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Teaching coherence through genre

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Abstract:

In this paper I focus on three ways of accessing text coherence: explicit cohesion, propositional coherence and genre coherence. I particularly concentrate on the issue of genre coherence, illustrating my argument with examples from a range of scientific texts. Although the assessment of coherence will always ultimately depend on the particular cognitive and social environment in which this evaluation takes place, genre knowledge can help to fix or stabilise this environment. An increased awareness of the generic features of particular text types can help learners to write more coherent texts

Keywords: Coherence, cohesion, genre.

Introduction

Assessing and textual coherence is an extremely complex task and one that has been a problem for linguists and teachers alike for many years. The fact that readers can usually distinguish a text from a non-text, leads us to think that 'text' as a concept exists in readers' minds. If we do not know what constitutes a text, at least we know when it is a text: the *factum textus* (cf. Lundquist 1999). However, listing the ingredients of text unity or coherence has proved far more elusive.

Designing a text grammar along the lines of traditional sentence grammar is practically impossible as the 'rules' at issue are not of the same order (Charolles & Combettes 1999). It is notoriously difficult to draw up any definitive inventory, primarily because the features contributing to text unity are difficult to identify in the absence of a precise context, and because context itself is open and seamless. Recreating or stabilising a context is therefore problematic. All this does not mean however that coherence is not teachable. Whilst it may not be possible to provide a blueprint for coherence, there

are range of ways in which learners can be familiarised with the issue of text coherence and thus helped to write more coherent texts.

1. Three ‘holds’ on coherence

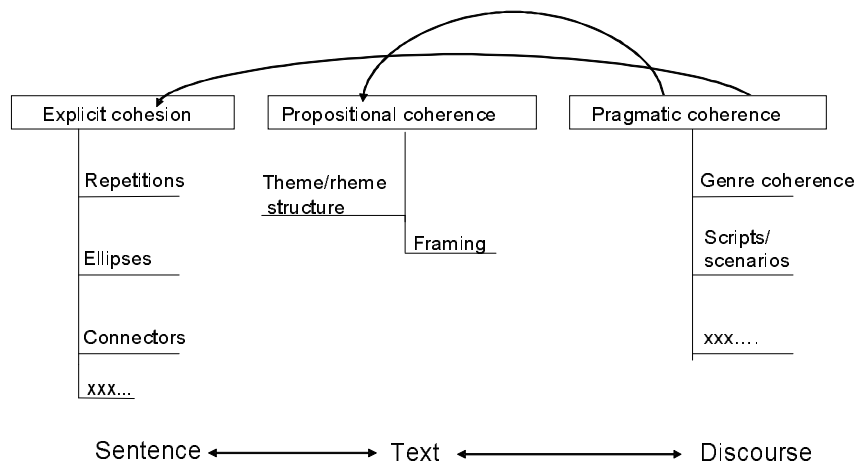


Figure 1. Three holds on -coherence

The diagram above illustrates three ‘holds’ or ‘handles’ on ways of accessing text coherence: These holds include explicit cohesion on the one hand and propositional and pragmatic coherence on the other. Most research in text linguistics distinguishes between the two complementary perspectives of cohesion and coherence. Both concepts represent how words, sentences and ideas conveyed in a text are connected. In the case of cohesion, the connections are grounded in explicit linguistic elements and concern connections at the sentence/text level. Coherence however results from an interaction between the text and the reader at the discourse level and is not necessarily signalled by explicit linguistic clues on the text surface. It has to do with the way propositional content is organised and interpreted by the text receiver within a specific discourse context.

As the table illustrates the three accesses to text coherence do not function in isolation. The higher pragmatic levels of text organisation, for example, also have an important impact on propositional coherence and on the types of cohesion patterns exploited. In the next sections I will briefly comment on what is subsumed under the heading of explicit cohesion and propositional coherence before focusing in more detail on the question of genre coherence in section 4.

2. Explicit Cohesion

Explicit cohesion refers to the linguistic means for binding sentence sequences, both within sentences and across sentence boundaries. Halliday and Hasan's well-known classification (1976) specifies five major classes of ties: reference, substitution, ellipsis, conjunction and lexical reiteration and collocation. Although several studies have attempted to gauge the importance of explicit cohesion in establishing coherence, most conclude that an appropriate use of connecting devices of this type is not sufficient in itself to produce coherent texts (*cf.*, for example Witte & Faigley 1981). However it is undeniable too that incorrect use of these links can create incoherent text. Textual cohesion can be improved by paying close attention to the way clauses and/or sentences are linked. If for example a language learner uses the wrong anaphoric pronoun or an inappropriate conjunction the resulting text is likely to hinder readers' comprehension (Carter-Thomas 2000).

3. Propositional coherence

Under this heading I am referring to the way a text is organised into informational blocks within and between clauses and the ways of accessing this informational structuring.

3.1 Theme/Rheme structure

One way of accessing propositional coherence is through theme/rheme analysis. Generally speaking the writer/speaker will place at the beginning of the clause what he is speaking about, the *theme*, which usually contains given (or recoverable) elements that the receiver can easily identify. 'New' information concerning this theme figures in the *rheme*. The sequences of thematic progression (Daneš 1974; Combettes & Tomassone 1988) that result from these choices – such as constant theme progression, linear progression, derived theme progression – can provide useful handles for examining information flow within and between sentences.

There will always be a certain number of intentional ruptures or changes or directions within a text, often coinciding with a change of section or paragraph. Writers can also signal the presence of an unexpected element in the theme function by means of an appropriate linking word. An analysis of theme/rheme structure makes it possible however to pinpoint some of the unintentional ruptures in the information flow – the points where the reader no longer understands the writer's intentions and the communication breaks down (Carter-Thomas 2000).

Very often a slight organisation of the informational blocks can be sufficient to render a problematic extract coherent. In the following sequence, taken from one of my EFL student's academic writing assignments:

(1) Indeed, the higher the satellite's orbit, the more of the Earth's surface can be seen.

However, polar regions are not covered

Theme ?

the presence of the nominal group 'polar regions' as the supposed theme of the second sentence is rather disconcerting (particularly as this theme is not in fact developed in the rest of the text). In the first sentence quoted the writer establishes a link between the altitude of the satellite and the extent of its coverage. Rereading the two sentences it would seem that it is the two rhemes which are linked. The *recoverable* information in the second sentence is conveyed in the verbal group 'covered'. Our interpretation of this sentence would then have been easier if the writer had in fact nominalised this information as the theme:

(2) However this coverage does not extend to polar regions (proposed modification)

Such a reorganisation of the theme-rheme distribution would have enabled the writer to respect the usual *given-new* order. The reader can then assimilate the new elements of information more easily from what would now be a linear progression.

3.2 Framing analyses

Another useful handle on the propositional level of text organisation is provided by framing analysis. The discourse framing model (Charolles 1997) focuses on the forward-labelling potential of certain detached adverbials in sentence initial position. As opposed to theme/theme progressions which essentially create backward connections, frame introducing adverbials look ahead and provide instructions for the interpretation of forthcoming text. In the following extract, the first of these two temporal adverbials (underlined) extends its scope over a whole block of text:

(3) On June 25, Soufriere began spewing a river of ash, rock and gas, heated to temperatures as high as 900 degrees fahrenheit, down its slopes at speeds of more than 100 miles an hour. Those lethal "pyroclastic flows," as volcanologists call them, left at least 10 people dead and forced the abandonment of several villages. Another 9 people (...).

Then, on July 31, after a respite(...), a new and even more dangerous cycle began.

The reader is instructed to interpret the clauses following 'On June 25' as occurring within this specific temporal frame. Such frame introducers often function in a series, as in this case where the first frame is closed by the introduction of a second time adverbial and frame.

Such frame introducers provide readers with strong clues as to how the writer intends the information to be classified. This type of organisation is well-suited to highly structured (planned) texts, such as student essays and academic writing. Frame introducers can be of various types¹ – temporal, spatial, organisational (“In short”), enunciative (“According to X”). However, as far as I know these structures have not been the specific target of pedagogical research in writing. If though such frames are not clear, readers can easily lose their way. Writers need to be made aware of the importance of guiding their readers with adequate signals of this type.

4. Pragmatic coherence

While framing analysis and theme/rheme analysis provide useful handles for accessing some of the more implicit ways coherence can be tracked, these procedures remain nevertheless largely dependent on a specific pragmatic environment and on the cooperative effort of the text receiver within this environment. It is not a just a simple questions of mechanically decoding instructions. The reconstruction or reconversion of the text (into discourse) is by nature probabilistic and cannot be established with absolute certainty.

These aspects of probability and indetermination can however be limited if the text is set into the context of a specific knowledge structure script or scenario (Schank & Abelson 1977) or a particular genre type. A genre serves as a model for constructing new (contextually appropriate) texts – texts which at the same time constantly renew the genre:

We learn to cast our speech in generic forms and, when hearing others' speech, we guess its genre from the very first words; we predict a certain length (that is, the approximate length of the speech whole) and a certain compositional structure; we foresee the end; that is, from the very beginning we have a sense of the speech whole, which is only later differentiated during the speech process. If speech genres did not exist and we had not mastered them, if we had to originate them during the speech process and construct each utterance at will for the first time, speech communication would be almost impossible (Bakhtin 1986: 78-79).

A text will be more likely to appear coherent to the receiver if it corresponds to genre expectations. I believe that a genre perspective on coherence can, in particular, be very profitably adapted to the teaching of academic writing skills, where genre expectations are easily identified.

In academic writing, genres constraints are strict. Research articles, for example, are highly codified, and require a considerable degree of conformity to genre and academic discourse norms. In order to be

¹ See Charolles M. & Pery-Woodley M-P (2005) for a discussion of various types of frame introducing adverbials.

deemed coherent pieces of writing within their specific discourse communities, research article authors are expected to conform not only to language-based norms but also to rather stringent genre constraints.

4.1 Genre and rhetorical organisation

The concept of genre, at it usually applied to the analysis of scientific and academic texts is a social and rhetorical construct. For John Swales (1981, 1990) a genre is above all based on the notions of discourse community and on the common objectives shared by the members of these communities:

A genre comprises a class of communicative events, the members of which share some set of communicative purposes. These purposes are recognized by the expert members of the parent discourse community, and thereby constitute the rationale for the genre. This rationale shapes the schematic structure of the discourse and influences and constrains choice of content and style. (Swales 1990: 58)

The impact of genre is immediately perceptible in top-down analysis of research articles' rhetorical macrostructure. The move analysis model proposed by Swales has proven to be remarkably robust (Nwogu 1997, Samraj 2002) and lends itself well to teaching applications. In my own academic writing courses, I use the three moves of Swales' CARS (Create a Research Space Model) of research article introductions, for example, as a basis for various exercises on planning and writing academic introductions:

Move 1: Establishing a research territory

Move 2: Establishing a niche

Move 3: Occupying the niche (Swales 1990: 141)

Students are asked to identify and discuss, for example, how these main moves and their sub-steps are implemented in research article introductions in their field (see Appendix 1). Conceptualising writing in this manner enables learners to become aware of the links between writing purpose or rationale and its formal features.

Genre constraints impact not only upon the higher level rhetorical organisation of discourse but also upon the linguistic choices writers make at more local text and sentence levels (*cf.* Figure 1). The type and number of explicit cohesion marks employed, for example, can be expected to vary according to genre. The same principle applies in the case of propositional coherence. Different types of frame introducing adverbials can fulfil specific genre needs. Whereas research articles are likely to contain a number of enuciative and organisational frame introducers, a biographical novel will more probably contain a high proportion of temporal frame introducers (Hempel & Degand 2008). Different types of theme /rheme structure and different thematic progression patterns are likewise not created randomly,

but are generated in response to particular genre needs. This impact of genre on theme selection and thematic progression will be briefly commented on in the next section.

4.2 Impact of genre on theme selection and thematic progression

Relating theme /rheme structure to genre can provide useful insights into the ways coherence is achieved in academic texts. The theme/rheme organisation of academic research articles is highly constrained by genre considerations. The genre impacts on the nature of the element(s) selected as theme, the syntactic resources exploited for signalling the theme/rheme structure as well as the thematic progressions created. In order to bring out the specificity of thematic choices adopted by research article writers it is worthwhile comparing them with another scientific genre, the popularised scientific account. The different communicative purposes and readerships of these two distinct genres impact strongly on the thematic choices made, resulting in some very genre specific configurations.

Research article authors are dealing with inanimate objects and procedures belonging to the real world and themes often thus consist of (frequently complex) inanimate noun groups. Existential constructions with a semantically empty 'there' as theme are also frequent. Proper nouns are occasionally thematised (the names of researchers in the literature review, for example) but personal pronouns are rare. However, in the popularised scientific accounts where a more personal tone is expected, personal pronoun themes (both in the first and second person) are widespread. The specific syntactic structures arrangements used in the two genres to signal the appropriate theme/rheme arrangements are consequently also very genre specific (Rowley-Jolivet & Carter-Thomas 2005). The decision to orient a clause around an inanimate noun group theme will entail in many cases a passive construction:

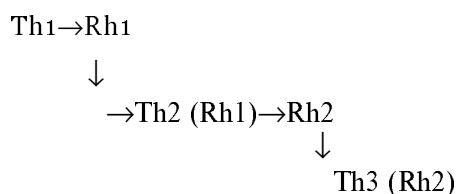
(4) *The blocks were painted. (VS. We painted the blocks)*

Likewise structures using extraposition are useful in research articles for allowing authors to hedge and retain the expected distance from their research claims.

(5) *It is advantageous to stress the blocks to the maximum electric field... (VS. You should stress the blocks as far as possible..)*

Thematic progression patterns are also intricately bound up with genre considerations (Fries 1994; Carter-Thomas 1999). Whereas linear progression is typical of popularised science accounts, constant theme progression is more called upon in the research article. These preferences can be linked to two factors central to Swales' (1990) definition of scientific genre given above: text purpose and intended readership. One of the main functions of a popular scientific article is a didactic one. In extract (6), taken from the *New Scientist*, for example, the author is at pains to explain the benefits of amplifying the signals transmitted by optical fibres optically rather than electronically. The theme of each new

clause comes from part of the immediately preceding rheme. As a result the explanations seem clear and easy to follow:



(6) *The signal must be boosted every 40 miles or so*

In the past this was achieved by electronic repeaters which convert the light pulses into electronic signal (...)

But electronic repeaters must be pre-set to process a certain amount of information.

So increasing the information capacity of the cable would mean replacing every repeater(...)

This problem can be avoided by using optical repeaters.

These are stretches of cable that contain the light-emitting element erbium and a 'pump' laser.

The linear pattern also enables the writer to gradually build up a stock of knowledge. The level of specialised shared knowledge expected on the part of the reader of a general science article account is relatively low. By drawing on information already presented in the preceding rhemes, in order to present it as given information in the subsequent theme, the information stock is increased in successive stages

In the research article proper, careful explanations based on linear progressions such as the above are not usually required, as research article authors are able to draw on the repertoire of knowledge shared with their readers. On the other hand, descriptive sequences are frequent, particularly in the Methods and Results sections:

Th1 → Rh1
Th1 → Rh2
Th1 → Rh3

(7) *Two different plastic clamps hold down the silicon vessel array (...)*

The smaller clamp has a total contact area of approximately 5.6mm.

while the larger clamp has a contact area of approximately 18.6mm.

To provide an adequate clamping force, four screws with springs push down on the corners of the clamp.

The constant theme pattern where the same theme is maintained over a series of clauses is well suited to this descriptive function.

The third main type of thematic progression, the derived theme progression, although less frequently employed in both genres, also fulfils specific functions. It is for example particularly well adapted to

the description of classifications or to enumerations. Derived theme progression is common, for example, in the move 'Occupying the niche' in article introductions, in a step in which authors preview the article structure. In such cases the paper itself plays the role of hyper-theme:

T (hyper-theme)

Th1→Rh1↗ Th2→Rh2↑ Th3→Rh3↖

The article is structured as follows

Section 1 describes (...).

Section 2 reviews (...), whilst section 3 concludes and discusses (...).

In other words the theme/rheme structure furthers a particular argumentative purpose of the genre.

5. Conclusion

In this article I have suggested three ways of accessing text coherence. Although each of the three can provide valuable insights into the issue of coherence, I believe that it is above all through the interaction of these three levels that useful teaching applications can be found in academic writing.

Genre-based pedagogies can provide an overall framework for pulling together these different strands, providing teachers with explicit and systematic explanations of the ways local and text level coherence is created. The notion of genre firstly provides an overall 'hold' on the specific social and cognitive context in which academic texts are produced. In order to raise learners' rhetorical awareness about probable reader expectations and reactions it is important to familiarise them with the genre rationale through, for example, moves analysis. At the same time, however, it is also important to understand how genre influences the way different coherence patterns and cohesive links are created at the text and sentence levels. By shuttling between these macro- and micro-levels of text organisation learners are made aware of the contextually motivated nature of many formal features of text coherence and thus helped to write texts likely to be deemed coherent at the discourse level.

The types of teaching environments most suited to implementing the suggestions proposed in this paper would be ESP and EAP writing courses designed for motivated graduate and postgraduate students. These students will generally have a sound command of English grammar and know how to create cohesive links at the sentence level. They will also often have a good passive knowledge of the expected practice and norms concerning the rhetorical structure of academic texts (research articles, abstracts, reports) in their particular disciplines. However, their previous training will not usually have shown them how to effectively combine these skills to a common end. By making students more aware of both the typical rhetorical structure and the corresponding linguistic features of the texts they need to master, teachers can provide students with clear options for creating well-formed texts that are also coherent in context.

Appendix 1

Genre coherence

Exercise on Moves (Adapted from Swales 1990)

Read the article introduction* and identify the sentences expressing the following moves:

Establishing a research territory:

1a) - Claiming centrality

1b) - Reviewing items of previous research

Establishing a niche

2) - Counter-claiming/Indicating a gap/Question raising

Occupying the niche

3) - Outlining purpose

- 1a { **Interest in materialism and its implications is apparent as far back as the early Greek philosophers. Pythagoras, for example, required that students relinquish their personal possessions before entering his school.** *Rudmin and Kilbourne (1996) provide a historical view of different attitudes toward materialism from the ancient world to the modern.* **Critiques of consumption do indeed transcend time and have remained**
- 1b { **forceful for thousands of years, though they have failed to deter the progress of materialism. This fact has been lamented by playwrights such as Shakespeare and Ibsen, romantic poets such as Emerson and**
- 1a { **Wordsworth, and economic historians such as Veblen and Tawney. Marketing scholars recently returned to an assessment of materialism in contemporary societies.** *While some studies have remained critical of*
- 1b { *consumption practices, referring to materialism as a “dark side” variable (Mick, 1996), others have suggested that materialism might have positive aspects as well (Holt, 1997).*
- 2 { **Despite the many examinations of materialism, it remains unclear how it relates to other aspects of life.** *Micken and Roberts (1999) suggest that materialism reflects a quest for certainty of identity. Schouten and McAlexander (1995) carry this idea further, arguing that consumers use products as a basis for social cohesion and interaction in subcultures of consumption. Contrary to this, it has been argued that materialism has a*
- 1b { *negative effect on perceptions of well-being (Richen & Dawson, 1992), quality of life (Muncy & Eastman, 1998) and sustainability (Norgaard, 1995).* **This suggests that the relationship of materialism to life in Western**
- 2 { **societies is still not well understood.**
- 1b { *Burroughs & Rindfleisch (2002) argue that the nature of materialism needs to be clarified, and that more researchers are beginning to examine it in the context of other life goals and values. Richins and Dawson (1992), Kasser & Ryan (1993) and Burroughs & Rindfleisch (2002) suggest that materialism can be considered the value consumers place on possessions, and this indicates that materialism is a value. Values researchers*
- 2 { **have argued, however, that the study of individual values should be undertaken in the context of the larger value systems that individuals hold (Schartz; 1992).**
- 3 { The purpose of this paper is twofold. The first purpose is to examine materialism as a variable in the context of values as suggested by values researchers. Thus, we will first determine if materialism is related to other values the individual might hold. The second purpose is to determine if this relationship holds across cultures. We propose to develop a causal model relating materialism to values and then to test the cross-cultural invariance of that model.

* Kilbourne, W., Grünhagen, M., & Foley, J. (2005) A cross-cultural examination of the relationship between materialism and individual values. *Journal of Economic Psychology*, 26, 624-641.

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