Neglected linguistic principles in the study of reading*

Despite a certain impression to the contrary, there is no such thing as a linguistic "approach" to the study of reading-in the sense of a specific technique derived wholly from the theories, methods and empirical findings of general linguistics. The role of applied linguistics, I would argue, is more general and also more fundamental than this. Firstly, it is to inculcate a state of mind, and to provide a set of principles which can shape our attitude towards specific problems, and which, because they come from a systematic framework, can inspire confidence when it comes to suggesting solutions. Secondly, it has an important descriptive role, specifying the nature of the visual input to the reader, and the nature of his output, in handling written text. In the first part of this chapter, I shall discuss three notions which seem to be particularly significant in promoting a linguistic orientation for the teaching of reading: the notion of language variety, the view of language as an integrated set of levels, and the idea of ordered stages of linguistic development. In the second part of the chapter, I shall examine one particularly neglected area of linguistic description in reading materials—the relationship between graphological variables (specifically, the line) and other linguistic levels—and consider the implications of this for our understanding of the reading process as a whole.

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General aspects

Language variety

The view that there is no such thing as a single, homogeneous entitylanguage—is now well-established. Language is a composite phenomenon, constituted by a range of dialects, styles and specialist uses, generally referred to under the heading of varieties (see Crystal and Davy, 1969). Two closely-related implications of this view immediately emerge: the principle of appropriateness, and the principle of autonomy of purpose. The idea of appropriateness is widely recognized in language-teaching contexts-the view that there is no single, universally-correct use of language, that acceptability depends primarily on seeing any language use in relation to its purpose (colloquial speech for informal situations, specialist terminology for scientific discussion etc). We all now accept that there are differences between the speech habits of children of different socioeconomic backgrounds and geographical areas (though whether these differences are sufficiently great to warrant their being called distinct "codes" is highly debatable). What is less well-established is the corollary of this view—that each variety has to be judged in its own terms, and its function not confused with any other. This is a principle underlying the Writing Across the Curriculum Schools Council Project, for example (see Martin et al., 1973), which emphasizes that the function of writing is to be seen in a different perspective from that of speech. To see the one merely as a reflection of the other may be reasonable in terms of formal structure. but is confusing as regards function. To see writing as an alternative to speech and no more, obviously invites the question, "Why bother to write, then, if I can speak?" And it is presumably this confusion which underlies the query of the child who, having returned from a nature ramble and being told to "write about it", asked "Why? It's much easier to tell you." What has not got across here, it would seem, is the view that writing can do what speech cannot do, e.g. make thoughts permanent, precise, transmittable over distances, allow the extra dimensions of colour, layout and size etc. This view-and its corollary, that speech has a role that writing can never perform—must be got across, however, if awareness of why languages have varieties at all is to develop, and be the basis of more sensitive judgements and discriminations at a later age (such as those investigated in Doughty et al., 1971).

The distinctiveness of the varieties of language is even more marked when we look at them from the formal point of view. It would in fact be quite inaccurate to see adult reading and writing as being a reflection of speech, as suggested above. Most people are aware of this as a general emphasis, of course, and can point to the differences in vocabulary and the

colloquialisms of syntax-contractions, tag questions, etc. (e.g. isn't, can't be)—in support of their view; but it is rare to see a full awareness of the extent of the difference. This is primarily because people operate with a relatively formal conception of speech. The really informal, colloquial kind of conversational language—which is the kind that children are exposed to most of the time before school—is not generally illustrated in textbooks, and it is not easy to become objectively aware of it. The main reason for this, one supposes, is that it is methodologically difficult to find out the facts about it. Obtaining samples of spontaneous speech for linguistic analysis is a specialist technique, and it is not easy to devise ways of getting at conversational English of a maximally informal kind without the speaker's awareness of the recording situation interfering with his spontaneity and colloquiality. But more information is becoming available, and it points up the differences mentioned above (see Crystal and Davy 1975, Dickenson and Mackin 1969, and Chapter 6 below). In syntax, for example, there are the many "comment clauses" (see Quirk et al., 1972, 11.65 ff) which play a major part in organizing the progression of thought in a dialogue-you know, you see, mind you, it's fair to say, believe me. These can be over-used, but cannot in principle be criticized as being merely markers of nonfluency. They have a specific role to play and follow strict grammatical and semantic rules. You know, for example, changes in meaning as it changes its position in the sentence:

1 in initial position, with high rising intonation, e.g. you know, I think we ought to

2 in medial position, e.g. I've just been to the shops—you know, the shop on the corner

3 in final position, with low rising intonation, e.g. I've just been talking to Mrs Jones—you know.

1 has a primarily stylistic role: it is an informal, intimate way of introducing the topic. 2 has a semantically clarifying role—the speaker becomes aware as he speaks of the need for clarification, and introduces this by the phrase you know. It is as if he says, "What I have said so far is unimportant—it is what follows that should be paid attention to". 3 adds the assumption of concealed information: the speaker is assuming that his listener knows something about Mrs. Jones, just as he does!

Grammatically, too, colloquial speech has its own rules which have to be followed if the conversation is to sound natural and acceptable. Even you know follows rules: for example, it is only used initially in statements; questions, commands, and exclamations with you know sound distinctly odd, e.g. you know, shut the door; you know, is it raining? But this is just one syntactic area of colloquial importance. Other areas would be the use

of tag statements (e.g. He's a nice chap, John is); relative clauses attached to sentences (e.g. He won the race—which surprises me); and inverted word order for emphasis (e.g. On the ship I said we'd meet him). Perhaps most important of all is the tendency to avoid complex sentences, with multiple subordinate clauses, and instead to string together clauses into loose sequences using conjunctions, comment clauses, and so on, so that often it is extremely difficult to define in traditional terms where one sentence ends and the next begins. Here is an extract from a storytelling session, to illustrate the point (see p. 49 for transcriptional conventions; the full extract is transcribed in detail in Crystal and Davy, 1975, extract 5):

/yes I remember/ there was a terrible/ story/ - horrifying story/ that was told by a colleague of mine/ when I used to teach/ years ago/ - who erm /this chap lived in erm - a semidetached house/ and next door/ - there was a man/ who'd just bought a new car/ - and he was telling me/ that one morning/ he was looking through the window/ - and this man allowed his wife to drive the car/ very unwisely/ and she was having a first go in it/ - and he backed it/ out of the garage/ - so that it was standing on the driveway/ - and he'd closed the garage doors/ - and - she came out of the house/ - to take his car out/ and go shopping for the first time/ - so. . . .

This sentence (as defined in traditional terms) continues for another half a page before one can be sure that it has finished. In written English, of course, sentence-boundaries are rarely a problem. We may write:

John came: and the clock stopped.

or

John came. And the clock stopped.

and depending on which way we choose to write it, so we know how to analyse it, as one sentence or two. But in speech, the intonation and rhythm of both these examples may sound exactly the same. Speech is analytically more ambiguous in this respect. Or, to put it another way, speech does not need to make the same range of linguistic distinctions as writing does. There are immediate implications for the study of reading. One implication is presumably that speech cannot be seen as a basis for reading development, but rather as a parallel skill, whose features can act as a framework for assessing the kind of linguistic difficulty that a given child has shown himself able to cope with. Nor can it be assumed that fundamental linguistic notions such as sentence, or word, or left-to-right progression, are going to be self-evident to a child upon encountering the written medium, as there is considerable indeterminacy about them when we search for their existence in speech.

Integrated account of linguistic structure: the importance of intonation

Perhaps the most important linguistic feature distinguishing speech from writing is the prosody of the former, compared with the punctuation of the latter. This is another point which is widely recognized, but whose significance is missed because the extent of the difference is underestimated. Punctuation, and the other visual variables of type size, layout, spacing and colour, is only a pale and partial reflection of the prosodic system of the language. The operative word here is "system". It is easy to forget that the melody, loudness, speed and quality of our speech, which seems so smooth and unstructured, is in fact the result of a highly complex set of formal contrasts, such as low falling pitch, high falling pitch, low rising pitch etc. It is not so easy to define and illustrate these variables as it is for the segmental (vowel and consonant) features of our sound systems, but the contrasts are there, and a great deal of recent work in linguistics has gone into showing what they are (see Crystal and Davy, 1969, Chapter 2; Crystal, 1973b, includes some examples on tape). Incidentally, they seem to be the earliest features of a language to be learned by children.

One reason why it is important to see intonation in relation to other aspects of linguistic structure, and not to minimize its role, is due to the function it has in the teaching and evaluation of reading. The concept of successful reading aloud is crucially dependent upon it, as is the notion of intelligibility in the provision of good models for imitation. Word by word reading is generally held to be unsatisfactory, if used for too long; but the only difference between this and the more acceptable phrase-, clause-, or sentence-unit reading is in the intonational or rhythmic cohesion which the reader can give it. And if a child is not aware of the role of intonation in this respect, or of the corresponding organizational role of punctuation, major difficulties can develop which it later takes a great deal of time to eradicate. A common example of this difficulty stems from the mismatch between grammatical and line boundaries, which unless anticipated, causes inevitable problems. Layouts such as:

They went for a ride on a pony. The next day . . .

will be predictably read as

'They 'went 'for 'a ride/ –
'On 'a 'pony 'the 'next 'day . . .

with the main emphasis in line 1 on ride, with a falling tone followed by a pause. The error may be interpreted by the teacher as one of comprehension, and it may have repercussions which permeate several lines; but

basically the difficulty arises out of formal linguistic considerations, and is not essentially a problem of comprehension at all. At the end of the first line, the child has to do one of the most difficult reading tasks of all, namely, find the beginning of the next line. While his eyes move, there is a pause, and the pitch of the voice will tend to fall. The first line's syntax is also a possible complete sentence in English, so it is not surprising if the reader assumes that the sentence has come to an end, and treats the second line as a new sentence, with raised pitch and new prominence. The whole of the second line will then be read as the beginning of a single new sentence, unless the child's attention has previously been drawn to the two graphic phenomena which show that it is not, namely the fullstop and the capital letter. If awareness of these is not present, there is little chance of any self-correction taking place until further down the page.

This is no isolated example. Another very common error is in cases like:

"I want to go," Janet said. "I will come too." said John.

The predictable difficulty is that the child will tend to pause after go, and then treat Janet said as going with the next sentence. Said John is then left in the air, or linked with the following sentence—and so the error grows. Once again, it is the mismatch between intonation and punctuation, induced through a lack of awareness of the latter, which causes the difficulty.

A further kind of example of the importance of intonation lies in its role in making sentence patterns acceptable which would otherwise not be so, due to a deviant or rare sentence structure. A classic example is:

One little, Two little, Three little kittens.

This, unless read with the appropriate "bouncing" nursery-rhyme intonation and rhythm, produces an impossible grammatical structure for English:

One/ little/ two/ little/ three/ little/ kittens/.

There are many such cases:

He saw toys and toys and toys.
I can eat caps (said the goat). I shall eat caps.
May I have a coat, a little coat for my doll?

Order of linguistic development

This last type of example leads to my third general linguistic principle, the relationship between norms of linguistic development for speech and for reading. The focus of attention here should be on grammar, which has been by far the most neglected level of language structure in reading studies. The tradition of study has given plenty of time to vocabulary enrichment and to the relationship between pronunciation and spelling, as the controversies over phonics, look and say, ita etc. indicate. But grammar is the central organizing principle or structuring process in language, without which sounds, no matter how well spelled, and words, no matter how well recognized, remain isolated units, a disorganized juxtaposition of noises and ideas. Grammar relates sound to sense and provides an essential measure of developing linguistic ability (the point is developed in Crystal et al., 1976). For the teacher of reading, then, it would seem crucial

- to be aware of the level of grammatical ability attained by a child, in order to see whether the grammar of the materials being presented is within the child's capabilities
- (2) to be able to criticize the grammatical standards of reading materials for realism and adequacy, and to develop alternatives.

To implement the first point means becoming aware of the way in which the child's development of speech manifests a stable order of grammatical features. Children do not acquire the grammar of their language randomly. They learn their language at different speeds, of course, depending on their backgrounds, environments, and personal skills; but the evidence from the language acquisition studies of the 1960s (summarized by Brown, 1973) is that the *order* of the various structures is approximately invariant for all children.

An example of the kind of developmental stages involved is given on p. 44 above. Using a developmental ordering of this general kind—and remembering to pay attention to the detail as well as to the outline of development—it is possible to "place" a child in terms of his syntactic development, and decide how far above or behind his group he may happen to be. It is then a pedagogical task to find reading materials which do not overtax his syntactic ability, by making him read structures which he has not yet learned in speech. (A little later, reading and writing can be used as a means of extending and experimenting with syntax, and developing a child's linguistic ability in general. But in the early months of reading, it seems pedagogically unsound to attempt to introduce the reading skill if there is going to be persistent interference from unfamiliar

syntax. This lesson seems to have been learned in connection with the choice of vocabulary, but it has not yet become universal in syntax.) Rather, the structures common in speech should be allowed to emerge whenever possible (i.e. without attempting to turn reading into "visual speech" as argued above), to reinforce the visual structures and provide a control against presenting too alien material. The *Breakthrough to Literacy* sentence maker and similar ideas would seem to be the most valuable in this connection.

The phrase "alien material" may seem strong, but it is fitting, at least for syntax. The second desideratum mentioned above for the teacher of reading concerned the criticism of the structures found in reading materials, and—at least in traditional materials—there is a great deal that can be criticized. Examples of non-English structures would be:

What have you in the shop?

which is a pattern no longer in general use (though it was common enough in Elizabethan English) or

One little kitten runs to the basket.

where the initial *one* is awkward (unless it is intended to make a contrast using intonation, i.e. *one* kitten, not two), and the simple present tense form is unreal unless a sports commentary implication is intended! A third example is:

A small red jug stood next.

And there are many more which in isolation may seem trivial, but put together produce an artificial kind of English syntax which the teacher must be on guard against. There is nothing particularly odd about *I see a book and a pen* or *I see a table and a desk*; but when it develops (under some misguided sense of grading complexity) into *A book and a pen are on a table and a desk*, and so on, the pervasiveness of the artificiality becomes more evident.

There are signs that linguistic principles such as those outlined are being borne in mind by more and more people involved in the professional study of reading. The detailed application of these principles in the production and evaluation of materials, however, has hardly begun.