

Review of

Dan Sperber and Deirdre Wilson (1986)

Relevance : Communication and Cognition.

(Blackwell's, Oxford)

Daniel Hirst - CNRS Parole et Langage, Université de Provence.

One of the examples Sperber & Wilson ask us to consider is the sentence :

"It took us a long time to write this book" (p 122)

In case the reader misses the point, they explain in the preface that the book developed out of a project begun over ten years ago to write "in a few months" a joint essay on semantics, pragmatics and rhetoric. The resulting book has been long awaited, having been announced as "forthcoming" since at least 1979 under various provisional titles ranging from *The Interpretation of Utterances : Semantics, Pragmatics & Rhetoric* (Wilson & Sperber 1979) through *Foundations of Pragmatic Theory* (Wilson & Sperber 1981) to *Language and Relevance* (Wilson & Sperber 1985). The final modification, dropping the word "Language" and adding the subtitle, is highly symptomatic of the evolution the manuscript must have gone through over the years. The Theory of Relevance presented here has considerable implications for the study of language, but in fact the subject of the book goes well beyond the fields of linguistics and pragmatics and attempts, as the back-cover puts it (with just a hint of exaggeration) :

"to lay the foundation for a unified theory of cognitive science."

It seems quite possible, as the authors suggest in the preface, that something like their Principle of Relevance is at the heart of human (and surely also non-human) cognitive processes, which are :

"geared to achieving the greatest possible cognitive effect for the smallest possible processing effort." (p viii)

Unlike Jackendoff (1987) and Johnson-Laird (1988), to mention just two recent introductions to cognitive science, Sperber & Wilson make no attempt to draw parallels between language processing and other cognitive activities such as visual perception, musical understanding etc, (although it is not hard to see how Relevance Theory might apply to a computational theory of vision for example), but in many ways *Relevance* is a far more radical rethinking of the nature of central cognitive processes. Both Jackendoff and Johnson-Laird set out to show how what we know about language fits in to, and at the same time throws light on, a general picture of the mind. By contrast, one of the implications of Sperber and Wilson's book is that a formal theory of communication may cause quite a considerable rethinking of the nature of language itself.

A common view of pragmatics is that it is :

"a theory of communication separate from but dependent on a previously stated account of semantics" (Kempson 1977 p 68)

assuming that semantics is in turn entirely determined by the grammar in the way that Chomsky for example defines "logical form" as :

"those aspects of semantic representation that are strictly determined by the grammar, abstracted away from other cognitive systems." (Chomsky 1977 p 5)

Defining pragmatics in terms of an independently motivated theory of communication could consequently lead us to restrict those aspects of meaning that need to be determined by the grammar : a conclusion

which is spelled out more explicitly in recent work by Kempson (1984, 1986) who shows that some cases of bound anaphora need to take into account pragmatic phenomena and that a unified account of anaphora is thus only possible on a pragmatic level - an account which she develops within the framework provided by Relevance Theory.

In a sense it is a pity that Sperber and Wilson did not go one step further and drop the word "Relevance" as well as the word "Language". Perhaps it would have been better if they had used some other term such as "payoff" or "yield" or "interest" for example (though admittedly none of them sound so nice as "relevance theory"). At least this would have prevented generalisations like :

"Sperber and Wilson attempt to reduce Grice's conventions to one : be relevant." (Johnson-Laird 1988 p 349)

which misses the point that the difference between Grice's Conversational Maxims and Sperber and Wilson's Principle of Relevance is a qualitative not a quantitative one. The principle of relevance is neither a maxim nor a convention nor a theorem but a :

"generalisation about ostensive communication" (p 159)

that boils down to a natural consequence of assuming that communication is rational goal-directed behaviour. When this assumption breaks down so does relevance.

"Relevance theory explains how ostensive communication is possible and how it may fail." (p 170)

The idea that the study of communication is a way to learn about the nature of language is hardly new. One of the main criticisms that have been levelled against Chomskyan linguistics by (mainly European) linguists from outside the generative field over the last thirty years, has been precisely that Chomsky has cut off the study of language from that of

communication. Sperber and Wilson, however, go even further than Chomsky and claim that the language faculty is not in itself a specifically human characteristic, neither is ostensive communication : what is original is the specific use which the human species has made of language for communicating, just as elephants have made an original use of their nose for picking things up.

One of the fundamental ideas expressed in this book is that the "semiotic programme", which aimed at reconstructing an underlying system of signs behind all forms of organised social behaviour, was doomed to failure. According to Sperber & Wilson :

"The recent history of semiotics has been one of simultaneous institutional success and intellectual bankruptcy. (...) no semiotic law of any significance was ever discovered."

Sperber has already shown (1974, 1982) that what progress has been made in the field of anthropology has come about despite, rather than because of, the search for an underlying code. Sperber and Wilson demonstrate convincingly in this book that "language" as studied by structuralists, in its widest sense of verbal communication, is not a code either. The originality of Relevance Theory, then, is to propose a genuine formal alternative to a code-based model.

The theory is developed in the following way. A purely cognitive notion of "manifestness" is introduced (Chapter 1 : *Communication*) applying to assumptions which an individual is capable of representing at a given moment as (probably) true. The concept of "knowledge" could then be analysed as derivative from this concept meaning "both manifest and true". This allows Sperber and Wilson to appeal to a notion of "mutual manifestness" rather than "mutual knowledge", thus avoiding the common accusation of infinite regress. A theory of non-

demonstrative inference is then developed (Chapter 2 : *Inference*) comprising a restricted deduction system (allowing only elimination rules but including conjunctive and disjunctive modus ponens). This in turn allows them to define the "contextual effects" of a set of assumptions in a given context as those assumptions which are either implied by, or the strength of which is modified by, the union of the context and the assumptions, but not by the context or the assumptions alone.

Relevance is then defined (Chapter 3 : *Relevance*) as proportional to the amount of contextual effects and inversely proportional to the processing effort required to recover these effects. Under this definition there is no single value for the relevance of a manifest assumption. An individual is free to explore the totality of the assumptions manifest to him (which is incidentally an infinite set since it may include such infinite series as "I am happy" "I know I am happy" "I know I know I am happy" etc.) This is not, however, a weakness of the theory since it is obvious that there is no theoretical limit to the search for the relevance of a manifest assumption (witness the Zen technique of meditation on *koans* , questions like "What is the sound of one hand clapping"). There is however a difference between the search for relevance of a phenomenon and that of an ostensive stimulus : in the latter case the individual can assume, following the 'principle of relevance' that the communicator is aiming at optimal relevance.

The final chapter (4 : *Aspects of Verbal Communication*) is devoted to applications of Relevance Theory to questions of pragmatics and rhetoric.

One interesting application is their approach to the problem of focus/presupposition, given/new, theme/rheme, topic/comment - to mention just a few of the labels which have been used to describe a variety of

intonation-related phenomena such as the difference of interpretation attributed to sentences like :

- (1) a. Lenny kicked the ALLIGATOR.
- b. Lenny KICKED the alligator.
- c. LENNY kicked the alligator.

where the capitalised word is assumed to carry the nuclear (= main) stress.

As they rightly say :

"there is a huge descriptive literature in this area, but nothing approaching an explanatory theory of the relation between linguistic structure and pragmatic effect." (p203)

Sperber & Wilson wonder innocently why linguists have felt it necessary to intersperse levels of semantic and/or pragmatic description, rather than assuming that it is the phonological form of the utterance which is directly affecting the way the utterance is processed and understood. In fact there is a very good reason : this type of phenomena seems to be practically the only case where phonological form is interpreted directly, rather than through the intermediary of syntactic structure. This has led linguists to considerable contorsions in a (legitimate) attempt to maintain the principle of autonomous linguistic components (cf for example Chomsky 1972; Culicover & Rochemont 1983; Selkirk 1984) . Once we find a way of accounting for these phenomena along the pragmatic lines Sperber & Wilson suggest, we are free to assume (as they do) that neither focus nor theme nor topic have any place in the linguistic description of sentences - a most welcome conclusion to my mind at least.

The explanation which they propose builds on the fact that an utterance is produced and processed over time, and that understanding it consists in constructing anticipatory hypotheses concerning both syntactic and semantic representations. Foregrounding (or focussing) a constituent consequently has the effect, like pointing, of drawing attention to a concept

which has particular relevance to the listener. It would be tempting to go a step further and suggest (cf Hirst 1987b) that in fact "focal" stress - particularly when associated with falling intonation - functions as a means of signalling that the anticipatory hypothesis which can be constructed at that point already fulfills the criterion of relevance. Thus in the examples above, we can assume, following Sperber and Wilson's analysis, that when the nuclear stress occurs the listener will have constructed semantic representations corresponding to something like :

- (2) a. Lenny kicked the alligator.
- b. Lenny kicked [SOMETHING].
- c. Lenny [DID SOMETHING].

which captures the fact that in the majority of contexts where utterances (1a-c) are appropriate, the following forms are also appropriate :

- (3) a. Lenny kicked the alligator.
- b. Lenny kicked it.
- c. Lenny did.

This account also provides a way of explaining why it is that answers like that of the following exchange (= Sperber and Wilson's (33)) :

- (4) (a) *Peter* : Would you drive a Mercedes ?
- (b) *Mary* : I wouldn't drive ANY expensive car.

imply both the premise :

- (5) A Mercedes is an expensive car.

as well as the relevant conclusion :

- (6) Mary wouldn't drive a Mercedes

Sperber and Wilson assume that when a reply like (4b) is processed in the context of the question (4a) the questioner looks in his encyclopaedic memory under the heading "expensive car" and finds the proposition (5) which then serves as premise to derive the conclusion (6). It

seems though that the questioner does not need to look in his encyclopaedic memory to find the premise (6) - he can construct it on the basis of the phonological form of (4b.) by assuming that the semantic representation :

(7) I wouldn't drive any [SOMETHING]

is already sufficient to derive a relevant answer. Note that with nuclear stress on 'EXPENSIVE' in (4b) the premise (5) (and the conclusion (6)) is lost. Suppose now that Peter had imagined that a Mercedes was not a car at all but a type of motor-bike or a lorry - Mary's reply would be sufficient for him to correct his mistaken impression (assuming he trusts her knowledge) despite the fact that neither (5) nor its negation had ever been part of his cognitive environment before.

Placing a premise in a post-nuclear position has of course always been a good way for speakers to palm off premises on their listeners by pretending that they are mutually manifest :

(8) Well of course if you MUST mix with snobs...

It can also be a useful way of checking that an assumption genuinely IS mutually manifest without throwing doubt on the listener's knowledge :

(9) (a) Why don't you speak to Peter anymore ?
(b) I don't LIKE strikebreakers.

There are, of course, a number of problems in this area which remain to be solved. Sperber and Wilson mention cases like :

(10) (a) My CAR broke down.
(b) The SUN'S shining.

but their explanation in terms of relevance of hardly goes beyond the "vague appeals to 'relative semantic weight' " which they rightly criticise in previous accounts. None of these accounts in any case explains why the

sentences in English are stressed as they are and why in French (excluding contrastive interpretations) the only possible stressing is final :

- (11) (a) Ma voiture est tombée en PANNE.
(b) Le soleil BRILLE.

The difference in stressing between (10) and (11) is in all probability linked to the fact that, as Sperber and Wilson point out (p 213), contrastive stress is more narrowly constrained in French than in English, but there seems to be more going on here than can be explained by an appeal to "strongly preferred final placement of focal stress" (which is a somewhat circular argument) and a "relatively flat intonation contour" in French (which as far as I know has no empirical justification at all). For recent attempts to provide a taxonomy of sentences of this type in English cf Gussenhoven (1984), Faber (1987).

In their discussion of rhetoric, the demonstration that metaphor and irony are not essentially different from other types of 'non-figurative' utterances is convincing, but the conclusion which the authors draw, namely that the notion of 'trope' "should be abandoned altogether", is too strong. By the same token we might claim that oil-painting is closer to house-painting than it is to singing and dancing and that in consequence the notion of 'art' "should be abandoned altogether". Surely what gives a central unity to the notion of trope, like that of art, is the use to which the different types of activity is put.

In their account of speech acts they argue, somewhat provocatively but substantially quite correctly, that :

"The vast range of data that speech-act theorists have been concerned with is of no special interest to pragmatics." (p 243)

with the single exception of their attempt to deal with non-declarative sentences. After pointing out that the correlation between syntactic

sentence types and generic speech acts cannot be maintained, they then somewhat weaken their position by making the surprising claim that there is no well-defined range of mutually exclusive sentence-types on the basis of examples like :

- (12) a. You are to leave tomorrow.
b. You won't be needing the car ?
c. This book is so interesting.

This argument is not very convincing, however, since once we distinguish sentence type from generic speech act there is surely no difficulty in identifying (12a) and (12b) as declaratives and (12c) as an exclamative. The case of (12b) is particularly interesting since, as I have pointed out elsewhere (Hirst 1983) a rising intonation pattern (or a question mark) is not sufficient to convert a declarative into a question as can be seen from the examples (assuming final stress on the capitalised word) :

- (13) a. Did you BUY something ?
b. Did you BUY anything ?
- (14) a. You BOUGHT something.
b. *You BOUGHT anything.
- (15) a. You BOUGHT something ?
b. *You BOUGHT anything ?

where the selectional restrictions on some/any are exactly the same for the forms in (15) as for those in (14).

It is perhaps only natural that much of this final chapter should have something of a programmatic flavour compared with the rest of the book. After all they do warn us in the preface that :

"the substance of two more books, one on pragmatics, the other on rhetoric, is already on paper and duly revised might even go into print."

It is certain that there is still much which remains to be said and done but as I mentioned above (cf also Hirst 1987a) the field of intonation studies is just one example of an area that is badly in need of the sort of

framework that Sperber and Wilson provide in this extremely thought-provoking book : a book that not only provides food for thought but which radically alters one's mental digestive system.

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