DAVID CRYSTAL

The past, present and future of English parsing

The teaching of 'grammar' is a matter of controversy in educational circles. In recent decades the pendulum has swung away from traditional 'parsing' towards 'language in use' – accompanied by cheers and fears in roughly equal measure. Is compromise possible between the two extremes, or even something better than simple compromise?

The teaching of English grammar in British schools has undergone a revolution in recent years, and is about to undergo another revolution.

Twenty years ago, it was standard practice to teach schoolchildren how to analyse the structure of a sentence, using procedures and terminology whose history could be traced from Greek and Roman times. From the early 1800s, generations of British schoolchildren (as indeed their Continental counterparts) were taught the traditional definitions of parts of speech, how to analyse sentences in terms of Subject and Predicate, or Subject, Verb and Object, how to distinguish the several classes of adverb (time, place, manner . . .), how to avoid split infinitives, and much more besides. It was known variously as 'parsing' or 'clause analysis'. If you're over the age of 40, you'll remember it well enough. You may even be able to show admirers your scars. As one correspondent wrote, after a BBC programme on split infinitives:

> 'The reason why the older generation feel so strongly about English grammar is that we were severely punished if we didn't obey the rules. One split infinitive, one whack. Two split infinitives, two whacks. And so on.'

Then, almost overnight – or perhaps it should be overyear – things changed. The teaching of traditional grammar in schools died away to a trickle. It disappeared from the curriculum, in all but a few (usually private) schools. The change was remarkably sudden, as was illustrated several years later, when the children turned into University students.

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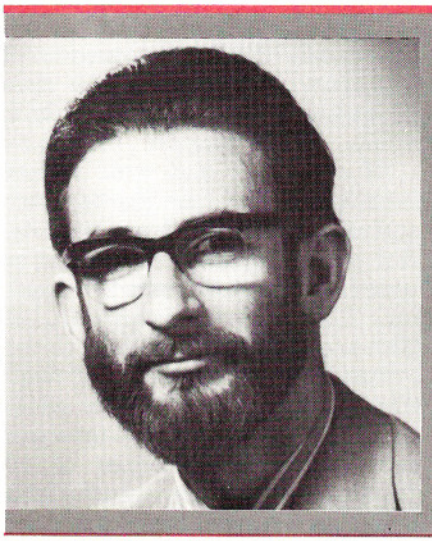
'Grammarless' students

I used to give an introductory course of lectures on Linguistics to first-year students. In my first lecture, I would draw a contrast with the older, prescriptive tradition of language study and the descriptive approach associated with linguistic ideas. I would illustrate from such old-style rules as 'Never end a sentence with a preposition'. In the lecture, I would argue that the difference between ending a sentence with a preposition or not was a matter of style – *That is the man I was talking to* being less formal than *That is the man to whom I was talking*.

I had given this lecture for several Octobers, without encountering any problems. Then, one October, as I was making this point, one student timidly put up her hand and asked, 'Please, what's a preposition?' I asked the rest of the class to raise their hands if they too did not know. I got a forest of hands. The result: I had to put on a special class, in order to tell the students about traditional grammar in the first place, so that they would make sense of my linguistics lectures which told them what was wrong with it!

I cannot explain the reasons for the rapidity of the change, but I do



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understand the factors which motivated it. Few people have happy memories of their grammar work in school. For most people, grammatical analysis was dry, boring, mechanical, with little apparent point. When children dared to ask why it was done, the answers received ranged from the historical ('because, Smith Minor, that is the way grammar has been studied, since the time of Plato and Aristotle') to the utilitarian ('because an intellectual knowledge of your language will facilitate your skill as a user of the language – you will write better-constructed essays, Smith Minor'). But these arguments failed to convince, and in some cases (such as the latter), there was never any evidence presented to support the view that intellectual awareness of language leads to improved performance (or to deny it either, come to that).

The first revolution

Whatever the reasons, out went traditional grammar. And in its place came – nothing, for a while. But then, the movement which has often been labelled 'language in use' gathered momentum.

The contrast in approach was quite clear. There was to be no formal analysis of structures carried out at all. Instead, the various situations in which language is used were to become the focus of attention. What kinds of language would children need to use, as they grew up? What kinds of demand would be made on them? What communicative problems would they encounter? As the main medium of teaching is through language, then to what extent was the language used around them actually making the task of learning easier? There were many studies which analysed teacher-pupil dialogue, to suggest that there was great room for improvement. And syllabuses were drawn up, in which children were introduced to different linguistic situations, and were encouraged to use their language in increasingly sophisticated ways. At the most junior end of the curriculum, the topics might be quite basic – such as understanding how to give or interpret successful instructions. At the most senior end, pupils might do projects on the language of advertising or newspaper reporting.

Most reports I've seen indicate that the children enjoyed this kind of approach. The ingenious way in which teachers brought them into contact with real English, and gave them a sense of exploration and discovery, contrasts favourably with the world of parsing. Several projects were initiated and developed in the early 1970s, and several generations have now been reared on these notions. These days, they are turning up at University, and they feel quite at home in a course on sociolinguistics. But the story is not one of total success. On the contrary, slowly a body of criticism has built up concerning the language-in-use approach, largely coming from the teachers who practise it.

The first doubts

One teacher explained his difficulties to me in the following way. He was working with a class on advertising language, and he wished to draw the pupils' attention to what it was that made the difference between a good and a bad advertisement, to how advertising language actually worked. But he had no terms available in which to do this. He wanted to point to particular parts of particular sentences, and use notions such as word order, noun and verb. He wanted to give them some analytical tools which would enable them to take the pieces of language apart and put them back together again, with a hopefully enhanced awareness of how they functioned. But his class had no terminology with which to do it.

'If only there was some way of bringing together the old approach and the new,' he bemoaned, 'so that the strengths of each could be used, and the weaknesses avoided.'

The acquisition revolution

There *is* a way, and it is this which may well be seen as the next revolution in the teaching of the English language in school. It is based on a single, simple assumption, which the study of child language acquisition has helped us to see as valid – namely, that school-children *already know* their language. They do not come to school to learn their language; they bring their language to school with them. The implications of this view are far-reaching.

Of course, the assumption needs to be sharpened immediately, if it is to be useful. I am not saying that children know *all* of their language, or that there is nothing they can be taught – simply that they know far more than old courses of grammar-teaching gave credit for, and that this knowledge can be the foundation for language work of many kinds (including the sort of thing that went on under the heading of 'parsing'). By five years of age, the acquisition research has shown, children have learned a remarkable amount about their language's structure. Their vocabulary is still quite limited (though even here, recent estimates suggest that it is far larger than we think; more than 20,000 word-tokens representing over 5,000 word-types in a day is by no means unusual). But vocabulary is never the best measure of language learning, because no one ever learns the whole of a language's vocabulary. Grammar and phonology (the pronunciation system) are far better measures, and it is in these respects that language acquisition is so impressive:

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- Average 5-year-olds have mastered all the vowels, and most of the consonants of their language; there is some evidence to suggest that control over the perception and production of front fricative consonants (such as [f] and [θ]) is not complete until around 7.

- They have learned all the basic intonation patterns (though the comprehension of some of the more subtle contrasts of meaning – such as the intonation of sarcasm – is a later development).

- In grammar, they have learned to use all the basic sentence pat-

terns relating to statements, commands, questions and exclamations; and they have learned most of the more 'complex' patterns of coordination and subordination.

• There are still several grammatical patterns absent from the speech of a 5-year-old – to take just one example, which has been well-studied, there is no use of more advanced patterns of sentence connection (the kind of connectivity which adults evince, using such items as *actually*, *however* and *as a matter of fact*). And their speech still shows occasional signs of the problem of learning grammatical irregularities – wrong tense forms, noun plurals, word order, and the like (*tooken* for *taken*, *much* for *many*, etc.). But these omissions and errors, which indicate that learning is still taking place, are the exception rather than the rule by age 5. If I had to put a figure on it, I would say that 5-year-olds have acquired over 80 percent of the grammatical structure of their language.

To verify this impression of competence, there is a simple exercise which anyone can carry out, given a tape recorder and patience. You find a tame 5-year-old, and record a sample of speech, on his home ground, under no pressure, when he is happily playing or chatting to someone he knows. You transcribe the recording, and go through with your pencil at the ready, looking for errors of grammar. My experience is that there will be pages of transcription with no pencil marks on them at all. You then compare the sample with the range of structures found in adult grammar. The language will be immature and limited in range, undeniably; but it is extremely competent.

Using metalanguage

Moreover, 5-year-olds have already made considerable progress in laying the indispensable foundation for later linguistic work: they have begun to use *metalanguage*. Metalanguage is the kind of language we use when we want to talk about language. *English Today* is full of it.

Whenever we use any kind of technical term at all, in order to talk about a language, we are using metalanguage. The notion thus subsumes such general terms as *word*, *letter*, *sentence*, *sound*, *voice* and *sounds silly*, as well as more technical constructs such as *noun phrase* and *accusative*. Put this way, it should be evident that children before they get to school have learned some metalanguage. From as early as 3, mothers have been haranguing them with such commands as 'Don't shout like that, I'm not deaf!', 'Say *please*', and 'Don't talk like that to the vicar!'.

Ferreiro and Teberosky, in a fascinating account of what preliterate children 'know' about reading, show how children of 3 and 4 are well able to talk about letters and the task of reading – though what they say and think may not much resemble what adults know about these matters. Some children evidently think that their parents' surname has to be longer than theirs – because parents are bigger than they are!

A new approach?

To summarise. Children come to school armed with a considerable unconscious knowledge of their spoken language and how it is used, and they have begun to reflect upon it in elementary ways. They do not yet know how to read or write, or how to use the more advanced structures of speech, or the more sophisticated styles which the language has available. But as far as the 'core' of the language is concerned, their performance is clear evidence of their competence. This is therefore the foundation on which all language work should build.

Language work is essentially a twofold process: It aims to develop a person's skills in using his language (whether in speaking, listening, reading or writing), and it aims to develop the ability to reflect upon these skills, and those of others, in all the contexts in which language is used (science, literature, leisure, humour . . .). The 'structural fallacy' implicit in the parsing approach is the assumption that, if reflection can be taught, in the form of metalanguage, then skills will improve. There has never been any evidence in support of this view. It does not follow that an intellectual awareness of language will necessarily lead to an increased ability to use language. A good car mechanic is not necessarily a good driver.

On the other hand (to continue the analogy), there is no denying that the more people know about cars, the more their driving is likely to improve. Does the analogy have some relevance for language, then? I believe so, if we remember that with cars, the driving usually comes first, and the mechanical knowledge, along with the associated car metalanguage, comes later. No one would assume, from having systematically learned the names of all the parts of a car, and learned about what a car can do, and where it can be driven, that the ability to drive would follow automatically, or the knowledge of how to drive safely.

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Indeed, it is well-known that learning acquired by rote, in this kind of context, needs to be reinterpreted later: I recall learning the stopping distances of a car in various road conditions to the satisfaction of any examiner, and equally recall my amazement when I first had to carry out an emergency stop in the wet, and learned what '200 feet' really meant!

Why should our expectations for language be any different? Why should we expect that children's linguistic abilities should automatically improve, after giving them a dose of linguistic terminology, or exposing them to an exposition of the structure and use of their language? Why should we even expect that children would retain any motivation for learning, when all they want to do is (as it were) get in and drive?

In traditional parsing, there was rarely any driving. The classes were based entirely on the manual, and

until its terms and concepts had been thoroughly mastered, there would be no exploration of the linguistic realities which they reflected. Indeed, the process of expounding linguistic structure often took so long, and was so cumbersome, that there was no time to do any exploring. Often, too, it was viewed as an end in itself: the manual was all; driving was out.

The analogy is near its death, but before it passes away, a point of difference must be noted. Children are not born drivers, but they *are* born with a natural capacity for language, which will be triggered, given an appropriate linguistic environment. Language teachers thus have an enormous advantage, compared with driving instructors.

Grammar as adventure

How can teachers make use of this advantage, therefore? There is one main way: to ensure that no piece of linguistic metalanguage is used in class without it arising from the needs and linguistic experience of the child. A technical term should never be taught first, and its application searched for afterwards. Rather, the children, by reflecting on the way they and others use language, should feel the need for a technical term. If the subject has been presented to them in a fascinating way, they should *want* to talk about language.

The teachers themselves will need to be aware of enough metalanguage to be able to direct the discussion, and give it some consistency – bearing in mind that the children will want to build on their terminology in later school years. But language is no different, in this respect, from the way in which terminology is learned and used in any other area of learning – such as chemistry, botany or geography. 'What do we call this, sir?' is a common cry, in project or experimental work, where the subject-matter is a piece of a flower, or a laboratory finding. But the same question is just as relevant when the child discovers something interesting in language.

The 'this' in the question can cover an enormous range, in language work, and cuts across the divide between language structure and language in use. It may be a point of difference between the way two children speak, or the quality of a voice, or the way in which a word is built up, or the curious style in which a newspaper headline is written, or an ambiguity which has given rise to a joke – or *anything* worthy of note, according to the age of the child.

It does not matter whether the observation is a point to do with linguistic structure, or to do with language in use. The important thing is that the observation is motivated by some real problem or interest in the language which a child has encountered. Some of the real topics which I have seen infant-school children spontaneously raise include: why some words are rude; why you can call some people by their first name, but not others; why some jokes are funny and some are boring; how you can tell where someone is from; why you have to talk carefully sometimes; why TV characters talk the way they do, and whether they can always be understood. The list is endless.

At older levels, the topics are

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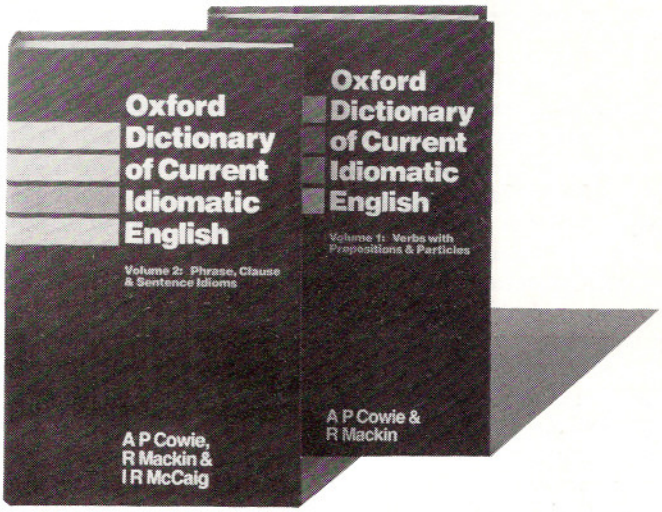

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somewhat more sophisticated, but the principle is the same. I have heard secondary school children raise such real topics as: why scientific reports have to be written in a special way; whether you can bring personal emotions into an essay on geography; and why it is so easy to be unintentionally rude. It ought to be possible to work out a list of linguistic 'issues' which motivate children at different ages, and indeed this is one of the aims of language acquisition research. In due course, it should be possible to construct a syllabus of topics. But even without the research, or the syllabus, the principle is plain: *the desire to talk about language should come from within.*

How to go about it

Traditionally, children would be told that 'sentences can be divided into subjects and predicates', and definitions given of the three main notions contained in this proposition, followed by some exercises, which would show whether the definitions had been understood.

In the present approach, the children are given some sentences – preferably, humorous or dramatic ones from their own experience (such as a piece of TV dialogue) – and are asked to divide them into two parts, giving a reason for the place of division. No further explanation is given to them. They then compare what they have done, to see whether everyone made the division in the same place, and gave the same reason. Usually, there is a clear consensus, in which the children themselves hazard 'terms' such as 'that part's the person who does the action' and 'that part's the action he does'. Whenever I have observed this activity taking place, I have been struck by the way in which the children themselves take to task those in their group who make the division in the 'wrong' place.

To see how far such an explanation is valid, each child can be asked to construct two lists, one of 'doers' and one of 'actions'. Again, points of similarity and difference can be discussed. One teacher wrote up a single doing word, *sleep*, on the board, and then put it into a frame '. . . is sleeping'. The children were asked to think of any words which could be used at the beginning of this frame. Words like *man, cow* and *baby* were suggested.

'Only people and animals then?' the teacher queried. 'Can anyone think of something that isn't animate that can sleep?' (The term 'animate' might have been explained at this point, but everyone seemed to guess what it meant.)

One pupil said, 'What about *city*?' That led to a flurry of words such as *house, town* and *planet* and a short discussion of why you could say that these 'things' slept. The teacher did not interpose a term such as 'personification' or 'figurative' at that point – but he might have done. Actually, *planet* led to a small row, in which half the class felt that it was legitimate to say *The planet was sleeping*, whereas the other half felt that you couldn't – because only half a planet would be sleeping at any one time.

'Could *anything* be said to sleep, then?' asked the teacher. 'What about *stone* or *ideas*?' (he had read Chomsky). The class hotly denied that these were possible – until one spark pointed out that in a fairy story, there was no reason why stones couldn't sleep! Before long, the discussion even managed to take in such idioms as *The hotel sleeps thirty people* (but not *The restaurant eats thirty people*). And by the end of the class, the pupils themselves were interested to discover that there were terms available to summarize what they already knew (for all the examples were theirs) – terms such as 'subject' and 'predicate', 'animate' and 'inanimate', 'noun' and 'verb'. The stage was set for a more sophisticated set of examples in the next lesson.

> *Curiosity knows no bounds when it comes to language, as long as the material is appealing.*

Now, I have deliberately not given the ages of this class. What are you expecting, from this account? Were they 13 or 14, perhaps? Or 11? In fact, that particular class consisted of 10-year-olds, but I have observed exactly the same kind of approach being used with several older age groups – and (though not with this example) younger. Curiosity knows no age bounds, when it comes to language, as long as the material is appealing. And the best way of making material appealing is to let it come from the children themselves.

So, could this approach provide a way of avoiding the clashes of the older antagonisms between structural and use approaches to language teaching? I think it could, given the chance. That chance would be a fine thing. ET