with other similar items, he apparently did so at first on the basis of pages, since he selected papers in one instance and magazines in others.

Children in the Delaware Valley area, when asked to draw a leaf, frequently produce a leaf that has the attributes of a maple leaf. When asked to draw a maple leaf as it appears early in May, in August, and in mid-October, they are puzzled. When asked to illustrate other leaves common to the area, they are puzzled even more. Like Victor and Dr. Itard, it takes a good deal of careful examining of leaf attributes before they are able to distinguish different kinds of maple leaves: silver, sugar, swamp, Norway, and to separate them from oaks, tulips, locust, sycamore, and so on. From this level to palmate and pinnate is another step. And from this to the three general classes of leaves—the palm leaf, broadleaf, and conifer—is an even greater task of recognizing potential attributes and categorizing.

It is this kind of identifying of levels of abstraction that is needed to develop agility in handling categories and attributes. As Brown indicates, distinction can also be made between potential criterial and actual criteriality. He illustrates this by showing that, even though Victor distinguished books from magazines, he probably did not do so on the bases that books are either one-time publications or republications, whereas magazines are periodicals. Neither did Victor use the publication date of books. These are potential attributes; they are defining attributes that could be used. Actual criteriality describes an attribute used by some person in categorizing, for instance, the attributes that Victor used to categorize books.

Identifying attributes and categorizing can be done even at the first-grade level. The word house has many possibilities—frame, brick, stone, ice; one-level, split-level, two-level, single, semidetached, row; and so on. And then from shelter, to house, to building, to structures. Certainly not all of these attributes and categories will be dealt with in a Directed Reading-Thinking Activity, but the process can be profitably initiated.

In the article "Arranging an Orchestra" (42, pp. 177–179), levels or categories are readily determinable and attributes definable: orchestra, instruments, woodwinds, clarinets. To this could be added B-flat clarinet, and so on. In the article "Americans Move with Their Bridges" (37, pp. 47–53) similar abstracting can be done. Bridges may be classified according to type of supporting elements as: slab, beam, girder, truss, arch, cantilever, suspension; according to use as: foot, highway, railway; according to position of roadway as: deck, through, bottom-road; and, if movable, as: bascule, vertical-lift, swing, traversing, transporter. Then, too, bridges can be categorized as in: architecture—a bridging joist; astronomy—a band across a sunspot; billiards and pool—the hand used as a bridge for the cue; card playing—a game; dentistry—anchoring artificial teeth to natural teeth; and so on.

Prior to coming to school, children have been busy accumulating a vast number of casual experiences on which is based their stockpile of con-

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ceps. As a consequence, many of the concepts formed, their categories and attributes, are vague and haphazard. When pupils are learning to read, they are learning a new set of symbols (printed words) to stand for another set of symbols (spoken words) that stand for their mental constructs. (17, p. 398) To do so requires a form of mental discipline not needed when they acquired the first set of symbols (spoken words). This, then, is the time to put stress on the need for mental constructs that are clear, accurate, and well organized.

**Shifts of Meaning.** In the story “Two In One” the word stand is used as a noun to mean a stall or booth for business. This is the lemonade story referred to on pp. 67–68. Children reading this story and required to deal with the word stand raise no questions about its use. The story context and the picture context help get across the idea that in this instance stand means the place where the lemonade was sold.

When the children first learned to read the printed symbol stand, the word was being used to signify a verb—an intransitive action verb—meaning to support oneself on the feet in an erect position. This is probably the most common meaning for stand and is in opposite position relative to sit. These two words were introduced among the first fifteen in a series. Sit was introduced in a context where Dad was arranging the family in order to take an indoor picture, and he wanted Mother and Susan to sit on two carefully placed chairs. In the next sequence Dad was asking Bill and Nancy to stand behind Mother and Susan.

The mental construct of sit and stand is so well established in the minds of children that they readily learn to recognize and recall the printed words. This kind of symbol-concept control is helpful in the learning-to-read stage. When the shift of meaning occurs from stand (to get on your feet) to stand (a stall or booth), many children readily make the transfer. They do this without realizing that in one instance stand is used as a verb and in the other, as a noun. Even so, this is the point at which attention can be given to raising the verbalism curtain—the use of vague and inaccurate concepts. This is the time to check on the quality of the constructs.

Pupils asked to define stand as used to designate Jack’s stand and Cooky’s stand have a fair idea as to the meaning: “It’s where Jack sold his lemonade,” or “It’s where Cooky sold his lemonade.” When asked to describe a stand, they say: “a box on which you can put things to sell,” or “a box with a sign on it.” Then when asked to name some other stands, on occasion someone comes up with the “ice cream stand” idea and can describe it.

Most children at this point resemble Victor in that they are vague about the definitive and potential attributes that will help them put stand in a category. Victor needed to struggle with the shift from book (one book) to book (many books). At this point the children could very easily “get by” with their concept of stand, if the teacher is one to let them do so. If the
teacher is not about to let them get by, but one who is ready to begin the lifting of the verbalism curtain, the children will begin to realize that building mental constructs is an active process.

So, in the hands of an able teacher, these children will now have three instances for stand and three descriptions: Bill's stand, Cooky's stand, an ice cream stand. Some will be ready to jump the category gap and attain a generalized meaning for stand. Others may need more experience with stand on the descriptive level: a newsstand, an umbrella stand, a taxi stand, and so on.

At a later level the same vigorous attention must be given to the word stand. Then children will learn what it means to "stand up and be counted," to "take the stand," to "stand firm," to "stand accused," to "stand for re-election," to "stand the cold," to "stand in judgment," to "stand a chance," and so on.

As has been shown, a single word can "stand for" many things. The unabridged dictionary lists forty-eight different meanings for stand. Is stand an "easy" word? Is it a hard word? Easy and hard are but names and, when linked with a word on the potential criteriality level, can be deceptive. Stand is a common word in that it appears frequently in writings and is used often in speech. Some of its concepts are very common and have been "constructed" by almost all, regardless of language facility and intelligence. But for some to attain all of its concepts requires experience, interest, intelligence, vigor, persistence, and efficient work habits.

At the intermediate level, a word like coral may for many pupils be merely the form of a symbol and not really symbolize. Not only is it necessary then to construct a concept but also to alert the pupils to its shift in meanings. This word is introduced in a story about spear fishing in the Red Sea. It first occurs in context:

Swimming below the surface, Omar admired the many strange fish that swam about. Unusual and beautiful plants brightened the coral.

Again, in the next paragraph:

If he swam too near them on the coral, the clams could close quick as lightning over his hand.

On the next page in:

Then the shark suddenly disappeared into one of the deep shadowy places among the coral. (37, pp. 14, 15)

The trained reader, if he does not know the meaning of coral, will, when he first meets the word, check for meaning in the glossary. At this point
in a Directed Reading-Thinking Activity, the reader is still on his own and is putting to work the skills he has been taught and which he is refining and developing into sound reading habits. The teacher is present to see how efficiently he does operate in this "controlled" context. She notes whether or not pupils are using the glossary while reading. This may be a skill that needs reteaching.

Turning to the glossary, the pupil finds the following:

**cor-al** (kor' al), 14. 1. A hard material like stone, with different and often bright colors, built up of countless skeletons of certain animals which grow in shallow tropical seas, and often appearing at or above the surface as reefs or islands. 2. One of the tiny animals that produce coral. 3. The color of orange red. *(Winston Basic Readers, 37, p. 276)*

![Fig. 5.](image)

The explanation given, along with the glossary illustrations (Fig. 5), usually is sufficient to permit the reader to go on with the story.

When the story has been read and other skill-building activities are being directed, the alert teacher makes a double check on such words as coral. Did the pupils grasp sufficient meaning, at this stage of their maturity, to go on? Did they grasp the three meanings given? Certainly at this point they are not ready to deal with the definition such as found in an unabridged dictionary: "1. a. the calcareous or hornlike skeleton of various anthozoans and a few hydrozoans (the millepores); also, the entire animal which produces this skeleton. b. etc."

At this point a teacher may produce some coral if available from a library or a science department. If this is possible, the language appropriate to the concept coral and the understanding of coral may develop together.

All of this work with coral, and particularly the approach to the word—i.e., pupils meeting the word first in the story context—are recommended because it is understood that a pupil cannot be given meanings but that he can be motivated and directed in building his own mental constructs.

Children are certainly not complete neophytes at dealing with shifts of
meaning. They love fun and especially a play on words. They respond heartily to such "Mark My Words" items as:

Fed: "Say, do you know what the wallpaper said to the wall?"
Ted: "No, what?"
Fed: "Stick 'em up. I've got you covered."

Betty: "When is a piece of wood like a king?"
Bruce: "When it is made into a ruler." (37, p. 62)

Referential and emotive language. A strong northeaster whipped across the ocean at gale force. All day long it churned the sea and heaved and tossed the water into huge and tumbling waves. Beating and pounding they smashed upon the shore, roaring as if to drown out the blatant wind.

Every statement made about this gale symbolizes some aspect of it thought to be important to the writer. Each is measured by the interest, experience, and purpose of the writer. Each is interpreted according to the interest, experience, and purpose of the reader.

This account of the gale may be sufficient to help the writer make an adequate recall of the experience at some future time. Whether it will rouse in the reader the recognition of a similar experience is difficult to say. Much depends upon the reader's experience and maturity. At best, all the writer can do is use words that satisfy his purpose syntactically, pragmatically, and semantically (17, pp. 387-389). At best, all the reader can do is reconstruct the ideas for himself within the limits of his experience and ability.

Language symbols, in order to fulfill their fundamental requirements semantically, should arouse about the same expectations in those who use them. Syntactically, language is a system of interconnected signs that the writer and the reader should understand. Both should appreciate the nature and the significance of this interconnectedness. Pragmatically, it is the purpose that is fundamental. This dimension includes the relation of language symbols to the purpose of the writer and the reader. Add to this Altick's statement about reading in the "Foreword" to Preface to Critical Reading:

True reading involves comprehension of material—comprehension far more penetrating and detailed than that required for a brief report on subject matter. True reading means digging down beneath the surface, attempting to find out not only the whole truth about what is being said, but also (and this is, in the long run, more important) the hidden implications and motives of the writer. When a reader finds out not only what is being said, but also why it is said, he is on the way to being a critical reader as well as a comprehending one. (3, p. xv)

To this Altick adds that college freshmen have been found lacking in these two vital respects—comprehension and criticism. This is understand-
able in this round-robin comprehension era. Twelve years of reading and parroting has taught them to "get nothing out of it."

Referential language is the language of literal truth, or the language of fact. What is the literal truth about the wind described in the first paragraph in this section? What are the facts? A wind is blowing; it is out of the northeast. Its velocity was such that it could be labeled gale force; it blew all day; waves breaking on the shore made much noise, at times louder than the wind. A gale-force wind can range between 25 and 75 miles per hour; beyond that it's a hurricane. In this case, what was the force—25, 50, or 75 miles per hour? There is a considerable difference. How high were the huge waves? How loud in decibels was the roar of the surf? How loud was the wind? In short, there were not many literal facts in those three sentences.

Emotive language tries to evoke a mood, a state of feeling, an attitude. The opening paragraph does just that—evokes a mood. A strong norther, not powerful, or mighty, or intense, or rock-ribbed, or titanic—but, to a degree, all of these. This wind that whipped across—did it switch, knout, swingé, rush, surge, thrash? When it churned the sea, did it stir, beat, and agitate as when one churns butter? Yet one "gets the idea," especially if one has had a similar experience.

Even the most literal words can be emotive—nylon, polyesters, stratosphere. Nylon, to a woman who finds a run in her stocking, has a meaning quite different from what it does to the scientist who discovered nylon. For both it has both literal and emotive meanings. Similarly, polyester has one meaning to a chemist in his laboratory and another meaning for the same chemist closing a sliding door partition in a church educational building. Stratosfatorrs has many meanings to the designer, to the Air Force general, to the pilot, to the pilot's children.

In the story "Home Again," White Cat says: "I know what I will do. I will run away from home, and I will not come back. Then he cannot play his tricks on me." (36, pp. 125–130) Six-year-olds "get the point" of White Cat's intent. Hide-away (the he) has made White Cat's life miserable, and White Cat is going away. Children also get the feel of this—White Cat is unhappy and is resorting to drastic action.

In the story "Who Stopped the Train?" this paragraph occurs: "At once all the people in Topton asked the same question. 'Why did the twelve o'clock train stop?' No one knew the answer. So each one stopped what he was doing and ran to find out." (43, p. 92) Again, the literal facts are readily identifiable. And so is the wonder and excitement of it all as the people of Topton ask why.

The following lines occur in "The Secret of Rainbow Ridge" and stir a sympathy of comprehension: "A cry of dismay escaped from Rod as he knelled over the small body. Jacky lay face down, his arm dragging in the water. When Rod touched his face something warm and sticky came off on his fingers." (42, p. 152) Twelve-year-olds grasp the situation readily. They
are kneeling with Rod. They are Rod. Their fingers are warm and sticky. Should passages like this really need to be studied carefully? Children sense what is meant. Do they, though, understand what the author wanted to suggest, and why? Can they deemotionialize this given situation?

Oliver Wendell Holmes said that when two people are engaged in a conversation, six persons are actually involved. His example was a conversation between John and Thomas, and the six personalities to be recognized are: the real John, John’s ideal John, Thomas’s ideal John, the real Thomas, Thomas’s ideal Thomas, and John’s ideal Thomas. (16, p. 53) Similarly, it is said that there are three sides to every question: my side, your side, and the right side. The right side may be hard to find, but seek it we must.

**DE Finite and INDEFinite LANGUAGE.** “One night at twelve o’clock, a raccoon came out of the woods. He was wet and dirty. His feet were full of mud. But he didn’t care. He was out to visit people.” (43, p. 170) This passage seems to be quite definite. But, is it? “One night” does not say which night. Was it the night of December 1, 1963? If so, was it midnight in Michigan, or midnight in California. If it was midnight in Michigan, it was only 10 P.M. in California but it was 1 A.M. in Maine. Was it a grove of trees this raccoon came out from? a dense forest? an evergreen watershed? How wet was he? Had he failed to shake himself? How dirty was he? What does “full of mud” mean? Were the soles of his feet covered or the entire paw? Can raccoon’s care? Do they have feelings as do people?

The passage about the raccoon was lifted from a story that begins with this line: “This is a story that really happened.” This being the case, should not the facts given be really as they happened?

“By 1959, people in the United States owned 40,500,000 record player turntables. There were 3,912 radio broadcasting stations of which 592 stations were FM.” (40, p. 118). Certainly this is a passage filled with definite terms. Does “by 1959” mean by January 1, July 1, or December 31, 1959? Did the people “own” the record players? Were there exactly 40,500,000 players and not 39,987,623? and so on.

Is it not more definite to say: “My home is one mile from here” than it is to say: “My home is a short distance away”? Surely “one mile” is more specific than “a short distance.” Is it not more specific to say: “I’ll be in New York City all day Monday” than to say: “I’ll be in New York next week”? Just how far away is a mile? Is it 5,280 feet? Is it a fifteen-minute walk? Will you take 4370 steps? Is it how tired you will be after walking a mile? Well, it all depends—does it not?—on who is saying what and why, and on who is reading what and why.

How definite or indefinite does a writer want to be as he touches the emotions of the reader, and why? Does he want to arouse pleasant or unpleasant feelings, deep-seated fears or anxieties, sentiments or sympathies, provoke certain actions—just what is he about?
I feel so exceedingly lazy,
   I neglect what I oughtn't to should!
My notion of work is so hazy
   That I couldn't to toil if I would!
I feel so exceedingly silly
   That I say all I shouldn't to ought!
And my mind is as frail as a lily;
   It would break with the weight of a thought!

(21)

The humor in those lines is readily apparent, as is the lazy, carefree, relaxed state that the writer wants to arouse.

I must go down to the seas again, to the lonely sea and the sky,
   And all I ask is a tall ship and a star to steer her by, . . . (23, p. 20)

This author seems quite definite about what he wants and about what he wants for the reader.

"Sure!" spoke up an old Cape Cod whaler. "Those whales will make matchwood out of their boat. The boys will be sliding down some whale's throat before they can swim one stroke." (40, p. 13)

The reader gets the point. The author wants to convince at this stage of the story that the boys are in for real trouble. Apparently they have taken foolish action. To carry weight, therefore, he cites the opinion of an experienced whaler.

How directive is the salesman who says that his product is a low-sudser and will not clog an automatic washer, or the ad that tells teenage boys not to use that greasy kid stuff?

This kind of analysis of definite and indefinite words and phrases and sentences appeals to children and is most fruitful. It gets them to take "another look": to weigh carefully, to avoid jumping to conclusions, to look before they leap, to search for proof. Falsehoods, half-truths, prejudices can be misleadingly deceptive when colored by indefinite as well as definite terms.

Conclusion

The essential difference, between teaching reading as a thinking process in a group situation and ordinary catechetical methods using set questions and answers, is that the students think. In the latter method the main lines of communication are between the teacher and the pupil, and the pupils are not encouraged to think. In many cases, it is a sad fact that the
instruction ruled by the tyranny of a right answer. In a directed reading-thinking activity, on the other hand, the emphasis is on pupil thinking. Pupils are being taught to examine, to hypothesize, to find proof, to suspend judgment, and to make decisions. They learn to do this in terms of their experience and knowledge.

In a Directed Reading-Thinking Activity it soon becomes clear that it is the pupil who must extract the information; he must comprehend and assimilate. If he repeats the thoughts of others, he does so not as a parrot but to supply evidence either to refute or substantiate a claim. If he accepts the purposes of others, he does so because he has examined them carefully and decided that these purposes are acceptable in light of the circumstances, and that they represent his interest and ambition. In these situations, if the pupil worries at all, he does so because he discovers he has made a faulty examination of the evidence, cannot find the lines to prove his point, needs to extrapolate on limited grounds, or does not know where to go next to find proof.

In our democratic culture, we cannot afford for one moment to become careless on this score. Pupils free to think and to evaluate are also responsible for proof and sound decisions. A Directed Reading-Thinking Activity in a group situation provides the conditions from which may emerge scholars who understand what it means to think, to learn, to test. Furthermore, it is from such a setting that they will learn to have the strength of their convictions and the courage to deal with ideas. They will not be fearful but courageous; not blind, but discerning; not hasty, but deliberate; not deceitful, but honest; not muddled, but articulate; not acquiescent, but militant; not conceited, but modest; not imitative, but original.

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