

MELANGES PEDAGOGIQUES 1981

" NOW WHERE WAS I... ? "
ASPECTS OF THE NEGOTIATION OF MEANING

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R E S U M E

Le discours produit au cours d'interactions face à face est le résultat d'une collaboration. Les relations entre les contributions des différents participants, telles qu'elles sont produites et perçues (stratégies interprétatives et stratégies communicatives) sont extrêmement complexes. Pour en rendre compte, un certain nombre d'hypothèses ont été émises parmi lesquelles les *maximes* de Grice, les *postulats conversationnels* de Gordon et Lakoff, les *procédures d'interprétation* de Cicourel et les *procédures d'inférences* de Searle.

Le point commun de toutes ces analyses est la notion de signification négociée ; l'un des buts de la collaboration dans le discours est de spécifier et d'interpréter les références contenues dans les manifestations discursives. Le propos de l'article est de montrer que ces stratégies communicatives sont essentiellement des stratégies d'apprentissage, des procédés de transfert. Elles ont donc une double importance du point de vue pédagogique puisqu'elles correspondent à des obligations dans l'utilisation du langage et à des outils pour l'acquisition.

I. COLLABORATION IN DISCOURSE

" Language disguises thought : so much so, that from the outward form of the clothing it is impossible to infer the form of the thought beneath it, because the outward form of the clothing is not designed to reveal the form of the body, but for entirely different purposes. "

Ludwig Wittgenstein

Tractatus Logico-Philosophicus, 1921

There is a delightful scene in Peter Ustinov's film " Romanov and Juliet ", where Ustinov himself, playing the rôle of Head of a tiny Ruritanian state which is desperate to remain neutral, bustles to and fro between the American and Russian embassies in his country, informing them of the status of their intelligence relative to one another.

" They know ! " he tells both ambassadors, who remain unperturbed.

" That's fine : we know they know ", they reply calmly.

Off sets Ustinov again. " They know you know ", he reports back to both sides.

" Of course ", comes the response " — and we know they know we know ".

Fortified by alternate doses of bourbon and vodka, he teeters from one embassy to the other.

" They know you know they know you know ! "

" No problem. We know they know we know they know we know... ".

So it continues, until suddenly the point is reached where both ambassadors react in horror :

" What ! They know we know they know we know they know we know they know we know ! This is terrible ! I must get on to Washington/Moscow at once... ".

As always, much of the strength of this caricature is derived from its very close resemblance to the real thing. When people interact, it is essential for each of them to know just how much the others know if communication is to be efficient. The nature of this knowledge will vary according to the situation, but it is always there to some extent. If, every time we wished to say something, we had to say everything, we could say nothing : when we

have something to say, we need first to know what does not need saying. That is, we have to decide what is irrelevant and what is already known to our interlocutor.

This is one reason why people who "know one another well" can communicate efficiently in a way which is often completely incomprehensible to an outsider, someone who does not belong to the group of people sharing a particular set of experiences or knowledge :

A. " Did you get the bus ? "

B. " I met the baker's wife ".

What are we to make of this exchange ? Precious little, as long as we lack the knowledge or background information which, we assume, A and B share. This knowledge cannot be linguistic : if it was, we, as speakers of English, would be just as able to understand this exchange as A and B were. To put it another way, there is no formal linguistic marker linking what B said with what A said, simply the fact that they were observed to say these things, in that order, and that they were apparently satisfied with their communication.

The knowledge, then, must be extra-linguistic. If I now tell you that the baker's wife is a notorious gossip, forever going on about her rheumatism, buttonholing people she meets for hours, you will immediately be able to draw the same conclusion as A, namely that B missed the bus because he was delayed by the baker's wife. Such an inference, though, is totally dependent on both A and B sharing that knowledge about the baker's wife, as we can see if we change the information : if, for example, we say that the baker's wife is a friend of B's and that she has a car, B will be "heard as saying" that he did not take the bus, he was given a lift.

How do we do it ? How, in this example, was A able to proceed from B's statement to a satisfactory answer to his question ? There clearly must be a series of intermediary, logical steps between the two : otherwise there would be nothing to prevent A taking what B said as the unrelated opening of a new exchange. How, then, did A go about working out what B meant ? What was his interpretive strategy¹ ?

Before we can even begin to answer those questions, though, we need to look at some of their presuppositions and implications, since they are important for applied linguistics in general and language teaching in particular :

¹ For a critical discussion of the term "strategy", its epistemological and historical background and its ideological implications, see Riley, 1981. Cf. also Berrendonner, 1977 ; Clark et Clark, 1977 ; Harding, 1980 ; Pit Corder, 1980 ; Faerch et Kaspar, 1981 ; Breen et Candlin, forthcoming.

1. Sentence and utterance.

A sentence is the maximal unit of linguistic structure : the utterance is the minimal unit of language use. A sentence is defined in terms of the internal relationships which hold between its parts, but an utterance is defined in terms of its external relations with non-linguistic items. A sentence is a unit of linguistic description ; an utterance is a unit for the description of behaviour. The former is part of grammar, the latter part of an event.

In real life, we produce utterances, then, not sentences. Sentences are abstractions made by grammarians to account for certain types of regularity, structural likenesses, to be observed in linguistic forms. Of course, if we describe an utterance in terms of its grammatical structure alone, we may find that we are dealing with a sentence (though not all utterances are well formed sentences, by any means).

" I met the baker's wife ".

Only when used on an instance i.e. as part of a real communicative event, can we describe such an item as an utterance, since an utterance, by definition enters into relationships with both its non-linguistic and linguistic i.e. in illocutionary value : it is quite easy to imagine this utterance having the real-life occurrences of " I met the baker's wife " and described them grammatically, we would have a dozen identical descriptions such as " Subject + Verb + Object ". But if we described them as utterances we would need a variety of descriptions corresponding with the variety of contexts in which they occurred. There would be variation due to differences in the common knowledge to which they made appeal and to the inferences derived from them, as in our example. There would be variations in the act B intended to perform, i.e. in illocutionary value : it is quite easy to imagine this utterance having the force of a complaint, say, or an apology. There would be variations, too, in its interactional function : depending on its relative position it might be an Opening, a Reply or a Closing. And there would be variations in its role in any longer-term plans of which it might form a part, such as B persuading A that he needs his own car.

2. A " minimal unit " ² for interpretive strategies.

If we are going to study interpretive strategies in interaction, then, we are going to look at utterances, not sentences, and we will need to consider sepa-

² This term is meant merely to clarify the approach taken here ; it is not a rigorously defined theoretical entity, but a useful rule-of-thumb. The problem is that according to the aspect of discourse-linkage being described (interactional, illocutionary, propositional, etc.) the precise definition will vary. (See Holec et al., Riley, 1980).

rately the roles of speaker and addressee. An utterance is, by definition, addressed to someone and unless there is a response of some kind (usually, though not necessarily a reply, usually though not necessarily, verbal) we cannot say that communication has taken place. We are, therefore, talking of a minimal unit of description which includes two consecutive turns produced by different participants in the same event and at least one utterance (usually "in" the first turn).

Part. Turn	1	2
A	X	
B		(X)

3. Goodbye to the " Ideal Speaker-Hearer ".

If the minimal unit for the description of face-to-face communication is two consecutive turns performed by different participants (" The exchange " or " Return ") it follows that no model of description which is based on the sentence and which fails to distinguish between speaker and addressee can be an adequate tool for describing the social and dynamic dimensions of interactive discourse.

In basic, down-to-earth terms, how can you describe how two people communicate using a model based on the individual ?

This is precisely why the last few years have seen the development of linguistic models which differ in important ways from those of mainstream linguistics : from de Saussure to Chomsky, the focus of attention had remained linguistic structure, the sentence and the ideal speaker-hearer. Now, for some linguists at least, the focus is on language use, the utterance and the interactive pair. Instead of static models of *langue* we are trying to develop dynamic models of *parole*, which means — amongst other things — trying to account for the ways in which we link utterances together, our own and those of other speakers.

Underlying all the points which have been made so far is the concept of interactive discourse as a collaborative construct.

In face-to-face interaction, in real time, any individual contribution may limit or influence subsequent contributions in a variety of ways : accounting for

this process — for the nature of the individual contributions, for the operations by which they mesh and fuse into a single whole — accounting, that is, for multi-source discourse, presents the linguist with an awesome list of problems. A full description would involve every mental operation from intention to outcome, as well as an understanding of the higher-level strategies an actor uses to steer his way, following the twists, turns and detours introduced by other participants but nonetheless heading generally in his own direction.

The complexity of this task can hardly be exaggerated, since ultimately it would require a theory of human action and a theory of human knowing, implying as it does not only a description of all the constituents of communicative events, but also the full range of psychological, epistemological and socio-cultural factors involved in the perception of such events. Slowly, though, a number of conceptual landmarks are becoming discernible : for example, communicative competence, act, utterance, interaction, rôle, address and strategy. This last term is proving to be exceptionally rich in insights, providing as it does just the sort of epistemological bridge between acting and knowing whose necessity has already been mentioned. We shall return to this topic later : for the moment, I would just like to emphasise the point that, if we accept the view of interaction as collaboration (the existence of ideal speaker-hearer models makes this pleonasm necessary) then we are logically bound to accept the propositions that the meaning of an interaction is (i) a property of events (ii) a collaborative construct. Of course, this is really only an extension of the definition of utterance put forward earlier : its meaning depends on use. Our definition of " meaning " therefore has the advantage of being *conversational* in two senses : it is the everyday use of the word and it is also a product of interactive collaboration. To the objection that sentences also have meaning of a sort, that, indeed, some philosophers distinguish between " sentence meaning " and " utterance use ", the following replies can be made : first, the terminological disagreements are so complete that we are obliged to choose between competing and contradictory meanings of " meaning ", so that in general it seems best to keep it as a superordinate term. Here, for example, one can talk about " semantic meaning " and " pragmatic meaning ". Secondly, the distinguishing characteristic of pragmatic meaning and therefore of utterances is *reference*. Sentences do not refer, utterances do. This point will be returned to in more detail, as it is crucial to the discussion of what we negotiate when we " negotiate meaning ".

This diagram is an attempt to summarise points 1 - 5 above. However, it is not intended to be a rigorous theoretical statement, just a rough summary. For example, the relationships between Acts, Utterances and Turns is not the same as those which hold between Sentences, Clauses, Groups, etc. : the former are units for the description of different strands in the organisation of discourse, whereas the latter are hierarchically organised.

Level of Description	GRAMMAR : Form	DISCOURSE : Use
Focus of description	i) Relations within sentences in isolation ii) Text	i) Relation between utterances in context ii) Speech acts
Units of description	Sentence Clause Group Word Morpheme	Exchange (" Return ") Turn, Act, Utterance
Locus	The Ideal Speaker-Hearer	Interactive Pair
Participation	Single-source	Multi-source
Meaning	Semantic	Pragmatic

II. APPROACHES TO THE DESCRIPTION OF INTERPRETIVE STRATEGIES

" It is not humanly possible to gather immediately from it what the logic of language is. "

Ludwig Wittgenstein (1921).

In this section I am going to look briefly at some of the approaches to the description of " utterance linking " which have already been put forward. By " utterance linking " I am referring to all those aspects of discourse processing which enable speakers and hearers to relate what is said to what is meant in a given context.

This is probably the most rapidly-developing area of applied linguistic interest at present and has attracted the attention of philosophers, sociologists, ethnologists and anthropologists as well as language teachers. For this reason, it would be quite impossible to give anything like a general survey or a " state of the art " here³. Instead, I shall try simply to indicate commonalities of

³ Useful general surveys are to be found in Schmidt et Richards, 1980 ; Holec (forthcoming) ; Clark et Clark, 1977. Collections of relevant articles include Cole et Morgan, 1975 ; Breen et Candlin (forthcoming).

approach, though I am very much aware that this runs the twin risks of over-generalisation and omission.

All the scholars mentioned below tackle either or both of the following two questions :

1. How do we attribute a " real " meaning to indirect speech acts ? That is, how do we recognise the intention of a speaker when that intention is not explicitly marked in the linguistic form of his utterance. For example, under what circumstances and applying what rules of interpretation do we know that

" I don't seem to be able to reach the rack "

 means

" Young man, please hand me down my suitcase ".
2. How do we relate two utterances across turns ? What are the different types of linkage and how do we express and recognise them ? e.g. under what circumstances and applying what rules of interpretation do we know that in the following sequence

A. " I don't seem to be able to reach the rack "

B. " Well you're taller than I am "

B is saying " No ".

One of the most copious and influential sources of attempts to tackle question 1. is the work of a number of transformational-generative grammarians. (Sadock 1970, 1975, Ross 1970, 1975). Briefly, they posit that the illocutionary force of an utterance is to be accounted for in the deep structure, the semantic component of their grammar. " Ifid's " (illocutionary force indicating devices) may be deleted in the surface structure, but native speakers are able to reconstruct the underlying structure by the application of various types of transformations. There are a number of powerful objections to this approach, but since I do not wish to trivialise their work, I shall not attempt what would necessarily be a superficial discussion here. For the moment, I will limit my comments to the following observation : questions of theory apart, their methodology — the formal analysis of decontextualised, often artificial sentences — prevents their saying anything relevant to the pragmatic values of utterances in context. Though such studies are often labeled " Speech Act Theory ", the term " act " here is a complete misnomer : they are studies of the semantic cover of sentences — their *potential* use, if you like — generalisations about the meaning of linguistic items which have no reference. Moreover, they are based on the reduction of the ideal speaker-hearer which, as we have seen, disqualifies them from making interactive or social statements. Given the central role of context in this matter, it is not suprising to find that

most researchers have concentrated on trying to establish sets of non-linguistic rules which speakers and hearers might apply in determining the meaning of utterances. As yet, there is considerable terminological confusion here, the sets (which often describe very different aspects of discourse processing) being variously called "inferencing procedures" (Searle), "maxims" (Grice), "conversational postulates" (Gordon and Lakoff), and "interpretive procedures" (Cicourel). However, before we take these sets for separate consideration, there is a useful distinction which I believe should be introduced here, since it helps with the understanding of just what aspects of discourse processing the rules are thought to apply to. This distinction concerns the nature of the constraints on speakers in planning and interpreting their utterances. Goffman (1976) has suggested that they fall into two main categories: *system constraints* and *ritual constraints*.

System constraints are those resulting from the nature of the communication system itself (Cf the discussion of the 'design features of language' in Hockett, 1960 a and b, 1963; Thorpe, 1972). If the communicative system is to function efficiently, speakers are bound to observe a number of principles such as 'don't speak all at once', 'be informative' etc. Work such as that on turn-taking and address (Sacks et al 1974, Kendon 1967, Duncan 1975, Holec et al. 1978) on politeness phenomena and face-threatening acts (Brown and Levinson, 1978) conversational postulates (Gordon and Lakoff, 1971) conversational maxims and conversational logic (Grice, 1975) falls into this category.

Ritual constraints are those governing the deontological relationships between classes of members of a given society: they consist of a series of social conventions governing the degrees of acceptability (etc.) of the various options and decisions available to a speaker as he proceeds from intention to outcome in a given situation.

This opposition is an interesting one, particularly as it provides us with a usefully strong hypothesis concerning the universality or otherwise of communicative strategies: system constraints impose *universal principles* of behaviour whilst ritual constraints give rise to *culturally-determined patterns* of behaviour. Such a hypothesis has a degree of plausibility, though obviously it leaves a number of extremely important questions unanswered — what are the relationships between the two categories: are they extremes on a cline, or are ritual constraints in some sense secondary to system constraints? If it can be shown that the constitutive rules for speech acts are based on universal principles, does this necessarily imply that strategies (here, sequences of speech-acts) are also based on universal principles: what is our level of description? In the most general terms what is the critical degree of acculturation? The implications of these questions for contrastive and pedagogical applications (Sajavaara and Lehtonen, 1981; Schmidt and Richards 1980) are crucial.

Perhaps an analogy will make things a little clearer : let us imagine that an army commander has decided to move his troops from town A to town B through a mountain pass. In 'strategical' terms, this move can be represented



Fig. 2.

In fact, though, the path taken by the men is not a straight line : they have to ford rivers, skirt mountains etc. In " geographical " terms the move will be represented :



Fig. 3.

Case 1

For the sake of argument, let us imagine that the route followed was the only possible one through the mountains. Now what is the relationship between Figs. 2 and 3 ? The route followed in 2 is uniquely the result of external constraints, involving no decisions on the part of the commander, because there was no choice. It is, therefore, a 'universal' : everybody going from A to B has to go that way.

Case 2

Now let us imagine that there are two ways through the mountain : the commander has a degree of choice :

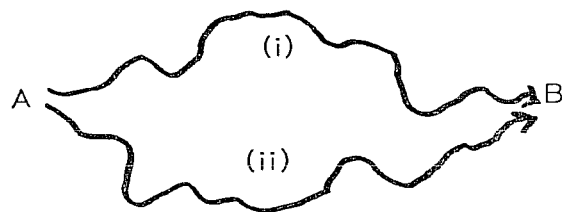


Fig. 4.

But let us assume, again for the sake of argument, that from the strictly physical point of view, — the length of time taken, distance, difficulty etc., — there is nothing to choose between (i) and (ii). When the choice comes to be made, it is made on " non-military " criteria : " We've always gone that way ", " The spirits will be angry if we go via (i) ", " There's a prettier view from (ii) " etc. These are ritual constraints.

Such an analogy must, of course, be taken with a pinch of salt, but it helps bring home the nature of the opposition in question, as well as warning us of the dangers of oversimplifications such as the expression 'universal strategies'⁴.

Let us return now to the consideration of specific suggestions concerning discourse linking : Grice (1968, 1975) has suggested four maxims which speakers apply and which their hearers normally assume them to be applying. They are :

1. The maxim of Quantity : Make your contribution as informative as is required (for the current purposes of the exchange).
2. The maxim of Quality : Try to make your contribution one that is true. Do not say what you believe to be false. Do not say that for which you lack adequate evidence.
3. The maxim of Relation : Be relevant.
4. The maxim of Manner : Be perspicuous. Avoid obscurity of expression and ambiguity ; be brief and orderly.

From the point of view of our immediate interests, it is worth noting that Grice groups all his maxims under the general heading of " The cooperative principle " : that is, he too — though for philosophical reasons — sees interaction as collaborative. It is also very important to note that he describes both the co-operative principle and the maxims derived from it as specific (linguistic) examples of a general theory of action.

Grice demonstrates that his maxims, which might at first seem to be too generalised to be of any practical analytic use, are in fact helpful in a most detailed way in our understanding of implicature. To take just one example :

A is standing by an obviously immobilized car and is approached by B ; the following exchange takes place :

⁴ Which is either a contradiction in terms, or a statement, which it would be impossible to verify, to the effect that actors invariably make the same choice when faced by a particular set of options.

A. " I am out of petrol "

B. " There is a garage round the corner ".

(Gloss : B would be infringing the maxim " Be relevant " unless he thinks, or thinks it possible, that the garage is open, and has petrol to sell ; so he implicates that the garage is, or at least may be, open, etc.).

In this example, the unstated connection between B's remark and A's remark is so obvious that, even if one interprets the supermaxim of Manner, " Be perspicuous ", as applying not only to the expression of what is said but also the connection of what is said with adjacent remarks, there seems to be no case for regarding that supermaxim as infringed in this example.

An exception to the criticisms made earlier of accounts based on TGG is the work of Gordon et Lakoff (1975) on " conversational postulates ". Their work is an attempt to formalise the natural logic on which conversational practise is based and to relate their formalisation, via " transderivational rules ", to the grammatical description. Insofar as they do recognise the speaker/hearer distinction and make a valiant attempt to make their rules context-sensitive, their work represents the most successful attempt so far to link form and use. Dealing with indirect requests, they show that there is a direct relationship between the types of " felicity conditions " and those conditions which have to be satisfied if an act is to be properly used : if A wishes B to do something, for example, he must

- (i) believe that B is able to do it
- (ii) want B to do it
- (iii) believe that B will do it if asked
- (iv) have reasons for wanting B to do it

To each of these conditions there corresponds a different type of indirect request :

- a) Can you lend me £5 ?
- b) I would be really grateful if you could lend me £5.
- c) Will you lend me £5 ?
- d) It is in your best interests to lend me £5.

This correspondence is extremely striking and the formal description based on it is capable of producing highly detailed and predictive accounts. However, it must also be pointed out that the notion of context invoked here is an extremely limited one : it is reduced to the relative status of A and B. For the class of act they are describing — requests — this may well be the most important contextual feature and this would explain the success of their

venture : yet even here we are left with no idea as to whether any of a) - d) is a threat, say, and other types of act might not be nearly as susceptible to this approach. In addition, the description is limited to the purely verbal aspects of the communication as it has to be, as their aim is to integrate it with the grammar : the exclusion of non-verbal features, especially intonation and facial expression, means that many important signals have to be omitted, and, with them, different types of meaning.

Searle (1975) follows Austin (1962) in suggesting that for every speech act there are a set of " felicity conditions " which must be satisfied if indirect acts are to be correctly interpreted. He rejects the necessity of assuming the existence of any conversational postulates, though he accepts Grice's general principles of cooperative conversation. For Searle, the crucial factors are " mutually shared factual background information of the speaker and the hearer, together with an ability on the part of the hearer to make inferences ". It is the interaction between the felicity conditions, the background information and the inferencing procedures which enables speakers and hearers to construct and interpret utterances in context. As an example, let us take his analysis of the indirect request where X says to Y " can you pass the salt ? "

STEP 1 : *Y has asked me a question as to whether I have the ability to pass the salt (fact about the conversation).*

STEP 2 : *I assume that he is cooperating in the conversation and that therefore his utterance has some aim or point (principles of conversational cooperation).*

STEP 3 : *The conversational setting is not such as to indicate a theoretical interest in my salt-passing ability (factual background information).*

STEP 4 : *Furthermore, he probably already knows that the answer to the question is yes (factual background information). (This step facilitates the move to Step 5, but is not essential).*

STEP 5 : *Therefore, his utterance is probably not just a question. It probably has some ulterior illocutionary point (inference from Steps 1, 2, 3, and 4). What can it be ?*

STEP 6 : *A preparatory condition for any directive illocutionary act is the ability of H to perform the act predicated in the propositional content condition (theory of speech acts).*

STEP 7 : *Therefore, X has asked me a question the affirmative answer to which would entail that the preparatory condition for requesting me to pass the salt is satisfied (inference from Steps 1 and 6).*

STEP 8 : *We are now at dinner and people normally use salt at dinner; they pass it back and forth, try to get others to pass it back and forth, etc. (background information).*

STEP 9 : *He has therefore alluded to the satisfaction of a preparatory condition for a request whose obedience conditions it is quite likely he wants me to bring about (inference from Steps 7 and 8).*

STEP 10 : *Therefore, in the absence of any other plausible illocutionary point, he is probably requesting me to pass him the salt (inference from Steps 5 and 9) (Searle 1975).*

Two further points should be made about Searle's approach. The first is the use of a particular sentence form in an utterance to convey a particular speech act is, he says, largely conventional i.e. not based on underlying form but on social habits. The second is that the decision to use an indirect rather than a direct form is almost always a matter of politeness : neither point is dependent on the existence or application of postulates.

" In order to be a plausible candidate at all for use as an indirect speech act, a sentence has to be idiomatic. But within the class of idiomatic sentences, some forms tend to become entrenched as conventional devices for indirect speech acts. In the case of directives, in which politeness is the chief motivation for the indirect forms, certain forms are conventionally used as polite requests. Which kinds of forms are selected will, in all likelihood, vary from one language to another ".
(Searle, 1975).

Finally, let us consider a very different approach to the problem of discourse processing. It is that expounded by Aaron Cicourel (1975). Cicourel's main

interest is in the use of interpretive procedures to establish what he calls a "reciprocity of perspectives" between interactants. He himself has provided us with this convenient summary of his argument :

- " 1. Participants in social interaction apparently " understand " many things (by elaboration of verbal and nonverbal signals) even though such matters are not mentioned explicitly. The unspoken elements may be as important as the spoken ones.*
- 2. The actors impute meanings which " make sense " of what is being described or explained even though at any moment in clock-time the conversation may not be clear to the partner or independent observer by reference to the actual terms being used. Through the use of interpretive procedures the participants supply meanings and impute underlying patterns even though the surface content will not reveal these meanings to an observer unless his model is directed to such elaborations.*
- 3. A common scheme of interpretation (the interpretive procedures) is assumed and selective background characteristics are invoked to account for and fill in apparent gaps in what is described or explained. The participants seem to agree even though neither has indicated any explicit grounds or basis for the agreement. Each may choose to " wait and see ".*
- 4. The participants do not typically call each other's utterances into doubt, demanding independent evidence, so long as each assumes he can receive " details " (or that " details " are available) on discrepancies detected in the conversation. But even when there are doubts, the partner will seek to " help " the other get through the conversation. Direct confrontations require radical shifts in the perspective each participant employs : but as a first approximation they both take for granted that each knows what they say and mean by their utterances.*

5. *The interpretive procedures activate short and long-term stored information (socially distributed knowledge) that enables the actor to articulate general normative rules with immediate interaction scenes. The interpretive procedures and surface (normative) rules provide the actor with a scheme for partitioning his environment into domains of relevance.*
6. *The interpretive procedures govern the sequencing of interaction and establish the conditions for evaluating and generating behaviour displays which the researcher labels as appropriate status and role attributes or conduct. The articulation of interpretive procedures and surface (normative) rules establish a basis for concerted interaction which we label the social structures.*
7. *Notions like status, role and norm, therefore, cannot be clarified unless the researcher's model explicitly provides for features enabling the actor to recognize and generate " appropriate " behavioural displays. Nor can we explain the observer's ability to recognize behavioural displays as falling under such procedures and rules, unless we have a model of interaction that provides for interpretive procedures and their interaction with normative or surface rules. (Cicourel, 1975).*

III. THE MEANING OF NEGOTIATION

" The tacit conventions on which the understanding of everyday language depend are enormously complicated. "

Ludwig Wittgenstein (1921).

Common to all the models for the description of discourse processing which we have been discussing is the notion of the negotiation of meaning. The function of discourse is seen as the creation of a common meaning through the participants' sharing and comparing information. As Widdowson (1980) says : " Communication is called for when the language user recognises a situation which requires the conveyance of information to establish a convergence of knowledge, so that this situation can be changed in some way. This transaction requires the negotiation of meaning through interaction. I refer to

It is this function of discourse, then, this negotiation, which I will take for more detailed discussion and exemplification in this section. Most of the work in this field has, as we have seen, concentrated on aspects of *how* this negotiation is carried out, the procedures which participants apply, their "communicative strategies". Although that must be any applied linguist's ultimate aim, I believe it is worthwhile studying *what* is negotiated; this may help us simplify our descriptions and will certainly be useful in our attempts to understand discourse strategies of different types.

First, though, a simple example : A is trying to explain to B where 'he lives :

Yeah

B : Yeah I know

What we have here is a classic example of the formulation of place (as studied by Schegloff, 1972). The aim of this piece of discourse, as clearly announced, is for A to share with B his knowledge concerning the whereabouts of the referent " 24 rue Marie Odile ". B indicates his ignorance, at the same time

providing a starting-point for the negotiation : " That's Nancy ? ". He is in fact asking for confirmation of a hypothesis formed on the basis of A's failing to add the name of the town at the end of his address. This is not pure chance : A and B were in the same town, Nancy, which was therefore a shared piece of knowledge and which A did not therefore need to negotiate.

Having established the general area of Nancy as their mutual field of reference, A now embarks on a process of progressive refinement. He does this by establishing a series of common points of reference (" You know... you know...") in relation to which he can introduce the new information in a way which could be meaningful to B. B signals that the points of reference are in fact, as A had presumed from his knowledge of B, common knowledge (Right... right... yeah right). Finally, A, having pinpointed a landmark, uses it as " the nearest thing " and switches to a description from B's perspective (... if you're coming from the middle of town...) believing — rightly, as it turns out — that this accumulation of familiar knowledge will enable B to locate the unfamiliar (" Yeah, I know... ").

It is this type of procedure which we refer to as the negotiation of personal knowledge. It is no use A giving B a map-reference, however objective and precise (unless B happens to have a copy of the same map, of course). A tries to select from his own store of information those items which are relevant and which he has good reason to believe will also be known to B. His own store of information will be the result of his experience, of course : this is why descriptions (for formulations of place are obviously just a sub-category of referential descriptions) vary according to speaker as well as hearer. If we stop passers-by for directions to the market place, one might say :

" Go past the Pig and Whistle, keep going till you come to the King's Head, turn left then when you get to the Mitre, it's right opposite ".
Another might say :

" Take the turning on the left of the Holy Redeemer, follow it all the way to St. Anne's Chapel and it's next to the cathedral ".

Speakers, then, vary their formulations according to their own knowledge and on the basis of their perception of their addressee's geographical (in this case) knowledge, which is itself an aspect of identity⁵. Our communicative

⁵ In France, where I have lived and worked for nine years, I am occasionally asked for directions by drivers on the main road which I walk along to get to the University. They are applying a very obvious " deictic reasoning strategy " : " If he's walking to work, he lives near here, if he lives near here he will have the information I want " etc. However, as soon as I open my mouth, my accent contradicts their classification of me, and they often display an impatient disbelief, or even just drive off in the middle of my (absolutely correct !) instructions.

behaviour towards people varies according to what we believe to be their degree of knowledge : we sort them into categories (good friend, foreigner, colleague, child, neighbour, etc.) and we select our descriptions on the basis of the information we believe members of such categories to possess.

IV. REFERENCE AND DEICTIC REFERENCE

Husband : Where's the cheque-book ?

Wife : In my handbag.

Husband : Where's your handbag ?

Wife : With the dog's lead.

Husband : For crying-out-loud where's the dog's lead ?

Wife : Instead of standing around shouting at people, why don't you just look for it ...?

We saw above that traditional descriptions of the linguistic code, based on the simplification of the ideal speaker-hearer, cannot account for multi-source discourse. This realisation is only one of the results of a widening interest in communicative behaviour and language use : others are :

- (i) The growing appreciation that communication in face-to-face interaction is a multi-channel process in which not only words but a wide range of behaviours including facial expression, gaze, posture, kinesics, proxemics, intonation, voice quality and key contribute to the overall meaning in direct and important ways.
- (ii) The realisation that many of the performance features which were idealised out of traditional descriptions (e.g. hesitation, postural shift) are in fact important discourse signals.
- (iii) And the fact that the search for underlying regularities fosters the view that all language variation is superficial, in all senses, rather than being the expression of social and communicative pressures with its own dynamic and its own needs.

But there is a fourth point which I have not seen made elsewhere and which I would like to discuss in slightly more detail, since it is relevant to our current interest in the communicative *event*. We read, time and again, that every event is a unique happening. Now I don't think it would be stretching the bounds of metaphysical argument too far to suggest that this uniqueness is to a great extent due to its occurrence at a particular time and place and

to its involving particular actors communicating on particular topics. My point is that it is this uniqueness, this particularity which is filtered out in idealised descriptions, which abstract from the physical reality. That is, *reference* is filtered out, and in particular, *deictic reference*.

The full force of this argument depends on the definition of "reference" being used : here, "reference" is understood to be a *property of utterances, not sentences*. In terms of the very lively philosophical debate on this subject which is going on at present, I am talking about "speaker-reference on an occasion" (Kripke, 1977)⁶. For obvious reasons, I shall not try to prove this view of the nature of reference here : I will merely justify it, by saying that it is the only view which is compatible with points (i) — (iv) above, and in Section I. Reference, then, as understood here, is one of the functions of instances of language, it links what is said to the world.

Two important claims are being made here :

First, that reference is a property of *utterances not sentences*, since, by definition and methodology, sentences are units for the description of structure, not of use. A sentence has no reference in the same way as a pistol locked up in a drawer has no target : only in use are they pointed at something. When we talk about the meaning of a sentence, we are talking about its semantic cover, its potential use : this is the area of study known as Speech Act Theory. The meaning of utterances is pragmatic, the most important distinguishing feature being the property of reference.

Secondly, — as I have tried to show, — since reference is part of contextual meaning, it, too, is a collaborative construct hammered out by the participants in an interaction. Reference is not an "objective" quality, something to be found in dictionaries, it is part of the meaning of interaction mutually agreed and contracted in use : *all reference is inference*. This is the distinction between the "meaning" of say, "the car" given in a dictionary and the use of that word ("Shall we take the car ?") in an instance.

Since reference is one of the defining characteristics of language, we expect it, in the light of what was said earlier, to exhibit features which can be directly related to the operations of system constraints. That is, the nature of the communication system imposes certain limits on the referential function. This does in fact prove to be the case : To take the most obvious example : since the human memory is finite, we cannot refer to every object by means of a unique expression : we cannot give every leaf its own name or number

⁶ Personally, I follow Travis (1981) in his argument that as 'speaker-reference' is the *only* form of reference we may as well drop the 'speaker' bit as being tautologous. Kripke, of course (op. cit.) opposes it to 'semantic reference', but I feel most people will continue to prefer the technical use of 'sense'.

the hairs on our heads, we have neither the storage nor retrieval capacity. This *reductio ad absurdum* underlying the fundamental nature of categorisation and classification in language also brings home something slightly less obvious : that a considerable degree of approximation is essential if communication is to take place, since if every referent had its 'own name' we would only be able to communicate at all with people who shared *exactly* our experience... and so on : the fact that this is nonsense is proof of the absolutely basic function of reference⁷.

When we communicate, then, we can use class labels like 'leaf' to refer to a particular member of the class. Obviously, we must have learnt rules which enable us to go about this task of referential specification. These rules are enormously complex, so I would like to limit my attention to one particular type, the form usually known as *deictic* reference.

The importance of deictic reference in any account of communication has been underlined by Bar-Hillel (1954), Weinreich (1963) and Benvéniste (1966), among others. However, in keeping with the general tendency to concentrate on the functioning of the verbal code, attention has tended to focus on *anaphoric deixis*, rather than on *indexical deixis* that is, on that class of words which refers back to other words or groups of words which have already occurred in the text, rather than on those words which refer to *non-coded elements in the situation*.

Indexical deictics refer to aspects of the situation in which the act of communication of which they form part takes place : 'I', 'you', adverbs of time and place, certain proper names, demonstratives.

Traditionally, then, deixis (of both kinds) has been limited to certain morpho-syntactic categories. However, the more we study communication and discourse, the stronger the pressure becomes to recognise that deictic reference is a far more widespread phenomenon than such a formal definition will allow. If, as part of an act of communication, an expression such as " in the kitchen " occurs, and if both speaker and addressee know that the kitchen is down the corridor on the left, then the use of the word 'kitchen' has contributed 'geographical' information about the situation which we can quite legitimately call 'deictic'. The same argument can be applied to verbs of movement ('bring', 'deliver' etc.). Indeed, once we accept that reference is

⁷ It is interesting to note that whilst in the *Dictionnaire de Didactique de Langues* (Galissou et Coste, 1970), the definition and discussion of deixis remain formal, in *Le Niveau Seuil* (Coste et al., 197) it is based on a far wider interpretation, including as it does verbs etc.

a property of utterances only, then we might well argue that it follows that all reference to objects having a spatial or temporal existence is deictic⁸.

It is impossible to exaggerate the importance of deixis either to our understanding of language or to its functioning in events : if it were not for the word 'I', no two people would ever be able to use the same language. The communicative event consists of the emanations from two 'I's', like the ripples from two stones thrown into a pool : the production, form, direction, distance of the ripple can only be defined with reference to the stone that produced it. Since every event is necessarily situated in space and time, indexical deixis is a property of all utterances. It seems to be acquired on the basis of the child's awareness of its own existence and the progressive extension of its cognitive categories through sets of binary semantic distinctions, starting with 'I'/'Not I', distal and proximal, with time being physically perceived as a succession of events (Whitrow, 1972) and space as 'relative to my body' (Douglas, 1970 ; Clark and Clark, 1977) In this way individual identity is created : hence the classic questions of the amnesiac — " Who am I ? ", " Where am I ? " — and the importance universally attributed to name, date and place of birth⁹.

Yet when we communicate, we do the most extraordinary thing : we " put ourselves in someone else's place ". Amongst other things, we try to ensure that any descriptions we give, any references we make, " are seen from their point of view ". That is, we select that description which, out of all the possible descriptions available to us, is appropriate to this moment in this interaction with this person " we try to find common ground ". Since the situation, and in particular the knowledge of the participants, changes from moment to moment, referring is like shooting at a moving target : we need constantly to compute where our addressee is. And to ask 'Where does he

⁸ It is also, of course, one of the main arguments for regarding reference and not sentences : if linguistic expressions referred to objects when they (i.e. linguistic expressions) occurred " outside " instances, we should not be able to use them to refer (to other objects) " inside " instances. Yet this is something we clearly are able to do.

⁹ This process has of course, always been the central concern of psycho-analysis, (Lacan insists that he and Freud are more linguists than psychologists) but it is the approach of the personal construct theorists which promises to be most rewarding for the study of the development and description of cognitive categories from a linguistic/learning perspective for reasons which I have discussed elsewhere (Riley, 1979).

It is also interesting to speculate on deixis as the source of the power of certain types of statement : 'Here I stand', 'Because it's there', 'Why this is Hell, nor am I out of it', 'And at my back, I always hear...' etc. Certainly the connection between poetry and place is a consistent one : nor should we forget the spatial origins of both the word 'topic' and of all measurements of time.

think I am ?' In the sense, possibly only figurative, that we use strategies which are in constant evolution to direct discourse towards a goal, 'strategy' is a kind of dynamic deixis. The nature of interaction is such, is constrained in such a way, that it precludes the possibility of referring expressions being either purely linguistic or purely objective. The selection of descriptions depends on the situation — the time, the place, the identity of the participants and their perception of the event.

V. DEIXIS AND DISAMBIGUATION

" 'I saw your Mum the other day'
 'Oh yeah'
 'Not to talk to like. Just through the car window'.
 'Through the what ?'
 'The car window'.
 'What car window' ?
 'My car window'.
 'You got a car ?'
 'I haven't just got the window'. "

(from *The Likely Lads*)

Deixis and identity — and our perception of them — are central to our present interest in interpretive strategies, since they lie at the very heart of the systems for classifying knowledge and individuals into " A events " and " B events ", into what we think they know. As we have seen, it is on these classifications that we base our strategies, in particular those for evaluating just how much information is necessary if we are to comply with Grice's principles, in particular " Be relevant " and " Be informative ".

As yet, linguists have not really begun to investigate the wider ramifications of the relationships between deixis and the negotiation of personal meaning — and they are very wide indeed : the minimum of shared knowledge in any interaction is deictic — " I ", " you ", " here ", " now ". Yet from the split second the interaction begins, other experience starts to accumulate, other knowledge is shared : our seats in life have their backs to the engine.

Yet there are a number of other sources, other disciplines, which have studied these matters. To some extent, we are beginning to rediscover the *sociology of knowledge*, especially as propounded by the German thinkers of the 1950's. (Schutz, 1962). There has still been no attempt, though, to take on board the considerable volume of work by geographers on " mental maps " (Gould and White, 1974) and in particular their relationship to " patterns of information ". Nor, to the best of my knowledge, have the elicitation tech-

niques of the Personal Construct psychologists (Maher, 1969 ; Augstein et Thomas, undated ; Bannister et Fransella, 1977) been used by linguists to study these phenomena, though they are clearly well suited to such work.

The danger is, of course, that we might replicate work already done or even, far more serious, fail to do so through sheer ignorance. Take, for example, this quotation from the work of one of the social anthropologists of the 1940's Evans-Pritchard :

" What does a Nuer mean when he says, 'I am a man of such-and-such a *cieng*' ? *Cieng* means 'home', but its precise significance varies with the situation in which it is spoken. If one meets an Englishman in Germany and asks him where his home is, he may reply that it is England. If one meets the same man in London and asks him the same question he will tell one that his home is in Oxfordshire, whereas if one meets him in that county he will tell one the name of the town or village in which he lives. If questioned in his town or village he will mention his particular street, and if questioned in his street he will indicate his house. So it is with the Nuer. A Nuer met outside Nuerland says that his home is *cieng Nath*, Nuerland... If one asks him in his tribe what is his *cieng*, he will name his village or tribal section according to the context... If asked in his village he will mention the name of his hamlet or indicate his homestead or the end of the village in which his homestead is situated... The variations in the meaning of the word *cieng* are not due to the inconsistencies of language, but to the relativity of the group-values to which it refers ".

The direct relevance of these observations to the present discussion is obvious. Now consider the comments on this passage by Kuper :

" The Nuer do not have an abstract notion of time as something which passes, can be wasted, measured, etc. They perceive time in terms of physical changes, or social relationships. " Oecological time " as Evans-Pritchard calls it, was related to natural progressions, like the seasons or the phases of the day... Structural time, in contrast, was not an abstraction from man's relationship to the environment but rather a way of conceptualising the periodicity of social relationships and the social development of the individual. The units are births, deaths, marriages ; or, for people in less intimate contact, such events as the succession of age-sets. Structural time was also a way of conceiving of lineage relationships. The social distance between a man and his agnate, for example, could be thought of in terms of the distance in time separating them from their common ancestor. If this was great, they were distantly related ; and the shorter the time-gap, the closer the relationship between them.

" Similarly, the Nuer are not concerned to measure the objective distance in space between two places. They are more concerned, on the one hand, with the practical distance, influenced by such factors as the nature of the intervening terrain, the existence of hostile groups on the way, etc. On the other hand, they measure social distance :

'A Nuer village may be equidistant from two other villages, but if one of these belongs to a different tribe and the other belongs to the same tribe it may be said to be structurally more distant from the first than from the second'.

(Evans-Pritchard, 1940)

" Now because these notions of time and space are not based upon objective measurement, but depend largely on structural relationships, they vary relative to the social relationships defining any situation.

The ways in which speakers and addressees weigh one another up — " Does he know X ? " " Does she know that I know Y ", etc. — are, therefore, directly related to deixis and have an immediate influence on speakers' choice of formulations or any categorisation of hearer's knowledge.

As Schegloff (1972) puts it :

" In selecting a 'right' formulation, attention is exhibited to " where-we-know-we-are ", to " who-we-know-we-are ", to " what-we-are-doing at this point in the conversation. " A " right " formulation exhibits, in the very fact of its production, that it is some " *this* conversation, at *this* place, with *these* members, at this point in its course " that has been analyzed to select *that* term ; it exhibits, in the very fact of its production, that it is some particular " *this* situation " that is producing it. "

As he summarises this point in a footnote, it

" ... is reminiscent of a classic concern of the sociology of knowledge...
" Right " formulations are " right " in part by exhibiting the particulars of the situation of their use. "

The fact that Schegloff's topic here was " place " is, almost, fortuitous : his findings can be generalised to descriptions of times, persons, events and objects, for reasons which are inherent in the nature of reference.

Thirdly, it seems to me that the strategies which Schegloff describes for establishing the recognizability of a referent are themselves susceptible to description in terms of semantic operators such as the relationships of synonymy, antonymy, hyponymy, (in-)comptability, etc. and that, given recent comment to the effect that we never cease learning discursive skills, the reappearance of these basic conceptual tools for language acquisition is of considerable interest.

Moreover, it may well be that the processes we have been discussing here as mother-tongue strategies are system-constrained learning procedures. The negotiation of meaning is essentially a learning process and the ways in which it is carried out are to some extent, the result of certain fundamental characteristics of language, in particular the nature of reference. The importance of this hypothesis for language-learning in general and for a communicative methodology in particular, can hardly be exaggerated : if communication strategies are learning techniques in the mother tongue, then they are obviously highly relevant to second-language learning. They may in fact, be the only ways in which certain vital aspects of language use can be learnt.

By and large, these strategies (I am loosely including what Schegloff calls " preparatory work " as well) are different ways of providing or eliciting the degree of detailed information which is adequate in a given situation :

- A. " ... one of those French cars "
- B. " Is it a Peugeot ? "
- A. " No, Renault, big blue job "
- B. " Oh I know... "

Other disambiguation strategies would include the metalinguistic ('I don't know what you mean' etc.) elimination and other logical selection procedures (" You're (not) talking about John ? ", " John Smith or John Brown ? " etc.) and the work on requesting information and on repair strategies (Harding, 1980) would certainly need to be taken into consideration in building up a taxonomy.

What we cannot speak about, we must consign to silence.
L. Wittgenstein.

BIBLIOGRAPHIE

- AUSTIN, J.L. (1962, 1971). *How to do things with words*, Oxford, Clarendon Press.
- BANNISTER, D. & FRANSELLA, F. (1977). *A manual for repertory grid technique*. N.Y. Academic Press.
- BAR-HILLEL, Y. (1954). "Indexical expressions". *Mind*, 63.
- BERRENDONNER, A. (ed.) (1977). *Strategies Discursives*. Presses Universitaires de Lyon.
- BREEN, M., CANDLIN, C. (eds.) (forthcoming). *Acts of the Lancaster seminar on interpretive strategies*.
- BROWN, P. & LEVINSON, S. (1978). "Universals in language usage : politeness phenomena", In Goody, E.N., *Questions and politeness : strategies in social interaction*, C.U.P.
- CICOUREL, A. (1973). *Cognitive sociology*, Harmondsworth, Penguin.
- CLARK, H. & CLARK, E. (1977). *Psychology and language : an introduction to psycholinguistics*, N.Y. Harcourt, Brace Jovanovich.
- COLE, P. & MORGAN, J.L. (1975). *Syntax and semantics : Vol. 3. Speech acts*. N.Y. Academic Press.
- CORDER, S.P. (1980). *Second language acquisition*. Study commissioned by the Council of Europe, Holec (ed.) forthcoming.
- COSTE, D. et al. (1976). *Un niveau seuil*. Strasbourg, Council of Europe.
- DOUGLAS, M. (1970). *Natural symbols*. London : Barrie & Rockliff.
- DUNCAN, S. (1975). "On the structure of speaker-auditor interaction during speaking turns", *Language in society*, 2, 161-180.
- EVANS-PRITCHARD, E.E. (1940). *The Nuer*. O.U.P.
- GALISSON, COSTE, D. (1970). *Dictionnaire de didactique de langues*.
- GOFFMANN, E. (1976). "Replies and responses", *Language in Society*, 5-3. pp. 257-314.
- GRICE, H.P. (1968). "Utterer's meaning, sentence-meaning and word-meaning", *Foundations of language* 4, pp. 225-242.
- GRICE, H.P. (1975). "Logic and conversation", Cole and Morgan (1975).
- GRICE, H.P. (1971). "Meaning", *Semantics*. C.U.P.
- GORDON D., LAKOFF, G. (1971). *Conversational Postulates*, Cole and Morgan (1975).
- GOULD, P. & WHITE, R. (1974). *Mental Maps*. N.Y. Penguin.
- HARDING, E. (1980). *Repair Strategies*. Strasbourg, Council of Europe, Holec (ed.) (forthcoming).
- HOCKETT, C.F. (1960). "Logical considerations in the study of animal communication", *Animal sounds and communication*, Lanyon, W.E. & Tavolga, W.N. (eds.) (1960) b) The organ of speech *Scientific American* 203.
- HOLEC, H. (ed.) (forthcoming). *Studies in applied linguistics commissioned by the Council of Europe*. Strasbourg, Council of Europe.

- HOLEC, H., GREMMO, M.J. & RILEY, P. (1978). " Prolégomènes à une description de la structure des échanges communicatifs directs ", Nickel et Nehls (eds.) (1980) pp. 92-107.
- KELLY, G. See Maher, B.A. (ed.) (1969). *Clinical psychology and personality : the selected papers of G. Kelly*. N.Y. Wiley.
- KENDON, A. (1967). " Some functions of gaze direction in social interaction ", *Acta Psychologica*, 26.
- KRIPKE, S. (1977). " Speaker's reference and semantic reference ", French, P. Vehling, T. et Wettstein, H. (eds.) *Midwest studies in Philosophy*. Vol II, University of Minnesota, Morris.
- KUPER, A. (1973). *Anthropologists and anthropology*. Harmondsworth, Penguin.
- RILEY, P. (1980). " Directions in the description of discourse structure ", Holec (ed.) (forthcoming).
- RILEY, P. (1980 b). " When communication breaks down : levels of coherence in discourse ". Paper delivered at the Bern Colloquium on Applied Linguistics, *Applied Linguistics* 1-3, pp. 201-216.
- ROSS, J. (1970). " On declarative sentences ", Jacobs, Rosenbaum (1970), pp. 222-272.
- ROSS, J. (1975). " Where to do things with words ", Cole et Morgan (1975).
- SACKS, H., SCHEGLOFF, E. & JEFFERSON, G. (1974). " A simplest systematics for the organisation of turn-taking for conversation ", *Language*, 50. 4.
- SADOCK, J.M. (1970). " Whimperatives ", Sadock, J. et Vaneck A. (eds.), *Studies presented to Robert B. Lees*, Edmonton, III., Linguistic Research Inc.
- SADOCK, J.L. (1975). *Towards a linguistic theory of speech acts*, N.Y. Academic Press.
- SCHEGLOFF, E.A. (1972). " Notes on a conversational practice : formulating place ", Sudnow, D. (ed.) 1972.
- SCHUTZ, A. (1962). *Collected papers I : the problem of social reality*, The Hague. Nijhoff.
- SEARLE (1975). " Indirect speech acts ", Cole et Morgan (eds.) (1975).
- SUDNOW, D. (ed.) (1972). *Studies in social interaction*, N.Y. Free Press.
- THOMAS, L. & HARRI-AUGSTEIN, E.S. (1977). *The self-organised learner and the printed word*, Brunel University, Centre for the Study of Human Learning.
- THORPE, W.H. (1972). " Comparison of vocal communication in animals and man ", Hinde, R.A. (1972). *Non-verbal communication*. C.U.P.
- TRAVIS, C. (1981). " Reference, speakers and semantics ", *Language and communication*. Vol. 1, pp. 13-38.
- WEINREICH, U. 1963). " On the semantic structure of language ", Greenberg, J.H. (ed.) *Universals of language*. M.I.T.
- WHITROW, G.J. (1972). *The nature of time*. Harmondsworth, Penguin.
- WIDDOWSON, H. (1980). Procedures for discourse processing. In Holec (ed.) (forthcoming).
- WITTGENSTEIN, L. (1921). *Tractatus Logico-Philosophicus*. Trans. by D.F. Pears et B.F. McGuinness (1961). London R.K.P.