

# **Speech act theory and the analysis of conversations.**

## Sequencing and interpretation in pragmatic theory

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### **1. Introduction**

Conversation has recently become a focus of interest for speech act theory and several proposals have been formulated concerning the possible extension of speech act theory to the analysis of conversation. This debate (cf. Searle et al. 1992) has to be interpreted as a reactive move rather than as a natural extension of the domain of speech act theory. Nevertheless, this reaction, either sceptical (cf. Searle 1992) or optimistic (cf. Dascal 1992, Vanderveken 1992 and 1994), has brought interesting issues which contrast with the various attempts by linguists at extending speech act theory to the domain of discourse<sup>1</sup>. The first purpose of this paper is to explicit the divergence between philosophers and linguists about the possible extension of speech act theory to discourse analysis.

This paper has another purpose : it also deals with the possible domain of pragmatic theory with respect to discourse analysis. I shall argue that the main purpose of discourse analysis is the definition of necessary and sufficient

conditions for sequencing and interpreting utterances in discourse. I claim that these two aspects of discourse (sequencing and interpretation) are intrinsically related and cannot be accounted for independently from each other. I claim furthermore that speech act theory cannot give any insight into the sequencing and interpretation problems, because speech act theory is neither a theory of interpretation (it is a theory of meaning) nor a global theory of action. Finally I show how a radical pragmatic theory (in the Gricean sense) accounts for the sequencing and interpretation problems.<sup>2</sup>

## **2. Speech act theory and conversation**

There is a common sense argument shared by philosophers and linguists in favour of the possible extension of speech act theory to discourse analysis. This argument is the following :

Speech acts are not isolated moves in communication : they appear in more global units of communication, defined as conversations or discourses.

Vanderveken (1994, 53) gives an explicit version of this thesis when asserting that

speakers perform their illocutionary acts within entire conversations where they are most often in verbal interaction with other speakers who reply to them and perform in turn their own speech acts with the same collective intention to pursue with success a certain type of discourse. Thus, above all, the use of language is a social form of linguistic behavior. It consists, in general, of ordered sequences of utterances made by several speakers who tend by their verbal interactions to achieve common discursive goals such as *discussing a question, deciding together how to react* to a certain situation, *negotiating, consulting* or more simply *to exchange greetings* and talk for its own sake. For terminological convenience, I will call such ordered sequences of speech acts *conversations*.

The basis of this argument is that conversation is made of sequences of speech acts. This certainly is a plausible theoretical claim<sup>3</sup>, but gives rise to a certain number of objections, raised mainly by Searle (1992) in his skeptical argument. These objections concern essentially the possible relations between questions and answers in conversation, and can be stated as follows.

First of all, questions are defined in speech acts theory as requests for information, and as such impose representative acts as replies. But this cannot be correct, since a reply may have another illocutionary point (as a promise) if the question is a request for a promise.

Secondly, certain questions require a directive as a reply, and not a representative, when the question contains a modal auxiliary verb (cf. the exchange : “Shall I marry Sally ?” - “Yes, do”/ “No, don’t” / “\*Yes, you shall” / “\*No, you shall not”).

The third counter-example is given by indirect responses, which do not satisfy syntactic conditions, although the answer is pragmatically appropriate.

To these three arguments, we could add an even more embarrassing one : *answer* is not a specific illocutionary force, which could be analysed by the seven components of illocutionary force (cf. Searle & Vanderveken 1985). *Answer* is a functional discursive qualification, but certainly not the semantic definition of a speech act type.

These objections make explicit an important difference between the structure of illocutionary acts and the structure of conversation. In speech act theory, and more precisely in illocutionary logic, illocutionary force is decomposed into seven components, which are all necessary conditions for the successful and non defective accomplishment of illocutionary acts. These components (cf. Searle & Vanderveken 1985, 12-20) are the illocutionary point, the degree of strength of the illocutionary point, the mode of achievement of the illocutionary point, the propositional content conditions of the illocutionary act, the preparatory conditions of the illocutionary act, the sincerity conditions of the illocutionary act, and finally the degree of strength of the sincerity conditions. That predictions

about the sequencing in conversation are difficult to come by follows from the fact that the internal structure of illocutionary acts (and more specifically the set of conditions for success) cannot determine the set of possible replies for any type of illocutionary act.

By contrast, discourse analysis, while specifying sequential relations in discourse between speech acts, does not constrain sequencing in conversation depending on the set of possible components of illocutionary force. The constraints are not structural, in the sense of speech act theory, they are on the contrary *functional*. This means that the basic structures of conversation (exchanges) are made of lower order conversational units (moves) which carry functional properties. If speech act theory has been used so extensively within this paradigm of discourse analysis<sup>4</sup>, it is because the functional properties associated with speech acts as units of meaning have been exported to speech acts as units of communication and discourse. This has several consequences for the description of speech acts within discourse analysis.

The first consequence is that the structure of conversation is not only based on a hierarchy of constituency, but is also functional. To take a classical discourse model (cf. Sinclair & Coulthard 1975), discourse categories (exchange, move, and act) are defined functionally. For instance, an act of ELICITATION is part of a move of ELICITATION, which governs an exchange of ELICITATION. Thus all discourse constituents receive a communicative function, that is, an interactive meaning. But we are here far from the conventional and semantic-meaning defining speech acts in speech act theory<sup>5</sup>.

As we have just noticed, discourse analysis supposes principles of constituency which allow interpretive or functional inheritance. If we assume, as above, that an ELICITATION is a two-place predicate relating utterance-units and discourse-units, we must assume too that the functional properties of the smallest discourse units (acts) are inherited by the larger constituents (moves and exchanges). This principle is structurally identical to the projection principle in generative grammar : a phrase is a maximal projection of a lexical head (for

instance NP is a maximal projection of a N); in discourse, then, an exchange is thus functionally a maximal projection of an act.

The principle of functional projection is not a necessary consequence of discourse analysis. Another classical discourse model, the Geneva hierarchical-functional model (cf. Roulet et al. 1985, Moeschler 1985, Moeschler 1989a) makes a different claim : functional values do not stand in a one-to-one relationship with discourse structures. In this model, there is a basic difference between *rules of discourse formation* and *principles of functional interpretation*. The structural dimension is based on the following rules of formation :

R1 Units of type Exchange are made of units of type Move.

R1' Exchanges are composed of at least two Moves.

R2 Units of type Move are made of units types Act, Move or Exchange.

R2' Moves composed by a single Act are well-formed.

R2'' Moves composed by an Act and another discourse-unit type (Move or Exchange) are well-formed.

R2''' Moves composed by a single Exchange are ill-formed.

Thus, the following discourse structures are well-formed :

- (1) a. <E <M1 <A>, M2 <A>>>  
 b. <E <M1 <A>, M2 <E <M1 <A>, M2 <A>>>, M <A, M <A, A>>>>  
 c. <E < M1 <E <M1 <A, A>, M2 <A>, M3 <A>>, A>, M2 <A>, M3 <A>>>>  
 where E = exchange, M = move, A = act

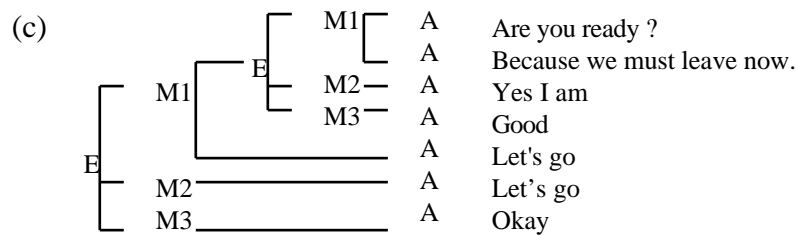
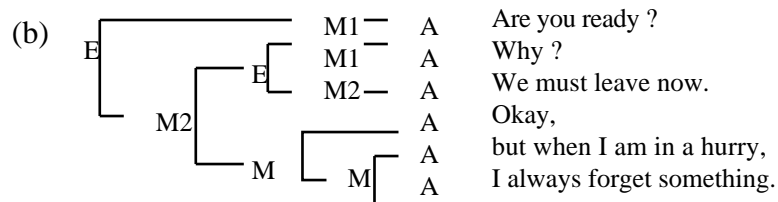
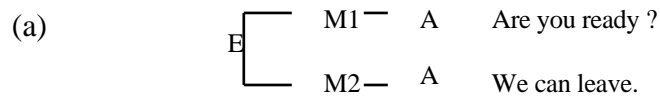
The structures in (1a-c) are the hierarchical representations corresponding to the following short exchanges in (2)-(4):

- (2) A Are you ready ?  
 B We can leave.
- (3) A Are you ready ?  
 B Why ?  
 A We must leave now.

- B Okay, but when I am in a hurry, I always forget something.
- (4) A Are you ready ? Because we must leave now.  
 B Yes I am  
 A Good. Let's go  
 B Let's go  
 A Okay

We can represent the bracketting structures given in (1) by the following tree-schemata :

(5)



These structures mean that in (5a) the exchange is made of two moves both composed of a single act, in (5b) the exchange is composed of two moves, the second of which is made of an exchange with two moves, and a move composed by an act and a move, and in (5c) the three-move exchange contains in the first move an exchange made of three moves.

What are the functional counterparts of the structural aspects of conversational discourse ? There are two dimensions of functional properties associated with the structural device : the first dimension is a restricted inheritance principle, and the second, a general procedure for assigning interpretation to discourse constituents.

The first principle is a principle of functional composition :

*Principle of functional composition*

- (i) Constituents of exchanges bear illocutionary functions.
- (ii) Constituents of moves bear interactive functions.

*Definitions*

- (i) Illocutionary functions are of three types : initiative, reactive, and reactive-initiative.
- (ii) Interactive functions are of two types : directive, and subordinate.

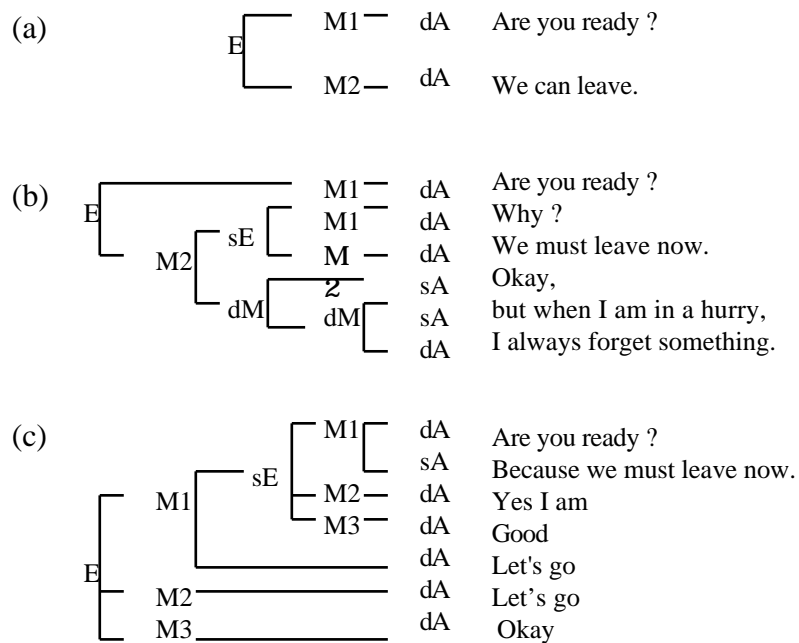
The first move of an exchange (M1) is always *initiative*; the final move of an exchange is always *reactive*. For instance M2 in the exchange <E <M1, M2>> is the reactive move, and M1 is the initiative move. An inserted move (for example M2 in the structure <E <M1, M2, M3>>) is a *reactive-initiative* move. A directive (D) constituent is of the type move or act, and contains the act from which the move receives its illocutionary function; a subordinate (constituent (of rank act, move or exchange) is cancellable, and generally completes, argues for, or justifies the main or directive constituent of the move.

We can now give the complete hierachical-functional structures given in (1) and (5) as (6) and (6') :

- (6) a. <E <M1 <dA>, M2 <dA>>>
- b. <E <M1 <dA>, M2 <sE <M1 <dA>, M2 <dA>>>, dM <As, dM <sA, dA>>>>
- c. <E <M1 <sE <M1 <dA, sA>, M2 <dA>, M3<dA>>, dA>, M2 <dA>, M3 <dA>>>

where E = exchange, sE = subordinate exchange, M = move, sM = subordinate move, dM = directive move, sA = subordinate act, dA = directive act

(6')



The second functional counterpart of the structural device is a procedure of interpretation assignment. It is not sufficient to have functional values assigned to discourse constituents; required is also to have a procedure governing the assignment of a functional interpretation to each constituent. In other words, the types of structures given in (1), (5) or (6) are syntactic representations of discourse; we need in addition a semantics, which can for instance assign to the hierarchical-functional structures given in (6) the following functional interpretations :

- (7) a. <QUESTION, ANSWER>  
 b. <QUESTION, <<QUESTION, ANSWER> ANSWER>  
 c. <<QUESTION, ANSWER, EVALUATION> PROPOSITION,  
 ACCEPTATION, EVALUATION>

Limited to the functions of the main moves, that is, moves which are constituents of exchange, this very elementary assignment of functions shows that discourse analysis needs something like a procedure for the interpretation of utterance-units and their functional mapping onto discourse-units. In other words, we need a theory of discourse interpretation. What is specific to discourse analysis is that the criterion for assigning a functional value to a constituent is different from the classical procedure used in speech act theory. Within speech act theory, the procedure is mainly conventional: besides general cooperation principles and background information, the procedure for the interpretation of e.g. indirect speech acts is dependent on semantic rules (the conditions of success and accomplishment of illocutionary acts). By contrast, discourse analysis cannot use a conventional procedure, because what defines a conversation is the sequencing of acts, moves and exchanges, and also the dependance between interpretation and sequencing. In conversation, a reactive move has two properties : (i) its sequential dependance *vis-à-vis* the initiative move, and (ii) its capacity to give retroactively an interpretation to the initiative move. The dependency relation between sequencing and interpretation is the topic of the following section.

### 3. Sequencing and interpretation in conversation

Let me recall briefly what the conditions for discourse analysis are. The basic notion of discourse analysis, as I have defined it in other occasions (cf. Moeschler 1982, chapter 3; Moeschler 1985, chapter 3; Moeschler 1986; Moeschler 1989b; and also Moeschler & Reboul 1994, chapter 17), is *appropriateness*<sup>6</sup>. I have assumed that units of communication are evaluated in

terms of their degree of appropriateness. As units of communication are units of discourse, two types of appropriateness can be distinguished: *contextual appropriateness* and *cotextual appropriateness*. Let us describe these notions and introduce the topic of this section, the sequencing and interpretation problems.

Cotextual appropriateness depends on conditions of cotextual appropriateness, which can be generally defined as sequencing constraints. Conditions of cotextual appropriateness are imposed by initiative moves, and have scope over reactive moves. These conditions of satisfaction (thematic condition (TC), condition of propositional content (CPC), illocutionary condition (IC) and condition of argumentative orientation (CAO)) impose on the reactive move to share a common theme to the initiative move (TC), to be propositionally related to the initiative move (by implication, contradiction or paraphrase) (CPC), to bear an illocutionary force compatible with the illocutionary force of the first move (IC), and to have a shared argumentative orientation, that is, an argumentative co-orientation (CAO) (cf. Anscombe & Ducrot 1983). The relation between conditions of satisfaction and cotextual appropriateness is a comparative one : the more conditions the reactive move satisfies, the more cotextually appropriate it is. In (9B1-B5), the degree of cotextual appropriateness increases, together with the degree of satisfaction of the conditions of cotextual appropriateness:

- (9) A Can you give me the time ?
- |                                    |                      |
|------------------------------------|----------------------|
| B1 I have a serious headache.      | -TC                  |
| B2 The postman has just passed.    | +TC, -CPC            |
| B3 Is it not already ten o'clock ? | +TC, +CPC, -IC       |
| B4 It is not yet ten o'clock.      | +TC, +CPC, +IC, -CAO |
| B5 It is ten o'clock.              | +TC, +CPC, +IC, +CAO |

When the thematic condition, the condition of propositional content and the illocutionary condition are satisfied, discourse is said to be *coherent*. If only the thematic condition and the condition of propositional content are satisfied,

discourse is said to be *cohesive*. So a coherent discourse is always cohesive, whereas the reverse is false.

The converse notion is the notion of conditions of contextual appropriateness. These conditions do not hold of the reactive, but of the initiative move. For any initiative move, the degree of contextual appropriateness is determined by the reactive move, and more precisely, by the degree of cotextual appropriateness of the reactive move. We can formulate this dependency relation between cotextual appropriateness and contextual appropriateness as stated by the following principle (cf. Moeschler 1982 and 1989b) :

*Principle of dependency*

The more sequencing constraints the reactive move satisfies, the more the initiative move is contextually appropriate; the less sequencing constraints the reactive move satisfies, the more the initiative move is contextually inappropriate.

The consequence of the principle of dependency is the following : sequencing and interpretation in conversational sequences are closely related. This is so because a dialogical sequencing, whether appropriate or not, always gives an image of the interpretation of the initiative move, and retroactively defines its degree of contextual appropriateness. The following principle gives a more precise definition of this relation:

*Principle of dialogical interpretation*

The interpretation of a move is dialogical, and results from the dialogical sequencing to which it gives rise.

In (10), the degree of contextual appropriateness of the initiative move is a function of the degree of cotextual appropriateness of the reactive move B1-B5:

- (10) A Peter is a friend whom one can count on.  
 B1 By the way, what are you doing tonight ? -TC  
 B2 Would you call that a friend ? +TC, -CPC  
 B3 Do you forget he voted against your project ? +TC, +CPC, -IC

B4 He never inspired me confidence.      +TC, +CPC, +IC, -CAO

B5 I think so too.                                      +TC, +CPC, +IC, +CAO

This set of principles yields a presumably robust approach of discourse sequencing. If we map the set of structural constraints defined in section 2 with the set of sequencing constraints defined here, we should have a powerful theory of discourse representation. An explicit version of this theory, containing a syntax, a semantics, and a procedure of analysis, has been proposed in Moeschler (1989a) and applied in computational linguistics for modelling person-machine dialogue in Bilange (1992) and Pernel (1994).

So far so good. But we are here far from the projection philosophers of language have made on conversation. We are also far from the basic principles of speech act theory, in which speech acts are conventional units of meaning. What is specific to the discourse theory presented so far is that illocutionary force is no longer a complex unit of meaning made of seven components (what we generally call a speech act), but is reduced to the functional and sequential properties of moves. Beside the fact that in speech act theory, there is no reason to take ANSWER as specific relational illocutionary force (the symmetrical counterpart of a question), while such reactive illocutionary function is required by the structural-functional device, there is a major difference between initiative and reactive moves that speech act theory cannot account for. This difference can be formulated as stated in the following asymmetry postulate :

*The asymmetry postulate of illocutionary functions*

Whereas a reactive move is a function with two moves as arguments, an initiative move is a function with a move as first argument, and a function as second argument.

According to this postulate, the formal difference between a question (initiative move A) and an answer (reactive move B) can be stated by means of the following notation :

(11) ANSWER (B, A)

(12) QUESTION (A, ANSWER (B, A))

This notation is consistent with the principle of dialogical interpretation : a move is a question because it has been interpreted as a question by its answer, which expresses the second argument of the question, that is, the function ANSWER.

The very optimistic proposal of this section thus contrasts with Searle's pessimistic view. But, as already mentioned, we are here far from an extension of speech act analysis to conversation : what we have is a structural and functional model for the analysis of conversation.

So far, my optimism was actually purely strategic, in order to discuss one of the possible extension of speech act theory for the analysis of conversation. The following section is much more pessimistic: I show the descriptive inadequacy of the so-called model of conversation, and in a more radical argumentation that both the sequencing and the interpretation problems can be solved in a non discourse-based approach to meaning, which belongs to radical pragmatics.

#### **4. The interpretation and sequencing problems revisited**

Let us first reformulate the interpretation and sequencing problems in a more general way.

The interpretation problem can be reduced to the following question: *What should hearers do in order to understand what speakers intend to communicate?* Strictly speaking, this problem is not different from the one pragmatic theory tries to answer. The main task of pragmatics is to explain, *via* non linguistic principles, procedures by which hearers can understand what speakers want to communicate. If discourse analysis were limited to the interpretation problem, one could conclude that there is no need for a specific domain of investigation like discourse analysis, since pragmatics and discourse analysis would be about the same set of facts, that is, the interpretation problem. Nevertheless, the question which remains open is whether interpretative facts are

better understood within pragmatics or within a conversational theory. As we have seen in the preceding section, discourse analysis covers another domain, the sequencing problem, which implies that the interpretation problem cannot be solved independently. The conclusion is that if we can show that the sequencing problem can be solved outside discourse analysis, the interpretation problem would no longer be a conversational problem and could be treated within pragmatic theory. Before pursuing the argument, let us reformulate properly the sequencing problem.

The sequencing problem follows from the sequential and dialogical nature of discourse. It can be summarized as in the following question : *Are there rules or principles which guarantee the well-formedness of discursive and conversational sequences ?* This formulation presupposes first that some discourse productions can be evaluated as well-formed, and others as ill-formed, and second that defective and non defective aspects of discourse sequences result from the satisfaction and non satisfaction of sequencing rules or principles. This formulation implies that the sequencing problem is identical with the problem of discourse coherence. But it has been argued (cf. Charolles 1988 for a synthetic review of research on text grammar and coherence) that discourse coherence is basically an interpretation problem, and we can conclude that the sequencing problem can be limited to the interpretation problem. If this assumption is correct, then there is no need for a conversational theory, since the sequencing problem is part of the interpretation problem, i.e. the object of a pragmatic theory.

So far, we have discussed two pairs of antinomic theses, belonging respectively to *conversational pragmatics* (what I called *discourse analysis*) and to *pragmatic theory* :

*The theses of conversational pragmatics*

T1 The interpretation problem is part of the sequencing problem.

T2 Conversational pragmatics is independant of pragmatic theory and makes different predictions.

*The theses of pragmatic theory*

T'1 The sequencing problem is part of the interpretation problem.

T'2 Conversational pragmatics is dependent of pragmatic theory and does not make different predictions.

Now, I must demonstrate that principles of conversational pragmatics are falsifiable, and that pragmatic aspects of discourse must be accounted for by general pragmatic principles. The principle of dialogical interpretation constitutes the Achilles' heel of conversational pragmatics, as I have defined it until now. We can raise three objections against this principle.

*First objection.* If the principle of dialogical interpretation is valid, it is impossible to assign an interpretation to the last move of an exchange, since there is no reactive move to base this interpretation on. From a technical point of view, the heuristics given by the principle of dialogical interpretation is only partial, and we must admit that other principles than sequential principles affect the interpretation of moves in conversation.

*Second objection.* As Trognon & Brassac (1982, 85) have shown, a reactive move is not an interpretation of the initiative move, but an interpretation in act. So, principles which make the accomplishment of an act come true do not rely on a theory of sequencing, but belong to illocutionary logic. For instance, the axiom of illocutionary logic stating that accomplishment implies success is just what we need to explain sequential relations between moves. In other words, sequencing in conversation is a trace of the accomplishment of illocutionary acts in conversation.

*Third objection.* The third objection is much more radical. It states that the principle of dialogical interpretation is either non informative or circular. According to this principle, it is possible to assign an illocutionary function to the initiative move depending on the reactive move. But we face here a dramatic choice: either the reactive move is predictable *via* sequencing rules, and then it says nothing about the interpretation of the initiative move, or the reactive move is not predictable. In the latter case, it becomes impossible to say anything about the relation between moves *via* sequencing rules, since they have no predictive

power. The situation is even worse, though: if the interpretation is given by the reactive move, and reactive moves are directed by sequencing constraints, how can these sequencing constraints be accounted for when there is no possibility of determining *a priori* the function of the initiative move ? In any case, the principle of dialogical interpretation leads to undesirable conclusions : it is either uninformative or circular.

We conclude that the theses of conversational pragmatics are falsified, and that we must abandon them. It also seems that we have not made much progress : we have spent a long time arguing in favour of a structural and sequential model of discourse within conversational pragmatics, and we now arrive at the conclusion that the interpretation problem is not part of the sequencing problem. So, what possibilities remain for the analysis of conversations ? It seems that what we need is a pragmatic theory which is a true theory of interpretation. I will now discuss two approaches to meaning and communication which could be good candidates, namely illocutionary logic and Relevance theory, and I will defend an approach of conversation within the latter type of pragmatic theory.

## **5. Illocutionary logic and conversation**

Recent work by Alain Trognon and Christian Brassac<sup>7</sup> offers a good illustration of how the sequencing problem can be treated within speech act theory, and more specifically illocutionary logic. Trognon & Brassac (1992), for instance, propose a general procedure of interpretation and sequencing for indirect speech acts and conversational implicatures. If we take as a prototypical example the indirect request *Can you pass the salt?*, their analysis proceeds as follows :

By passing the salt, the interlocutor satisfies the request, which entails its success, which entails the truth of the proposition that the hearer can pass the salt (preparatory condition of requests), which entails the satisfaction of the

question, which entails its success. (Trognon & Brassac 1992, 89; the translation is mine)

To make a long story short, we have the following chain of entailments :

(13) SATISFACTION(REQUEST)    SUCCESS(REQUEST)    SATISFACTION  
       (QUESTION)    SUCCESS(QUESTION)

The element which determines the satisfaction of the primary illocutionary act (the request) is the passing of the salt, that is the action that should be obeyed under the illocutionary point of the directive act. I do not intend to discuss here the principle of illocutionary logic under which satisfaction implies success, but this analysis calls for the following remarks.

First, the retroactive procedure is close to the principle of dialogical interpretation. The analysis goes backwards, that is, moves from the satisfaction of the primary illocutionary act to the success of the secondary illocutionary act. As a natural procedure of interpretation, it seems very strange, for at least two reasons: it is contradictory to the basic principles of speech act theory, which proceeds from the derived illocutionary act to the literal illocutionary act; once the illocutionary point is obtained, it seems odd to go on processing until the source of the derived illocutionary point is found. This leads naturally to the second objection.

Second, the analysis is counter-intuitive, and does not constitute an interpretation procedure. It implies that in speech act theory, as well in illocutionary logic, the literal meaning of an utterance like *Can you pass the salt?* has the illocutionary force of a question. But the illocutionary point of this utterance is not that of a request for information; thus, the question is a secondary act, and it conveys a primary illocutionary act. Speech act theory predicts that the illocutionary point is a directive, because the utterance questions a preliminary condition of directives; so, the literal meaning is a question, and the derived meaning (which corresponds to speaker's meaning) is a request. The following interpretation procedure can be stated in contrast to (13) :

- (14) a. literal meaning : request for information  
 b. propositional content of the request for information : ability of the hearer to pass the salt  
 c. condition of success of directives : as a preparatory condition, the hearer is able to accomplish the requested action  
 d. generalisation on indirect directives : to ask for a preparatory condition of a directive is a way to realise an indirect directive (as a primary illocutionary act)  
 e. inference : the speaker accomplishes as primary illocutionary act a request *via* a secondary illocutionary act of request for information.

The conclusion is very simple : Trognon & Brassac's proposal within illocutionary logic is another version of the principle of dialogical interpretation, for which the interpretation problem is part of the sequencing problem. The revised version of their analysis proposed in (14) under the most classical version of speech act theory has the advantage of giving a coherent procedure for utterance interpretation. Admittedly, it has the disadvantage of saying nothing about the sequencing problem: I claim that a radical pragmatic theory of utterance interpretation makes correct predictions about sequencing in conversation without having to formulate any sequential constraints on interpretation.

## **6. Relevance theory and sequencing in conversation**

In previous work (cf. Moeschler 1989c, 1993, 1994, to appear, chapter 11 and 12), I have argued for a radical pragmatic treatment of the sequencing problem within Relevance theory. The argument developed in these papers is that sequencing explicated *via* discourse connectives<sup>8</sup> cannot be explained by principles of discourse structure or discourse sequencing, because discourse connectives often contradict either their conventional meaning or the predictable discourse structure they should make explicit. The meaning of discourse

connectives is what Wilson & Sperber (1993) call *procedural encoding*, and refers to the nature of context (as a cognitive construct), and to the possible contextual inferences.<sup>9</sup> I will give a brief overview of this type of analysis with an example of conversational use of the French connective *parce que* ('because').

Let us take the following example, drawn from a phone call (cf. Schmale-Buton & Schmale 1984, 190-191), translated here from French (where S = the secretary of the practice and P = the patient) :

- (15) S1 you should come at the very beginning of the afternoon  
P1 at what time  
S2 well at two o'clock but not later because just after I don't know if he visits as he has no appointment  
P2 yes  
P2' he will be there just before two o'clock or  
S3 yes  
P3 (*parce que*) because if I come a little before two o'clock he will be there  
S4 he will be there yes yes yes

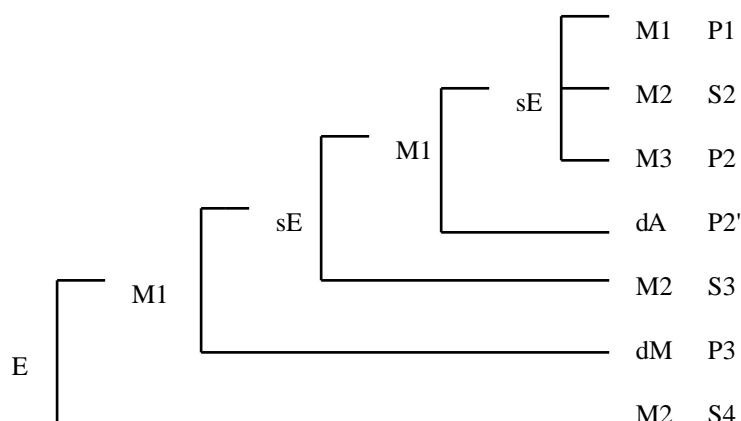
This example raises two types of problems for conversational pragmatics : the first problem is structural and sequential, and bears on the discourse function of connectives like *parce que*; the second problem is interpretive, and bears on the possibility of the standard causal reading of *parce que*. I will discuss briefly these two aspects of (15), which will demonstrate that a discourse oriented analysis is hopeless. I will then turn to an alternative interpretation, within a few postulates of Relevance theory.

The first problem is structural. Very informally, the sequences P1-S4 is composed by three exchanges, as described in (16) :

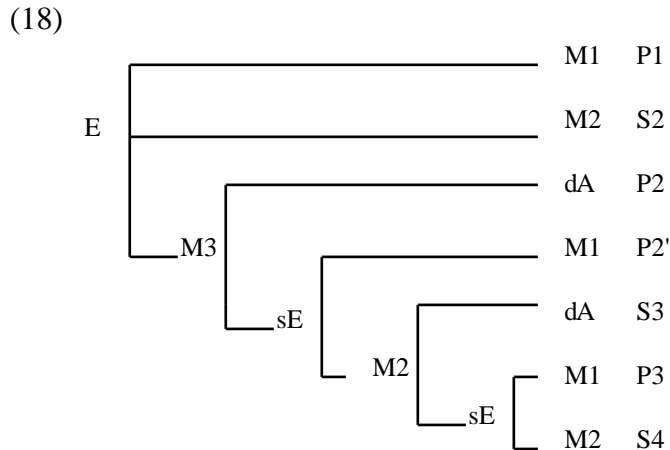
- (16) a. <E1 <QUESTION (P1), ANSWER (S2), EVALUATION (P2)>>  
 b. <E2 <QUESTION (P2'), ANSWER (S3)>>  
 c. <E3 <QUESTION (P3), ANSWER (S4)>>

These exchanges are related, and one of the interpretation is to represent the integration of forward-oriented exchanges : there is a consecutive relation between E1 and E2, and E2 and E3. It is because the answer in E1 that P questions S in E2, and so on. So the hierarchical-functional representation should be something like (17) :

(17)



Unfortunately, it is no longer possible to describe discourse connectives as markers of interactive functions (as Roulet et al. 1985, chapter 2). Conventionally, *parce que* should introduce a subordinate move (introducing a cause or an explanation), and thus, if the move is initiative, a subordinate exchange. This solution is structurally possible, as shown in (18), but raises a new problem, which is interpretive.



Let us turn to the interpretation problem and suppose that *parce que* (*because*) triggers the following logical elimination rule (cf. Blakemore 1987, 43) :

- (19) Input            P *parce que* Q  
 Output (a) P  
           (b) Q  
           (c) Q is the cause of P

Let us reformulate the following variables in this use of *parce que* :

- (20) P = QUESTION (the doctor will be there just before two o'clock)  
 Q = if the speaker comes before two o'clock, the doctor will be there

The rule (19c) cannot apply here, because it would yield a very counter-intuitive interpretation, as (21) shows:

- (21) (if the speaker comes before two o'clock, the doctor will be there)  
 CAUSE (QUESTION (the doctor will be there just before two o'clock))

In others words, it does not make any sense to say that the conditional assertion of a fact (*the doctor will be there*) causes the request for information (*will the doctor be there ?*). The coherent relation suggested by the connective *parce que* is in fact the opposite, as shown in (22) :

- (22) (QUESTION (the doctor will be there just before two o'clock)) CAUSE  
 (if the speaker comes before two o'clock, the doctor will be there)

To be more explicit, what happens is that the reverse causal relation is no longer a relation between propositional contents, but a relation between illocutionary acts, as (23) indicates:

- (23) (QUESTION (the doctor will be there just before two o'clock)) CAUSE  
 TO SAY (if the speaker comes before two o'clock, the doctor will be there)

The interpretation of *parce que* which imposes here a reverse causal (so to speak) relation implies that the use of *parce que* is here identical with the semantic meaning of *donc* ('thus'). If this interpretation is correct, the problematic structural interpretation given in (17) is accounted for: *donc* introduces a directive act (or move). So we face here a very strange case for discourse analysis : the interpretive procedure imposing a possible structural interpretation of the discourse, rather than the discourse structure imposing an interpretation. Sequential relations in discourse are thus determined by pragmatic constraints on interpretation. If we adopt Blakemore's terminology, we can say that we face here a very typical *semantic constraint on relevance*. The consecutive meaning of *parce que* (or, which is the same, its inverse causal use) is the only possible pragmatic interpretation because it is the only interpretation consistent with the principle of relevance. What this means is that the consecutive interpretation is the first interpretation which comes to mind and which creates a sufficient effect capable to balance the cognitive effort necessary for the treatment of the utterance. What is this effect ? The effect is minimal, but consistent with the principle of relevance, which states that the utterance is the most relevant possible one in the circumstances : the effect concerns the plausibility of whether a fact true of X can be true of Y. So, the demand of confirmation uttered in P3 and introduced by *parce que* is a relevant utterance as far as it questions the non trivial fact that if it is true that the doctor is at a certain place at a certain time for X, this fact is also true for speaker P.

The consecutive meaning of *parce que* is not part of the semantics of the connective, but part of its procedural encoding. This “change of logical meaning” is not an exception, and constitutes a typical way of reasoning in Gricean pragmatics. As examples, one can mention the exclusive reading of *or via* a scalar implicature and its inclusive meaning (cf. Gazdar 1979), the so-called bi-conditional use of *if P, Q*, which by invited inference (cf. Geiss & Zwicky 1974), conveys *if non-P, non-Q* or also the interpretation of negative utterances (cf. Moeschler 1991). For instance, (24) does not communicate (25a), but (25b) :

(24) If you are quiet, we will go to the movie.

(25) a. If we will not go the movie, then you are not quiet.

b. If you are not quiet, we will do not go to the movie.

In this section, I have tried to give a solution to the sequencing problem of *parce que* within an interpretive framework. I pointed to some consequences of the analysis for the function of connectives in discourse, and as a result, it appears that this description does not require a theory of discourse. But I still have to say how sequencing with indirect speech acts or conversational implicatures could be described and explained within Relevance theory.

## **7. Sequencing and implicatures in Relevance theory**

I have argued in section 5 that a possible application of illocutionary logic to the analysis of conversation is identical with a model of discourse based on the principle of dialogical interpretation. I have also assumed that an interpretive approach within speech act theory will necessarily explain inferential and inductive reasoning from the secondary to the primary illocutionary act. I have claimed further that speech act theory says nothing about the sequencing problem, as I have tried to show in section 2. But I have suggested too that Relevance theory, which is a pragmatic theory of utterance interpretation, has something to say about the sequencing problem.

What is paradoxical is the assertion that a theory of interpretation is capable of predictions about discourse. The main reason why this is possible is that discourse coherence is interpreted in Relevance theory as an effect of relevance, and not as something specific to discourse. For a theory of interpretation, the sequencing problem is equivalent to the interpretation problem. The issue we should address is whether conversation, as a type of communication, exhibits particular levels of organisation which would play a role similar to notions like *frame* (Fillmore), *script* (Shank) or *background* (Searle). I have argued in Moeschler (1993) that in certain types of conversation, such as those examined in this paper, i.e. phone calls to a medical surgery, it is necessary to refer to general scripts, which relate to the sequential organisation of conversation. For instance, move (26) is typical of a script associated with a phone call to a surgery (27), which constitutes a chunk of information easily accessible in such circumstances :

(26) I am calling because my daughter is a patient of Dr. R\*  
and she's had a high temperature since yesterday  
now her temperature is over 40 degrees Celsius  
yesterday night it was about 39<sup>10</sup>

(27) *Script associated with a phone call to a surgery*

1. When a patient calls a surgery she generally gives the reason for her call. The principal reasons in this context are :

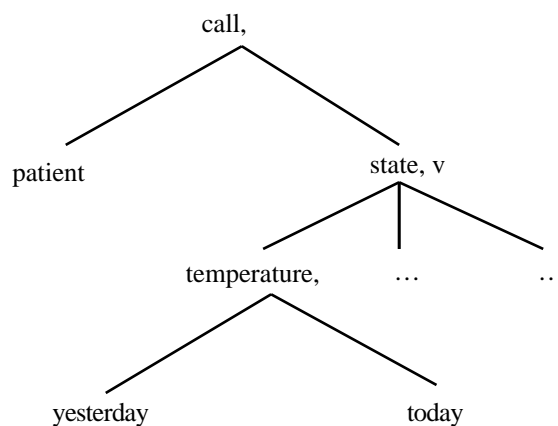
(a) being a client of the doctor (generally a necessary, but not a sufficient condition for the call);

(b) indication of the state of the patient (high temperature, pain, etc.).

2. When the principal reason (b) has been given (for instance high temperature), further details can be given depending on the informative intention of the speaker (for instance, if the previous information was vague, it could be further specified by giving quantitative, qualitative, temporal, spatial references).

We see that in (26) each act refers to one proposition of the script, and that the sequential organisation of the discourse perfectly reflects the hierarchy of information presented in the logical structure (28) :

(28)



We face here the problem raised by Searle (1992) in the third part of his paper on conversation, the default of common intentionality :

The reason that conversations do not have an inner structure in the sense that speech acts do is not (as sometimes claimed) because conversations involve two or more people, but because conversations as such lack a particular purpose or point. (Searle 1992, 20)

This means two things: first, that conversation has no structure in the sense that illocutionary acts have<sup>11</sup>; and second, that the cause is that there is no shared intentionality. At this point, we have the choice between two positions: the first position would require a particular type of discourse to be defined in which these conditions would be satisfied; the second position would just ask why it should be so, that is, why speakers should share intentionality in conversation ?

The argument underlying the second position, within Relevance theory, is that relevance is defined relatively to an individual. More precisely, “An assumption is relevant to an individual at a given time if and only if it is relevant in one or more of the contexts accessible to that individual at that time” (Sperber

& Wilson 1986, 144). This means that relevance is a question of accessibility of context, and not of shared knowledge.<sup>12</sup> We face here one of the most important ideas of Relevance theory : communication is a highly risky task, and a not always successful one. If we admit that the use of language in verbal communication is never accompanied by a warranty of successful communication (whereas verbal communication implies a warranty of relevance), the second position becomes acceptable. There is no evidence or necessity for shared intentionality because communication does not imply mutual knowledge.

If these proposals are correct, one important consequence for the analysis of conversations is that it is not possible (except for very standard and canonical processes like those illustrated in (26)) to define conversation in terms of a theory of complex actions. If this is correct, we are again in a position to argue for a non discourse-based solution to the sequencing problem. And if there is no possibility for a discourse theory of sequencing, we are back to the interpretation problem. So, why should we not accept the classical analysis for indirect speech acts and implicatures, implied by speech act theory, as presented in section 5 ? The main criticism I would address to a theory of meaning like speech act theory is that it is basically a theory of literal meaning. Indirect speech acts, metaphors, irony, are analysed within speech act theory (cf. Searle 1979) as derived speech acts. Within Relevance theory, we can make a different claim. It is not assumed that any non literal speech has to be understood against its literal meaning, because linguistic meaning is seldom sufficient for the hearer to understand the utterance. Non linguistic knowledge is nearly always necessary, which implies that the interpretation of an utterance triggers two types of processes: the development of the logical form of the utterance (that is, its *explicature*) and the detection of *implicatures* (either the implicated premisses necessary for inferences to take place, or the implicated conclusions).

Implicatures do no longer follow from the use or the exploitation of maxims of conversation, *contra* Grice (1975) : they are just contextual implications resulting from an inferential process based on contextual premisses, and on the

logical form of the utterance. As the context is constructed, and not given, communication succeeds when the intersection of the set of the contextual implications drawn by the hearer and the set of the conclusions entailed by the propositional form representing the speaker's thought is not empty. Communication fails when the intersection of these two sets yields the empty set. But the situation where the two sets are the same, i.e. in literal utterances, obtains seldom.

What about indirect speech acts ? Even if Sperber & Wilson do not propose any explicit treatment of indirect speech acts (mainly because the classical analysis is based on a taxonomy of speech acts rejected within Relevance theory), we can suppose that indirect speech acts, when they have the properties of generalised conversational implicatures, are no longer indirect: they are direct speech acts. But what they communicate (for instance for the classical *Can you pass the salt ?*<sup>13</sup>) is that some fact is sufficiently manifest for the question to be relevant in that context. It means that the explicature of the utterance would be that of a directive : “the speaker wants the salt”.

## 8. Conclusion

In this paper, I have tried to show how speech act theory could be extended to the analysis of conversations. I have argued that one of the possible extensions, which belongs to *discourse analysis*, makes different predictions on conversation than speech act theory, and that the meaning of *speech act* changes: starting as a unit of communication, it becomes a unit of discourse. Discourse analysis leads to specific problems, that is, the interpretation and the sequencing problems. I have discussed the classical solutions within discourse analysis and illocutionary logic, arguing that both approaches meet the same type of objections. Finally I have defended a non discourse-based solution for the sequencing problem within Relevance theory and proposed a solution within the same framework for the

interpretation problem, and more specifically for indirect speech acts and conversational implicatures.

## NOTES

1. I take *discourse* to refer to any type of speechs consisting of sequences of exchanges, moves or speech acts, either monological or dialogical, following here the Geneva tradition of discourse analysis developed in Roulet et al. (1985). Cf. also Moeschler (1985), Moeschler (1989a) and Moeschler (forthcoming) for further developments.
2. See Moeschler (1993) for a formulation of the sequencing and interpretation problems within Sperber & Wilson's Relevance theory (1986), and Moeschler (1992a) for a more general discussion on the domain of discourse analysis.
3. From the following extract of Searle & Vanderveken (1985, 11), we are authorised to look for sequencing principles defining the sequences of speech acts in conversation : "The key to understanding the structure of conversations is to see that each illocutionary act creates the possibility of a finite and usually quite limited set of appropriate illocutionary acts as replies". I shall present below a coherent and complete model of sequencing rules for conversation analysis, which is explanatorily adequate, but unfortunately descriptively inadequate.
4. One should remember here the classical opposition formulated by Levinson (1983) between *discourse analysis* (DA), which is based on speech act theory, and *conversation analysis* (CA), which comes from the ethnomethodological paradigm.
5. Cf. Stenström (1984) for an exhaustive analysis of questions and answers within a functional model, and Moeschler (1986) for a critical review.

6. Cf. van Dijk (1977) for a general definition of pragmatics and discourse *via* the criterion of *appropriateness*.
7. See especially Brassac (1992), Brassac (1994), Trognon & Brassac (1992), Trognon & Larrue (1994), Trognon & Ghiglione (1993), Trognon (1994); see also Moeschler (1992b) for a general discussion of Trognon & Brassac (1992).
8. Following Blakemore's (1987) terminology.
9. I refer here to Luscher (1994) for a very detailed analysis of pragmatic connectives within Relevance theory.
10. For simplicity, I present every utterance-act as a separate line.
11. See Vanderveken (1992) and (1994) for a different analysis, and a very global proposition of discourse taxonomy in terms of direction of fit.
12. See Sperber & Wilson (1982) for a detailed criticism of the notion of *mutual knowledge*, and Moeschler (1994) for a general discussion of warranty of uptake in conversation.
13. See Groefsema (1993) for an analysis of *can* and more specifically of *Can you pass the salt?* within Relevance theory.

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