Thoughts on information structure in language

Margaret Masterman, information scientist and linguist, has not only reviewed at our request two new books which touch on the subject of information structure, but has also submitted a discussion note drawing attention to the importance of some of the work now being done in this area.

English word Stress

by Erik Fudge
published by George Allen & Unwin
paperback £7.50
hardback £22.95

I found this an exceedingly readable book. In fact, it fascinated me, so that I could not put it down.

The reasons for this "readerworthiness" are not that it is unacademic. On the contrary, it is widely referenced, and from several literatures. It is, moreover, conventional: it takes as its starting point, for example, that all languages, when spoken, will reveal themselves as being either stress-based or syllable-based, which, over the long run, and with the current mixing of languages, may turn out to be an oversimple dichotomy.

No, the reasons for its attractiveness to your present reviewer are twofold. Firstly, it starts from a multilingual approach, not an unilingual one;

Professor Fudge knows, and knows about, very many languages. Secondly, if you try doing the exercises, you will find that much trouble has been taken to make the book user-friendly. You can, if you wish, construct stress patterns by drawing trees; or by drawing curves; or by using the stress-notation which is used throughout the book; or by transcribing the words into the phonetic script given on page five, and which greatly assists the subsequent stressing process. Likewise, you can break up words into morphemes, using the script; or etymologically into traditional syllables.

Because the book has been designed for practical teaching, it reaches to the point where complications begin to build up; which fact is disclosed (Fudge does not fudge). When the notation begins to fail because only three levels of stress are accounted for; when lists of exceptions proliferate; all this is stated.

There is only one *caveat;* is this not only half a book? Given the progressive intrusions of the rhythmic principle and of phrasal patterns, ought there not to be a second half, going downwards from the most frequent stress-patterns of paragraphs?

However, this is a spanner-in-the-works remark to make about a very-interesting-to-have-on-your-shelves kind of book.

Rhetoric of Every day English Texts

by Michael P. Jordan
published by George Allen & Unwin
1984
paperback £5.95
hardback £15.00

This book is the third in what is already becoming known as "the Hatfield Series".

It is a teaching manual, to encourage clear reading and clear writing: called

in the book "practical communication". It takes 106 sample texts, every one of which is partially analysed (for even the texts which are exercises for the students have hints attached); and it takes them all as variants of a common *Situation-Problem Solution Evaluation* schema, the nature of which is expounded on pages 23 to 24. Thus "the Hatfield method" of analysing English phrase texts consists in discovering precise contextual "signals" which betray the existence of overall information structures, which in turn can be related back to the basic schema.

This manual is not vague, though; it is precise, with classified lists of schema-variants and signals given at the end in Indexes A-J - which increasingly begin to look like a quite new kind of semantic thesaurus. It is also modest, and makes no claim to completeness (see especially p. 136, "No 'Method' offered").

Its title is misleading. Currently, "rhetorical" usually means "stylistic"; classically, "rhetorical figures" were reiterative patterns of linguistic parallelism. The book itself, however, is not. It describes a determinedly practical and successful teaching experiment using a technique which increasingly challenges "pure" mainstream academic text and discourse analysis.

A new approach to finding the large-scale information structures of text

During the last two years a sequence of three books have been released to the public which set out - or begin to set out - a quite new approach to the task of finding large-scale information structures in written text.

These books all come from the same publisher (George Allen and Unwin) and all refer back to the first one. They will, I am sure, have been separately reviewed in the journals. But academically their joint message has been totally ignored, studiously, academically ignored.

The first book is *Towards a contextual grammar of English,* by Eugene Winter (1982). This book was acknowledged as seminal by both the other two authors, but in fact the really seminal work was a Hatfield Polytechnic manual for internal circulation, also by Eugene

Winter, dated 1976, and titled *The fundamental of information structure: a pilot manual for further development according to student needs.*

The second book is *On the surface of discourse* by Michael Hoey (1983); it was started when Michael Hoey was with Eugene Winter at Hatfield, though it has been finished at the University of Birmingham.

The third book is *Rhetoric of Everyday English Texts,* by Michael P. Jordan (1984), and describes a practical teaching experiment. In it Michael Jordan describes himself as simultaneously in Queen's University, Canada, and the Hatfield Polytechnic, England; and he dedicates his book to "those who have kept their heads on the surface while all about them have been losing theirs in the deep".

Now what is it to "stay on the surface of discourse"? It is, I think, to study the real flow of information as this is made explicit by markers (called "signals") throughout quite long texts. Thus you discover many and precise criteria (listed by Jordan in classified semantic indexes) which will both reveal the structures actually occurring in the texts, and also relate them - as variants - to a single overall schema: Situation - Problem - Solution - Evaluation. The main (and successful) field of practical application of this work so far has been that of teaching students both to analyse better the information-structures or texts, when reading them, and to "communicate" better when they are writing them, which means in practice to write more self-consciously and more clearly. But of course this method, if developed, could have vast other applications also - especially if Winter's promised Encoder materialises, thus enabling the technique to be tested on a machine.

Now granted, the terminology (and titles) of these three authors is contorted and difficult. For instance, if Winter is going fundamentally to call in question whether we know at all what a sentence really is, how can he call his goal the making of a grammar? And Hoey, while saying that he is staying on the surface, reaches final controversial theoretic conclusions which, on any conceivable conception of "depth", are exceedingly deep. And Jordan, throughout his book, describes a method which he then calls "No 'Method' Offered".

The point I want to bring out here, though, is the new confidence this approach brings to those few who know about it. You can now "explore and understand structures in everyday English prose, and the features of language which signal these structures ... and you can also develop a sense of

style", Jordan tells his students, right at the start. And Hoey's final sentences made an even stronger claim:.. ."We are acutely conscious of what a paltry beginning this book is, compared to the work that is still to be done. Our only consolation is that this book is a shanty-town built upon rock, rather than a palace (i.e. nearly all the rest of linguistics) built upon sand. As such it awaits redevelopment with the confidence that what it offers is worth redeveloping".

All right, this work is still unfinished. But these books describe experiments: the experiment of jumbling sentences, with constrained rearrangement into paragraphs: the experiment of transforming any given paragraph, informationally speaking, into a question-answer sequence: an

experiment on what makes writers have to choose alternative ways of saying the same thing according as they transpose the order of what they are saying: and many more (and there could be many more yet).

These experiments need repeating: disproving or confirming: varying: extending. They are precise experiments, so that this can be done. And they are key experiments, not trivial ones, which means that it needs to be done fast.

Mainstream academics, stand up, forget your prejudices, and do something about this new work, using your own not inconsiderable skills. Otherwise, as the years pass, you may cease to have any sand left to stand on.
Margaret Masterman