Pragmatic Issues in Discourse Analysis

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Abstract

Starting from the problems raised by the notion of 'discourse' and its definition, this paper takes issue with the views that consider discourse as an object of study observable and describable as a 'whole' static structure, and which meaning is richer than the sum of the meanings stemming from the individual utterances composing it. The assumptions previously put forward by authors such as Chafe, who claimed that discourse is better studied as a process unfolding through time, is taken seriously into account. Within the ongoing discussion about the very notion of discourse, some arguments are proposed to sustain the view that all the meaning produced by a given discourse is in fact reducible to the meaning produced by the single utterances composing it; in particular, implicit rhetorical relations are conceived as the result of pragmatic inferences of the same nature as contextual hypotheses in general, and therefore rhetorical relations are to be interpreted at the level of pragmatic meaning.

Keywords: *Pragmatics, Meaning, Discourse analysis, Rhetorical relations*

1. Introduction

Since *Discourse analysis*, as a field of study, is trivially concerned with discourse, it is thus equivalently trivial that it is concerned with language, in particular with language *use*, which is a common definition for *pragmatics*. In that sense, discourse analysis is a subfield of pragmatics.

Pragmatics in general − and thus discourse analysis in particular − has to deal with meaningful units: meaningless objects can not be studied as 'conversations' or 'discourses'. It follows that in order to understand the mechanisms of some discourse, its rhetorical organization, its hidden semiotic properties, or the psychosocial activities that take place and, as some say, are 'shaped' by the interactive use of language, one must take for input spans of meaningful utterances (or fragments of utterances). *Meaning* is the issue addressed by semantics and by pragmatics in a narrower sense. In this particular sense, pragmatics is the theory of meaning in context (including implicit meaning), or, equivalently, the theory of human natural language understanding in context.

One may however wonder whether the *analysis* of meaning is indeed required for the study of discourse. After all, we are all competent speakers and as such, we are capable of finding out intuitively about the meaning of linguistic stimuli; these intuitions could then be enough to serve as inputs for discourse analysis proper.

The aim of this paper is to emphasize that it is certainly not so. Lacking a theory of meaning entails lacking a theory of discourse; what one can do about discourses but without an awareness of semantic issues is limited to intuitive opinions, with a high risk of mistakes. This risk is particularly high when wondering whether this or that constituent of meaning is provided by a speaker explicitly or implicitly, which is all but trivial, since when the message is implicit, the speaker shows less commitment, or

even not at all, to the message, its interpretation being presented as if left to the interpretive speculations of the hearer. When considering the various kinds of entailments which are calculated by the hearer on the basis of an utterance, such as implicit or indirect meanings (*implicatures*), speech act types (when necessary), presuppositions and implications, this problem appears very clearly. In a recent paper, Wodak (2007) shows how much discourse analysts gain when taking a closer look at the ongoing research in semantics and pragmatics on this matter.

For it is untrue, although sometimes still believed by discourse analysts and scholars in communication science, that linguistic analysis has little to offer to discourse analysis and to communication studies. No doubt it used to be true, even not further than 20 or 30 years ago. But the research on 'discourse semantics' and 'pragmatics' has dramatically developed in recent years, with a close eye to philosophy of language and philosophy of mind, and to cognitive science.

In the following section, I will try to trace back the main epistemological attitudes towards language use and discourse in pragmatics to their foundations, taking into account that the sciences of language have always been at the crossroads of natural, formal, and social sciences. I will then try to go into further details on the two main views on language use, considering discourse 'as wholes' and discourses as 'processes'. I will argue for the latter and in section 3, I will turn back to the notion of discourse and to the considerations I have just evoked above, before I give a few arguments to sustain the view that discourse analysis should take into deeper consideration semantic and pragmatic facts at the 'micro' level.

2. Conflicting approaches: Wholes and processes

It is tempting, and I think, justified, to suggest that two different philosophical attitudes are represented in the field of pragmatics. First, there is *pragma-semantics*, or, for some trends, *radical pragmatics*, which is pursued by the inheritors of Paul Grice and many scholars of the referential-logical tradition, with various degrees of commitment to truth-conditionality. This approach is interested in the construction of meaning by a hearer, through cognitive or formal (computational) models. Second, there is the trend that views the *production of speech acts* as the primary concern of pragmatics. This trend pays of course close attention to social determinations of linguistic behaviour.

Roughly (since the subfields of 'pragmatics' are in fact countless, representing a great variety of orientations), the first trend focuses on the theory of human language understanding, assuming a 'bottom-up' view (where global – discursive – issues are explainable by local semantic and pragmatic phenomena), while the second one focuses on a theory of speaker's productions of utterances within structural patterns of discourse and interaction, assuming a 'top-down' view (where issues concerning single utterances are explained by global discursive or social constraints).

I will take issue with the mutual exclusivity of these approaches. It is true that they are generally incompatible as theories: top-down approaches are relying on the standard methods of social science while bottom-up approaches adopt more generally an epistemology with strict determinism (sometimes pointed out by its detractors as 'positivistic'). But it is also true that a deterministic approach can provide the input for a non-deterministic approach depending on the phenomenon tackled – heretic as this may seem on the epistemological side at first glance. I will suggest that a bottom-up explanation of pragmatic understanding is a necessary *input* for top-down models

of discourse. That is why I will follow Chafe, Sperber and Wilson, Carston, Recanati, inter alia in arguing that discourse is better analysed not as a *structured entity* but as a *process*.

The very nature of the object we call *discourse* is a very disputed problem among linguists and in particular among discourse analysts; another disputed issue concerns the right way to scientifically investigate discourse. As for the definition of discourse, we probably all agree at least on the idea that a discourse is an *organized set of utterances* reflecting, or in relation with an organized set of thoughts (I will leave aside here the old structural hypothesis of a strict language-thought equivalence). Discourse analysis assumes in general that discourses bear properties of their own (which are not the properties of single utterances). The consequence of this assumption is a very common idea: a discourse is *more* than the sum of the utterances composing it, an idea however not shared by radical pragmatics, or, better, which is differently understood and approached in radical pragmatics. This assumption actually depends on what one wishes to call 'discourse': are we talking of *explicit* contents or fully developed meanings starting from the literality of the considered discourse?

Among theories of discourse, the properties that discourse bears are strongly associated with the notions of *coherence*, *cohesion* and (informational or hierarchical) *structure* or any other concept related to internal organisation. However, it is now well acknowledged that pure formal linguistic features of utterances in discourse ('cohesion markers') do not suffice to establish coherence or to provide evidence for such an internal organisation, so that it is necessary to include various contextual devices, typically the recourse to discourse relations, or *rhetoric relations* (even not verbalized), in order to see what the 'deep' structure of the considered discourse looks like. On the other hand, it is also clear that spans of text with all necessary cohesion markers and clear rhetorical relations may well be incoherent according to a commonsensical intuition of the notion of coherence (Reboul and Moeschler 1998). As for *structure*, there is a large literature talking of discourse as an organisation of arguments, speech acts or even actions bearing functional relations of various kinds with each-other (van Eemeren and Grootendorst 1992, 2004; Mann and Thompson 1980; Lascarides and Asher 1993), as a coordinated negotiation in the sense of Goffmanian praxeological sociology (Roulet et al. 2001) and as, more simply, a structure in a syntax-like sense as old-style *textlinguistik* views it (Weinrich 1953). To make the picture more complicated, ethnomethodological approaches to conversational analysis brought together conversation as speech acts with *action* in the sense of social psychology to address the structure of conversation as ritualized or as bearing crucially social functions.

If discourse is a scientific object in itself, bearing specific structural properties, then a given discourse has to be studied as a singular object (although complex). If on the contrary discourse is nothing more than the dynamic modification of representations achieved sequentially by the succession of single utterances, then a given discourse needs to be studied as a process; in the latter case, the meaning of a discourse is *reducible* to the meaning of the last utterance composing it, with regard to the initial and final cognitive environments of the interlocutor(s). This view is held by a number of scholars in radical pragmatics[1] who, in the end, will simply refuse to take anything like a 'discourse' into consideration.

From a cognitive pragmatic standpoint, it is possible to hypothesize that there exists a higher level of representation of information besides the structural and propositional

ones we attach to single utterances in context. These higher-level representations would be 'discursive representations', and would concern at the same time several utterances bearing relationships, just as we can handle several organized thoughts about a given topic. Pragmaticists deal with a finite set of representations: formal ones (the logical syntactic form), propositional representations of explicit meaning (typically Sperber and Wilson's *propositional form* or Grice's *what is said* etc.) that correspond to saturated semantic representations, and representations of implicit meanings (*implicatures*).

Are we now able to defend the idea that things like 'discursive representations', which happen only in organised sets of utterances, exist? And: how are we exactly to deal with these complex representations? The answer to the first question at least seems obvious: we are certainly capable of attributing to the speaker complex thoughts that are only expressible with more than one utterance, thus discourses, that is, combinations of propositions that allow for further inferences. This means that pragmaticists in general agree that there are things that deserve to be called discourses and which deserve scientific description.

Such a viewpoint is presupposed in a wide number of approaches from Antiquity to Port-Royal Grammar and to contemporary theories of argumentation, not to mention many approaches of language within social science, sociolinguistics, social psychology of language, and of course, within literature studies and Critical Discourse Analysis (CDA).

Yet I would like now to insist on a point that I see as crucial: the fact that discourses do exist does not entail that the best explanation for discourses must consider anything other than contextual single utterance interpretation. In other words, it is not clear a priori whether we should speculate or not that there is anything at the level of discourse interpretation that is not explained by utterance interpretation procedures. This is the standpoint I am going to explore here, taking seriously the idea that discourse is best explained as a process unfolding through time, following Chafe (1987); an idea probably too radically expressed by Blakemore (2002: 150), who says that 'a theory of verbal communication must not be built upon the study of discourse'. In fact, we should be aware that the term *discourse* is itself confusing. It can mean 'sets of utterances', 'texts', or in the post-modern view, 'thoughts and ideologies'. What nowadays more and more people call 'discourse' is taken as an equivalent of 'verbal communication', although the precise sense of 'discourse' gets then unclear with regard to the *single-utterance* vs. *span of utterances* dichotomy, as far as the unit tackled is concerned.

Before I can enter in more detail into this problem of sketching out what discourse *is* and how it can be tackled according to radical pragmatic views, I need to address a few points of comparison between the two main kinds of approaches available on the market about human communication with language. Let me call the approaches that view discourses as finite spans of utterances *Discourse* approaches, that I will oppose to *Utterance* approaches, which in turn aim at explaining the whole of verbal communication by addressing the process of understanding single utterances in context.

First, a number of *Discourse* approaches anchor on speech-act theory and assume that the key to a scientific understanding of discourse-structure and conversation resides in social psychology, while most *Utterance* approaches focus on human individual cognition, following Fodorian methodological solipsism and the epistemology of

naturalistic mechanism dear to both Bloomfield and Chomsky (each in their own way), and aim at providing model-theoretic accounts, assuming that social conventions can be reduced to elements of the (mutually) manifest cognitive environment – although not consciously (cf. Saussure 2005a).

Second, some *Discourse* trends suggest that parts of discourse are distributed non-sequentially; in other words, spans of discourse can attach to spans other than the directly preceding one, through a particular rhetoric relation (typically in Mann and Thompson's Rhetorical Structure Theory (RST), in Roulet's modular approach of discourse, in Lascarides and Asher's Segmented Discourse Representation Theory (SDRT)). On the contrary, *Utterance* trends will say that these are not relations between *spans of discourse* but relations between the current utterance and parts of the environment available, as representations, for contextualization. All this may be a dispute of words, though, since what *Utterance* trends call 'context' incorporates what comes out from the understanding of preceding utterances, therefore of parts of the preceding 'discourse', and since *Discourse* trends have to take single utterance meaning into account for anything 'discursive' to emerge.

Furthermore, many *Discourse* approaches, such as CDA (van Dijk 1998; Fairclough 1999; Wodak 2007) and some other trends (Roulet et al. 2001), it is assumed that the study of discourse is not only a scientific attempt at understanding discursive phenomena. It is also an attempt at bringing awareness about some covert properties of discourses that go unnoticed by ordinary hearers and which are potentially manipulating their commitment to the speaker's ideas (there is here a similarity with continental and other trends in philosophy that see discourse, language and speech as means of power – or as being a form of power itself). On the other hand, *Utterance* approaches have also showed that semantic and pragmatic features of the utterance itself are a key to manipulative uses of language (see Allott 2005; Choi et al. 1997; Saussure 2005b), however without commitment to the notion of 'discourse' as a structured whole, and without the generalization that discourse or language is always in relation with power.

In that perspective, *Discourse* approaches are more like *tools for the analyst* rather than *explanation of natural language understanding procedures*, although some theories aim at bridging the gap between the two, following the pioneering work of Searle when he, so to speak, made the Austin-Grice interface through the architecture of *illocutionary force* applied to a *propositional content* in order to handle implicit meaning (van Eemeren and Grootendorst's Pragma-dialectical approach is another example of how Searle's early ideas can be exploited in a way that articulates natural language understanding procedures with issues regarding utterances' interconnections in a given conversation or discourse). The pursued outcome of a number of *Discourse* approaches, notably within CDA, is that ordinary individuals should in the end become *analysts* in a weaker sense. There is less of such ambition in most *Utterance* approaches, although a number of works are now opening to similar objectives (Allott 2005; Blass 2005; Saussure 2005b).

In short, *Discourse* approaches tend to see discourse as having organisational properties of its own and that there are rules that allow for the description of these properties, while in *Utterance* approaches a discourse is simply a sequential production of changes in the interlocutor's beliefs, discourse being, then, a by-product of human communication, itself being basically the result of cognitive systems at work.

It has been proposed to a number of theories of discourse structures, in particular to the RST (Mann and Thompson 1980), that their rules allow for the generation of several equivalently plausible structures for a given discourse. In other words, there is, within the theory, no way to say what the *actual* structure of a text span is. That happened because not much was speculated within these theories about the fact that the specificities of given interlocutors, their knowledge, etc., are generally taken into account by a speaker in verbal communication in order to avoid many ambiguously possible interpretations. *Discourse* approaches facing these problems fail to achieve the explicative and predictive objective of deterministic theories that aim at (and restrict themselves to) identifying clear relations of causes and consequences. Mann and Thompson however did not use the word *theory* with this particular background; in a recent paper, Taboda and Mann (in press) stress how RST is a descriptive tool rather than a theory in the strongest sense, and the paper clarifies a number of issues raised by their approach. However RST is typical of approaches that rely very much on the analyst's own opinions and feelings about what role is assumed by which span of text with respect to which other (justification, explanation, elaboration, etc.); but intuitions about these functions are all but automatically generated, and therefore are all but strongly reliable without solid semantic and pragmatic grounding.

It seems however difficult to deny that the approaches targeted by these critics provide nonetheless highly valuable *heuristic* methods of investigation. They are heuristic first for the analyst who uses them and who will end up with potential findings, which must be further validated according to the methodology he considers better. Second, they are heuristic for scholars outside the theory, since the data found and the explanations suggested can be interpreted and evaluated within one's home framework. Less trivial is the fact that there is also a higher level where an approach can serve as a heuristic for other approaches of verbal communication: this is what happens when the original approach can be exploited, fine-tuned, 'translated', into the format of an approach initially working with very different concepts and still using a very different methodology. This is what happened when Lascarides and Asher (1993) founded SDRT, a standard approach in formal semantics applied to discourse ('dynamic semantics'), merging strong assumptions from Kamp's Discourse Representation Theory (DRT) (see for example Kamp and Reyle 1993) with, precisely, the convincing intuitions from Mann and Thompson lying at the basis of RST. That way, through SDRT, DRT become aware of discourse structures while RST became aware of meaning computation and representation according to formal requirements.

However, it remains that most scholars in *Discourse* theories use non-deterministic approaches and prefer to use informal heuristics rather than formal tools. For example, in mainstream *CDA*, through a number of underlying methods established on the basis of functionalism à la Halliday, the scholar looks for specific features (like stereotypes, causal transitions, participants of eventualities, etc.) with regard to the historical context of the considered text, and provides with some creativity an argumentation about the ideology underlying the considered corpus. A possible reason for preferring informal tools is that if we do not use a formal model, we are able to focus on much more complex concerns, leaving aside the complex and time-consuming details of consistent micro-analysis, which would be anyway provided intuitively to a satisfactory level of reliability. Instead of worrying about pragmatic accommodation of semantic forms, or about the semantic or pragmatic nature of existential presupposition, we can have scope over complex networks of human

negotiation, and address, through observation of discourse, things like the underlying set of assumptions of the considered discourse, its coherence, its structural effects on social matters, dismantle the way a speaker organises his speech in order to influence others, etc. On one hand, things like *meaning* need not, in such perspectives, be technically explained since meaning is an obvious and given data to deal with. On the other hand, it is no surprise that the conclusions obtained through *Discourse* approaches are qualitatively more speculative than what is obtained through formal models that do not accept an unidentified number of possible outputs for a given input, and sometimes redundant with the ones we can get from semantic and pragmatic analysis.

Most formal approaches admit (that is the case for DRT, SDRT and Ter Meulen's Discourse Aspect Trees, (Ter Meulen 1995)) that they provide a *model* of discursive reality and organization, and that they do not worry about the complexity of cognitive reality.

This position is wise in the measure in which all model-theoretic positions can be: a picture of reality is not reality but a picture; a road map has not the size of the actual land it describes (otherwise it would be of no use) but a useful – although approximate thus false – picture of that land. But this position also seems wise if we suppose, as Saussure did in his third course of general linguistics, that we do not have access to the 'boxes of the mind' (Komatsu and Harris 1993:80)[2]. In this idea, cognition is a black box and the best way to account for human natural information processing is to build an ideal model of it, no matter whether we indeed use, for example, automatic non-monotonic (default) logic, or another type of rationality (other approaches will prefer to avoid, or correct, the model-theoretic bias through a focus on 'external' observation in the line of behaviourism or through various types of non reductionist, or less reductionist standpoints). As a matter of fact, formal theories of dynamic natural language processing, in general, boil down to computational models of natural language processing. It is no surprise then that the model gets validated by appropriate coding for computer implementation. Yet such a way of modelling human understanding looks like building airplanes in order to address how birds fly. In the end, by doing so, we indeed end up with the ability to fly, while, the ornithologist, should he speak about birds for ages, will not see wings appear on his back. But it is still questionable that the airplane engineer knows anything at all about birds. And here, that the computational modeller knows anything about actual human language processing.

Yet the crucial question regarding model-theoretic is in fact the one of appropriateness to reality. A good model of communication, or discourse, is not some complex machinery which provides procedures for a computer (which is not the human mind) but a plausible representation of specific aspects of cognitive processes, i.e. procedures plausibly followed by a human mind given its cognitive properties. An abundant literature on human reasoning within cognitive psychology – notably within connectionist psycholinguistics – emphasizes the fact that human reasoning does not share much with canonical 'hard' logic (which is used in computational modelling)[3]. It is particularly visible when thinking of logical fallacies and inconsistencies, on the one hand, and the procedures that allow for a belief to be fixed in the mind, on the other hand. A computational model has therefore little chance of being the picture of human verbal communication-as-a-process that we are looking for, if taking into account that research in experimental pragmatics and philosophy of mind converges towards a non-computational rationality.

It is a widespread view in psycholinguistics that syntactic disambiguation is an *early* process: we do not need to develop far parallel competing structures before we actually start contextualization, reference assignment and other logical and propositional form construction, at least as hypotheses. We do bet, at an early stage of linguistic information processing, on a contextually relevant structure and on its likelihood to be the one intended by the speaker. In *Flying planes can be dangerous*, we try to assign straight away, 'online', a value to the expressions, one after the other, following the order in which they arrive to the pragmatic system; we do so with regard to salient contextual information. In a context where it is clear that the topic of conversation is about the possibility of making an aeroplane fly, we would get the early assumption that *Flying planes* corresponds to *making a plane fly* and not to a complex NP (planes that fly); on the contrary, if contextual features are about dangers of aeroplanes, the early preferred structure will be about planes that fly. The hypotheses that we form 'online' about the actual structure of the linguistic string as well as its meaning have two important pragmatic properties. First, they are pragmatic in the sense that they are context-dependant. Second, they are pragmatic in the sense that they have to do with rationality and beliefs: in particular, they are assumed with a certain degree of plausibility. If that degree is too low, then the hearer waits for more reliable information before he places a (new) bet. This happens when the hypothesis can not be exploited when confronted with the hearer's previous beliefs in order to make new relevant information emerge.

At a higher representational level, the literature rejects more and more the classical idea that the separation between 'what is said' and 'what is implicated' entails a timeline staging. In fact, it may well be the case that we start betting on implicatures as soon as i) we have available information on the propositional content at the level of explicatures, and ii) an implicit meaning is more obviously intended. Among scholars who would pursue this line of thought, Gibbs (1989, 2002, 2003) needs to be mentioned, as well as Carston (2002). The fact is however that we still lack a comprehensive model in order to account for the actual procedure going on at this level of semantic-pragmatic interfacing (or syntactic-pragmatic interfacing, for some scholars, see Pollock 1997 and Kempson et al. 2000).

It is in fact far more likely that we hold early beliefs about the potential intended contents, that these beliefs were awaiting further confirmation, and that such confirmation can come up from the confrontation of the various levels of representation at the same time. The 'modules' dealing with explicit and implicit information (or with different types of implicit meanings if considering unarticulated constituents as *implicatures* (Bach 1994)), need to work 'together', in parallel, under the control of some other device. When all necessary representations (logical-syntactic, semantic, pragmatic) make sense together, that is, *conform* or *are congruent* with one another, then the hearer considers that the intended meaning is found – provided there is some relevance in that meaning, that is, provided that the effort of processing information was compensated by sufficient cognitive effect (such as new information, changes in the presupposed assumptions, etc.). In Saussure (2005c), I made this claim with regard to a particular case of implicit-explicit content interdependency. This could be actually the key to another kind of *coherence* than the fuzzy notion of that name we are accustomed to.

What is assumed in such a model is i) that we make interpretive bets, ii) that these bets are about forms as well as about meanings, and iii) that they are automatically compared together until they form a unit of 'interpreted utterance' so that they can

join the contextual level (so that they can join memory). Plus: the inferences that we make in order to enrich the underspecified semantic meaning to a full meaning (including implicatures) are risky (we make early guesses based on more or less reliable information, but we may fail).

Now, much is also controversial, of course, about the very nature of what deserves to be called *explicit meaning* and about the operative criteria used to delimit this level of representations, in particular because the ordinary case of conversation implies sophisticated strategies of meaning reconstruction even in order to build up that part of meaning usually called explicit, or *what is said*. Carston (2002), in line with Relevance Theory, assumes that the explicit content is the part of meaning on which the speaker overtly communicates his commitment. Carston (2002) and Recanati (2002), following well-known examples from Perry (recalled in Perry 2000), have suggested various processes of pragmatic enrichment at the level of explicit meaning construction. For example, cases like *Paracetamol is better* (Carston 2002), with a PRO- or elliptic syntactic component, or the usual *It's raining* where 'hidden' indexicals would be recovered through a necessary enrichment procedure (Recanati 2002, Carston 2002, although Recanati now finds it controversial[4]). The kind of enrichment that goes on at the lexical level in the increasingly interesting domain of 'lexical pragmatics' (which addresses the conceptual specification of lexical items depending on contextual features and collocations, such as in *red apple* as opposed to *pink grapefruit*, or as *open* in *open a door* and *open a restaurant*), is also currently much debated.

These various processes of enrichment, going on at the levels of syntactic-logical form, explicit-propositional form and implicatures, also going on at the level of phonological-prosodic recognition, do not develop arbitrarily: they are guided, so to speak, by the wording itself, for example the choice of connectives (see Saussure 2007 for a short development on this).

All this entails that understanding is a procedure, that is, a kind of algorithm. At the level of semantic and pragmatic ambiguity, Sperber and Wilson (1997) have already convincingly argued that the mapping between the lexicon and the concepts repository is not one-to-one but one-to-many, a lexical item being therefore underspecified with regard to the actual conceptual meaning. Pragmatic meaning narrowing at the lexical level entails that pragmatic accommodation is already necessary at the level of propositional form (roughly: 'what is said'). This implies that the procedure of human language understanding uses contextual information not only to generate assumptions about implicatures (which is trivial), about the syntactic form as I suggested above, but also about the level of explicit meaning.

Many aspects, of course, need to be taken into account in this global process: the utterance can be ironical, metaphorical, etc. These aspects are built up through either extra-processing effort or direct conceptual loosening. What is more important here is that *understanding* corresponds to a metarepresentational process: we elaborate a representation of the speaker's intended meaning, which is itself a representation; some suggest there is a specific cognitive device dedicated to the task of intention and mental states recovery, the *mindreading module*, that would be also at work during natural language interpretation. This mindreading ability is directly linked to a metarepresentational ability; I guess, in fact, that it will be in the end assumed that the central notion is *metarepresentational ability*, not *mindreading ability*. But this takes

us too far away from our key issues. The next section takes us back to the notion of *discourse*, discussed with regard to this global picture of pragmatics.

4. Back to discourse

I will now try to see what can be said of discourses within this perspective. Most of all, the idea that a given discourse conveys 'more than the utterances composing it' because of the possibly implicit 'rhetorical relations' that hold between the considered segments, must be addressed. This is a crucial issue to be resolved in order to see whether cognitive pragmatics can address what scholars in discourse analysis usually call *discourse*, or not. In other words: is there a possible interface between pragmatics understood as the theory of human comprehension, and pragmatics understood as the theory of discourse? The key point to be made with regard to this general question is that *discourse* should not stand for an equivalent for *communication* despite the fact that the term 'discourse' is very often used informally as an equivalent of verbal communication. Yet communication is about (generally intended) flows of information while discourse is about ordered sets of phrases or utterances (or even thoughts). It remains that discourse can be thought of in very different ways.

First, discourses can be thought of as formally autonomous objects of study, delimited by macrostructural aspects considered from the outside, 'externally' (a book, a speech, a given conversation intuitively or materially identified as closed) and belonging to a particular type (narrative, deliberative, commentative…). Discourses can thus be addressed as autonomous objects 'internally' determined: a discourse is a span of utterances that obeys structural parameters, such as *coherence / cohesion*, or has an autonomous semantic structure, with a homogeneous domain of reference, within a particular type imposing formal features (it is a commonplace, for example, to recall that many approaches would rigidly assume, for example, that temporal and spatial indexicals are theoretically incompatible with fictious past narratives). A discourse can also be seen as a set of organised representations held within a cultural community, appearing in specific texts. This is assumed for instance for both postmodernist continental approaches (Foucault or Bourdieu would assume something like this) and 'dialogism', the trend initiated by Bakhtin (see for example Bakhtin 1981), for whom any given text or conversation 'polyphonically' evokes and echoes dialectically other texts and conversations. I will not comment on these interesting but barely operative intuitions here (on polyphony vs. metarepresentation, see Saussure to appear).

Second, as discussed in this paper's introduction, discourses can be tackled as *meaningful* units, where 'meaningful' means their 'corresponding to a speaker's intention to pass on a given message' and therefore implies, for the interpreter, speculations not only on the local meaning of individual sentences, but also on the global meaning of some given span of speech or text; local and global meanings are in fact local and global *intentions* to bring manifestness to particular assumptions held by the speaker (for local and global intentions, see Reboul and Moeschler 1998).

Whatever the best definition of discourse may be in the end, the central issue in its study is, in my view, the following: by studying the abstract structure of discourses, their types, their internal organisation, will we better understand human communication? Opinions regarding this point diverge, but it is easy to notice that discourses, if they are not seen as a by-product of semantic and pragmatic understanding procedures, are abstract objects, which have little relation to what

actually happens during the communicative action. Let me briefly elaborate on this point.

Looking at the relations that utterances bear with one another within a given span of text or of conversation, it is commonplace to assume that the content of this span is richer than the contents of the utterances it contains. This magical result, where the set ends up being quantitatively more than its exhaustive parts, was and still is one of the main arguments used to justify the need for a linguistics that escapes from the limits imposed by the syntactic-semantic structures and finds out more about global structures of meanings. It is sometimes believed that the contribution of linguistics to discourse studies is to be found – if any at all – in the fact that linguists are well equipped to address larger items than simple clauses, for example discourses obeying rules of *macrosyntax*, whatever they are exactly. Certainly, discourses do bear structures, since they are not elaborated randomly or arbitrarily. Now the question is: what causes these structures to appear? Many scholars assume that the individuals are engaged, when exposed to a discourse, in 'discursive' mental operations of coherence-tracking, of recovery of organisational properties, or identification of the discourse type. In this line of thought, there would therefore be specific 'discursive operations' taking place when interpreting more-than-one-utterance segments, which should entail that the hearer / reader has something like 'discursive competence', just like he/she has a linguistic competence. This view is reflected by the idea sometimes put forward that the 'syntax' of discourses is broken when there is no verbalized connection between two constituents; the fact that the interpreter is able to provide a connecting information to fill this missing slot can then be taken as evidence for this 'discursive' competence.

This global view entails a division of the interpretive tasks: the hearer, on one side, interprets single utterances – or speech acts –, and on the other side, processes these utterances and acts with regard to their discursive function, with some awareness of what a discourse formally is. Although this makes sense intuitively, I want to stress that as a matter of fact the hearer / reader can spontaneously form hypotheses regarding the meaning of a discourse, but he/she does not naturally end-up with hypotheses regarding the structure of the discourse. 'Discursive structures' could therefore be seen as an artefact elaborated by the analyst. But an alternative approach is to say that discourse structures do actually exist, but that they are the *result* of meaning construction, thus of interpretation, as I will now argue; only the *meaning* level is easily accessible to a hearer/reader's consciousness, while the *structure* of discourse appears only with cautious analysis. Recovery of discourse structures is not a spontaneous and automatic cognitive operation; conversely, meaning recovery is. This is why 'utterance understanding' links back to the speaking subject's rather reliable intuitions, while 'discourse structures' or 'rhetorical functions of text spans' does not, thus the several equivalently possible analyses provided by theories such as RST or Roulet's 'modular' approach (to take the example of a trend mostly known in the French-speaking area). Nonetheless, studying discourse structures can be the key to backtrack the main problem, that is, how meaningful information is recovered through related utterances.

Yet I take it for granted that rhetorical relations, or discursive connections, which are the cement of discourses, and which are the key to most utterance interpretations, are not at all independent from the construction of the meaning of single utterances. In fact, any discourse semanticist, any pragmaticist interested in utterance meaning, would argue that these relations must be viewed as a result of pragmatic processing:

the hearer seeks to link the currently processed utterance to other representations in order to make the most of it; these other representations come typically – but not always – from the previously achieved processing of past utterances; they can be previously verbalized representations, or representations that have to do with other contextual assumptions. In other words, the linguistic context is just a part of a global context; representations that arise from the linguistic context have however specific properties as inferential premises since they were intended by the speaker while contextual representations in a broader sense can be used as inferential premises only more or less speculatively.

Connections are realized between representations coming from elements of the current utterance and representations previously obtained from past utterances. It is intuitively sound that these connections, usually called *rhetorical relations*, such as *justification, cause, result, explanation, elaboration* or whatever it may be, are a type of cognitive information, and as such there is no other way than to see them as springing out from (pragmatic) cognitive processing. They are therefore achieved bottom-up, they are not predictable from general rules of discourse organisation (but they are of course *constrained* by unconsciously known conventions of conversation and discourse, which is another matter). A text is, in this perspective, an empirical document for these relations.

Therefore, current models of Gricean and post-Gricean pragmatics, as well as models in dynamic semantics, simply do not need to ascribe discursive functions to utterances: they would rather consider that these functions are about communication as a dynamic process. Discourse structure studies, in the end, should boil down to full utterance interpretation studies, since they are by-products of individual utterances' meaning attribution, which is always considered with regard to the context, which in turn contains a number of salient previously verbalized propositions. This implies that 'coherence', as an intuitive notion, is in turn a by-product of interpretation: an utterance U1 within a given discourse has the function of preparing the appropriate contextualization of the next utterance U2; the function of U1 is to be easily combined as a contextual premise with U2. It is simple to see that if a set of representations coming from the previous utterances correspond to, say, (P & Q), and that the current utterance U corresponds to a proposition presented as implied by (P & Q), (P & Q) count as a contextual premise for the conclusion U; there is nothing here that can not be explained through online utterance processing, including the argumentative structure. Here, the full-fledged meaning M derived from U corresponds to something like this:

$$M = U \ \& \ [(P \ \& \ Q) \rightarrow U]$$

which is a structure bearing not only the relevance of U with regard to the premises, but also satisfies the intuition of coherence.

Again, this does not imply that there is nothing like discourse structures, nor that it would be meaningless to study discourse structures according to the analysts' intuitions. Certainly, some pragmaticists would say, elaborating on Blakemore's claim that communication should not be studied in relation to the notion of discourse, that discourse structures are simply irrelevant. But this is far too abrupt. When considering argumentation in particular, it is clear that only discourse structures can help us understand the role of utterance sequence production with regard to things like belief-acquisition / inculcation. Studying discourse as bearing structures of functional items thus means tracing back to the cognitive operations that are driven by a typical

sequence of types of utterances. That way, discourse studies combine, or interface potentially well with semantic-pragmatic analysis. And when it comes to generalization, discourse structure studies are technically allowing for tracing back possible interpretations, and therefore tracing back potential belief inculcation and other changes of the cognitive environment of the hearer/reader (reason for which many discourse approaches focus on discourses with a generic audience like media and political discourses, with a concern on how discourses are produced, rather than interpreted).

However, since communication is an ongoing 'online' process, it is better explained by a procedural modelling of information processing with regard to contextual features. But whatever the ultimate solution to the problem of discourse meaning ends up being, for semanticists and pragmaticists of the post-Gricean tradition, it is clear that the meaning of a given discourse is equivalent to the meaning of the last utterance of the considered discourse along with the consequently triggered changes in one' cognitive environment, that is, beliefs and mental states in general. This is expectable from these approaches since they consider discourses as processes unfolding though time.

Communication, in this view, is a process of continuous hypotheses formation, validation and refutation, with comparison to background assumptions and to other contextual features, including previous discourse. I claimed earlier that this ongoing process already takes place at all levels of *logical form*, *propositional form* and *implicatures*. At this stage, it became important to evaluate whether things like 'discursive representations' were relevant or not for pragmatics. Assuming that all these hypotheses are, in fact, hypotheses about the speaker's representations (conscious or non conscious, actual or mistakenly speculated by the hearer/reader), in particular about the speaker's intentions, it makes definite sense that pragmatics can indeed worry about global intentionality, even if this is not clearly acknowledged in a number of radical traditions of pragmatics.

4. Conclusions

A discourse is an ordered set of representations which are outputs of the interpretive process: a set of representations corresponding to various intentions of the speaker. What remains to be clearly explored within neo- and post-Gricean pragmatics is the fact that discourses convey a series of hierarchized components. But this hierarchy can not be adequately tackled through rhetorical relations, although they can help in reconstructing it. The hierarchy of information conveyed by a discourse is the result of a very pragmatic process, and finding out about this hierarchy is probably not the work of linguists themselves but rather that of communication scientists and psychologists, who help us see which information is extracted and considered as more relevant by the hearers. In a recent study (Rubinelli et al. forthcoming) we discovered with some surprise that a panel of people exposed to an advert for a medicine, when afterwards asked about the key elements in the advert's text, tended to mention elements that were only implicitly communicated, sometimes far remote from the literality of the text. The hierarchy of information, in such a case, would have been predicted by rhetorical relations very differently than what actually happens in message reception; we assumed on the contrary that this hierarchy of information, or salience of interpreted elements, was the result of a pragmatic cognitive process where completely extra-discursive notions played a crucial role, such as beliefs about what is

importantly communicated by the writer and what is not, the hearer's own concerns, etc.

If this is correct, then rather important consequences follow about discourse analysis proper. Namely, taking into account recent research on the complex borderline between explicitness and implicitness should definitely help discourse analysis to enhance its capacity to provide substantial stories about the object – discourse – they tackle. In particular, addressing these issues with a substantial awareness in the research pursued in the field of pragmatics and cognition, I am sure, is the necessary ground for the necessary turn in discourse studies (see also Chilton 2005 on this). Until now, it made sense to wonder what kind of content, for example ideological, is embedded in a given discourse. However, this made sense insofar as one had no idea how information is actually processed, a problem upon which much relies as far as belief change is concerned. Now that the research on pragmatic psycholinguistics is undergoing a (notably technical) revolution (although it is still considerably speculative, opposing materialistic attitudes to neo-behaviourism, opposing internal and external models), cognitive processes of understanding and of belief acquisition on the basis of discursive, linguistic, forms, can not be eluded.

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[1] Carston, personal communication; Blakemore (2002).

[2] Saussure says in his 'third course' : 'About the boxes inside our mind, we can't explore them' (Komatsu and Harris 1993: 80, translation mine).

[3] I refer here to Noveck and Sperber (2004), and, in psycholinguistics proper, to MacDonald et al. (1994), Trueswell and Tanenhaus (1994), Labelle (2001), Faust and Gernsbacher (1996) and the numerous works of Gibbs, to name a few. Their position does not entail, though, that computers can not *model* how the mind works, of course; they presuppose however the difference of actual human processing with computer processing.

[4] Personal communication, Nov. 2005. See Recanati (in progress), "It is raining somewhere".

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