similarities in use of oral and written language.
4. Understanding the personal social motivations that lead children to learn or not learn language.
5. Understanding the cultural factors which make the acquisition of literacy of more or less personal importance to children of differing backgrounds.
6. Understanding the natural process of acquisition of literacy some children achieve.
8. Understanding how to create programs and environments which enhance the natural motivations, awareness, experiences, and cultural variables so that reading is acquired naturally by all children.
9. Understanding the roles teachers must play as guides, monitors, environmental arrangers, and stimulators to help the process happen.

Natural, not innate

This view of development of literacy as natural is not the same as the view held by those who regard language as not learned but innate. Many of those who espouse such a position have tended, reasoning back from the apparent lack of universality in acquisition of literacy, to treat oral language as innate and written language as acquired.

Mattingly (1972, pp. 133-147) summarizes such a view:

The possible forms of natural language are very restricted; its acquisition and function are biologically determined . . . . Spec.: neural machinery is intricately linked to the vocal tract and the ear, the output and input devices used by all natural (ital. ours) human beings for linguistic communication . . . My view is that . . . speaking and listening are primary linguistic activities; reading is a secondary and rather special sort of activity that relies critically upon the reader's awareness of these primary activities.

That leaves Mattingly by his own admission rather surprised "that a substantial number of human beings can also perform linguistic functions by means of the hand and the eye. If we had never observed actual reading or writing we would probably not believe these activities possible."

Mattingly's use of awareness in describing reading is a focal point. Oral language is a "synthetic, creative process" which is not "in great part deliberately and consciously learned behavior like playing a piano. . . . Synthesis of an utterance is one thing; the awareness of the process of synthesis quite another." Mattingly is led then to conclude that reading, unlike speech, requires very deliberate awareness of linguistic process.

This view makes the learning of oral and written language very different. Learning to read is seen as not natural like listening, but a deliberate conscious, academic achievement dependent on awareness of certain aspects of oral language.
Since we view language as personal-social invention we see both oral and written language as learned in the same way. In neither case is the learner required by the nature of the task to have a high level of conscious awareness of the units and system. In both cases control over language comes through the pre-occupation with communicative use. Awareness of the uses of language is need. But in neither case is it possible or profitable for the competent language user to be linguistically aware in Pattingly's sense. In reading, as in listening, pre-occupation with language itself detracts from meaning and produces inefficient and ineffective language use.

Not a Garden of Print Either

Our position is also not Rousseauian. When we use the term natural learning we do not regard the process as one of unfolding in an environment free of obstructive intrusions. Teaching children to read is not putting them into a garden of print and leaving them unmolested.

Language learners are active participants in communication with unseen writers.

They are seekers of meaning, motivated by the need to comprehend, aware of the functions of print and adaptive to the characteristics of print. The environment must certainly be rich in print, a literate one. But reading instruction, particularly beginning instruction, has a vital role to play in creating and enhancing the conditions which will bring the reader's natural language learning competence into play. Children must be among people who talk in order to learn to speak and listen. But that's not enough. Their need to communicate must also be present for learning to take place. This is also the case in acquiring literacy.

Instruction does not teach children to read. Children are in no more need of being taught to read than they are of being taught to listen. What reading
instruction does is help children learn.

This distinction between learning and teaching is a vital one. Helping children learn to read is as Frank Smith has put it, "Finding out what children do and helping them do it." (Smith, 1973, pp. 183-196). That's possible given children's language competence, language learning competence, and the social function of written language. Teaching children to read has often meant simplifying and fractionating reading into sequenced component skills to be learned and used.

With the focus on learning, the teacher must understand and deal with language and language learning. The learners keep their minds on meaning. With the focus on teaching both teachers and learners are dealing with language, often in abstract bits and pieces. The need of the learners for making sense may help them to use their language learning competence to circumvent such instruction. But that demonstrates how we have tended again as Frank Smith has said to find easy ways to make learning to read hard.

Halliday has stated a position we can agree with:

There is no doubt that many of our problems in literacy education are of our own making; not just ourselves as individuals, or even educators as a profession, but ourselves as a whole society, if you like. In part the problems stem from our cultural attitudes to language. We take language all too seriously--and yet not seriously enough. If we (and this includes teachers) can learn to be a lot more serious about language, and at the same time a great deal less solemn about it (on both sides of the Atlantic, in our different ways), then we might be more ready to recognize linguistic success for what it is when we see it, and so do more to bring it about where it would otherwise fail to appear, (Halliday, 1971, p. VIII).

The Difference between Oral and Written Language

"What is common to every use of language," says Halliday, "is that it is meaningful, contextualized, and in the broadest sense social." (Halliday, 1969, pp. 26-37.)

Modern linguistics correctly shifted the main focus of linguistic concern
from written to oral language several decades ago. It’s unfortunate that many linguists began to equate speech with language to such an extent that written language came to be treated as something other than language. Such a view is unscientific since it is largely unexamined and illogical: if written language can perform the functions of language it must be language. Nottingingly rather than being surprised that people can perform linguistic functions by means of hand and eye must be prepared to modify a view of language that would make such linguistic reality surprising. Written language in use is also meaningful, contextualized and social.

For literate users of language, linguistic effectiveness is expanded and extended. They have alternate language forms, oral and written, which overlap in functions but which have characteristics which suit each for some functions better than the other. Let’s consider the basic characteristics of the alternate language forms so that we may see which uses they are better suited for.

<table>
<thead>
<tr>
<th><strong>Input-output medium</strong></th>
<th><strong>ORAL</strong></th>
<th><strong>WRITTEN</strong></th>
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<tr>
<td>Symbolic units</td>
<td>Ear/voice</td>
<td>Eye/hand</td>
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<td></td>
<td>Sounds &amp; sound patterns</td>
<td>Print &amp; print patterns</td>
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<tr>
<td>Display</td>
<td>Over time</td>
<td>Over space</td>
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<tr>
<td>Permanence</td>
<td>Instantly perishable unless electronically recorded</td>
<td>As permanent as desired</td>
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<tr>
<td>Distance limits</td>
<td>Distance between encoder &amp; decoder limited unless amplified or electronically transmitted</td>
<td>Distance between encoder and decoder unlimited</td>
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<tr>
<td>Structure</td>
<td>Phonological surface representation of deep structure &amp; meaning</td>
<td>Orthographic surface representation of deep structure &amp; meaning</td>
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Speech lends itself easily to here-and-now, face-to-face uses. Writing is best suited for use over time and space. Certainly the need for extending communication between people separated by time and distance was the social
cultural reason for development of literacy historically. In some early societies this social need required literacy from only a few people who functioned either as a kind of signal corps or as the archivists of the communities. The Persians used a small corps of literate Hebrew slaves to handle communication across their empire.

In other societies the need for and uses of written language became more pervasive. Religious communities that hold the belief that each individual must share in a body of knowledge stored in print documents will develop widespread literacy.

Oral language is of course the first language form for most individuals even in literate societies. This primacy means that for a period of their lives children will use oral language as the first means of dealing with all the language functions. Evidence exists however that very young children have some awareness and make some use of both the form and function of written language long before their control of oral language has become fully functional.

Our contention is that we can explain both acquisition and lack of acquisition of literacy in terms of the internalization of the functions of written language by children. Let's start with a simple example: Children in a developing nation go off to a village or boarding school where they are taught basic literacy, among other things. The functions of written language they encounter in school may have no parallels in their homes. Instruction may deal with the mechanics of reading and writing and not even attempt to establish need or linguistic function. Instruction, literacy, and materials may even be an unknown language. Success in initial acquisition of literacy will certainly be limited in any sense. If any mechanical skill is achieved it is unlikely to become functional. Furthermore when the pupils leave school there will be little or no use to be made of written language. The village culture is one with little
use for print. Since there are strong patterns in many countries of early school drop out before the third or fourth grade, progress in developing literacy is unlikely.

Halliday has presented a view of children's models of language which we wish to apply to written language. Halliday states that "the child knows what language is because he knows what language does." Children in literate societies use written language to various degrees and for various social, personal purposes. Halliday considers that these functions appear in approximate order and he believes that they develop before the child learns the adult language. In building initial literacy it is important to understand that function precedes form in language development and that children have acquired all functions before they come to school (Halliday, 1975, p. 244).

Halliday's Functions of Language:

- Instrumental: I want
- Regulatory: Do as I tell you
- Interactional: Me and you
- Personal: Here I come
- Heuristic: Tell me why
- Imaginative: Let's pretend
- Informative: I've got something to tell you

The extent to which children become aware of how each function is dealt with in written language will be influenced by which ones are most commonly served by print and which continue to be best served by speech in their cultures and communities.

Children in literate societies are aware early of the regulatory function. The function of STOP signs is quickly learned. One six year old was asked why she thought it was important to read. "You might be out driving. And you might want to park. And there might be a sign that says "No Parking." And a man might come out and say "Can't you read?"

The people who write the copy for the Saturday morning TV cartoon shows
work hard at establishing the I want function so that millions of preschoolers will be able to spot the "Count Chocula" box and say "I want Count Chocula."

Letter and note writing represent the interactional function of language. Many children become aware of letters, enjoy receiving them, dictate letters to be sent to grandparents, and begin to play at or actually produce letters. Parents often leave notes for children. But the "he and you" function begins to illustrate the important differences between the two forms of language in use. Conversation is oral interaction. Usually it is strongly situationally supported. Speaker and listener are together, response is quick, topics usually relate to the situational context itself. Pointing, facial expressions, body movements, all support successful communication. Interacting through print is not situationally supported (the context is more abstract), response is delayed and the respondent unseen; language must express aspects of messages which are indicated in other ways in oral conversation.

Two differences are involved in written interaction as compared to oral. One is the absence of supportive situational context. Writing shares this condition with telephone use. It's interesting that the extension of oral interaction to telephone conversation causes children to refine and extend the function. But telephones provide immediate response, written letters result in delayed responses.

The second attribute of written language which distinguishes oral and written interaction is that the writer, the partner in communication with the reader is most often unseen and unknown; the young reader may in some sense be aware of the message but not its source. This difference also shows in other written language. Signs tell you to "keep off the grass." Who wrote and put them there may not be something children have considered.

Children may be no more concerned with who puts stories in books than they
are with who puts milk in bottles. In fact the message appears to be coming from the language itself or its context in the case of signs.

Some children become aware of the personal function of written language perhaps earlier than others. They may be in a very egocentric stage at the time when they are aware that they have written representation of self becomes a way of identifying what is "mine".

One of our graduate students recently reported an experience of a ten year old fifth grader who was considered learning disabled. Reading is so far from having a personal function for him that he encountered the name Miguel four times in a story before he recognized it as his own name. Then he was amazed to find it in print.

On the other hand a three year old, asked to write his own name, scrawled an A. That's Ali, he said. Then he drew a picture with an A discernible in its center. That's Ali on his bike. His graphic name was his image.

If Halliday is right about a sequence in development of language functions, then it is interesting that the last three, heuristic, imaginative, and informative are the functions for which written language is most heavily used in literate societies.

As language functions are extended beyond the immediate concerns, needs, and interactions of children to exploration of the real world, the world of ideas, and the world of what might be, language expands, takes on new textures and begins to transcend the immediate contexts in which it occurs.

The language of children expands to serve their needs as they become fully interactive with their communities.

Halliday (1969) suggests that the informative model of language which is the abstract use of language to talk about ideas may be the only model of language which adults articulate but it is a "very inadequate model from the point
of view of the child."

He indicates that if our concept of language is to be helpful to children, it must be exhaustive. It must take into account all the things language can do for children. In reading that means using street signs, buying favorite toys and foods, finding favorite TV programs, writing and reading notes from parents left under magnetic markers on the refrigerator, reading stories which expand the creative and fanciful world of play, using books to discover how to make a sock puppet or read a recipe from the box to find out how to make marshmallow Rice Krispy crunch.

Readers in our society who are the readers who do read, as opposed to the readers who can read, use reading for all its varied purposes. We must focus more and more attention on how written language is used in society because it is through the relevant use of language that children will learn it. They will learn it because it will have meaning and purpose to them. Written language, too, can then fit into Halliday's statement that what is common to every use of language is that it is meaningful, contextualized and social.

When and how does reading begin? The Research Base

Reading begins when children respond to meaningful printed symbols in a situational context with which they are familiar.

The onset of this process probably goes as unnoticed as the point in time when listening begins.

Yet there is lots of evidence in the literature that suggests that some kind of print awareness starts in children at a very early age without formal instruction.

Frank Smith (1976, pp. 297-299) makes several points relating to the onset of reading:

The first is that children probably begin to read from the moment they become aware of print in any meaningful way, and the second is
that the roots of reading are discernable whenever children strive to make sense of print before they are able to recognize many of the actual words.

Third, not only are the formal mechanics of reading unnecessary in these initial stages, they may well be a hindrance. It is the ability of children to make sense . . . that will enable them to make use of the mechanics . . . Fourth, words do not need to be in sentences to be meaningful, they just have to be in a meaningful context . . .

The awareness of print seems to develop as children learn to categorize the large amount of print information which surrounds them in a literate society. As they drive down a highway, walk down a street or through a shopping center, or watch television, they are bombarded with print media. Children learn to organize their world and make sense out of it. When printed language is part of that world, children will use that aspect of the environment if it is functional and significant to their life and culture. Gibson (1970, p. 137) reports on children who at four could not only "separate pictures from writing and scribbles . . . they could separate scribbles from writing."

After being aware of print as different from other graphic information, the child begins to assign meaning to the print in the environment.

Ingrid Ylisto (1968) studied pre-schoolers who had no formal instruction responding to signs in situational context and concluded "In reading as the child interacts in a print culture his awareness and recognition of printed word symbols become more and more autonomous. He abstracts the printed word symbol from the contextual setting, classifies and orders it and systematizes or assimilates it in a language system he knows."

Our recent pilot research substantiates this movement from children learning to read printed symbols in familiar situational contexts toward more reliance on language contexts.

Children from age three on have been asked to respond to common signs in their environment. Certain signs are recognized in the situational context only. Circle K Market may be recognized when the family drives by the store but the
logo may not be recognized on a match book cover. However, certain logos like McDonald's and Coca Cola are recognized as long as the print retains its distinctive form even when away from the golden arches or the sexy bottle.

Children's responses to signs suggest that they are concerned with the meaning of the graphic unit more than the representation of the name itself. Some children seeing Chicken and Stars in white block letters similar to how it is printed on the can will say "That's Campbell Soup" and they respond to the logo Campbell as Campbell Soup as well. One three year old called signs of Burger Chef, Burger King and McDonald's all McDonald's but when shown the sign of a local hamburger place which was more distinctly a sit-down as opposed to take-out place, the child said "That's a restaurant." Children are categorizing using associations other than significant graphic features to read. One two-and-a-half year old calls Myna and Mother (when she sees them written) as Mother. Myna is her mother's name. Her father's name is Mark. When Myna, Mark, Daddy and Mother are all presented to her, she interchanges Daddy and Mark, but never confuses Mark with Mother or Myna. In the beginning of reading children may relate concept of meaning to a graphic unit and not be concerned with an exact oral representation. So it is not surprising when a kindergartner responds to each graphic alternative of his name as "That says Jimmy" whether the name is written Jim, Jimmy, James, or James Jones Junior.

Just as oral language meanings are developed and used in ongoing everyday experiences so written language is learned through functional use.

Marie Clay (1972, p. 28) has studied five year old entrants to New Zealand's schools. She suggests that children are print aware when they ask "What's that say?" in response to a TV advertisement or when telling a story from a picture story book they might sigh and say "I can't read all the words but I know what they say." She describes children who are reading a book obviously not follow-
ing the print but using a book like pattern such as "Once upon a time. . ." or "Mother said, Do you want a piece of cake?" Instead of the familiar "Reading is Talk Written Down" these children indicate that "Books Talk in a Special Way."

As children respond to written language in its contextual setting, they begin to respond to significant features and may even use some metalinguistic terminology to suggest their developing rule structures.

One child suggested "Reveo has the same face as my name (Roberta).

But for the most part children use language. They become interested in signs which help them control their lives. Men - boys - Senors are all important signs to learn to read. Exit signs are important and many pre-schoolers respond to them appropriately although one doctor's son at age four responded to it by saying "I know that's not X-ray."

Charles Read (1975) and others have made us aware of the children who seem to be developing rules of written language through their invented spellings. "Certain pre-school children print messages, employing an orthography that is partly of their own invention. They represent English words with the standard alphabet and are thus compelled to classify distinct phones in some way. They do so according to articulatory features, making judgements of similarity that are quite different from those that most parents or teachers might make (Read, 1975, p. 329).

Marie Clay suggests her own model of beginning reading and how children begin to develop rules about written language. She sees:

Beginning reading as a communication system in a formative stage. At first the child is producing a message from his oral language experience and a context of past associations. He verifies it as probable or improbable in terms of these past experiences and changes the response if the check produces uncertainty.

At some time during the first year at school visual perception begins to provide cues but for a long period these are piecemeal, unreliable and unstable. This is largely because the child must learn where and how to attend to print" (Clay, 1972, p. 153).
Clay (1976) suggests that how children view the significance and function of written language in their own particular culture may provide the basis for success in reading. She studied Pakeha, Maori and Samoan children in New Zealand. Statistics indicated that "the English language skills did not relate closely to progress in reading. While every Samoan group had the poorest average scores on each language test at every age, the Maoris had the poorest reading averages." (Clay, 1976, p. 337). She suggests these reasons: The Maoris had little contact with printed material prior to entry to school and had few opportunities to learn concepts about print. The Samoan children do not have homes filled with reading books but their culture provides oral Bible reading in the home. A Sunday School teacher also reported "... four year old Samoan children who come to Sunday School all want to write. They take the pencils and paper and write." This teacher described back home relatives involved in selling various crafts at the market place to tourists on Boat Day. While working they are "reading their mail from New Zealand and frantically writing their answers so that the boat which only stays a few hours can take the letters back to New Zealand. ... Children would see high value placed on written messages."

"The Samoan child who speaks two languages, who is introduced to a book and to written messages in his home who is urged to participate fully in schooling and is generally supported by a proud ethnic group with firm child-rearing practices, manages to progress well in the early years of his school without handicap from his low scores on oral English tests." (Clay, 1976, p. 341.)

Readers know how to use written language long before they can talk about it. Downing, Clay and Read have all reported that children can't respond appropriately with terms like word, letter, number, in the fifth and sixth year. However, it is important to consider that the labels may follow the concepts. (Clay, 1975; Downing & Oliver, 1974, pp. 560-582.)
How Beginners Differ from Proficient Readers

In our research on the reading process in readers with widely different levels of proficiency we reached certain key conclusions:

1. There is only one reading process. Readers may differ in the control of this process but not in the process they use.

2. Non-proficient readers show problems in getting it all together. They tend to bog down in pre-occupation with letters and words and lose meaning.

3. The major difference in readers of varying proficiency is their ability to comprehend what they read.

4. Older non-proficient readers seem to have acquired non-functional skill. They can produce phonic matches or near-misses for words. They can handle short phrases. But they don't get much sense from what they read and seem not to expect sense. (Goodman & Burke, 1973.)

In fact it appears that a gap has developed for some children between the skills of reading and any useful function of language. So much focus has been placed on form and those functions explored through reading have been so removed from the functional needs of the learner that reading becomes a school subject not a useful language process.

Even when some degree of functional reading competence is achieved through instruction it often leaves people with so strong a distaste for reading that they only read what they must, particularly avoiding literature and educational materials, the most common school-related written language.

Beginners may follow four basic paths in moving into literacy: they may move forward from the natural beginning they've made gaining flexibility and control of the process as they expand the functions of written language they control; they may be distracted from function by instruction coming to regard reading as an essentially non-functional, non-linguistic school activity; they
say themselves bring their natural growth and school instruction together choos-
ing from instruction that which facilitates instruction; they may develop func-
tional literacy outside school while developing a school behavior which is non-
functional but satisfies school and teacher demands.

The key to these different results lies in the reader's perception of the
functions for reading, the extent to which reading is functional in their cul-
ture, the extent to which instruction is facilitative, building on natural de-
velopment, and the extent to which school experiences are relevant to the func-
tional needs of the learners.

That people can achieve literacy under less than optimal conditions, even
in very unlikely circumstances, is more a tribute to the universal human ability
to acquire and use language than it is proof that educators can afford to be un-
concerned about building programs which create optimal conditions.

Beginners have a sense of function which we have demonstrated has already
led to some beginning of literacy before instruction. Shifting their focus to
the forms of written language does not make them like proficient readers since
the latter never sacrifice function to form even when they encounter misprints.

**How Does Proficient Reading Work**

Our research on reading miscues have been primarily concerned with develop-
ing and testing against reality a theory and model of proficient reading. (Good-
man, 1974.)

We've come to view proficient reading as a process in which readers process
integrated grapho-phonetic, syntactic and semantic information as they strive to
construct meaning. Reading consists of optical, perceptual, syntactic and sem-
antic cycles each melting into the next as readers try to get to meaning as
efficiently as possible using minimal time and energy. That involves sampling
from available cues, predicting syntactic structures and subsequent graphic
cues, confirming or disconfirming predictions, correcting when necessary, and accommodating the developing sense as new information is decoded.

Efficiency, using minimal cues, and effectiveness, constructing meaning, depend on the readers being able to maintain focus on meaning. For that to be true, the material being read must be meaningful, comprehensible and functional to the reader. Unlike Mattingly we are not surprised at the facility readers develop nor at the fact that reading actually becomes more efficient than listening; again this difference turns out to be not a basic distinction in the two receptive processes but one that results from the conditions of use. Listening need only happen as rapidly as speech is produced; reading has no such constraint so it happens more rapidly with no loss of comprehension. We could listen as efficiently as we read; we just don't need to.

Proficient reading and listening processes are parallel except for the form of the input, their speed, and as we repeatedly said the special uses we make of each. Proficient readers do not recode print as speech before decoding it. Why should they depend on a less efficient process and how could they given the greater efficiency of reading?

It is not their ability to listen but their underlying ability to process language to get to meaning which beginning readers rely on to develop reading competence. The strategies we have described the proficient readers using are already used effectively and efficiently by children beginning to read their native language. Within meaningful, functional use of written language, they naturally, quickly and easily learn to use these same strategies with the new graphic inputs in the new contexts.

The Natural Sequence: A Theory and Some Premises

We believe, as we've said, that motivation is inseparable from learning. Recognition of function, the need for language, precedes and is a prerequisite
for acquisition.

The crucial relationships of language with meaning and with the context that makes language meaningful is also vital. Learners build from whole to part and build a sense of form and structure within their functional, meaningful experiences with language.

Written language development draws on competence in oral language since both share underlying structures and since for most learners oral language competence reaches a high level earlier. As children become literate the two systems become interactive and they use each to support the other when they need to.

As children expand their views of the world and become more concerned with things beyond the immediate they find more need for the informational and literary uses of written language.

We believe that it helps educators in understanding the reading process to study what proficient readers do when they read. But it's a serious mistake to create curricula based on artificial skill sequences and hierarchies derived from such studies. To build facilitative instruction, we must understand not only how language processes work but how and why they are learned.

Our research has convinced us that the skills displayed by the proficient reader derive from the meaningful use of written language and that sequential instruction in those skills is as pointless and fruitless as instruction in the skills of a proficient listener would be to teach infants to comprehend speech.

Methodology and Motivation

We take as our principal premise in designing initial reading instruction that our goal is to create conditions which help all students to learn as naturally as some do.

Here we will focus on instruction for children growing up in a highly
literate society. But in passing we must reiterate our premise that literacy will not be acquired if the community and society do not use literacy to any significant degree for any significant purpose.

Our initial instructional concerns are two-fold: (a) to determine and expand on the literacy learners have already achieved (b) to establish and expand awareness of the function of literacy.

An old but essential educational premise is that education takes the learners where they are and helps them grow in whatever directions are legitimate for them.

That turns out to be essential in building initial literacy. In the balance of this paper we’ll explore some in-school activities that school and teachers can include in initial reading instruction. What we’re proposing are elements in a program; it is not yet a full program.

**Finding Out What They Can Read**

If teachers take children for a walk around the school, the neighborhood, or a supermarket they can get quick insights into the literacy kids have already attained. With a Polaroid camera a pictorial record can be brought back to the classroom. "Show me anything you can read and I’ll take a picture of it" is all the teacher needs to say. This sense of what they’re reading is important for the teacher but it's also important for the kids who will discover reading isn’t new, it’s already part of their experience.

Earle Clay’s sand test gets at kids’ concepts about print (Clay, 1972). The tests relate to her concept that careful observation of children is a basic requisite to facilitative instruction. Noting how children handle books, how they respond to print, how they relate print to meaning are things which teachers can do with or without the test. The teachers must be an informed monitor, able to see where the kids are and helping them to find function and build competence.
Creating a Literate Environment: The classroom and school must become an environment rich in functional use of written language. That means there must be lots of written language pupils will need and want to read. It does not mean that every chair, table or window should be labeled. The uses of written language must be both natural and functional. Furthermore, it will be helpful if the kids are involved in creating the literate environment. That will give some sense of where written language comes from. Dictating a set of "Rules for Taking Care of Our Hamster" is an example of their participation.

Work, Play and Living. Play is the child's equivalent of the work world of the adult. In language development it forms a valuable adjunct to the real-life experiences of children. They can read real letters but they can also create a classroom post office which delivers letters and notes between class members. We need to bring back into kindergartens and primary classrooms the stores, kitchens, gas stations, play houses and other centers for dramatic play.

Reading Something. Language, reading included, is always a means and never an end. Reading is best learned when the learners are using it to get something else: a message, a story, needed information. Literacy development, therefore, must be integrated with the science, social, studies, math, arts, and other concerns of the classroom. In isolation it becomes non-language and non-functional.

Reading and Writing. Reading needs to be kept in constant relationship to writing. Wherever possible composition in written language should be related to reading activities.

Utilizing all Functions. Halliday's seven functions make a good guide for generating learning experiences for initial and continuing reading instruction.

Since most forms of writing are almost completely outside a situational context, it's important to begin in school with those situationally supported
functions which children have already begun using: the instrumental, regulatory, and personal.

<table>
<thead>
<tr>
<th>Function</th>
<th>Experiences and Activities</th>
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| Instrumental: (I want) | Sign-ups for activities or interest centers  
Picture collages with captions: things I want  
Play stores, gas stations, etc.  
Reading cans, boxes, posters and ads, coins and paper money  
Orders for supplies: things I need |
| Regulatory: (Do as I tell you) | Signs  
Directions  
Rules for care of class pets, plants, materials |
| Interactional: (He and you) | Notes from the teacher for children on a message board  
e.g.: Tori, Did you bring your absence excuse?  
Margaret, Remember your music lesson at 10 a.m.  
Class Post Office: Encouraging note writing between pupils |
| Personal: (Here I come) | Books about self and family, pictures with captions  
Individual language-experience stories with character to identify with |
| Peuristic: (Tell me why) | Question box  
Single concept books  
Science experiments  
Instructions to make things  
Recipes |
| Imaginative: (Let's pretend) | Story-telling  
Hearing picture-story books read and joining in  
Acting out stories read, creative dramas which teacher writes down  
Read-along books and records, comic strips |
| Informational: (Something to tell you) | Message boards  
Bulletin boards  
Notes to pupils paralleling school messages to parents  
Resource books  
Class newspaper  
Weather board  
Community newspaper, TV guide  
Content textbooks |

In all that we've said we see the teacher as making the crucial difference between whether some or all will learn to read. The teacher's role, in our view
is a complex one.

Kid watching: To build on what kids have learned and to facilitate natural acquisition of reading, the teachers must be insightful kid watchers. They must know what to look for, how to look, what it means. As children progress, they must be able to monitor the progress, building on strengths and helping over hang-ups.

Environment arranger. Teachers must be able to create the literate environment which will facilitate learning. They must constantly be bringing kids in contact with relevant, functional print.

Interactor. The teachers will be the literate adult using print in functional ways to interact with the learners.

Motivator, Stimulator and Encourager. Teachers have major roles to play in helping children to recognize functional need, stimulating children's interests and encouraging and responding to their efforts.
Bibliography


LESGOLD: I would just like to note that even though there has been some suggestion, both formally and informally, that points of views such as those that were presented yesterday are inconsistent or different from what Ken just said, that's not really the case at all. Everything that Ken said is compatible with at least my views on reading. All that's happened is that we have chosen to emphasize different parts of an overall picture.

It's striking that some of the recommendations that Ken made are almost exactly the recommendations that were made yesterday, except for the fact that Ken seems to prefer hamsters to gerbils. I don't think that there is some kind of unremovable polarity between Ken's position and a skills point of view; it's probably just a case of different necessary components of the teaching of reading being emphasized.

RESNICK: Jeanne, you laid out a nice set of stage sequences, and it seems to me that the relationship between your position and Ken's is worth some discussion.

CHALL: I feel I would like to see the paper and read it carefully.

It is interesting that you ask for a comparison, because the last two notes I made to myself were on Marie Clay and the fact that she is concerned primarily with Samoan and Murari children, who, at age 6, are probably at a stage in development of reading comparable to that of our preschool child. They would be on this kind of global stage a prereading stage—"pseudo reading," where they look at Jimmy James, or Jimmy Jones, Jr., and say, "That's me, Jimmy."
I am wondering if Ken Goodman isn’t interested primarily in what I would call Stage 1 reading—reading for confirmation. Your example tends to be of a little kid who can’t get meaning. There is nothing wrong with him. It’s only that somehow we have boxed him in with how we teach him to read. It seems to me that in much of Ken’s writing he is interested in what I would call beginning with Stage 2, reading for meaning, for confirmation.

I always wonder when children start on what seems to be an advanced stage. Who teaches them how the letter A is written or the letter B? Where in all of this natural reading from the start does the child learn what goes with what? Now, with the child who comes from a highly literate home and culture, usually the mother or father shows him how and what. He writes letters, his name, words, and is told, “Oh, that’s lovely.” Or, “You do it this way.” Then when he enters school, he can probably learn to read by the natural way—what I would call Stage 2 reading—because he learned to the pre-reading and Stage 1 at home.

One question that I would like to ask Ken is: How does your procedure, natural reading, differ from the language-experience approach popular since the 1960s and the earlier experience method practiced widely for the past 50 years particularly during the popularity of progressive education? You find a lot of it in the 1920s and 1930s, where the children are supposed to write or dictate their experiences.

GOODMAN: Let me deal with a couple of relatively informational kinds of things, and then get to some basic ones. I think, Jeanne, you accused me of being interested in a stage 0 and a stage 2; the stage 0 being what precedes what you call your stage 1; the stage 2 being what kids are doing after you conceive of them as having been taught something. Now, I guess that’s true, because I don’t
see your stage 1 in the picture at all. As I said, I believe firmly, as does Frank Smith, that it is possible that initial instruction that focuses on the technical details of form, does not facilitate the development of literacy. In addition such instruction may actually interfere with the development of literacy, because not only does it not build on function, it actually distracts the child at an age where, according to Piaget and others, the child is likely to have trouble dealing with abstraction; it makes learning to read dependent on the ability to deal with abstraction.

In terms of Marie Clay's work, I tried to indicate that her term pakahe is the Maori word for everybody except the Samoans and the Maoris, so she has dealt with general populations. In fact, she had a monumental dissertation study which dealt with the majority culture kids.

But two key premises are that, one, I am looking at how kids learn to read, and two I am asking the question: In what sense can you teach people to read? And the answer, I thought I stated, is that I don't believe you can. I think all we can do with instruction is facilitate learning, and I see that as very distinct from teaching.

The statement was made yesterday that you find out what a kid can't do, and you teach him to do it. That isn't at all what facilitative instruction is about. If a child is not responding to instruction, at least you have to consider the possibility that the instruction is inappropriate; it may be running counter to things the child already knows.

Now, I think maybe we haven't gotten over the initial mistake we made of thinking that you have to teach reading. Maybe what we should understand is that it can't be taught; it has to be learned. From that perspective, instruction
looks very different.

You asked how does what I propose differ from the 50 year tradition—I would make it longer than that—of progressive education language experience. Of course, it doesn't in many elements. One of the things that I find gratifying is that many teachers, even some who firmly believe in particular approaches to instruction, have intuitively understood the things that I have been talking about. They have intuitively understood that if reading doesn't matter to kids, if it isn't functional for them, they are not going to learn. Those teachers have intuitively understood that whenever instruction interferes with development, that's the time to drop the instruction and to work at facilitating what the kids are doing.

STICHT: Ken, I was pretty happy with a lot of the stuff you had to say; as a matter of fact, I thought it was nice. You didn't quote all of what Mattingly said in the "Eye and Ear" thing. He did mention, to begin with, that listening appears to be a more natural way of perceiving language than reading. That raises the question of what is natural, though. To talk about something being natural and talking about other things being unnatural seems to imply that unfolding picture you want to put aside. My guess is that it's natural for people to cope with whatever environmental stresses come their way, so to talk about natural learning versus unnatural learning, does imply, I think, a kind of biological unfolding.

The major thing I was concerned with here is your statement that almost all children acquire language, that coupled with one of your statements that readers frequently have difficulty comprehending what they read.
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So we now have the problem of many people acquiring language, but not being able to comprehend what they read. And I wonder if that's because, when we say people acquire language, we don't really know exactly what we mean by that. Should we, perhaps, say they learn some language; rather than they acquire language, as though once you have it, it's all there?

That finally gets coupled into a point about proficient readers, you mentioned. I want to note the distinction between a proficient reader from the point of view of skill deficiency, as contrasted with knowledge, particularly knowledge in the language mode, which relates back to the problem about almost all children acquiring language.

I have one more point that has to do with the functional aspect of this. Are you stressing the functional because of its motivational value primarily; that is, because almost all of us would prefer to learn something if we saw some reason for doing it? If so, is this any different for children than for adults, in the sense of trying to make learning functionally relevant to the adult?

GOODMAN: You are raising the issue of my use of the word "natural." I am talking about something which is natural in a person in a social sense. What I am saying is that human society uses language to communicate and that people in a society have to acquire language in order to be part of that society. In a sense, then, it's a natural social phenomenon, as well as a personal one. I don't disagree that there are some things that people are uniquely equipped to do, but that's not enough to explain why they do it. You have to relate both their ability to learn and their reasons for learning. That's why I said you can explain both the acquisition and the lack of acquisition of literacy in terms of the same conditions.
The fact is that I think we can conclude that if there are differences among groups, in terms of how much they accept literacy instruction, instruction has to reflect those differences in the functional uses that people become aware of if it is to lead them to development. That relates to the whole issue of difference, which we then complicate by introducing nonfacilitative or obstructive instruction.

That's particularly a problem with adults in a literate society, who have come to the point where they consider themselves illiterate. They are so hung up on form, so convinced of having a nonproductive model, that everything that happens to them reinforces their conviction that they can't read. For example, we have identified something we called a next word syndrome. Adult readers will frequently attempt to prove to you that they can't read by saying, "I don't know that word." They believe that a reader is somebody who knows every next word, and since they don't, they are not readers. Because they are so busy trying to do what they have been taught, they don't even recognize the coping mechanisms that they have developed to survive in the literate world. I think maybe that deals with the issue of function for kids and adults. Adults do have to function. Sometimes, what's so tragic, is the desperate recognition of function they have and their inability to get what they have learned about reading together with that function. The main problem often is simply convincing them that they are already reading successfully and showing them that they can build on that.

Let's talk about comprehending, then. This paper, of course, focused primarily on beginning reading, and I didn't get into the issue, which of course is a crucial one, of why people don't comprehend what they read.
My definition of proficiency has two parts. I used them in passing, but let me state them. Proficient readers are **effective**. That means that they are good at constructing a message from what they read. Usually their intention is that the message match the one they assumed the writer had in mind. They are striving to comprehend. They are also efficient in the sense that they use the least amount of time and energy; that is, they are least concerned about the details of the print, least concerned with form, and most concerned with function.

Now, I think the things that interfere with comprehending are inefficiencies, which result in lack of effectiveness. But then it gets more complicated. One of the complications is that we ask people to do things through reading, particularly in school, which are unwarranted. We abuse reading; we expect it to carry the load of learning very often.

To cite an example, I had a call not long ago from a reporter for the *National Enquirer*. She was interested in the issue raised in other journals of college students not being able to read college textbooks and of this reflecting some kind of a change in the quality of earlier education. I asked her whether she had gone to college, and she said she had. And I said, "When you were in college, did you ever have any trouble reading textbooks?" And she said she had. Then I said, "Well, it is not a new problem; the only difference is that we are recognizing it now."

The recognition, by the way, comes from two things: One is having open admission policies in universities, and the other is getting some people into community colleges who care about whether the kids that come into those colleges survive or not. Those are the people who are raising issues about the kinds of reading materials used and the ways they are used in college level work. That of course reflects the same thing that's happening in secondary and elementary
GLASER: Ken, to sharpen your distinction between facilitating learning and teaching some performance, can you give some examples? Are there any performances in children that should be taught rather than facilitated? If so, what would those be, and then along what lines would the instructional program proceed?

GOODMAN: I believe that the distinction that linguists have made between competence and performance is a very useful one, and I believe that in a pragmatic sense. I am not defending the reality of there being a distinction, but I am suggesting that we make a serious mistake when we look at the superficial manifestations of language behavior, and not at the underlying competence that produces it.

One of the major things I find wrong with reading instruction, initial and otherwise, is its tendency to rehearse kids in the kinds of things that readers do, rather than to create the situations in which reading is most likely to develop.

I see the teacher's role as very different. The teacher is not a technician carrying through somebody's structured program. The teacher is not a fountain of wisdom or a societal agent whose function is to correct the child every time he makes a mistake. The teacher is there to monitor, to guide, to interact, to arrange the environment, and to be so aware of what's happening in the classroom that he or she really becomes the director of learning. That's very different from being the person who makes it happen.
When I go into classrooms to observe student teachers, I am often met at the door by the supervising teacher, who apologizes and says, "It's too bad you came right now; she isn't teaching now." That means that the teacher is not imparting information, spelling it out. Instead, she is doing all of the things I have been talking about, and a lot of learning is taking place. I think that's the major distinction. It probably is very obvious to you that I consider behavioral psychology to be less than useful in explaining what happens to kids during the language learning process.

VENEZKY: Ken, I am curious about why you dropped out Halliday's eighth function.

GOODMAN: He only has seven, as far as I know, Dick. Has he got an eighth one?

VENEZKY: Yes, there is an eighth one in his later articles. It's called the ritual function.

GOODMAN: Apparently he dropped it himself, because I took this from a very recent article (in a posthumous volume by Lenneberg) which is an updating of Halliday's work.

VENEZKY: You are talking about Lenneberg's UNESCO volume?

GOODMAN: Yes.

VENEZKY: Those articles are about six years old.

GOODMAN: Yes, but it is the latest version I could find.
VENEZKY: He doesn't list them; he discusses them. It is a eighth function. I was just curious if you dropped it intentionally or just missed it.

GOODMAN: I agree with you; there is a ritualistic function of language. As a matter of fact, I had a very interesting doctoral dissertation that probed Hassidic Jewish kids' comprehension of Yiddish and of English, languages written in two different directions. Yiddish is the home language with those kids. They also learn to pray in Hebrew, and prayer, of course a very ritualistic use. In addition, the Hassidic Jews believe that the function of language isn't all on the surface; there are hidden functions, mystic kinds of things. So, in some sense, there is a ritualistic function that becomes very important in that society.

VENEZKY: Halliday is concerned with things like "Thank you" and "Pleased to meet you" and "How are you today," which, of course, do not develop very quickly. It was a very unnatural thing.

GOODMAN: And it varies considerably from culture to culture.

VENEZKY: Would you want those things in reading materials?

GOODMAN: Yes. My kids, for instance, at an early age were terribly amused when we went through a toll booth on the New York State Thruway, and a sign lit up that said, "Thank you." That really broke them up.

FREDERIKSEN: Did they say, "You are welcome?"
GOODMAN: They wanted to make a sign that would flash, "You are welcome."

WILLIS: I have a question about the teacher's role. I believe you described the teacher as an informed monitor. Your description made it pretty clear what the monitoring activities are. I guess I am concerned about the "informed." How does that occur?

GOODMAN: When I say "informed," I hope you understand that I also mean turned on, and patently concerned, because I think the teachers can be terribly well informed, but very ineffective. As a matter of fact, I said before that some of the most effective teachers I know function on an intuitive level. They have so much empathy for kids that they intuit most of the things necessary for success in helping kids to learn to read.

I do think that information, or knowledge, is important for teachers. I believe, for instance, that knowledge about language and language processes is as essential for a teacher as knowledge about physics is for an engineer; it's the basic building block.

Jeanne commented yesterday, and I agree with her, that there is a limit to the number of things you can cram into a pre-service program or even an in-service program. The State of Arizona now requires all teachers, elementary or secondary, to have four courses in reading, one of which by the way, Jeannec, is called decoding; it has to be called that. Fortunately, of course, the state can't control the content of it.

GLASER: How is that compatible with your statement that we need to know as much about the reading process as we can and your statement that studies of proficient
readers and of the processes they use don't help you very much in designing your reading project?

GOODMAN: I didn't say that. Let me finish the one point, and then I will get to his.

I think that teachers have to have a background in language. Now, I don't want simply to tie it to courses. A course in language and learning may be one way to handle it. But mainly what we need to do is restructure and reorganize the existing reading and language arts courses, so we make sure they build a strong base in language. In universities that have foreign language requirements, maybe we could let students take linguistic courses in lieu of those.

Bob, state your question again. I want to make sure I understand it.

GLASER: Of course, you just said it is important for teachers to know about reading processes, but, in the course of your remarks, you said that studies of the distinctions between the processes of proficient readers and nonproficient readers weren't useful to you in designing a reading program.

GOODMAN: No. What I said, essentially, is that you can't simply take knowledge about how reading works and translate it into curriculum and instruction and methodology. You also have to include knowledge of how and why language is learned, and one of the mistakes we made was to try to pluck a concept out of research and immediately translate it into instruction, and that has lead us into problems.
POSNER: I guess I wanted to sharpen the debate a little, because it might be too
easy to say that we all agree, and I really think there is a lot of disagreement
here, and I think I understand something of its nature.

Most of the examples Goodman gave of the use of reading, especially from the
empirical studies, are really the use of print material in its logographic form.

Of course, when a child enters school, not only does he know spoken
language, he also knows a lot about visual perception: he recognizes trees and
chairs and all sorts of things, so it shouldn't be very surprising that he can
take a visual pattern and get meaning from it and so act appropriately to a chalk
and board or a cereal box, for example.

I think when people talk about decoding, they are really talking about a
very special thing about our language; namely, our language happens to have an
alphabetic principle.

It may be that although many uses of print, even in its logographic form,
are quite natural and occur quite easily, children need additional help in
cracking the riddle of the alphabet and thus in getting the relationship between
the visual letters and the already existing auditory language.

So I'm not convinced that because children can read in the senses Goodman
outlines, they necessarily will be able to read the English language and
languages of the alphabetic type. I think that it's the special nature of the
alphabetic code that may lead some people to want to take different views on what
would be necessary to help the child to develop meaning from a written language,
in which the very same letter is used in so many different ways from one word to
the next.
GOODMAN: I think there are several things involved.

First, I think that your argument is exactly what Halliday was talking about, when he referred to our being so solemn about language, but not taking it seriously enough. We make it so difficult, but we don't take it seriously enough, because we don't get into how it works.

I am going to quote my friend Dick Venezky about the alphabetic principle, and he can correct my quotation if he chooses to. I think I heard him say once that the alphabetic principle is more a convenience for writers than for readers; that, in fact, it facilitates the writing task considerably, but it isn't necessarily a convenience for readers. That's one reason why we don't need spelling reform in order to solve reading problems.

Your logographic comment is probably true; in fact, you may have detected a kind of developing theory of stages, which I really have to attribute to my wife, who is doing that research on early reading. She has a hunch that kids may recapitulate the development of writing systems in their own development of literacy. I think, though, that the key thing you have to understand is that the focus is really on meaning. The symbols become logographic representations of that. It's like the holophrase stage that kids go through in developing oral language.

People have said that reading and writing are different from oral language. What we are reporting is that they are not different at all; they are very much the same, and the things which kids do as oral language processors, they do as written language processors. The learning mechanisms are in fact the same.
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One more thing. Again I think that elaborate description of the decoding process comes from a serious mistake we have made in thinking. Thinking like adults reasoning backwards from what we can already do, we tell ourselves that first we have to teach the form, and we have to teach it in its simplest way; we have to get it apart from meaning, and we have to focus on all of the bits and pieces, so we don't just teach written language as form; we teach it in terms of all of its minute detail. What we end up with is the 768--count them--steps that the Chicago schools have now adopted their reading program. 768. And guess how far you have to go before you get to comprehension in those 768 steps?

VENEZKY: Ken, I am not sure where that comes from. It sounds like something more in relation to adults reading. I think it should be clear, from what Dom and I said yesterday, that we feel there is a lot to the alphabetic principle in learning to read, and certainly you know, from the kinds of prereading things I have done, that that's the direction I would go. Let me just add something to sharpen the argument that Posner is making. The argument really has been brought out clearly by Furth and Wachs, and others in relation to reading readiness, and they have tried their approach out rather unsuccessfully in more experimental settings. The argument is that if you let him, the child can be induced to discover basic relationships in reading, for example, that b is different from d, in its lower case and that ship and show start with the same sounds. Every experiment that I am aware of that tried to induce the child to discover these relationships on his own or her own failed. The implication of that, I think, is intuitively obvious. A pair of glasses retain their label as glasses, whether they point this way or that way. Everything in the child's environment, up to the time he encounters numbers and letters, is, in terms of its identity, invariant by rotation. There is something completely arbitrary about calling a
letter a b if it points one way and calling it a d if you rotate it so it points
another way. And it is quite difficult to imagine how a child would ever
discover that on his own.

I think that, in general, we would not want him to discover that on his own,
because this could encourage him to start calling an object one thing if it were
pointed one way and another thing if it were pointed another way.

If we set up a very clever environment, where b's with little labels sit in
corners where they eat, and if we do other clever things to get the child to pay
attention, I think that whether you call that learning or teaching seems not to
be a very interesting argument.

Clearly, you have to recognize certain features of the alphabetic principle,
the alphabet, and so on, and you have to insure that the child acquires the
features that he has to attend to to make distinctions, whether it is a graphemic
environment that tells him A is long or short or a letter position orientation.

That's why, Ken, I have a lot of trouble with what you are saying now,
because I know even you have tried to set up some of the things we have talked
about in relation to the identification of things the child has to attend to.
And I don't know quite how you can get by without calling that teaching.

GOODMAN: The lists of the things the child has to attend to are very different,
and it's partly because of a difference between the bottom-up, top-down views
we've been discussing.

I am thoroughly convinced that the kind of thing you are talking about
doesn't work in experiments because it comes much later.
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Just as children derive their control of phonology from the use of the functional language, they are going to derive their control of the orthography from their use of the functional written language.

VENEZKY: What comes later, things like recognizing the difference between b and d?

GOODMAN: That's right. Particularly in any isolated position. The difference is going to be recognized most quickly in words that are more meaningful, words in a more meaningful context. The ability to deal with differences in isolation develops later.

VENEZKY: People have thousands and thousands of data points that indicate that you can teach kindergarten children very easily to distinguish b from d.

GOODMAN: I didn't say you couldn't. I can teach them to distinguish b from d, but then that leaves 100 or a thousand other minor things to teach them. That's the mistake. You know, when people go into innercity classrooms and get a bunch of kids to teach them things they think are hard and say, "See, that's the way to teach them, because they don't learn otherwise," the mistake they are making is in thinking those kids are stupid. They are not stupid because they haven't learned the way we have taught them, and they can learn things just as well as anybody else can, but that's no proof.

VENEZKY: So your argument is related to sequence. You would teach letter distinction later, but not earlier?
GOODMAN: I wouldn't teach it.

VENEZKY: But you would insure it is learned?

GOODMAN: Yes. I guess I would go that far, Dick. If it isn't learned, I would worry about it at some later point.

VENEZKY: This worrying about it would again involve teaching?

GOODMAN: But again I would be more concerned that children learn general things such as the fact that there is a relationship between print and speech in an alphabetic system than I would be in details like letter differences.

VENEZKY: But you are really attending to these, even though you are putting them in at different times. You are more worried about an analytic approach than a synthetic approach.

GOODMAN: Not on the part of the learner. I don't want the learner to be analytic at all, except in the functional sense that he has to have in using reading.

VENEZKY: Are you opposed to the child acquiring the ability to recognize letter correspondences?

GOODMAN: Am I opposed to him acquiring letter correspondences? Not if I believe he does acquire them, and I do believe that. If you are asking if I am opposed to his being shown letter correspondences, you bet, at any point.
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SHUY: Since Ken talked about functions, and I talked about functions somewhat, I think it would be useful to clarify the category differences I believe that exist between our views.

The categories that Halliday refers to tend to be much broader than those I talked about. It would seem that more specific functions which might or might not fit into those categories, but I would like to mention that there is also the overlapping membership. I think Ken may have illustrated this, but I didn't catch it.

The teacher says to the class, for example, "I see paper on the floor." It looks like a personal statement or a personal function; it can also obviously be regulatory and instrumental and maybe interactional. The critical thing, it seems to me, is to identify which of those functions the teacher really has in mind. And that kind of functional use of language, I believe, is translatable also to the questions in standardized tests and in many other areas of classroom and teacher, materials and teacher, and classroom and materials interaction.

But that's the basic argument I was trying to make last night, in terms of special function such as acceptance, refusal, politeness, assertion, all of these many kinds of functions that are essentially more micro than those Halliday covers. These can be identified, I think, but I don't think have been identified very well by institutions.

There are certain functions that obviously relate to being a teacher; not the least of these is an evaluation. As everybody will say, "'We take a video tape of a classroom, and the teachers keep saying, What is wrong?' " Don't get into evaluation; just observe, and just come.
I have seen that carried to an extreme in a classroom, where a teacher asked a little girl, "What's your name?"

The girl said, "Mary Jane."

And the teacher said, "Very good."

The second point is that, as a linguist, I would ask that people in reading class, that they mean by the word decoding. It seems to me to mean in reading something like word level or beneath, and I can't see any reason why it wouldn't be every bit as much decoding if I were to say, "It certainly is hot in here," and Wendy would get up and open a window or something.

Clearly, I didn't say semantically, "Please go open the window." But isn't that decoding? Isn't that decoding a language function as much as it is decoding a letter sound?

GOODMAN: My definition of decoding has to be going from code to something other than code.

SHUY: That fits your definition.

GOODMAN: It sure does.

SHUY: Is there a controversy about that? Is that not called decoding?

GREGG: There are many different ways to define decoding, and there are some criteria that we could apply, but I haven't heard one in a day and a half. One of them is very simple; it has to do with how fast something happens.
None of the models we've seen and none of the comments that we have heard to date has any quantitative basis. We hear that maybe Ken Goodman is going to worry about sequencing things. That's at least getting to ordinal numbers. I was hoping that in terms of decoding we could come up with a definition that involves, for example, a perceptual act, something that takes less than a thousand milliseconds.

And what you have just suggested; that is, that decoding may be trying to interpret the intent of someone's behavior sounds much more like problem solving, and problem solving goes on in fairly complex ways, and it takes more than a few milliseconds.

GOODMAN: There are a lot of uses of decoding, and most of them are wrong. If you use the term decoding in a way that relates to its derivation, it has to mean going from code to something that isn't code.

Now, the problem and the confusion is that people have only treated written language as a code, but oral language is a code, too.

What Roger referred to is decoding, because I have taken oral language, as he stated it, and I have constructed a message. I decoded the language to a message. (Problem solving may be involved, too, there is no doubt about that.) But that's clearly an example of decoding. Matching letters to sounds is a kind of recoding operation, because I still come out with code. That is not decoding.

Recess