

Relevance-theoretical *versus* pragmatic and cognitive approaches to coherence

A survey*

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Discourse coherence can be approached as one of the variables that allow both the writer and the reader to cope with the meaning of texts. It will be hypothesised that this is possible because coherence integrates both cognitive and textual aspects. In fact, most of contemporary linguistic and pragmatic theories have laid emphasis on the need to go beyond the sentence and enter into the realms of text and discourse so as to grasp meaning. Hence, meaning results from an ongoing process of negotiation among language users. An important consequence of this is the need to approach discourse formation and comprehension as a cognitive process, which in turn entails that the notion of *coherence*, as the key defining trait of discourse and of texture, must also be cognitively grounded. It is for this reason that a cognitive approach to interpersonal communication, like the one supplied by relevance theory, appears to be in a position to provide suitable proposals for the explanation of the production, processing and interpretation of discourse. This paper will therefore aim to examine critically the proposals on coherence contributed in the framework of relevance theory and assess them in relation with other discourse and cognitive approaches. Its main underlying contention is that these proposals are best understood as complementary rather than mutually excluding.

Keywords: discourse analysis, discourse and language, discourse coherence, relevance theory, negotiation of meaning in discourse

1. Introduction

According to Angela Downing (2001), the shift towards a more cognitive orientation to coherence has become recurrent in the most recent approaches to the analysis of discourse. This coincides with the turn of interest from the text as a structure to the language *user*, as well as with a corresponding view of meaning

as the result of a process of *negotiation* between addressers and addressees, both in written and in oral texts. As Gernsbacher & Givón express it in a quite graphic way, “coherence emerges not in the text, but in two collaborating minds” (1995, p. viii, *apud* Downing, 2001, p. 58). As a result, coherence is best approached as a scalar notion, in terms of processes, rather than products, and which is negotiated and continually checked by both the speaker or writer and the addressee (Bublitz, 1999). Similar claims are held by authors such as Károly (1998).

In contrast, Blakemore (2001) has referred to a much sharper contrast between functional and cognitive approaches to discourse coherence, so that, in her view, the former describe discourse as external and independent of the human mind. Besides, she claims that relevance approaches are, rather, geared to accounting for discourse understanding.

Thus, the present paper will set out to assess the claim that approaches to text may be seen as a *continuum* from more language-based proposals to more psychological or cognitive-grounded perspectives. As our main working hypothesis, then, we shall argue that the so-called “discourse and pragmatic approaches”, on the one hand, and the “cognitive approaches” to coherence, on the other hand, are best approached as *complementary*. Besides, we would rather tend to think that the so-called “discourse and pragmatic approaches” must have regarded coherence as both discourse and also cognitive-oriented. Indeed, in our view, it cannot be missed that already in the general framework of his model of a functional grammar, Halliday (1994) — as representative of one of the earliest discourse approaches to coherence that will be analysed here — distinguishes three basic metafunctions — namely, the ideational, interpersonal and textual — as the fundamental components of meaning. Since the three of them are closely interrelated, and also since cohesion and coherence are involved in text and discourse, we can expect them to be also cognitively-oriented.

Another assumption that we take as a starting point is that there has not been a unique, homogeneous definition or approach to coherence so far, a fact acknowledged by scholars such as Bublitz (1999). This is so despite the increasing interest aroused regarding this notion, in contrast to initial studies in text and discourse linguistics, which had tended to focus rather on cohesion, and which had even seen in coherence a rather complex or even fuzzy notion, as Sinclair (1991) had regretted. For this reason, we will rather tend to analyse some of the main proposals made regarding coherence.

Taking into account such views, this paper seeks to explore the way how these approaches have focused upon coherence as a basic feature of discourse. Accordingly, the discussion will be structured as follows. First, we shall deal with the relevance-theoretical views on coherence: no matter if the model is defined as an ostensive-inferential approach to communication, yet it seems to neglect the role

of coherence in discourse, by subsuming it under the all-embracing notion of relevance. Then, this orientation will be contrasted to other textual and cognitive approaches, so as to explore their main similarities and differences, and therefore assess their existing claims.

2. The relevance-theoretical approach to coherence

The question of discourse coherence was scarcely dealt with by Sperber & Wilson (1986/95) in the keystone work of this theoretical model, except for a footnote, which expressed the subservience of the notion of coherence under relevance: "... it can be shown that cohesion and coherence are derivative categories, ultimately derivable from relevance" (Sperber & Wilson, 1986/95, p.289, footnote 19). Not only is coherence seen as derivable from relevance, but its role as an inherent feature of texts is also denied (Jucker, 1995).

Yet, the fact is that Sperber & Wilson do not approach discourse at all in *Relevance*, even though, on the one hand, the model aims to account for communication and, on the other hand, it is generally agreed that the latter takes place within discourse. It is also significant to note that all relevance theoreticians point at *context* as a central aspect both of communication as well as of their model, as can be seen in works such as Wilson (1994), Blakemore (1987, 1992, 2002), or the different outlines of the theory, such as Sperber & Wilson (1987), or Wilson & Sperber (2004), to name just a few.

As is well known, relevance is understood within this framework as a balance between the processing efforts expended and the effects to be achieved. In the second, revised version of the theory, Sperber & Wilson (1995) referred to two different *principles of relevance*, termed as the *cognitive* and the *communicative* principle of relevance, respectively. The First (or Cognitive) Principle of Relevance reads as follows: "Human communication tends to be geared to the maximisation of relevance". The Second (or Communicative) Principle of Relevance states: "Every act of ostensive communication communicates a presumption of its own optimal relevance" (Sperber & Wilson, 1995, p.260). These will be applied to the study of coherence in a subsequent version. As will be further analysed later on in the present paper, both will lie at the core of the proposals on discourse coherence put forward by Wilson (1998) in the debate on coherence and relevance held between Rachel Giora (1997, 1998) and Deirdre Wilson herself.

It can be noted that the difference between these two *principles of relevance* lies on a twofold basis: first, which aspect of the two components that constitute it, namely, cognition or communication, is emphasised. The second aspect establishes a very subtle difference between *maximal relevance* and *optimal relevance*.

We shall see in the present paper that the distinction between the two principles and their subsequent implications has proved to be crucial for the understanding of discourse coherence within this theoretical framework.

As for *maximal relevance*, or what is called the *maximisation of relevance*, it is connected to its cognitive aspect, since Sperber & Wilson (1995) claim that it is human cognition that is geared to the maximisation of relevance, and thus, tends to make the most, that is, to achieve the maximal possible effects with a view to being most *efficient*.¹ Moreover, for Sperber and Wilson the main purpose of the maximisation of relevance is to guide and contribute to the success of human interaction by making the communicative behaviours of participants predictable enough.

In contrast, *optimal relevance*, which is also introduced by Sperber & Wilson (1995),² is defined by Carston & Uchida (1998) as follows:

OPTIMAL RELEVANCE: a property that an utterance (or other **ostensive stimulus**) has, on a given interpretation, when (a) it has enough **contextual (or cognitive effects)** to be worth the hearer's attention, and (b) it puts the hearer to no gratuitous **processing effort** in achieving those effects.
(Carston & Uchida, 1998, p.298, bold type as in the original).

It appears, therefore, that the distinction between *optimal* and *maximal relevance* may be seen in terms of a gradation ranging from sufficient to maximal possible cognitive and contextual effects. This springs as a result of the relativity that characterises relevance itself, which, as is well known, is defined both in classificatory and comparative terms.

Next, we shall aim to provide a synthesis of the state of the art of the aspects on coherence that have been focused upon within the relevance-theoretical framework. These will be related to the following aspects: first, the relationship between coherence and relevance, in particular, as connected with the similarities and differences between the two — both as concepts and as theoretical approaches — and also with the problems or shortcomings of discourse approaches to coherence, as put forward by relevance theoreticians; second, the types of coherence that are distinguished, as well as the implications of such a taxonomy; third, the relevance-theoretical approach to discourse; and fourth, the views that can be adopted on discourse connectives.

2.1 The relationship between coherence and relevance. Shortcomings of discourse approaches to coherence, for relevance theoreticians

Relevance is proposed — by authors such as Wilson & Sperber (2004), Blakemore (1987, 1992), Sperber & Wilson (1987, 1995), among others — as a theory that

seeks to account for communication, more specifically, that modality which is characterised as being *ostensive* and *inferential*. This means that it is assumed that the speaker aims to convey her *informative* and *communicative intentions*,³ so that the addressee may reach or derive them inferentially in a certain *context*.

As a starting point, let us assume that communication generally takes place within *discourse*, a principle generally introduced by discourse analysts and text linguists and widely accepted nowadays. However, discourse is somehow overlooked by Sperber & Wilson (1995), and most of the analyses carried out within this model do not seem to go beyond the level of the proposition. Earlier versions of the formulation of relevance by Wilson & Sperber (1981), however, had pointed at relevance as a relationship between propositions, so that there seemed to be ground for coherence: “Relevance is a relation between the proposition expressed by an utterance, on the one hand, and the set of propositions in the hearer’s accessible memory on the other” (1981, p. 169). Even authors such as Werth (1984) had concluded that, seen in this way, coherence and relevance might have been approached as equivalent concepts.

Likewise, it is also interesting to note that there is a clear connection between, on the one hand, the formulation of the principle of relevance — by Sperber & Wilson, as the central concept of the model —, and on the other hand, the notions of *effectiveness* and *efficiency*, defined by Beaugrande & Dressler (1981) as two of the *regulative principles of discourse*:⁴

The EFFICIENCY of a text depends on its use in communicating with a *minimum expenditure of effort* by the participants. The EFFECTIVENESS of a text depends on its leaving a strong impression and creating favourable conditions for attaining a goal.

(Beaugrande & Dressler, 1981, p. 11, my italics).

The comparative definition of relevance, formulated in an extent-conditions format, reads as follows:

– **RELEVANCE**

Extent condition 1: An assumption is relevant in a context to the extent that its contextual effects in this context are large.

– *Extent condition 2:* An assumption is relevant in a context to the extent that the effort required it in this context is small.

(Sperber & Wilson, 1995, p. 125)

These quotations illustrate that Beaugrande & Dressler’s notion of *efficiency* takes into account the processing efforts demanded on communication participants to cope with the meaning of a text. Therefore, the notion of relevance as understood by Sperber & Wilson shows interesting similarities with it. Nevertheless, no matter how important the connection between both notions seems to be, in the earliest

stages of the development of relevance theory, no importance was paid to this, which might have contributed to the development of an approach to discourse. Perhaps not quite by chance there have been proposals within the relevance-theoretical framework (Gutt, 1998) that have tended to stress the role of *effect* over that of *effort* so as to characterise the notion of relevance itself.

Within relevance theory, the preliminary work done on discourse and some of its defining aspects such as *coherence* is mainly due to other authors, most importantly, Blakemore (1987, 1988) or Blass (1986, 1990, 1993). Blakemore sets out to establish a relevance-theoretical approach to coherence on the basis of the *proposition*, defined as “a structured string of concepts” (1987, p.55).⁵ In this way, she continues the somehow incomplete proposals made by Sperber & Wilson (1995), and approaches discourse exclusively from the perspective of a kind of *bottom-up* process: that is to say, she explores how a set of utterances make up discourse. Jucker (1993, 1995) proposes the existence of a *condition for relational coherence*, which accounts for the fact that a given utterance provides an optimal context for the interpretation of the following ones, as long as discourse is coherent. There are different degrees of relational coherence, which Jucker also associates with topic: “If the relational coherence between any two utterances is strong, we are still within the same topic” (1995, p.73). Despite the overall trend within relevance theory, Jucker (1995) admits that an understanding of discourse coherence enables the understanding of discourse structure. In fact, for Jucker, relevance can explain — but not necessarily substitute for — discourse coherence in the process of utterance interpretation. Jucker also points at the existence of a *coherence constraint*, which could be understood in a similar manner to *semantic constraints on relevance*, in the sense that they provide the communicator and her audience with evidence on the way a definite utterance — or text — is intended by the speaker to be interpreted. The *coherence constraint* is defined by Jucker as follows: “Without evidence to the contrary, (...) an addressee will always try to interpret an utterance on the background of the previous utterance. I call this the coherence constraint” (1995, p.74).

A connection between *cohesion*, *coherence* and *relevance* is established by Blakemore (1987), just on the same grounds as Sperber & Wilson (1995): “... An account of the contribution of linguistic form to the interpretation of discourse is grounded in an account of coherence which is itself grounded in an account of relevance” (1987, p.148, footnote 1). For Blakemore, even though most existing accounts of discourse coherence see it as a fundamental element of the unity of texts — and, therefore, of what makes texts be such unities —, yet there are discrepancies about the source upon which such unity relies. Thus, in her view, former approaches to coherence contain certain *problems*, among which the following stand out: first, the lack of a psychologically grounded explanation of the principles of

discourse organisation and processing; second, the ways in which the attempt to establish coherence relations is influenced by the addressee's choice of context; third, the fact that coherence cannot be limited to the establishment of a finite list or taxonomy of relations, but which nevertheless must include those factors that influence or even constrain the speaker's choice of certain utterances; or fourth, the underspecified connection between coherence and the topic of discourse.

Similarly, Blass (1986, 1990, 1993) argues that coherence relations are neither necessary nor sufficient for comprehension. As Blakemore (1987), she claims that coherence cannot be restricted to the establishment of certain relations between utterances. On the contrary, coherence springs as a result of the establishment of relevance relations between text and context: "(...) Connectivity among utterances in a discourse arises merely as a by-product of establishing relevance connections between text and context" (1993, p.95). In our view, this means that coherence is a relationship between the text and the state of affairs pointed at or referred to by it, in so far as it is intended to be communicated by the speaker. Blass points at the *pragmatic* nature of discourse, which is therefore neither merely a grammatical nor a semantic unit: "the main requirement in utterance interpretation is not just to choose any arbitrary context, but to identify the intended one" (1993, p.95).

The main differences between coherence and relevance — according to the upholders of the latter theory — are firstly tackled with by Blakemore (1987). For her, to begin with, whereas *coherence* is a relationship between linguistic units, — namely, utterances or discourse segments —, *relevance* is established between propositions. *Context* stands for the second aspect in relation to which Blakemore contrasts coherence and relevance, so that for her, whereas for coherence approaches it is limited to the linguistic context of discourse, it is only relevance approaches that view context in cognitive terms, as a set of assumptions entertained by a cognitive device and stored up in its memory. Thirdly, and on the basis of the conclusions reached in the analysis of conjoined utterances, Blakemore notes that any coherent discourse is characterised by the existence of connections springing from the way in which information reached at by the interpretation of a definite discourse segment is used for the processing and establishment of the propositional content of the following one.

Within Sperber and Wilson's theoretical framework, it is assumed that the principle of relevance governs discourse, as one more aspect of communication. The theory goes so far as to claim itself to be "the only possibility of a genuinely explanatory account" of discourse (Blass, 1990, p.1), since it may shed light on the universal mechanisms of discourse comprehension, in contrast to ethnographic approaches, which tend to emphasise what is culturally and linguistically specific. Such claims are probably based on their belief that human communication is a relevance-oriented activity (Sperber & Wilson, 1995; Wilson, 1999). In connection

with this, Wilson (1999) has drawn an overall distinction on the possible ways in which the notion of relevance has been approached within pragmatic theories, which will have consequences for the consideration of coherence within such approaches. In her view, relevance has been related to either of two main aspects: on the one hand, to notions of *topic*, interest or concern, by authors such as Giora (1985ab), Reinhart (1981) or Strawson (1964); on the other hand, to the concept of *required information*, by authors such as Horn (1984). Relevance theory does not rely upon such notions as topic or interest, but also rejects the approach taken by Horn (1984), since the latter's *R-principle*, "Do not make your contribution more informative than required", comes in a similar line of development to Grice's prescriptive approach based upon certain maxims.

In this sense, we shall focus next upon those approaches which, like Giora (1985ab) have drawn certain connections between relevance and coherence. For instance, Reinhart (1980, 1981) claims that *consistency*, *cohesion* and *relevance* stand for the three main requirements to be fulfilled by any coherent text. Yet, a necessary connection between cohesion and coherence has been questioned by authors such as Bublitz (1989, 1994, 1998, 2006) or Giora (1985ab). Thus, Giora (1985a) argues that cohesion is to be seen, rather, as a by-product of coherence, whose main function is to provide the addressee with guidance when coping with the meaning of the text. Such an approach seems to be congruent with the overall definition of discourse markers as constraints on relevance. She also notes that there is a tendency to regard as coherent those sentences that are about the same topic.

Giora's views on discourse also confront the relevance-theoretical approach to the role of *linear coherence*, an aspect which she rejects, in contrast to the relevance-theoretical analysis of *conjoined utterances*. Thus, she argues, "My claim is that linear coherence between adjacent sentences cannot be considered a sufficient condition for the well-formedness of a text" (1985b, p. 17). Consequently, the scope of coherence is discourse as a whole, and not just intersentential relations.

On the basis of such assumptions, Giora points at a *relevance requirement*, which, in contrast to the concept proposed by Sperber & Wilson (1995), is connected with discourse, and more concretely, with a *discourse topic*. In her view, there is a close relationship between coherence and discourse topic: "Utterances in an appropriate text which can be interpreted as predicating something about a (discourse) topic are conceived of as coherent" (1985a, p. 705). This further entails that a necessary distinction has to be made between *sentence topics* and *discourse topics*, so that whereas the former cannot account for the coherence of a discourse, yet there is a connection between discourse topic and coherence. Van Dijk (1976) had already pointed at a contrast between *sentence topics* and *discourse topics*, in the sense that sentence topics may be formulated in terms of NPs, while *discourse topics* are to be formulated in terms of propositions.

The approach taken by Giora (1985ab) to the connection established between discourse topic and coherence can be related to the relevance-theoretical approach to the *encyclopaedic entries* of a concept: that is, just as the latter provide communicators and addressees with an efficient and economical way to store and access information, in turn, *discourse topics* for Giora allow the addressee to store those propositions that are connected with such discourse topics and the states of affairs pointed at by them. Besides, on the basis of Stalnaker's (1978) notion of *context sets* — which concern the presuppositions accepted to be true by both speaker and addressee at a certain point of discourse —, Giora concludes that topics instruct the reader on how to construct a context set. Accordingly, there is a further connection between this theoretical approach and relevance, in the sense that the two view context as a cognitive entity which is constructed in the ongoing process of meaning negotiation within any communicative interchange. She goes as far as to conclude that discourse topics may be viewed as “the organizing principle of a context set of a text” (1985b, p. 20). Besides, for Giora, for discourse topic to be associated with discourse coherence, it is necessary that it be formulated in terms of a proposition.

In contrast, within the relevance-theoretical framework, the tendency has been to neglect or undermine the connection between topic and coherence. Thus, Blass (1990) claims that coherence in discourse does not depend on aspects such as *topic continuity* as the example referred to by her shows:

- A: What did Susan say?
 B: You've dropped your purse.
 (Blass, 1990, p. 73)

The above may admit two possible interpretations: either the message uttered by B is what Susan actually said, or what she points out does not really answer her interlocutor's question, but all the same she finds it relevant enough to have the sufficient contextual effects. In other words, in the latter interpretation the relevance of the proposition uttered surpasses that of the information being initially requested. In this way, the pair breaks topic continuity — which would be a requirement for the coherence of discourse for some authors —, but still is relevant enough. Instances such as this lead Blass to claim that coherence is subservient to relevance. In any case, it is neither sentence structure nor coherence that makes an interaction meaningful, but it is the relevance it has in a certain context: “... context has a crucial effect on the way utterances are understood, and it may not be possible to see the connection between one remark and another without considering the context in which they are processed” (1990, p. 77). Thus, in discourse, apart from the relevance of an utterance in its own right, how far it contributes to the relevance of later stretches of discourse has to be considered.

In contrast, the approach to relevance taken by Giora is closely connected with the notion of discourse topic, so that the *relevance requirement* is enunciated by Giora as follows: “I take a set of propositions to meet the *relevance requirement* if all the propositions in the set can be interpreted as being about a certain discourse topic” (1985a, p. 705, my italics). The Discourse Topic can then be compared with a *prototype* or most representative member of a definite category.

Later on (Giora, 1988), this *Relevance Requirement* is seen as complementary to an *Informativeness Condition*: thus, whereas the Relevance Requirement has been applied to the discourse topic as the minimal informative constituent, the Informativeness Condition is gradually applied to every text unit until the most informative message is reached. Besides, *informativeness* can be approached as a hierarchy governed by different degrees of accessibility to concepts and which ranges from the least to the most informative member in a specific category. Again, this may be illustrated by *prototypes* and their connections with other members of the category: thus, Giora (1985c, 1988) contends that texts are likewise hierarchically organised, in a manner not different from prototypes and the more marginal members of a definite category. Giora (1988) claims as well that *informativeness* understood in this way is equivalent to the notion of relevance postulated by Sperber & Wilson (1995). For Giora, this amounts to assuming that the greater the number of contextual implications — hence, the more relevant a message, in the relevance-theoretical framework —, the more informative it will be.

On the whole, according to Giora (1988, 1996) for a certain discourse to be coherent, three conditions are to be fulfilled: first, to conform to the Relevance Requirement; in the second place, to the Graded Informativeness Condition. In sum, the former stipulates that all the propositions of any given discourse are conceived of as related to a discourse topic proposition; the latter requires that each proposition should be more informative than those preceding it in relation to the discourse topic. Besides, and as the third condition, any deviations from these two requirements should be indicated by an *explicit marker*. As a result, any coherent text, by having fulfilled all three conditions, will be easiest to process.

A correlation is then sought by Giora (1988) between amount of information or informativeness and text ordering, which in her view has implications for coherence: this is so in the sense that a coherent text tends to proceed from the least informative or most redundant message to the most informative one. Therefore, a coherent text would likewise conform to the Graded Informativeness Requirement, referred to above. It may also be noted that a correspondence may be drawn between the concept of informativeness as a scalar notion, on the one hand, and the conceptual or cognitive notion of *accessibility*, on the other hand, the latter explicitly contemplated in the model devised by Sperber & Wilson as follows:

ACCESSIBILITY (OF AN ASSUMPTION): the ease or difficulty with which an assumption can be retrieved (from memory) or constructed (on the basis of clues in the stimulus currently being processed); accessibility is a matter of degree and is in a constant state of flux depending on, among other things, what is occupying attention at any given moment.

(Carston & Uchida, 1988, p. 295)

Giora's Graded Informativeness Requirement also implies that, in her model, relevance explicates coherence: a coherent text must satisfy both the relevance requirement and also the requirement for consistency (as put forward by Reinhart, 1980), according to which each sentence must be consistent with previous ones, so that all can be true in the same state of affairs. Therefore, coherence is seen by Giora as being a derivative notion and a result of relevance, even though her notion of relevance is different from the one adopted by Sperber & Wilson. Indeed, she goes as far as to claim that relevance is a necessary condition for coherence: "Relevance constitutes a necessary condition for text coherence" (1985b, p. 23). That is to say, if a text is not relevant, and has therefore no underlying topic, it will by no means be coherent. Similar views had been manifested by Manor (1982): relevance is applied to two propositions, which are then relevant to each other if they share the same topic. In contrast, for Van Dijk (1979), relevance and coherence have a different nature altogether: thus, whereas coherence is a property of discourse, the notion of relevance is connected with the contrast between foreground and background information.

Next, we shall reexamine all the tenets put forward within the relevance-theoretical framework. Our focus will be the contrast of these claims with some of the most significant discourse and cognitive approaches. Our aim in doing so is to test how far these critical issues can be verified, and also to explore the main similarities and differences of the relevance theoretical perspective on coherence with both discourse and cognitive approaches.

In accordance with the series of critical issues raised by relevance theoreticians, the discussion will initially be structured as follows: first, the ways how coherence and cognitive approaches have focused upon discourse organisation and processing; second, the relevance-theoretical approach to context will be contrasted against the ways in which other, both discourse and cognitive, perspectives have analysed the relationship between coherence and context; and third, the claim that coherence theories have been limited to the consideration of coherence as a finite list or taxonomy of relations will be assessed.

2.1.1 *Discourse organisation and processing in discourse analysis and cognitive approaches*

These will be analysed next with a view to testing the relevance theoretical claim that these theories lack a psychologically grounded explanation of the principles of discourse organisation and processing. A more detailed account of both discourse and cognitive theories will be undertaken in Sections 3 and 4 of the paper, respectively.

In our view, so far, the only existing proposals from the standpoint of relevance theory on discourse as such that have aimed to be comprehensive have been provided by Blass (1986, 1990, 1993). Like Sperber & Wilson (1995) or Blakemore (1987), Blass assumes that “relevance governs discourse” (1990, p.1) as a basic, underlying thesis. Her analysis has sought to answer a twofold question with regard to discourse: first, the extent to which coherence relations are semantically encoded; and second, the role of context in the speaker’s choice of a definite coherence relation. In her view, context plays a much greater role than that assumed by traditional discourse theories. It is not restricted to the filling of the gaps of that implicit information that has to be recovered from context by the addressee. For her, traditional theories fail to account for initial sentences and one-clause utterances, in so far as these do not rely on cohesive ties.

The distinction between *text* and *discourse* is drawn by Blass in the following terms: whereas *text* refers to the explicit manifestation of discourse — and is therefore purely linguistic or formal — *discourse* stands for a more general term, which refers to all acts of verbal communication and which, therefore, has both linguistic and non-linguistic properties.

In a more recent work, *Relevance and Linguistic Meaning: The Semantics and Pragmatics of Discourse Markers*, Blakemore (2002) claims that coherence, as a property of discourse, can be reanalysed within this theoretical framework. With such a purpose in mind, the similarities and differences between coherence and relevance based approaches are dealt with. In Blakemore’s view (2002), many among the existing proposals on discourse dwell with it following the patterns applied to the sentence, and apart from this, their main weakness seems to lie in their approaching discourse in terms exclusively based upon the code. These liabilities would be present even in the work of the earliest studies of text, as for instance Halliday & Hasan (1976).

It may be remembered that the relevance-theoretical approach establishes a crucial distinction between two different systems when accounting for communication, namely the so-called *code* and *inferential* models, respectively. The former corresponds to the traditional account, which explains communication as the addressee’s decoding of the message encoded by the speaker and transmitted through a code. In Sperber & Wilson’s view, manifested in their work *Relevance. Communi-*

ation and Cognition (1995), such an explanation falls short to cover the speaker's intentions and the inferential processes that must have been entertained by the addressee so as to recover them. In the case of coherence, as is traditionally explained, text and discourse are analysed as structures made up by sentences. Following Schiffrin (1994), this would be the most defining trait of formalist approaches.

2.1.2 *Relationship between coherence and context in discourse and cognitive approaches*⁶

In connection with this, we aim to analyse the views on context that have been put forward by discourse and cognitive approaches. This is done with the purpose of examining whether in these approaches the establishment of coherence relations is influenced by the addressee's choice of context. Indeed, the relationship between coherence and context had been already put forward by Halliday & Hasan (1976), and will also become a central aspect of the notion of coherence put forward by authors such as Ventola: "Coherence can very briefly be said to be about the relationship the text has to its context of situation" (1999, p. 105).

Blakemore (1987) claimed that within coherence-based approaches, the role of context was restricted to the establishment of coherence relations, so that it could be characterised as the linguistic co-text of discourse. With regard to this, we shall demonstrate next that no matter if the relevance-theoretical account of context is indeed quite an original feature, so that it is conceived of as a cognitive entity characterised by two main properties — namely, choice and accessibility —, yet such a view of context is rooted and can also be traced within other coherence-based and cognitive approaches. Besides, Blakemore (1988) proposes that whenever a given discourse does not render contextual assumptions accessible for the processing of a new utterance, the addressee will fail to trace any relevance in such discourse, and consequently, it will be regarded as incoherent.

To begin with, we shall underline the main features of context within the relevance-theoretical framework. Authors such as Sperber & Wilson (1995), Blakemore (1992), Wilson (1994) or Jucker (1995), had pointed at the fact that context is a cognitive entity, which cannot be restricted to the linguistic co-text. Besides, it is claimed that context — or *cognitive environment* — will change and be enlarged as the communicative process unfolds. More precisely, Wilson defines context as "the set of assumptions brought to bear in arriving at the intended interpretation" (1994, p. 41). The fact that context was not to be regarded as fixed, but as a variable entity that was modified as a result of communication had been hinted at by Sperber & Wilson as early as 1982, in a paper where they had also defined the property of the *accessibility* of assumptions. This feature also becomes paramount in their 1986/95 work: "In order to feel confident that his utterance will be adequately relevant to the hearer, the speaker must have grounds for thinking that the hearer has

an *accessible context* in which a sufficient number of contextual implications can be derived” (Sperber & Wilson, 1982, p.76, my italics). In turn, the *choice of context* is determined by the speaker’s search for relevance, and as a result, for communication to be successful, both the speaker and the addressee must reach the same context or mutual cognitive environment. Otherwise, communication fails: “Misunderstandings occur when there is a mismatch between the context envisaged by the speaker and the one selected by the hearer” (Blakemore, 1987, p. 31).

We shall show next that there had been increasing interest in the connection between context and cognition since the earliest proposals made within pragmatics and text linguistics. Thus, Brown & Yule had also included the addressee’s construction of the context required for the interpretation of the message in the so-called *principle of local interpretation*: accordingly, the addressee tends to avoid the configuration of a context “any larger than he needs to arrive at an interpretation” (1983, p. 59, *apud* Otal Campo, 2008, p. 1271). Likewise, Quirk *et al.* (1985) signalled a close connection between coherence, context and the state of affairs referred to by the text: “A text is a stretch of language which seems appropriately coherent in actual use. That is, the text ‘coheres’ in its real world context” (1985, p. 1423).

The approach to context that undoubtedly comes closer to the cognitive and dynamic character as defined by relevance theoreticians is Van Dijk’s, who applies the notion of *possible worlds* to the context. As a result, he draws a distinction between the *possible context* and the *real context*, the latter being an actualisation of one instance of a possible world. He also notes the connection between *context changes*, and differences in accessibility that in fact produce them. Besides, he also notes that such changes in context will affect the knowledge which is shared by participants: “We must know or have assumptions about what is relevant and important in some communicative context (...) and we must know what stereotypical aspects are involved in global events and actions (...) so that we can, as hearers, activate the relevant scripts and have a global representation of the communicative context and goals of the speaker” (1985, pp. 116–7).

Likewise, at that same period, Levinson (1983) had also hinted at the possible existence of changes in context in the communicative process, even though he had also admitted that the possibility was only starting to be considered. He undoubtedly traces a picture of the context that goes beyond the purely linguistic elements:

A context must be understood here to be a set of propositions, describing the beliefs, knowledge, commitments and so on of the participants in a discourse. The basic intuition is very simple: when a sentence is uttered more has taken place than merely the expression of its meaning; in addition, the set of background assumptions has been altered (1983, p. 276).

This shows that the consideration of context as linked to communication and to its development had been taken into account by discourse and also other cognitive approaches. Therefore, it can be concluded that the consideration of context as an entity that changes throughout the communicative process is shared by relevance theory with other approaches to discourse. Likewise, all these approaches also admit a close relationship between coherence and the context.

2.1.3 *Coherence as a finite list or taxonomy of relations*

For Blakemore (2001), if it is assumed that the acceptability of discourse is based upon coherence relations, then it follows that there should be a complete taxonomy of such relations. However, there has not been by any means a homogeneous classification of coherence relations. Quite on the contrary, different taxonomies have been put forward.⁷

Besides, Blakemore claims that the recognition of a definite coherence relation within a taxonomy is neither sufficient nor necessary for either discourse interpretation or comprehension. Not only have different taxonomies been proposed, but what is more, it seems that speakers can cope with the meaning of discourse without being aware or familiar with the existing classifications of coherence.

In our view, another reason why a taxonomy of coherence relations is neither necessary nor sufficient has to do with the fact that coherence does not necessarily rely upon cohesion. However, it seems that, ultimately, the criterion to decide the structure of the different taxonomies tends to be based upon the cohesive links which may be used to connect the sequence of utterances that are regarded as coherent. If coherence is independent of cohesion, then it follows that it cannot be adequately catered for by such taxonomies.

2.2 Types of coherence

Blakemore (1987) establishes a distinction between two different types of coherence. The basis rests upon whether the information available is used to determine either the propositional content of the following discourse segment or else its contextual effects.⁸ This is applied to the analysis of *conjoined utterances*, such as the following:

She slipped. The road was icy.

(Instance commented upon by Blakemore, 1987, pp. 117-ff.)

Conjoined utterances are characterised by the fact that even though they are juxtaposed, implicit casual connections between the two may be found. Furthermore, for Blakemore, the relevance reached at by their interpretation is different and greater than the relevance obtained by the processing of each individual sentence.

In any case, in our view, this analysis casts doubt on the relevance approach to coherence, since it remains within the scope of sentences which are related to one another, and does not seem to go beyond a level whose main context has to do precisely with the linguistic context. Similar claims are put forward by Giora: “Coherence should not be pursued in the form of a linear relation between pairs of sentences” (1985a, p. 702).

In connection with this, it may be noted that the role of *inference* in the processing of non-adjacent pairs of clauses during comprehension, where local coherence holds, has been explored by Trabasso & Suh (1993). On the whole, these studies have shown that inferential mechanisms play a crucial role in the processing of texts, and that such processing is in turn guided by considerations of coherence. These inferences can be motivational, or else provide indications of the recurrent mental operations taking place within working memory during processes of comprehension. The latter are involved, in particular, when it comes to using information already stored which helps to activate new knowledge with a view to interpreting and integrating the current text into a coherent mental representation. The evidence for the study was mainly based on the analysis of thinking-aloud protocols. Concretely, inference has been found to play a role in the following mental operations: repetition of texts, repetition of thoughts, retrieval of text or of thoughts, elaboration of consequences or associates of existing knowledge with the information supplied by the text, explanation, prediction and meta-comments.

All the same, however, it must be admitted that some important *implications* of the relevance approach to coherence are derived by Blakemore from the analysis of such conjoined utterances. Among those, the following may be noted: to begin with, the fact that the interpretation of the content of an utterance becomes a significant aspect of the context of the following ones: therefore, the former points at a close connection between context and content. In this sense, it must not be forgotten that this is a basic tenet of the relevance-theoretical framework, in so far as, for instance, both form two essential aspects of a concept, related, respectively, to *encyclopaedic* and *logical entries*. Besides, the very notion of relevance calls for an interaction between old and new information, between *foreground* and *background assumptions*.

In her analysis of the ways how *coherence* has been understood by the different scholars who have approached it, Blakemore makes a distinction depending on whether it has been related to *textuality* or to *comprehension*. With regard to *textuality*, it is maintained that coherence entails connectivity either of semantic or of pragmatic content. This is the view held by authors such as Hobbs (1978, 1979, 1985), for whom coherence relations are approached as “text-building strategies” (1985, p. 22), so that their being recognised by text users enables them to shape a structure for the discourse as a whole. Even so, however, and no matter whether

Hobbs proposes a set of coherence relations, he also admits that the establishment of such taxonomies is above all arbitrary: “same fuzziness [...] as the coherence relations in general” (1985, p. 15).

For Blass, this approach lacks an adequate definition of context as well as the relationship between text and context. What is more, the connection between coherence and *comprehension* — referred to by authors such as Hobbs himself (1979), Johnson-Laird (1981, 1983), Charolles (1983) or Brown & Yule (1983) — is rejected by Blass on the grounds that they cannot account for those cases of isolated sentences or the first sentence of a paragraph. This is so because coherence-based approaches such as the ones just mentioned tend to claim that coherence plays a role in interpretation as far as it is hypothesised that in cases of ambiguity the interpretation of an utterance will be the one that is coherent with the preceding context. For Blakemore (1987, 2001), isolated sentences should be interpreted and processed following the same principles as any other kind of texts, and these, on top of that, cannot be said to have established coherence relations.

Nevertheless, we should like to stress that a cognitive author such as Bublitz (1998) proposes an analysis of isolated sentences that fully squares with the relevance approach to context as constructed on-line in the process of communication: “To ask people whether or not an isolated sequence of utterances ‘has coherence’ is tantamount to asking whether or not they have enough imagination to come up with a context in which the sequence is indeed coherent” (1998, p. 7).

2.3 Relevance approaches to discourse connectives

In contrast to those theoretical perspectives that deal with discourse as based upon cohesion and coherence, — which see connectives as linking devices and as guides to coherence relations —, such a role is denied in relevance theory. It is otherwise claimed (Rouchota, 1998) that connectives are devices of *procedural meaning* which besides do not affect the truth conditions of the utterances where they occur: thus, they provide clues for the indication of the sort of inferential processes required in the processing of an utterance, so that the appropriate and intended contextual effects are recovered and optimal relevance is consequently achieved.

However, this seems to indicate a somehow inaccurate understanding of some other cognitive approaches to coherence. Thus, for instance, Bublitz (1989) also notes that the main role of cohesive devices is to guide the addressee’s interpretive process: “Cohesive means are hearer-oriented signs given by the speaker to suggest a certain deductive process of interpretation; they facilitate the recognition of what belongs together” (1989, p. 36).

Rouchota seeks to examine the coherence approach to discourse, in particular, what concerns the following questions: first, whether connectives are seen as

linking devices; and second, the kind of semantic account of connectives that the coherence approach suggests. With regard to the relationship between coherence relations and linking, Rouchota claims that connectives do not link utterances or linguistic units. Rather, they link states of affairs, and also those linguistic events expressed by the clauses — such as the speaker's attitudes, desires, or beliefs, in short, propositional representations. Therefore, the connection established is not really of a linguistic nature, but rather, it is made between the text and the world represented by it. This also means that some of the aspects of the addressee's task cover the identification of the context in which the speaker intends the utterance to be processed, and also the identification of the propositions linked by the connectors. For Rouchota, this ultimately means that a theory of context construction and selection has to be incorporated for the analysis of cohesion and coherence.

So as to account for the lack of a univocal relationship between discourse connectives and coherence relations, Rouchota argues that coherence relations are psychological entities which need not be referred to by any connectives whatsoever. In relation with this, Rouchota suggests a classification of connectives into two main kinds, namely, *procedural* and *conceptual*, respectively.

The classification of discourse connectors into *procedural* and *conceptual* stands for a further difference between coherence approaches — which treat all connectors alike — and relevance theory. More generally, this distinction has to do with the possible ways in which representations may be entertained. Thus, a representation may refer to concepts, or else encode information on the ways or procedures to be undertaken so as to cope with the meaning and also to process such conceptual representations. With regard to discourse connectives, if they affect the truth conditions of the utterances where they occur, they will be regarded as *conceptual*. Otherwise, they will be *procedural*. Other differences between conceptual and procedural connectives regard aspects such as the following: first, conceptual connectives have a complex semantic and syntactic structure; and second, procedural connectives may contribute either to the explicitly or the implicitly communicated content of an utterance. In contrast, conceptual meaning does not affect the implicatures of an utterance. For Rouchota, in the end, procedural connectives do not really connect propositions, but rather indicate the way in which a definite representation is to be processed so as to achieve optimal relevance; that is, they behave as *semantic constraints* on the relevance of the utterance or discourse. This would embrace those cases of unique sentences which contain procedural connectors and also the case of isolated connectors.

2.4 Towards an assessment of relevance approaches to discourse coherence

Despite the fact that the main trends within relevance theory tend to subsume coherence under their own all-embracing notion of relevance, we have found remarkable exceptions, such as Jucker (1993, 1995), who concedes coherence a certain role. On the whole, the relevance-theoretical approach to discourse is restricted to a bottom-up analysis. Such an approach, however, neglects any study of discourse other than the one which is based upon contiguity, that is, is exclusively restricted to an 'on-line' sequence of utterances followed by other utterances. Consequently, it does not account for global mechanisms of coherence.

All in all, it may be argued that both coherence and relevance are intuitively grounded: that is, the speaker aims to convey a certain message and in doing so, in general terms, will seek a balance between the efforts that will be required from the addressee and the effects sought. One way of doing so is to present a discourse which is coherent, regardless of whether such discourse shows cohesive ties or not. Nonetheless, in our view, whereas relevance aims to account for communication in general, coherence is more specifically related to the way in which such communication is structured and the information intended to be conveyed is presented. In a sense, both coherence and relevance are different, though complementary aspects. If the addressee is presented either with an apparently irrelevant message or else with an incoherent one, he will seek 'to bridge the gap', and search for a context in which the message is meaningful for him. A point that seems to be adequate is the relevance-theoretical approach to the context, in the sense that it is a cognitive entity, characterised by its *choice* and *accessibility* of the assumptions by which it is formed in different degrees. Yet, as shown above, such an approach to context — defined in particular as a variable entity —, is not exclusive of the relevance theoretical framework, but has otherwise been shared by other cognitive and pragmatic approaches.

3. Coherence in text linguistics, discourse analysis and pragmatics

From the nineteenth-sixties onwards, disciplines such as text linguistics, discourse analysis and pragmatics started to search for units of analysis beyond the sentence. Within all these, research on coherence has generally been pre-eminent. In any case, it is our hypothesis — based upon Downing's (2001) contention — that these trends already contain a cognitive orientation. Besides, we shall aim to find out next whether these approaches already show any recurrent traits with the claims put forward by relevance theoreticians. This is so done with a view to deepening

into the conclusions reached so far regarding the relationships between relevance and coherence analysed above.

Already in 1973 as well in successive works, Petöfi develops a full-fledged textual model, known as *TeSWeST* (or *Text-Struktur Welt-Struktur Theorie*), which focuses both upon the text and the reality or the world expressed by it, and which in further developments (Petöfi, 1975; Petöfi & Bredemeier, 1977; Petöfi & García-Berrio, 1979) has also incorporated phonological and pragmatic aspects. Regarding text and its environment, Petöfi (1973) already draws a distinction between *cotext* and *context*, the former being constituted exclusively by linguistic elements, whereas the latter comprises those aspects of reality external to the text and related to the world or state of affairs referred to by it.

Halliday & Hasan (1976), whose work stands for another of the first and most influential forays into textual linguistics, point at *texture* as the main defining trait of texts, in the sense that it makes them hold together. Furthermore, *texture* can be seen manifested into two different ways: *cohesion* and *coherence*. The study had initially focused upon *cohesion*, so that the main aspects of lexis and grammar that contribute to making the text hang together had been traced. These *cohesive ties* included reference, ellipsis, substitution, conjunction and lexical cohesion. The fact that there must be a close relationship between the text and the world or state of affairs reflected by it is shown in aspects such as the distinction between two different kinds of reference, depending on whether they are connected with the context of situation (*exophoric reference*), or within the text itself (*endophoric reference*).

A few years later, Hasan (1984) already notes that textual coherence entails bringing it with a certain kind of relationship with states of affairs of the extralinguistic world. She also dwells upon the connection between cognition, language and the structure of the text, by showing that speakers are sensitive to variations in coherence. Thus, coherence is defined as an essential feature of texts which is furthermore *gradual*, so that texts may be more or less coherent, and it is also regarded as a representation of reality. Her analysis also deepens into the relationship between cohesion and coherence, so that it is concluded that there is no correlation between the number of cohesive links or *ties*⁹ and the coherence of the text: in other words, a text may be coherent and yet may not necessarily rely upon cohesive links, whereas a text showing cohesive links may not be coherent at all, if it fails to point at a certain extratextual state of affairs. Besides, the paper re-examines lexical cohesion, — which has to be complementary and integrated with grammatical cohesion —, and a distinction is made, depending on whether it is *general*, on the one hand, or text-bound or *instantial*. So as to cope more adequately with lexical cohesion, Hasan also proposes the notion of *cohesive harmony*, which is applied to the existing chain interactions and connections within

a text, and which is defined as “the lexico-grammatical reflex of the semantic fact of coherence” (1984, p.218). By this notion, the relationship between cohesion and coherence is re-examined, so that it is claimed that “the greater the cohesive harmony in a text, the greater the text’s coherence” (1984, p.216). Indeed, Martin (2001) notes that the purpose of cohesive harmony is to facilitate at least a partial measure of the degree of coherence of a given text, which has to be complemented with other different parameters.

Thus, further developments within systemic-functional linguistics (Martin 1992, 2001) have pointed at the connection that is to be established between text cohesion, coherence and the reality or state of affairs referred to by it. Within the tradition set up by Halliday (1973, 1978, 1989, 1994), this is pointed at through the notions of *social context* and *register*, which, for Martin (2001), motivate the cohesion patterns in a definite text and the way these are realised through the lexico-grammatical system. Besides, following a modular perspective, a further level that crystallises the relationship between discourse and the reality pointed at by it has to do with the different *genres* (Martin, 1992; Swales, 1990, 2001) that are established by each particular social and discourse community, so that a specific genre is meant to fulfil certain purposes within given social occasions and processes.

Beaugrande & Dressler (1981) and Beaugrande (1980, 1996) amplify the model provided by Halliday & Hasan, in the sense that cohesion and coherence are but two more *standards of textuality*, together with intentionality, acceptability, situationality and intertextuality.¹⁰ Besides, these standards of textuality had been organised into three main fields, depending on whether they are *text-oriented* — cohesion —, *psychologically-oriented* — coherence and intentionality —, or *socially-oriented* — acceptability, situationality and intertextuality. This shows a clear cognitive orientation as far as coherence is concerned. The model aims to provide a functionalist approach to discourse, so that texts are seen as meaningful configurations of signs, which become real communicative occurrences if they meet the standards noted above.

In Beaugrande & Dressler’s view, coherence is important because it makes the components of the textual world — namely, the configuration of concepts and relations which underlie the surface text — “accessible and relevant” (1981, p.4). These authors also stress that coherence need not be made explicit — that is, it does not necessarily rely upon or makes itself manifest through cohesion. In a certainly innovative way in the early eighties, which has recurred throughout to become a central notion nowadays, Beaugrande and Dressler also note that coherence is not merely a property of texts: quite on the contrary, so as to make sense, the text cannot be seen as a self-contained unit, but, as they claim, its meaning is achieved “by the interaction of TEXT-PRESENTED KNOWLEDGE with people’s STORED KNOWLEDGE OF THE WORLD” (1981, p.6, small capitals as in the original).

Coherence is, therefore, approached by Beaugrande & Dressler in *cognitive* terms as the continuity of senses that can be traced in a text, on the basis of an underlying textual world and commonsensical and mutual knowledge between participants that enable them to cope with its meaning. Their notion of coherence is based upon the assumption that the use of language in real texts can be explained with the aid of certain models which are cognitively grounded. It is also assumed that knowledge and meaning as represented by texts are to be interpreted in the context where they are found.

According to these authors, the patterns of knowledge that are activated so as to cope with the meaning of a text include processing tasks such as finding out the *topic* of a text; or exploring the ways how to store its meaning, which affect episodic and semantic memory, short and long-term memory. Even though, in contrast to Van Dijk (1977), no distinction is made between global and local coherence, these authors do refer to certain global patterns of discourse coherence, to be stored as chunks such as *frames* (Minsky, 1975), *schemas* (Rumelhart & Norman, 1978), or *scripts* (Schank & Abelson, 1977). More recently, the role of frames, as mental representations of our knowledge of the world in discourse, has been more closely defined as “coherence-inducing” mechanisms, as far as they enable the addressee to create coherence (Bednarek, 2005).

Beaugrande & Dressler’s model may be said to stand for a search for the balance between the text seen as a structure and as a tool employed by text users in social communication. This is achieved through the different *standards of textuality*, some of which are *text-oriented*, in contrast to the ones which are *language-user oriented*, and also *socially-oriented*. Therefore, as regards coherence, their model may as well be regarded as based upon a balance of textual and cognitive factors.

All in all, then within Beaugrande & Dressler’s model, the study of coherence is thus seen as one of the basic standards of textuality, whereas cognitive models are just tools, that is, structures or configurations of world knowledge, stored in memory and acquired through cultural and physical experience. These aid in the process of the identification of those categories, such as *frames*, *schemas* or *scripts*, aimed to describe and conceptualise reality, and which therefore play a part in the creation of coherence. Text coherence would allow, then, the systematisation of the strategies used by speakers to cope with the meaning of a text.

Some of the most significant aspects contributed by Brown & Yule (1983) to the study of discourse may be closely related to the approach proposed by relevance theoreticians, as they are also cognitively grounded. To begin with, for Brown & Yule, coherence is understood as a complex approach to texts, which may not necessarily correspond to the existence of explicit cohesive links. Precisely, reference is made by these authors to two different text types where no correspondence between *cohesion* and *coherence* can be traced: first, the text composed

of grammatically correct sentences which are nevertheless found non-coherent or incomprehensible by the addressee, probably due to the fact that he may need to enlarge his world knowledge so as to infer the meaning made manifest by the speaker. The second type of texts lacking any relationship between the aspects of texture corresponds to those whose coherence relations are not reflected through cohesive links.

If, as noted above, a basic tenet of the relevance-theoretic framework has to do with the *presumption of relevance*, Brown & Yule refer to the notion of *assumption of coherence*, which they account for in the following terms:

We might say that, in addition to our knowledge of sentential structure, we also have a knowledge of other standard formats in which information is conveyed. We also rely on some principle that, although there may be no formal linguistic links connecting contiguous linguistic strings, the fact of their contiguity leads us to interpret them as connected. We readily fill in any connections which are required.

This last point we have already mentioned in connection with the assumption of coherence which people bring to the interpretation of linguistic messages. (...) There are several things in the *reader* (...) The most important of these is the reader's (or hearer's) effort to arrive at the writer's (or speaker's) *intended meaning* in producing a linguistic message.

(Brown & Yule, 1983, pp. 224–25, italics as in the original).

It may be argued, therefore, that just as relevance is seen as grounded in language users' intuitions for the authors working in the framework put forward by Sperber and Wilson, for Brown and Yule coherence is likewise grounded on speakers' intuitions about text formation. Hence, it may be concluded that both coherence and relevance are intuitively grounded. Similarly, the most fundamental aspects of the interpretation of meaning are related to the addressee's identification of the speaker's *communicative meaning* on the basis of the following criteria: the trace of the communicative function, the reference to the overall socio-cultural knowledge and the inferences required to accomplish this objective.

Interestingly enough, and similarly to Brown & Yule (1983), Downing also makes reference to what she calls a *mutual assumption of coherence* (2001, p. 58), by which she aims to capture the fact that coherence may be approached — and so has been done by most recent approaches to discourse — from the perspective of the *language user* rather than as a structural feature of discourse:

Previously viewed as a property of written texts defined positively via relations of semantically established connectivity, or negatively as lack of contradiction and therefore imbued with 'consistency' (Conte 1998 in Vilarnovo 1991), or 'texture' (Halliday and Hasan 1976), coherence is now seen by some linguists as the

outcome of integrated cognitive processes between speaker and listener, writer and reader.

(Downing, 2001, p. 57).

As Downing notes, this form of analysis may be said to be fruitful for a cognitive approach to discourse in a number of ways. To begin with, the relationship between coherence and context is worth exploring. Thus, “the building of coherent links between chunks of discourse and some kind of context” (Linnell & Korlija, 1997, p. 165, *apud* Downing, 2001, p. 60) is approached as the basis of the sense-making of a text, but at the same time it crucially involves a relationship of discourse with context. Also similar to the relevance approach is the consideration of context as dynamic, which, among other things is reflected in the “renewal and progression of topic” (Downing, 2001, p. 61).

Another aspect where the relationship between coherence and topic can be traced has to do with the delimitation of *topic boundaries*, which gives way to different levels of discourse coherence, from the most *global* — the whole text or discourse — to the most *local* levels, in the sense put forward by Van Dijk (1977) — the level of the *utterance* — including intermediate levels such as the *episode*.

This shows that coherence is not to be traced only at the level of the connection or “relatedness” of different utterances, but at the most global level of whole discourses, texts and genres. That coherence plays such an important role in communication, therefore, may be seen as evidence both of the fact that its importance transcends its structural value, as well as of the need to explore its cognitive and also social interpersonal values.

Charolles (1983) draws on coherence as a general principle in the interpretation of discourse, in such a way that it is motivated by a single global intention. For Charolles, this is ultimately so because coherence is also a general principle in the interpretation of human action, and basically, any discourse is the necessary result of a certain kind of action. In the case of verbal communication, the overall underlying intention is connected with the transmission of a certain message.

Most importantly, Charolles (1983) dwells upon an aspect that leads us to conclude that coherence and relevance are by no means mutually exclusive, but are best seen as complementary. Thus, it is claimed that addressees may have expectations of coherence: “whenever a discourse presents itself materially as forming an entity, the receiver of the message automatically supposes it to be coherent” (1983, p. 77). If this is so on the part of the addressee, he immediately sets out to trace an *intention* on the part of the speaker, so that she has organised the message in a certain way and by doing so the utterance of a complete discourse has been implied. That is to say, in communication, both relevance and coherence will play an important role: the speaker generally aims to convey a message to the addressee. If

she wants to do so in an efficient way, she may point at a balance between processing efforts required to process the message and the effort required on the addressee. Relevance, therefore, is related to the cognitive processing of the message. As for coherence, in our view, it relates the structural organisation of the message or of discourse with the intentions of the speaker and the *inferences* necessarily made by the addressee in order to cope with the meaning of the message. Yet, coherence and relevance seem to us both different and independent of one another: thus, on the one hand, a certain message may be coherent and yet irrelevant if it does not amount to a substantial improvement of the participants' cognitive environment. On the other hand, a message may at least be partially incoherent at more local levels and yet be relevant.

Charolles' approach is also essentially cognitive in so far as it is concluded that coherence does not lie in the text, but rather, in text *users*: "No text is inherently coherent or incoherent. In the end, it all depends on the receiver, and on his ability to interpret the indications present in the discourse so that, finally, he manages to understand it in a way that seems coherent to him" (1983, p.95).

More recently, Scheppers (2003) has drawn attention to the fact that, if coherence is to be considered in cognitive terms, it should therefore be possible to trace it not only among different units of discourse, but also in the relationship that discourse establishes with the reality — both verbal and non-verbal — represented by it. Scheppers argues that *the P-tree model* described in the paper, which is designed "to provide a bottom-up analysis of particular action tokens as they are perceived and understood by an observer" (2003, p.666), may account for, among other aspects, structural aspects of discourse — such as segmentation or cohesion —, as well as for "(i) the space-like distribution of content items over the different segments in terms of the relevance of the items to the segments, and (ii) some time-related aspects of cognition in general, and discourse in particular" (2003, p.682).

Precisely, Scheppers notes that one of the central aspects that his model may shed light upon is the relations between 'coherence' and 'relevance', a point which is nevertheless not dealt with any further in his paper:

Within the scope of this paper, it is unfortunately impossible to explicitly investigate the (in)compatibilities of the present model with the Relevance Theory of Sperber and Wilson (1986/1995). Especially note the consequences of the P-tree model for the mutual relations between the notions of 'coherence' and 'relevance' (Wilson, 1998; Blakemore, 2001). (...)
(Scheppers, 2003, p.682, footnote 11).

We can also expect to find recurrent traits between functional and cognitive approaches to discourse coherence in so far as the former — such as Cook (1989) — also hypothesise that both *schemata* — as "data structures, representing

stereotypical patterns, which we retrieve from memory and employ in our understanding of discourse” (Cook, 1989, p. 73) — and *relevance* — understood both in Grice’s and in Sperber & Wilson’s sense — are important for language speakers to cope with discourse coherence. This is so because they enable participants to organise information in communication and also to comprehend it. Some years before, Widdowson (1979) had already combined a systemic, Hallydean approach with a cognitive orientation, so as to account for discourse processing. Thus, he had drawn a distinction between *ideational schemata* and *interpersonal schemata*.

Coherence may intuitively be connected with the *textual* dimension of communication, as it is an element of text and discourse structure. Yet, it may be argued that it also shares elements of the *ideational* and also of the *interpersonal* dimensions of communication (Halliday, 1994), as they all stand for the threefold aspects of every message. Thus, authors such as McCarthy (1991) or Hoey (1991) have drawn attention not just to the structural aspects of coherence — in so far as it makes a text ‘hang together’ —, but also to the role it plays in communication: “Coherence is something created by the reader in the act of reading the text” (McCarthy, 1991, p. 76). Besides, and similarly to Grosz & Sidner (1986) — a proposal that we shall deal with next within cognitive approaches —, McCarthy has also claimed that the reader strives to interpret the connections between the different textual segments, all of which stands for a cognitive act or process on the part of the reader.

The survey of traditional approaches has confirmed that most of them already offer some cognitive traits regarding discourse coherence, which shows that the two are best seen as complementary. Next, we shall cover the most significant traits of cognitive approaches to discourse coherence. Finally, we shall contrast both kinds of approaches.

4. Main approaches to coherence within Cognitive Linguistics

The main underlying assumption of cognitive approaches to discourse is that the human mind entertains and constructs various kinds of cognitive representations (Graesser *et al.*, 1997, p. 292). Like relevance theory, their analysis of discourse concerns the exploration of the ways how propositions are interrelated in a coherent manner so as to make up discourse, thus following a *bottom-up* approach. Furthermore, their focus also covers those mental operations involved in discourse production, processing and comprehension, which are assumed to be based upon general cognitive models.

Besides, one of the reasons why we may expect complementary aspects between pragmatic and textual approaches to coherence, on the one hand, and more

cognitively-based models, on the other hand, lies in the fact that early cognitive models were based upon research carried on in other fields. Among those disciplines, Graesser *et al.* refer, precisely, to text linguistics (Van Dijk, 1972; Halliday & Hasan, 1976), artificial intelligence (Schank & Abelson, 1977) or pragmatics (Searle, 1969; Grice, 1975). In this sense, one of the main targets of cognitive linguists has been to test whether the findings of these disciplines resulted in a psychologically plausible model of processes of discourse production and comprehension.

The fact that cognitive approaches already sprang at the earliest moments in the development of discourse and text analysis is illustrated by Beaugrande & Dressler (1981). These authors had defined coherence as concerning “the ways in which the components of the textual world, i.e., the configuration of concepts and relations which underlie the surface text, are mutually accessible and relevant” (1981, p. 4). In turn, *concepts* had been defined as configurations of knowledge or cognitive contents to be accessible, recovered and activated. Likewise, Johnson-Laird (1981) argued that coherence relations hold not between linguistic forms, but rather between mental models closely related to the structure of events and states of affairs described in discourse.

All in all, the main proposals that aim at a cognitive analysis of discourse and discourse coherence have been traced to be the following: first, Van Dijk (1977), Kintsch & Van Dijk (1978), and Van Dijk & Kintsch (1983); second, rhetorical structure theory (Mann & Thompson, 1986, 1988; Thomas, 1995); third, the proposals made by Grosz & Sidner (1986), connected with the former; fourth, certain research made within the framework of contrastive rhetoric, such as Kaplan (1966, 1987); fifth, Rickheit & Strohner (1991); sixth, Sanders *et al.* (1993) and Spooren & Sanders (2008); seventh, Bublitz (1989, 1994, 1998, 2006); or eighth, Givón (1995). Their main aspects will be examined in the following sections.

4.1 Van Dijk (1977); Kintsch & Van Dijk (1978); Van Dijk & Kintsch (1983)

Throughout his scientific production on discourse, which has come up to present times, the approach taken by Van Dijk to coherence may be regarded as being both pragmatic and semantic, since for the Dutch author its study must be related to aspects of information such as the distinction between what the text makes *explicit* or what it leaves otherwise *implicit*, or the distribution of *old* and *new* information. Similarly, Kintsch & Van Dijk (1978) cope with coherence from the perspective of text processing and comprehension. Implicit information tends to be identified with the “set of implications necessary for the interpretation of subsequent sentences” (Van Dijk, 1977, p. 112), and is therefore relevant in so far as it helps to create or maintain the coherence of a text or discourse. Significantly enough, Van

Dijk also suggests that *inference* will play a central role in the comprehension of discourse, which shows a very clear connection that can be established between coherence theories and relevance: “Or should we rather assume that they [missing links] are ‘constructed’ viz. by rules of *inference*, or by rules and processes defined at the level of pragmatics or in cognitive theory?” (1977, p.95, my italics). *Missing links* are precisely those “propositions which are postulated to establish theoretical coherence of a text but which are not expressed in the discourse” (1977, p.95), which shows the importance of the implicit for the understanding of coherence. The inferences required to process discourse are based not on the speakers’ knowledge of the conventional meanings of the language, but on their knowledge of the world. This is so because for Van Dijk coherence must not necessarily rely upon the formal organisation of discourse: “Sentences or propositions in a discourse may form a coherent discourse, however, even if they are not all connected to every sentence or proposition” (Van Dijk, 1977, p.93).

Van Dijk distinguishes two different forms or kinds of coherence: *linear or sequential coherence* and *global or overall coherence*. The former is that kind of coherence “holding between propositions expressed by composite sentences and sequences of sentences”, whereas *global coherence* is composed of “sets of propositions ... of a discourse”, and is in itself “determined by the linear coherence of sequences” (1977, p.95). As Kintsch & Van Dijk also show, both forms of coherence, local and global, are complementary and necessary: thus, a text will be coherent “... only if its respective sentences and propositions are connected, and if these propositions are organized globally at the macrostructural level” (1978, p.365). In his exploration of the conditions that make a text coherent, Van Dijk notes that there will be constraints of three different kinds: semantic, pragmatic and cognitive. Usually, texts are not complete, since if that were the case, much of the information provided would become irrelevant. That makes Van Dijk hypothesise that “perhaps each type of discourse, given a certain topic of conversation, has an UPPER BOUND of generalization and a LOWER BOUND of particularization or specification” (1977, p. 109, capitals as in the original).

An important consequence of the approach taken to coherence by Van Dijk, which is based upon the pragmatic interplay between explicit and implicit information, or a relationship between topic and comment, among other factors, is that it does not necessarily depend on an explicit counterpart of cohesive relations. Therefore, coherence does not rely upon a formal correspondence of textual or discourse connectives, but upon implicit relations of a pragmatic nature, such as inference or shared knowledge. Once more, this shows that we can trace in Van Dijk’s approach similar concerns and even solutions to those put forward by Sperber and Wilson, and also, then, that in a sense, coherence theories and relevance are offering similar solutions to the problems raised by coherence relations in discourse.

4.2 Rhetorical Structure Theory (Thomas, 1995; Mann & Thompson, 1986, 1988)

Rhetorical Structure Theory (henceforth, RST) characterises and explores the relationships between propositions, from a functional, cognitive and psychological perspective, so as to account for text organisation. As noted by Torrance & Bouyand-Agha (2001, p. 1), it involves “building a tree-like structure representing the *coherence relations* that exist within the text”. According to Thomas (1995), the main central claims of RST are the following: first, the nucleus-satellite structure is a predominant feature; second, the basis of the textual hierarchy is functional; and third, text structure has a communicative role.

Coherence is seen as “the consequence of the language user’s ability to impose connectivity upon disconnected parts of a visual image” (Károly, 1998, p. 89). Text users perceive coherence depending on their ability to grasp the different relationships established between the propositions that constitute the text, and which are related to the author’s intention. These relations do not rest upon grammatical factors, but rely exclusively upon an entirely semantic or functional basis. Particularly important in this respect are the so-called *relational propositions (RP)*, which implicitly specify the sort of relationship established. Mann & Thompson define *relational propositions (RP)* as follows: they are “unstated but *inferred* propositions that arise from the text structure in the process of interpreting texts” (1988, p. 244, my italics). They also claim that coherence depends, at least in part, on these relations. The most important types of RPs that have been traced are the following: solutionhood, evidence, justification, motivation, reason, sequence, enablement, elaboration, restatement, condition, circumstance, cause, concession, background, or thesis/antithesis. In this sense, for RST, “the message of the text is the set of propositions which form the nodes of a hierarchically organised structure expressing the writer’s *intentions* with each proposition” (Thomas, 1995, p. 170, my italics). In any case, and so as to meet some of the critical arguments that have been put forward, Mann and Thompson make it clear that these relations are to be seen as an open set (Mann & Thompson, 1988, p. 250). Crucially, the addressee’s recognition of these relational propositions enables her to cope with the meaning of the text.

These relational propositions (RPs) also stand for the source of the formation of *schemata*, which define “the structural constituency arrangement of a text” (Károly, 1998, p. 91). Besides, they hold between two different text spans, identified respectively as the *nucleus* and the *satellite*. If the nucleus is removed, it will not be easy to determine the meaning either of the satellites, or of the entire text. But if it is the satellites that are removed, the nucleus will provide a sort of summary or core statement of what the text is all about. Being a sort of backbone of

an essentially cognitive approach, these relational propositions also stand for as a source of the formation of *schemata*, which define “the structural constituency arrangements of text” (Károly, 1998, p. 91). These may be related to the function of *encyclopaedic entries* of a concept, defined within the relevance-theoretical framework: as noted by Thomas (1995, p. 169), “nuclearity could be seen as the way to signal that the memory of the satellite can be usefully accessed through the memory of the nucleus”. In turn, encyclopaedic entries contain factual assumptions and also assumption *schemas*, “which an adequate context may convert into full-fledged assumptions (Sperber & Wilson, 1995, p. 88). Such encyclopaedic entries are stored and accessed as units or “chunks”, so that they may be highly accessible.

4.3 Grosz & Sidner (1986)

Grosz & Sidner (1986) have underlined that, so as to account for discourse coherence, a theory of discourse must necessarily rely upon such non-linguistic notions as attention, purpose or intention. An account of coherence in terms of a definite set of relations is explicitly criticised for being insufficient.¹¹ Similarly, most authors within cognitive approaches to discourse coherence claim that both intentions and relations are necessary and complementary (Moore & Pollack, 1992; Sanders & Spooren, 1999). In the formalised account supplied by Grosz & Sidner (1986), three main elements constitute discourse structure: its linguistic structure, the attentional state and its intentional structure. The *linguistic structure* of discourse differentiates several *discourse segments*, each of which fulfils several communicative functions in connection with the discourse as a whole. The *attentional state* is a property of the discourse itself, in contrast to the other two, which are more closely related to the discourse participants. It is related to a focusing structure, which makes available for participants the contextual information that is necessary for them to process the different utterances that mark the progression of discourse. It gives way to different levels of *salience*, so that it allows participants to distinguish those aspects that are salient and which can be linked to the significant aspects of both the linguistic and the intentional structure.

It is the *intentional structure* that characterises discourses as being either coherent or not. As Grosz & Sidner (1986, p. 178) note, “some of the purposes that underlie discourses, and their component segments, provide the means of individuating discourses and of distinguishing discourses that are coherent from those that are not”.

For a certain discourse to be coherent and comprehensible, Grosz & Sidner (1986) claim that participants must be able to recognise both the overall *discourse purpose* and the different *discourse segments purposes*, and the relationships to be established between them. This implies that because of the complexity of the

different conceptual relationships that can be expressed through discourse, the establishment of a close set or typology of coherence relations is likely to be insufficient to account for the possible variety of intentions and purposes expressed by discourse participants. It is with regard to this that we find a basic similarity between the model devised by these authors and the relevance-theoretical framework, in so far as intention recognition and the availability of information become crucial aspects to determine whether a certain discourse is coherent or not: “Two issues that are central to the recognition problem [of the purpose of both the entire discourse (DP) and its corresponding discourse segments, (DSPs)] are what information the OCP [other conversational participants] can utilize in effecting the recognition and at what point in the discourse that information becomes available” (1986, p. 188). Thus, we are dealing with discourse purpose or intention and also the availability of information.

However, Grosz & Sidner (1986) note that even though *discourse-level* intentions seem to be related to utterance meaning and intention — in the sense given to the term by Grice (1969) —, discourse level intentions differ from the former in that they “occur in a context in which several utterances may be required to ensure their comprehension and satisfaction” (Grosz & Sidner, 1986, p. 199). Thus, the ways in which the purposes of the different discourse segments contribute to the overall purpose of the entire discourse will have to be analysed. A distinction between different levels of intentions is therefore introduced, so that the *primary intention* corresponds to the overall intention of the DP, to which the different intentions of the various segments become *subsidiary*. All in all, Grosz & Sidner suggest that the theory thus put forward hints at the fact that the main requisites for a certain discourse to be coherent will have to do with *purpose*: “a discourse is coherent only when its discourse purpose is shared by all the participants and when each utterance of the discourse contributes to achieving this purpose, either directly or indirectly, by contributing to the satisfaction of a discourse segment purpose” (1986, p. 202).

4.4 Contrastive rhetoric and related fields

Contrastive rhetoric, whose main purpose has been to analyse similarities and differences across cultures, in particular, in so far as these are reflected in textual, rhetoric and discourse models, has offered interesting insights on coherence. This field was initiated with works by Kaplan (1966, 1987), and has continued up to present times (for instance, Connor, 2001). The *paragraph* becomes a central unit of discourse organisation. The whole area of English for Specific Purposes (ESP) and English for Academic Purposes (EAP) has also dwelled upon these aspects (for example, Trimble, 1985). There has been a gradual shift from organisational

to interpersonal aspects and social processes as reflected in discourse construction and negotiation of meaning (Connor, 1996, 2001). This trend also points at the existence of certain cultural patterns of discourse coherence. As Connor herself puts it, and reaching similar conclusions to Bublitz (1999), “coherence lies in the culturally conditioned eye of the beholder” (Connor, 2001, p. 40).

4.5 Rickheit & Strohner (1991)

Despite the general tendency to understand coherence in terms of linguistic connectedness, Rickheit & Strohner (1991) claim that linguistic coherence has to be understood as an aspect of cognitive coherence. Like relevance theory, significant importance rests upon *inference*, so that for these authors it is *inferential strategies* that enable the cognitive system to cope with certain problems of linguistic coherence.

Being a cognitive system, Rickheit & Strohner claim that coherence has tectonic, dynamic and genetic aspects. The *tectonic* aspects concern its most basic and defining characteristics, and as for coherence, these entail its *integrity*, that is to say, “the connectedness of the structural and functional relations of the cognitive system” (1991, p. 220). The structural relations connect the internal components of the system, namely, the text and the cognitive models necessary to cope with its meaning, whereas the functional component relates the language processing system to its environment, in particular, the communicative situation.

Within this approach, coherence structures are to be found at various levels of discourse, so that the following types of coherence may be distinguished: *conceptual coherence*, *local coherence* and *global coherence*. As for *conceptual coherence*, these authors approach concepts as cognitive schemata, which are activated in order to select textual information and also interpret and integrate it into already existing knowledge. *Local coherence* is based upon the *proposition*, so that the meaning of a text can be represented through a series of propositions. Following Kintsch & Van Dijk (1978) and Van Dijk (1972, 1977) two basic levels of representation of the meaning of a text are distinguished: the microstructure and the macrostructure. Finally, the analysis of *global coherence* concerns more comprehensive structures that go beyond the meaning of the text but which are necessary to cope with it, such as *mental models*, as described by Johnson-Laird (1981, 1983), or the *scenario* theory of Sanford & Garrod (1981).

On the whole, this tripartite classification of coherence enables the model put forward by Rickheit & Strohner to go beyond the recurrent characteristic that we had observed in some of the most important cognitive approaches: namely, the approach to coherence relying upon the *proposition*, in a kind of bottom-up form of analysis.

The *dynamic* aspects of coherence have to be related to the production and comprehension of language which are themselves dynamic, in so far as they take some time to perform, and they lead up to the ensemble of the mental representations of the contents being actually processed. These have to do with the necessary interaction of *old* and *new* information, so that a final state of *stability* is achieved. Finally, the *genetic* aspects of coherence concern precisely the integration of new information into the cognitive system, through processes of *creativity*.

The model described by Rickheit & Strohner also purports to face up with the problems that the establishment of coherence may raise. Thus, *integrity problems* are generally caused by insufficient information. To solve them, *inferential* mechanisms are required, which may be *backward* or *forward*, depending on whether they focus upon precedent or subsequent aspects of the text. Besides, such inferences may have to be involved at the different levels of coherence: first, at *conceptual levels* they decompose the text information into semantic primitives; second, at the level of *local coherence*, inferences will be intended to connect parts or whole propositions; and thirdly, at the level of *global coherence*, inferences based upon more complex knowledge structures — such as scripts, mental models or scenarios — will be required. *Stability problems* are related to a mismatch of the capacity of the working memory and the amount of information provided, and to solve them it is generally necessary to *rearrange* or select the processes being used. Lastly, *creativity problems* arise when the system has to cope with considerable amounts of unknown information, and they may be resolved through language training or learning strategies.

Coherence is such a vast field that calls for interdisciplinary research. Rickheit & Strohner suggest, in particular, the importance of counting on contributions from the fields of cognitive science, artificial intelligence, linguistics, pragmatics, or communication theories.

4.6 Sanders *et al.* (1993); Sanders & Spooren (1999); Spooren & Sanders (2008)

The fact that coherence is not simply a property of discourses, but a cognitive reality — as those most recent approaches to coherence have demonstrated — shows that it lies within the speakers' ability to make a representation of discourse. This has led authors such as Sanders *et al.* (1993) to stress three basic aspects of coherence: first, speakers may *infer* those coherence relations existing in a text on the basis of certain minimal knowledge; second, coherence depends on context; and third, the number of coherence relations is best seen as related to the type of discourse. These authors also claim that intentions and discourse coherence should be maintained apart, and that coherence relations are best seen as *realisations* of communicative intentions.

Spooren & Sanders (2008) distinguish between two main types of coherence, namely, *referential coherence* and *relational coherence*, the latter having to do with smaller linguistic units that relate to the same mental referent. The distinction is interesting for, in our view, it surpasses the approach to coherence as based on certain coherence relations — as these authors themselves had put forward in their first proposals, and which would be restricted to *relational coherence*. Another important aspect about their proposal is the way they show that coherence is based both upon linguistic and cognitive aspects: “Coherence phenomena may be of a cognitive nature, but (...) their reconstruction is often based on linguistic signals in the text itself” (Spooren & Sanders, 2008, p. 2005).

4.7 Bublitz (1989, 1994, 1998, 2006)

Taking Halliday’s dichotomy into cohesion and coherence as a starting point, Bublitz (1994) juxtaposes coherence with *comprehensibility* and complements cohesion with *connectivity*, respectively. Cohesion is not to be seen as either a sufficient or a necessary condition for coherence; cohesive ties are limited to making the underlying coherence relations explicit: that is, on the one hand, a text may be coherent and yet fail to show any cohesive links, and on the other hand, a text may be cohesive and be incoherent. He argues that language users have *intuitions* about both cohesion and coherence (Bublitz, 1998), in such a way that a text will be judged as coherent if it accomplishes the following requisites: if it ‘hangs together’, displays order, forms a meaningful unit that is suitable in both the linguistic and the situational context, serves the expected communicative purpose and contributes to the topic being discussed. The distinction between cohesion and coherence is for Bublitz one of kind, qualitative: whereas *cohesion* is linked to the linguistic forms of the text, and it is therefore defined for being invariant and independent of both context and text users, *coherence* is an essentially cognitive property, and not a feature of texts.

Bublitz (2006) retakes the relationship between cohesion and coherence, and concludes that it is coherence that addressees look primarily for, and then, if a text is found coherent, they may explore the cohesive means that have been used so as to achieve such a purpose. It is emphasised that cohesion is neither a sufficient nor a necessary condition for coherence. Even so, the relationship made between cohesion and coherence is such that enables us to draw a parallelism between the approach to cohesive means proposed by Bublitz as “cues which ‘signal’ or indicate the preferred line of coherence interpretation” (1998, p. 6) and the relevance-theoretical approach to connectors as constraints on relevance. All in all, Bublitz claims that cohesive links contribute to securing coherence.

In fact, coherence may rely upon different levels of language: thus, as noted by Schiffrin (1985), it may comprise semantic, syntactic and pragmatic aspects. Following the main tenets of cognitive approaches to coherence, Bublitz (1989, 1994) puts it forward that coherence is not inherent to the text, but is rather constructed in the hearer's mind. As a result, a text may be more or less coherent for different addressees, depending on the knowledge that they share with the text producer. As Bublitz says, "one cannot say *a text has coherence (...)*; one can only say *someone understands a text as coherent*" (1994, p.220, italics as in the original). Another important feature is that it is a *scalar* notion, that is to say, it is a matter of degree, in such a way that texts will be more or less coherent. On the whole, Bublitz avows for "a recipient-constructed, discourse-based and comprehension-dependent notion of coherence" (1994, p.218). In Bublitz's view, this allows the analyst to break the association that is often made between coherence and comprehensibility.

As is well-known, the relevance-theoretical framework underlines the role of *inference* in communication, so that it is a process defined by the addressee's inferential recognition of the speaker's informative and communicative intentions in a certain context. For Bublitz, however, inference and deductive processes also play an important role in the recognition of a text as being coherent, and these have to be necessarily related to the context where such text is produced: "The ascription of coherence is the result of a deductive process of interpretation which is a part of the more general process of understanding. A text is not coherent in itself (...) but is understood as coherent in an actual context" (1989, p.39).

Again, the approach taken to context by Bublitz (1998) squares with the main properties of context noted by relevance-theoreticians: that is, for Bublitz, the construction of a *shared context* is one of the tasks that communicators purport to accomplish in the process of meaning negotiation. This further implies that coherence is interpretable and assessed by text users.

The relationship between coherence and connectivity is also addressed by Bublitz, concretely, regarding the different taxonomies of semantic relations that have been proposed. Yet, his conclusion is that texts may display a combination of different types of semantic relations. Therefore, probably most taxonomies are probably not exhaustive enough. Besides, such taxonomies tend to rely upon cohesive links. However, the point is that coherence does not necessarily rest upon explicit cohesive or discourse markers.

As for a possible taxonomy of types of coherence, Bublitz's proposal is to establish one on the basis of the different levels of linguistic analysis. Hence, he puts forward the following classification: prosodic coherence, syntactic coherence, semantic coherence, pragmatic coherence and stylistic coherence. Actually, the coherence of any given text will tend to be based upon several of these types.

Bublitz (1989) also points at a close relationship between coherence and the context where utterances are produced. More specifically, a connection is drawn between *coherence* and *acceptability* in context, so that only those utterances found to be coherent by addressees will likewise be regarded as acceptable. The sequence of utterances regarded as coherent must be connected, meaningful, understandable and acceptable.

Another aspect tackled with by Bublitz (1984, 1989) concerns the relationship between *topic* and *coherence*, that is to say, *topical coherence*, in so far as topic may be a useful means that guides the addressee's search for coherence. It can be connected with global coherence, because it deals with 'what the text is about'. The main properties of topic are that it is neither fixed nor unchanged nor inherent in a text, but is on the other hand intersubjectively and often implicitly arrived at.

Furthermore, Bublitz (2006) tackles the relationship between discourse *coherence* and different systems of *knowledge*, with a view to showing that coherence is instrumental in the establishment of the necessary *common ground* that guarantees comprehension and successful communication. It is remarkable that Bublitz (2006) defines common ground in such a way that it makes up for the psychological implausibility that characterises traditional views on mutual knowledge. Such shortcomings had also been avoided by Sperber and Wilson's (1982, 1995) notion of *mutual manifestness*. *Common ground* is therefore shown as being constantly reassessed and renegotiated in the communicative process.

Most importantly, an approach to coherence is formalised, so that six main core tenets are established about it: first, speakers have intuitions about coherence; second, coherence is different from cohesion; third, speakers operate on a default or standard assumption of coherence, so that a text is normally expected to be interpretable as being coherent, and the point at stake is whether *addressees* succeed or not in making the text coherent; fourth, — as already noted in former papers by Bublitz —, coherence is seen as variable, approximate and scalar, mainly because it does not reside in texts, but rather in text users, which for Bublitz ultimately means that "coherence is always coherence *to* an individual" (2006, p. 365); being an important consequence of the former that coherence is constantly renegotiated by text users; fifth, coherence is seen as a construct, and accordingly, for Bublitz, it is epistemologically but not phenomenologically real — in other words, text users may speak and write in a coherent way without deepening into the concept —; and sixth, partly on account of the eminently cognitive nature of coherence, it can only be assessed through its results, that is, in so far as it is reflected in the text.

These assumptions result in an approach to the study of coherence in which *shared knowledge* or *common ground* plays an important role. As Bublitz notes, the research into the coherence of a given text should "start with the question of what it is that we need to know and assume in order to understand it as coherent" (2006,

p. 367). Therefore, a classification of knowledge or cognitive resources which coherence rests upon is put forward. Such a classification contemplates six main *cognitive resources* on which the addressee may rely so as to grasp the meaning of the text: his knowledge of the language; his immediate, contextual knowledge of the situational parameters; his episodic knowledge of connected, relevant experience; his factual or declarative knowledge, related to the contextual background referred to in the text; his cognitive skills; and finally, his empathetic skills or assumptions that he may entertain about his interlocutor.

4.8 Towards a synthesis of discourse and cognitive approaches: Givón (1995).

On the basis of the inherent complexity that characterises discourse and coherence — which he qualifies as an ‘epi-phenomenon’ —, an interdisciplinary approach is avowed by Givón (1995), in what stands for one of the most comprehensive models that have been put forward to account for coherence. Givón points at a *dynamic* view of coherence, an aspect that, within relevance theory, Jucker (1995) has also noted. Most importantly, his main thesis is that coherence resides *both* in the text and in the user’s minds. Coherence is seen not as a product, but rather, as a *process* which is constructed through discourse production and comprehension. It is also avowed to locate the study of coherence in oral rather than in written texts. His main proposal is, then, to approach coherence as a manifold phenomenon, which comprises the following aspects:

- first, as an external property of texts, that is, as the continuity or recurrence of some elements across a span of text;
- second, as a mental entity that is imposed by text users through certain cognitive operations, both at the levels of production and comprehension;
- third, as grounding: this is connected with the access to the nodes formed up in the process of the access to the mental representation of the text, which is made possible through the interconnection of such nodes within the mental structure of the text. Such grounding may be *cataphoric* (*anticipatory*) or *anaphoric*. *Cataphoric grounding* includes grammar-cued phenomena, such as referential, temporal or thematic coherence. In turn, certain mental structures contribute to anaphoric grounding, most importantly, the model of the current speech situation, the model of permanent generic-lexical knowledge — which involves both the generic access to certain referents (frame-based or script-based reference) — and also the episodic model of the current text — which has to do with the activation of topic referents.
- fourth, a distinction is drawn between *knowledge-driven* versus *grammar-cued coherence*, both of which work as two parallel processing channels activated

simultaneously during text comprehension: grammar is seen as an automated discourse-processing node, which, as Kintsch (1995, p. 158) notes, “provides the comprehender with a ‘weak’ but general method for comprehension”. However, grammar has to be complemented with knowledge-based and domain-specific methods, that is to say, with lexical information.

- fifth, a distinction is likewise made between local and global coherence, both of which are involved in vocabulary-cued and grammar-cued text processing alike.
- Sixth, different mechanisms of coherence are detailed, each of which can be either grammar-cued or vocabulary-guided, and can also be either global or local. These mechanisms of coherence are the following: spatial coherence, temporal coherence, thematic coherence, and referential coherence.

Coherence is also approached from the point of view of its connection with the informative structure of texts, so that two different *constraints* are proposed, on old and on new information, respectively. Accordingly, each clause in a natural text tends to have at least one chunk of old information per clause and not more than one chunk of new information per clause. Whereas relevance theory has put forward a criterion of accessibility to provide encyclopaedic information with structure, Givón associates *accessibility* with coherence. He does so by formulating a *principle of multiple grounding, coherence and mental access*: “The more grounding connections the clause has, the more mentally accessible it is, and thus the more coherent it is relative to the text in which it is embedded” (1995, p. 76). This shows that one of the main aspects of coherence is indeed cognitive. Besides, if we compare this with the relevance theoretical framework, which also relates the accessibility of encyclopaedic information with relevance, we believe that it presents a shortcoming: it is only connected with concepts, that is, therefore, with propositions, whereas no attempt is apparently made to relate it to larger units beyond the proposition.

On the whole, coherence is approached by Givón in terms of *degree*, so that there are upper and lower degrees of coherence. This means that coherent texts range at some point between two extremes of total *redundancy*, on the one hand, and utter *incoherence*, on the other hand.

5. General conclusions

The present survey has shown that a cognitive orientation to discourse coherence has been present ever since the first proposals were laid down. Furthermore, the dominant view has increasingly become that the connectedness, and therefore,

coherence of discourse is a defining trait not so much of discourse itself, but rather, of the mental representations that text users come to entertain of it in any communicative process. This leads us to conclude that coherence may be viewed as both a textual and a cognitive variable of discourse.

Both cognitive approaches to coherence and relevance draw on certain common aspects, such as the following: first, the need to approach discourse in cognitive terms; second, the fact that discourse reflects a certain set of intentions and purposes; third, the fact that the comprehension of discourse must rely upon certain levels of knowledge that must be shared by speakers and audience, even if one of the main purposes of communication is precisely to broaden such shared knowledge, on the one hand, and if the knowledge which is shared must be actualised, checked and monitored in context by all participants, on the other hand. Yet, coherence also copes with the organisation of the message, and is certainly based upon the levels of text and discourse. In contrast, the relevance-theoretical model of communication had essentially been based upon the utterance, and consequently, its views on discourse coherence had lain upon an exclusively bottom-up perspective. Both coherence and relevance dwell upon linguistic data and facts, but go further beyond language. Besides, the two are best coped with in terms of *degree*, and as such both may be valuable tools to account for the production and comprehension of discourse. This leads us to conclude that there does not seem to be any contradiction between discourse and cognitive approaches to coherence, on the one hand, and relevance theory, on the other hand. Therefore, there does not appear to exist, either, an intrinsic antonymy between relevance and coherence. This is so even though the survey carried out has shown that there have been different approaches to either, relevance and coherence. But most importantly, in our view, this shows that the two notions are compatible, and are best understood as tools that speakers and addressees have at their disposal, so that messages can be entertained more fruitfully and communication may be more successful.

The analysis carried out has enabled us to reach the following conclusions. To begin with, there have been certain recurrent traits in the analysis of coherence found in all three approaches — discourse, cognitive and relevance. Amongst the most important ones, the following stand out: first, the need to relate discourse coherence with the extralinguistic reality or state of affairs referred to by the text; second, and as a result, all three approaches have pointed at the need to broaden the way context is understood, and the survey of this has shown a recurrence in the consideration of context as a cognitive entity which is likely to be modified and enlarged throughout the communicative process; third, a further implication shows that coherence relations are not to be seen only within or among the different units that constitute discourse, but also between the whole discourse and the reality being referred to by it, an aspect that may be captured as long as context

is approached as a cognitive entity; and fourth, regarding the relationship between relevance and coherence, it may be argued that both of them are intuitively grounded. Therefore, they are best understood as complementary.

Notes

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1. The reference to *efficiency* may be related to Beaugrande & Dressler’s (1981) or Levinson’s (1983) concepts of *effectiveness* and *efficiency*. For Beaugrande & Dressler’s (1981) *effectiveness* and *efficiency* are two of the regulative principles that control textual communication, and may indeed be said to have been strongly influential upon the concept of *relevance* by Sperber and Wilson. They are defined in the following way: “The EFFICIENCY of a text depends on its use in communicating with a minimum expenditure of effort by the participants. The EFFECTIVENESS of a text depends on its leaving a strong impression and creating favourable conditions for attaining a goal” (Beaugrande & Dressler, 1981, p. 11).

2. Sperber and Wilson (1995) define the PRESUMPTION OF OPTIMAL RELEVANCE as follows, so that both conditions are fulfilled: “(a) The set of assumptions I which the communicator intends to make manifest to the addressee is relevant enough to make it worth the addressee’s while to process the ostensive stimulus. (b) The ostensive stimulus is the most relevant one the communicator could have used to communicate I” (Sperber and Wilson, 1995, p. 158).

3. Unless indicated otherwise, we shall follow the convention of using the feminine pronouns — personal, possessive, etc. — to refer to the speaker, and masculine pronouns to refer to the addressee.

4. Following Searle (1969), in their theory of text and discourse analysis, Beaugrande & Dressler (1981) make a distinction between the different *standards of textuality* — those which must be met by a text in order to be regarded as such and also as a communicative occurrence — which are regarded as *constitutive principles*, on the one hand, and *regulative principles*. *Constitutive principles* are necessary to define the text as such: “they define and create the form of behaviour identifiable as textual communication, and if they are defied, that form of behaviour will break down” (1981, p. 11). As noted above, these are cohesion, coherence, intentionality, acceptability, informativity, situationality and intertextuality. On the other hand, *regulative principles* are three: effectiveness, efficiency and appropriateness. For Beaugrande & Dressler, their basic property is that they “control textual communication rather than define it” (1981, p. 11).

5. *Concepts* had been defined as constituents of the logical forms organised in sets and giving way to assumptions. What is important about concepts is that they constitute economical ways of storing and retrieving information. Such information may be of three different types, namely,

logical, lexical and encyclopaedic. *Logical entries* are approached as sets of premises and conclusions, which apply to the assumptions in which the associated concept appears, and which determine its *content*. For this reason, they are relatively constant across speakers and time. In contrast, *encyclopaedic entries* provide information about the extension and denotation of a concept, that is, the objects and qualities that instantiate it. As Blakemore (1992) notes, *encyclopaedic* information may become part of the context for the interpretation of utterances. Finally, *lexical entries* contain information about the natural language lexical item used to express the concept. The relevance-theoretical notion of *encyclopaedic entries* can be associated with concepts and tools offered by Artificial Intelligence (AI), also used by coherence approaches, such as *frames* (Minsky, 1975), *schemas* (Rumelhart & Norman, 1978), or *scripts* (Schank & Abelson, 1977). What *encyclopaedic entries* share with all these is the fact that they account for the possible ways in which information is organised so that it may be processed, stored in long-term memory and subsequently accessed in easy and economical ways. All these models stress the fact that information is stored in units or packets, the so-called *chunks*, so that the activation of a certain key, central unit of the whole may give access to the information represented by it.

6. A wider account of the antecedents of the relevance-theoretical approach to the context had been explored in a former paper (Ruiz Moneva, 1998).

7. As instances, we shall make a brief reference to some representative classifications. Thus, Halliday & Hasan (1976) distinguish among the following types of conjunction: additive, adversative, causal, and temporal. Crombie (1985) refers to a list of general semantic relations between propositions, among which he includes categories such as the following: temporal, matching, cause-effect, truth and validity, alternation, bonding, paraphrase, amplification and setting/ conduct. Martin (1992) classifies logico-semantic relations and distinguishes the following: additive, comparative (including similarity and contrast), temporal (including simultaneous and successive) and consequential (including purpose, condition, consequence, concession and manner).

8. It may be argued that there may be different criteria to be used for the tracing of different kinds of coherence. Yet, we should like to underline, in particular, the classification put forward by Connell & Keane (2004) -quoted by Le Foch (2008)- which draws a distinction between *concept coherence* and *word coherence*. *Concept coherence* is related to "the strength and the nature of inferences made between parts of a discourse" (Le Foch, 2008, p. 1204). In turn, *word coherence* is connected with the frequency of co-occurrences between words in language. It seems obvious that *concept coherence* holds significant connections with the notion of relevance, as understood by Sperber and Wilson. Therefore, this provides further evidence of the compatibility of both relevance and coherence.

9. *Cohesive ties* make reference to the relationship between a cohesive item and that item that it presupposes in a text (Halliday & Hasan, 1976; Martin, 2001).

10. The distinction between *cohesion* and *coherence* has gradually become established on the basis of the axis to be drawn between the text and the text users: thus, authors such as Bublitz (1999) or Bednarek (2005) note that whereas *cohesion* can be regarded as a text-inherent property, because it deals with the ways in which sentences are connected in a text by means of lexical and grammatical devices, on the other hand, *coherence* is not a text-inherent property and concerns rather the logical relations in a text that are established by text-users.

11. Thus, the authors note the following: “the intentions that underlie discourse are so diverse that approaches to discourse coherence based on selecting discourse relationships from a fixed set of alternative rhetorical patterns (e.g., Hobbs, 1979; Reichman, 1981; Mann & Thompson, 1988) are unlike to suffice” (Grosz & Sidner, 1986, p. 176).

References

- Beaugrande, R. de. (1980). The pragmatics of discourse planning. *Journal of Pragmatics*, 4, 15–42.
- Beaugrande, R. de. (1996). The ‘pragmatics’ of doing language science: the ‘warrant’ for language corpus linguistics. *Journal of Pragmatics*, 25, 503–35.
- Beaugrande, R. de & Dressler, W. (1981). *Introduction to Text Linguistics*. London: Longman.
- Bednarek, M. (2005). Frames revisited: the coherence-inducing function of frames. *Journal of Pragmatics*, 37, 685–705.
- Blakemore, D. (1987). *Semantic Constraints on Relevance*. London: Blackwell.
- Blakemore, D. (1988). The organization of discourse. In F. Newmeyer (Ed.), *Linguistics: The Cambridge Survey. Vol. IV: The Socio-Cultural Context* (pp. 29–50). Cambridge: Cambridge University Press.
- Blakemore, D. (1992). *Understanding Utterances*. London: Blackwell.
- Blakemore, D. (2001). Discourse and relevance theory. In D. Schiffrin, D. Tannen & H.E. Hamilton (Eds.), *The Handbook of Discourse Analysis* (pp. 100–118). London: Academic Press.
- Blakemore, D. (2002). *Relevance and Linguistic Meaning: The Semantics and Pragmatics of Discourse Markers*. Cambridge: Cambridge University Press.
- Blass, R. (1986). Cohesion, coherence and relevance. *Notes on Linguistics*, 34, 41–64.
- Blass, R. (1990). *Relevance Relations in Discourse. A study with special reference to Sissala*. Cambridge: Cambridge University Press.
- Blass, R. (1993). Are there logical relations in a text? *Lingua*, 90, 91–110.
- Brown, G. & Yule, G. (1983). *Discourse Analysis*. Cambridge: Cambridge University Press.
- Bublitz, W. (1989). Topical coherence in spoken discourse. *Studia Anglica Posnaniensia*, 22, 31–51.
- Bublitz, W. (1994). In the eye of the beholder: the rather mystical notion of coherence. In K. Carlson, K. Davidse & B. Rudzka-Ostyn. (Eds.), *Perspectives on English. Studies in Honour of Professor Emma Vorlat* (pp. 213–230). Leuven, Paris: Peeters.
- Bublitz, W. (1998). Cohesion and coherence. In J. Verschueren, J.-O. Östman, J. Blommaert & C. Bulcaen (Eds.), *Handbook of Pragmatics* (Installment 1998) (pp. 1–15). Amsterdam: John Benjamins.
- Bublitz, W. (1999). Introduction: Views on coherence. In W. Bublitz, U. Lenk & E. Ventola (Eds.), *Coherence in Spoken and Written Discourse. How to Create It and How to Describe It* (pp. 1–7). Amsterdam/Philadelphia: John Benjamins.
- Bublitz, W. (2006). It utterly boggles the mind: knowledge, common ground and coherence. In H. Pishwa (Ed.), *Language and Memory: Aspects of Knowledge Representations* (pp. 359–386). Berlin: Mouton de Gruyter.
- Carston, R. & Uchida, S. (Eds.). (1998). *Relevance Theory. Applications and Implications*. Amsterdam: John Benjamins.

- Charolles, M. (1983). Coherence as a principle in the interpretation of discourse. *Text*, 3(1), 71–91.
- Connell, L. & Keane, M.T. (2004). What plausibility affects plausibility? Concept-coherence and Distributional word coherence as factors influencing plausibility judgments. *Memory and Cognition*, 32, 185–97.
- Connor, U. (1996). *Contrastive Rhetoric: Cross-cultural aspects of second-language writing*. Cambridge: Cambridge University Press.
- Connor, U. (2001). Changing currents in contrastive rhetoric: new paradigms. In A.I. Moreno and V. Colwell (Eds.), *Perspectivas Recientes sobre el Discurso/Recent Perspectives on Discourse* (pp. 27–56). León: Universidad/AESLA.
- Conte, M.E. (1988). Coerenza testuale. *Condizioni di coerenza: ricerche di linguística testuale* (pp. 29–44). Pavia: Faculta di Lettere e Filosofia.
- Cook, G. (1989). *Discourse*. Oxford: Oxford University Press.
- Crombie, W. (1985). *Process and Relation in Language Learning*. Oxford: Oxford University Press
- Downing, A. (2001). Topicality, coherence and interaction. In A.I. Moreno and V. Colwell (Eds.), *Perspectivas Recientes sobre el Discurso/ Recent Perspectives on Discourse* (pp. 57–82). León: Universidad/AESLA.
- Gernsbacher, M.A. & Givón, T. (1995). Coherence as a mental entity. *Coherence in Spontaneous Texts* (pp. vii–x). Amsterdam/Philadelphia: John Benjamins.
- Giora, R. (1985a). Notes towards a theory of text coherence. *Poetics Today*, 6, 699–715.
- Giora, R. (1985b). What's a coherent text? In E. Sözer (Ed.), *Text Connexity, Text Coherence. Aspects, Methods, Results* (pp. 16–35). Hamburg: Buske.
- Giora, R. (1985c). A text-based analysis of non-narrative texts. *Theoretical Linguistics*, 12, 115–35.
- Giora, R. (1988). On the informativeness requirement. *Journal of Pragmatics*, 12, 547–65.
- Giora, R. (1996). Language comprehension as structure building. *Journal of Pragmatics*, 26, 417–436.
- Giora, R. (1997). Discourse coherence and theory of relevance: Stumbling blocks in search of a unified theory. *Journal of Pragmatics*, 27, 17–34.
- Giora, R. (1998). Discourse coherence is an independent notion: A reply to Deirdre Wilson. *Journal of Pragmatics*, 29, 75–86.
- Givón, T. (1995). Coherence in text vs. coherence in mind. In M.A. Gernsbacher & T. Givón (Eds.), *Coherence in Spontaneous Texts* (pp. 59–116). Amsterdam/Philadelphia: John Benjamins.
- Graesser, A., Gernsbacher, M.A. & Goldman, S.R. (1997). Cognition. In T. Van Dijk (Ed.), *Discourse as Structure and Process* (pp. 292–319). London: Sage.
- Grice, P. (1969). Utterer's meaning and intentions. *Philosophical Review*, 68(2), 147–77.
- Grice, P. (1975). Logic and conversation. In P. Cole & J.L. Morgan (Eds.), *Syntax and Semantics, Vol. III: Speech Acts* (pp. 41–58). New York: Academic Press.
- Grosz, B.J. & Sidner, C.L. (1986). Attentions, intentions and the structure of discourse. *Computational Linguistics*, 12(3), 175–204.
- Gutt, E.A. (1998). Relevance and effort: A paper for discussion. Text of the paper presented at the 2nd Relevance Theory Workshop, Luton, 96–101.
- Halliday, M.A.K. (1973). *Explorations in the Functions of Language*. London: Arnold.
- Halliday, M.A.K. (1978). *Language as a Social Semiotic: The Social Interpretation of Language and Meaning*. London: Arnold.

- Halliday, M.A.K. 1989(1985). *Spoken and Written Language*. Oxford: Oxford University Press.
- Halliday, M.A.K. 1994(1985). *Introduction to Functional Grammar*. London: Arnold.
- Halliday, M.A.K. & Hasan, R. (1976). *Cohesion in English*. London: Longman.
- Hasan, R. (1984). Coherence and cohesive harmony. In J. Flood (Ed.), *Understanding Reading Comprehension* (pp. 181–219). Delaware: International Reading Association.
- Hobbs, J.R. (1978). Why is discourse coherent? Technical Note 176176, SRI Project 5844, 7510, 7910. [reference taken from Blass, 1990, 267].
- Hobbs, J.R. (1979). Coherence and coreference. *Cognitive Science*, 3, 67–90.
- Hobbs, J.R. (1985). On the coherence and structure of discourse. In L. Polanyi (Ed.), *The Structure of Discourse* (pp. 1–35). Norwood: Ablex Publishing Co.
- Hoey, M. (1991). *Patterns of Lexis in Text*. Oxford: Oxford University Press.
- Horn, L. (1984). A new taxonomy for pragmatic inference: Q-based and R-based implicature. In D. Schiffrin (Ed.), *Meaning, Form and Use in Context (GURT 1984)* (pp. 11–42). Washington: Georgetown University Press.
- Johnson-Laird, P.N. (1981). Comprehension as the construction of mental models. *The Psychological Mechanisms of Language*. Philosophical Transactions of the Royal Society of London. London: The Royal Society and The British Academy.
- Johnson-Laird, P.N. (1983). *Mental Models*. Cambridge: Cambridge University Press.
- Jucker, A. (1993). The structure and coherence of discourse. In H. Löffler (Ed.), *Dialoganalyse IV. Refereate der 4. Arbeitstagung* (pp. 71–78). Tübingen: Niemeyer.
- Jucker, A. (1995). Discourse analysis and relevance. In F. Hundsnurscher & E. Weigand (Eds.), *Future Perspectives of Dialogue Analysis* (pp. 121–147). Tübingen: Niemeyer.
- Kaplan, R.B. (1966). Cultural thought patterns in intercultural education. *Language Learning*, 16, 1–20.
- Kaplan, R.B. (1987). Cultural thought patterns revisited. In U. Connor & R.B. Kaplan (Eds.), *Writing Across Languages: Analysis of L2 texts* (pp. 9–22). Reading, Mass.: Addison-Welsey.
- Károly, K. (1998). Written text analysis: A multidisciplinary field of study. *Sprachtheorie und germanistische Linguistik*, 8(1), 71–108.
- Kintsch, W. (1995). How readers construct situation models for stories: The role of syntactic cues and casual inference. In M.A. Gernsbacher & T. Givón (Eds.), *Coherence in Spontaneous Texts*. Amsterdam/Philadelphia: John Benjamins.
- Kintsch, W. & Van Dijk, T.A. (1978). Toward a model of text comprehension and production. *Psychological Review*, 85, 363–94.
- Le Foch, V. (2008). Plausibility judgment of casually related social events: impact of conceptual coherence and word-coherence. *Journal of Pragmatics*, 40, 1202–15.
- Levinson, S.C. 1994(1983). *Pragmatics*. Cambridge: Cambridge University Press.
- Linnell, P & Korlija, N. (1997). Episodes: coding and analysing coherence in multiparty conversation. *Linguistics*, 34, 799–831.
- Mann, B. (1999). An introduction to Rhetorical Structure Theory (RST). <http://www.sil.org/~mannb/rst/rintro99.htm> (last accessed: 16/12/09)
- Mann, W.C. & Thompson, S.A. (1986). Relational Propositions in Discourse. Technical report RR-83–115. Marina del Rey, California: Information Sciences Institute.
- Mann, W.C. & Thompson, S.A. (1988). Rhetorical Structure Theory: Toward a functional theory of text organization. *Text*, 8(3), 243–81.
- Manor, R. (1982). Answers and other reactions. *Theoretical Linguistics*, 9(1), 69–94.
- Martin, J.R. (1992). *English Text: System and Structure*. Amsterdam: John Benjamins.

- Martin, J.R. (2001). Cohesion and texture. In D. Schiffrin, D. Tannen & H. Hamilton (Eds.), *A Handbook of Discourse Analysis* (pp. 35–53). Malden, Mass.: Blackwell.
- McCarthy, M. (1991). *Discourse Analysis for Language Teachers*. Cambridge: Cambridge University Press.
- Minsky, M. (1975). A framework for representing knowledge. In P. Winston (Ed.), *The Psychology of Computer Vision*. New York: McGraw Hill.
- Moore, J.D. & Pollack, M.E. (1992). A problem for RST: The need for multi-level discourse analysis. *Computational Linguistics*, 18, 537–44.
- Otal Campo, J.L. (2008). Discourse strategies and cognition. In R. Mairal Usón *et al.* (Eds.) *Actas del XXIV Congreso Internacional de AESLA* (pp. 1269–1274). Madrid: UNED.
- Petöfi, J.S. (1973). Towards an empirically motivated grammatical theory of verbal texts? In J.S. Petöfi & H. Rieser (Eds.), *Studies in Text Grammar*. Dordrecht: Reidel.
- Petöfi, J.S. (1975). *Vers une théorie partielle du texte*. Hamburg: Buske, Papiere zur Textlinguistik 9.
- Petöfi, J.S. & Bredemeier, J. (Eds.). (1977). *Das Lexicon in der Grammatik. Die Grammatik im Lexicon*. Hamburg: Buske, Papiere zur Textlinguistik, 13.
- Petöfi, J.S. & García Berrio, A. (Eds.). (1979). *Lingüística del texto y crítica literaria*. Madrid: Corazón-Comunicación.
- Quirk, R. *et al.* (1985). *A Comprehensive Grammar of English*. London: Longman.
- Reichman, R. (1981). *Plain Speaking: A theory and grammar of spontaneous discourse*. PhD dissertation. Department of Computer Science. Harvard University.
- Reinhart, T. (1980). Conditions for text coherence. *Poetics Today*, 1(4), 161–180.
- Reinhart, T. (1981). Pragmatics and linguistics: An analysis of sentence topic. *Philosophica*, 27(1), 53–93.
- Rickheit, G. & Strohner, H. (1991). Towards a cognitive theory of linguistic coherence. *Theoretical Linguistics*, 18, 209–237.
- Rouchota, V. (1998). Connectives, coherence and relevance. In V. Rouchota & A. Jucker (Eds.), *Current Issues in Relevance Theory* (pp. 11–58). Amsterdam/Philadelphia: John Benjamins.
- Ruiz Moneva, M.A. (1998). Relevance and the context: two sides of the same coin. Some notes on the origin of the relevance approach to the context. In I. Vázquez Orta & I. Guillén Galve (Eds.), *Perspectivas Pragmáticas en Lingüística Aplicada* (pp. 177–180). Zaragoza: Anubar.
- Rumelhart, D.E. & Norman, D.A. (1978). Accretion, tuning and restructuring: Three models of learning. In J.W. Cotton & R.L. Klatzky (Eds.), *Semantic Factors in Cognition* (pp. 37–53). Hillsdale, N.J.: Lawrence Erlbaum Ass.
- Sanders, T.J.M. *et al.* (1993). Coherence relations in a cognitive theory of discourse representation. *Cognitive Linguistics*, 4(2), 93–133.
- Sanders, T. & Spooren, W. (1999). Communicative intentions and coherence relations. In W. Bublitz, U. Lenk & E. Ventola (Eds.), *Coherence in Spoken and Written Discourse. How to Create It and How to Describe It* (pp. 235–250). Amsterdam/Philadelphia: John Benjamins.
- Sanford, A.J. & Garrod, S.C.. (1981). *Understanding Written Language*. Chichester: Wiley.
- Schank, R. & Abelson, R. (1977). *Scripts, Plans, Goals and Understanding*. Hillsdale, N.J.: Lawrence Erlbaum Ass.
- Scheppers, F. (2003). P(ragmatic)-trees. Coherence, intentionality and cognitive content in discourse and non-verbal action. *Journal of Pragmatics*, 35, 665–694.
- Schiffrin, D. (1985). Conversational Coherence: the Role of *Well*. *Language*, 61, 640–67.
- Schiffrin, D. (1994). *Approaches to Discourse*. Oxford: Blackwell.

- Searle, J.R. (1969). *Speech Acts*. Cambridge: Cambridge University Press.
- Sinclair, J. (1991). *Corpus, Concordance, Collocation*. Oxford: Oxford University Press.
- Sperber, D. & Wilson, D. (1982). Mutual knowledge and relevance in theories of comprehension. In N.V. Smith (Ed.), *Mutual Knowledge* (pp. 61–85). London: Academic Press.
- Sperber, D. & Wilson, D. (1987). Précis of *Relevance*. *Communication and Cognition. Behavioral and Brain Sciences*, 10, 697–710.
- Sperber, D. & Wilson, D. 1995(1986). *Relevance. Communication and Cognition*. London: Blackwell.
- Spooren, W. & Sanders, T. (2008). The acquisition order of coherence relations: On cognitive complexity in discourse. *Journal of Pragmatics*, 40, 2003–26.
- Stalnaker, R. (1978). Assertion. *Syntax and Semantics*, 9. Ed. P. Cole.
- Strawson, P. (1964). Identifying reference and truth-value. *Theoria*, 30, 96–118. Reprinted in P. Strawson. (1971). *Logico-Linguistic Papers*. London: Methuen. 75–95.
- Swales, J. (1990). *Genre Analysis*. Cambridge: Cambridge University Press.
- Swales, J. (2001). Issues of genre: purposes, parodies and pedagogies. In A.I. Moreno and V. Colwell (Eds.), *Perspectivas Recientes sobre el Discurso / Recent Perspectives on Discourse* (pp. 11–26). León: Universidad/AESLA.
- Thomas, S. (1995). Rhetorical Structure Theory. *Studies in Machine Translation and Natural Language Processing*, 9, 159–74.
- Torrance, M. & Bouyand-Agha, N. (2001). Rhetorical structure analysis as a method for understanding writing processes. *Proceedings of the International Workshop on Multi-disciplinary Approaches to Discourse (MAD 2001)* (pp. 51–59). Amsterdam: Amsterdam & Nodus Publications.
- Trabasso, T. & Suh, S. (1993). Understanding text: achieving explanatory coherence through on-line inferences and mental operations in working memory. *Discourse Processes*, 16, 3–34.
- Trimble, L. (1985). *English for Science and Technology. A discourse approach*. Cambridge: Cambridge University Press.
- Van Dijk, T. A. (1972). *Some Aspects of Text Grammars*. The Hague: Mouton.
- Van Dijk, T.A. (1976). Sentence Topic and Discourse Topic. *Papers in Slavic Philology*, 1, 49–61.
- Van Dijk, T.A. (1979). “Relevance Assignment in Discourse Comprehension”. *Discourse Processes*, 2, 113–26.
- Van Dijk, T.A. 1989 (1977). *Text and Context*. London: Longman.
- Van Dijk, T.A. 1989 (1985). Semantic discourse analysis. In T.A. Van Dijk (Ed.), *Handbook of Discourse Analysis* (pp. 103–136). London: Academic Press.
- Van Dijk, T.A. & Kintsch, W. (1983). *Strategies of Discourse Comprehension*. New York: Academic Press.
- Ventola, E. (1999). Semiotic spanning at conferences: Cohesion and coherence in and across conference papers and their discussions. In W. Bublitz, U. Lenk & E. Ventola (Eds.), *Coherence in Spoken and Written Discourse. How to Create It and How to Describe It* (pp. 101–123). Amsterdam/Philadelphia: John Benjamins.
- Vilarnovo, A. (1991). Teorías explicativas de la coherencia textual. *Revista Española de Lingüística*, 21(1), 125–44.
- Werth, P. (1984). *Focus, Coherence and Emphasis*. London: Croom Helm.
- Widdowson, H.G. (1979). *Explorations in Applied Linguistics*. Oxford: Oxford University Press.
- Wilson, D. (1975). *Presuppositions and Non-Truth Conditional Semantics*. London: Academic Press.

- Wilson, D. (1994). Relevance and Understanding. In Gillian Brown *et al.* (Eds.), *Language and Understanding* (pp. 35–58). Oxford: Oxford University Press.
- Wilson, D. (1998). Discourse, coherence and relevance: A reply to Rachel Giora. *Journal of Pragmatics*, 29, 57–74.
- Wilson, D. (1999). Relevance and relevance theory. In R. Wilson & F. Keil (Eds.), *MIT Encyclopedia of the Cognitive Sciences* (pp. 719–22). Cambridge, Mass.: MIT Press.
- Wilson, D. & Sperber, D. (1981). On Grice's theory of conversation. In P. Werth (Ed.), *Conversation and Discourse* (pp. 155–78). London: Croom Helm.
- Wilson, D. & Sperber, D. (2004). "Relevance Theory". In G. Ward & L. Horn (Eds.), *Handbook of Pragmatics* (pp. 607–32). Oxford: Blackwell.

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