The role of paragraphs in the construction of coherence – text linguistics and translation studies*

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Abstract

This article presents and illustrates a formal model of linguistic analysis in order to explain a phenomenon that is fundamental to translators in their practice: the construction of coherence. First, the role of paragraphs in the construction of coherence is explained with the application of the model to a newspaper editorial. It is shown, in particular, how a change in the paragraph division of this text affects its meaning. Second, the article underlines the theoretical usefulness and practical limitations of text linguistics for translation studies. In this sense, this article calls for a better understanding between specialists in both fields.

1. Introduction

Translation, as the act of making known what has been written in one language in another language (Vinay and Darbelnet 1977: 24), is a communicative event (Fawcett 1997: 4; Nord 1997: 2). In order to perform this act successfully, the translators' first task is to understand the text. They do this by reconstructing in their mind the coherence of the text on the basis of the text itself and by placing the text in its context (Snell-Hornby 1995: 2). The construction of coherence is a psychological process in which inferences are drawn to link sentences on the basis of linguistic knowledge, domain knowledge and world knowledge. This results in the understanding of the text as an entity to which a global intention can be assigned (Charolles 1983: 72, 77; Givón 1995: 60; Hobbs 1979: 69; Sanders, Spooren, and Noordman 1992: 2).

Coherence has its place not only in discourse comprehension but first and foremost, in its production (Givón 1995: 60): in their writing, authors build coherence at a micro- and a macrolevel (Kintsch and van Dijk 1978: 365; van Dijk 1997: 9). In their comprehension process, readers reconstruct the coherence of the text, but this coherence might not necessarily be the same as the

IRAL 42 (2004), 259-275

0019042X/2004/042-0259 ©Walter de Gruyter author's. However, a full understanding of a text supposes that readers have been able to reconstruct the author's coherence. Thus, the translators' task can be defined as the transfer of the author's coherence, which they have reconstructed as readers, into another language and culture (Nord 1997: 32). The notion of coherence is therefore the key to the entire process of translation. Despite a number of studies on this topic in cognitive psychology and linguistics, it remains a relatively unknown domain, which tends to be highly theoretical. As a result, when the notion of coherence is mentioned in books on translation, it is mostly in rather general terms and tends to refer to the microlevel, i.e., between sentences. Connections between theory and practice (here, linguistics and translation) are indeed sometimes quite difficult to establish. Theories are conceived to help explain and predict phenomena. They tend to become increasingly abstract and complicated in direct relation to the phenomena. As a result, practitioners looking for concrete principles that they can apply directly to their work often do not find guidance in these theories. It is therefore not surprising that translators in training sometimes fail to see the relevance of linguistics in translation.

In this article, linguistic concepts are used to explain a phenomenon that is fundamental to the practice of translation. This article has two specific aims. The first is to illustrate how coherence works at a level where it is generally overlooked and never demonstrated, the macrolevel, i.e., between units larger than the sentence. After having reconstructed the coherence of a text (a newspaper editorial) through the application of a formal model of linguistic analysis (Section 2), I will underline the role of *macrostructural bases* (generally corresponding to paragraphs) in the processing of a text, and how paragraph boundaries affect the meaning of the text (Section 3). The second aim consists of exposing the usefulness and limitations of text linguistics in translation practice on the basis of the previous example (Section 4). In this sense, this article is a call for a better understanding between specialists in both fields.

2. Construction of coherence

To reconstruct the coherence of a text, I use a formal model of analysis (Le 1996) that integrates work done on processes of text production and interpretation by van Dijk (1980), Kintsch (1988, 1998), Hobbs (1985, 1990), and Daneš (1974).

In this integrated model, coherence links between syntactic sentences are established on the basis of the type of logico-semantic relation existing between two elements in each sentence. There are three basic relations: coordination (elaboration and parallelism), subordination, and superordination. These relations are a completed version of Hobbs' (1985, 1990) relations of expansion (see Appendix A).

In the process of establishing the type of relation between two sentences S1 and S2, each sentence is considered to contain three parts. For example, let us consider S1, which contains the elements x1, p1 and a1: x1 is taken as the commentary made about the pair of elements, p1 and a1. Similarly, in S2, x2 is taken as the commentary made about the pair of elements, p2 and a2. Each relation of coherence, be it coordination, subordination or superordination, depends on the combination of the relations of inclusion that exist between p1 and p2, and between a1 and a2.

Let us give examples of definitions for the different types of relations when the elements p1 of S1 and p2 of S2 represent the same $signifi\acute{e}$. If the elements a1 and a2 represent the same $signifi\acute{e}$ [a1 = a2], then the sentences S1 and S2 are said to be coordinated by elaboration. If the $signifi\acute{e}$ of a1 and the $signifi\acute{e}$ of a2 are both elements of a same set [$\exists \Sigma$, a1 $\subset \Sigma$ and a2 $\subset \Sigma$], then the sentences S1 and S2 are said to be coordinated by parallelism. If the $signifi\acute{e}$ of a1 is included in the $signifi\acute{e}$ of a2 [a1 \subset a2], then S1 is said to be subordinated to S2. If the $signifi\acute{e}$ of a2 is included in the $signifi\acute{e}$ of a1 [a2 \subset a1], then S1 is said to be superordinated to S2 (for the definition of all relations of coherence, see Appendix A).

In other words, when we read a text and construct its coherence, we are brought to compare the meaning of lexical items, and to determine how the ranges of these meanings relate to each other. Let us illustrate this with an example of the relation of coordination (elaboration). The text *A City in Ruins* (see Appendix B) is a *Washington Post* editorial (February 8, 2000) about the war in Chechnya, that was published just after the capture of Grozny, Chechnya's capital city.

Examples (1a) and (1b) show the first two sentences of the first paragraph (words have been underlined for the purposes of the analysis).

- (1) a. Sentence 1.1

 RUSSIAN LEADERS announced with pride Sunday that their armed forces had captured Grozny, the capital of Chechnya, five months into their war to subdue that rebellious province.
 - Sentence 1.2
 Reports from the battle zone suggested that the Russians had not so much liberated the city as destroyed it.

The expression "the Russians" (p2) in the second sentence represents "their armed forces" (p1) of the first sentence. Moreover, "had captured" (a1) of the first sentence describes, according to Russian leaders, the action of their forces in Grozny, and "not so much liberated the city, as destroyed it" (a2) in the second sentence represents the way the author of the editorial interprets the same action. Thus both a1 and a2 represent the same fact (although it is considered from a different perspective). As, on the one hand, p1 and p2 represent the

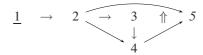


Figure 1. Coherence graph of paragraph I

same $signifi\acute{e}$, and on the other hand, a1 and a2 represent the same $signifi\acute{e}$, we have p1 = p2 and a1 = a2, and it is said that the second sentence is coordinated to the first sentence by elaboration.

The analysis of the entire text can be displayed in graphs representing the relations of coherence between the sentences within each paragraph. The coherence graph for the first paragraph of the *Washington Post* editorial is shown in Figure 1.

In paragraph 1, sentences 1, 2 and 3 are coordinated by elaboration (symbol: \rightarrow). Sentence 4 is subordinated to sentences 2 and 3 (symbol: \downarrow). Sentence 5 is superordinated to sentence 4 (symbol: \uparrow), coordinated by parallelism to sentence 3 (symbol: \Uparrow), and coordinated by elaboration to sentence 2 (for the complete analysis of paragraph 1 and for the coherence graphs of all paragraphs, see Appendix B).

The representation of the relations of coherence between syntactical sentences within the paragraph of which they are part allows for the determination of the macrostructural bases. A macrostructural basis is a set of sentences within a single paragraph. It begins with the first sentence of the paragraph and ends with its last, either at the same or highest hierarchical level (including all the sentences in between and eventually the sentences subordinated to the last sentence at the highest level), unless a relation of parallelism at the highest hierarchical level breaks this chain of sentences. Relations of parallelism occur between sentences at the same hierarchical level. As this definition, by nature, postulates the existence of two different elements belonging to the same set, one in each sentence (in opposition to relations of elaboration that postulate the existence of the same two elements in each distinct sentence; see Appendix A), they are considered to interrupt the chain. In this case, a new macrostructural basis starts with the first sentence immediately following this relation of parallelism at the highest level, unless a relation of elaboration dominates this relation of parallelism.

In the case of the first paragraph of the *Washington Post* editorial, sentences 1, 2, 3 and 5 are situated at the highest hierarchical level. This chain is broken by the relation of parallelism between sentences 3 and 5, but this break is "repaired" by the relation of elaboration between sentences 2 and 5. Therefore, sentences 1 to 5 form one macrostructural basis.

Macrostructural bases thus constitute suprasentential units of analysis that are formally defined. Within each macrostructural basis, we can distinguish a theme, i.e., the sentence that indicates what the macrostructural basis is about. The theme is, in principle, the first sentence at the highest level of abstraction. In the *Washington Post* editorial, it is sentence 1 (underlined in Figure 3 in Appendix B). We can also determine the macrostructure(s) of the macrostructural basis, i.e., the sentence(s) that represents its gist. In principle, the macrostructure is the last sentence at the highest level of abstraction. In our editorial, it is sentence 5 (in italics in Figure 3 in Appendix B). In other words, the theme is the point of departure of the argumentation, and the macrostructure is its point of arrival. Macrostructures are the sentences most likely to remain in long-term memory (van Dijk 1980: 254). The general principles for the determination of the themes and macrostructure given above are completed with three particular cases constituting exceptions to the principles (Le 1996).

From these definitions, it follows that the position of a sentence in one paragraph or another will affect the limits of the macrostructural bases of the text, as well as the determination of their theme and macrostructure. This is particularly important, as this type of analysis is recursive and this recursivity allows for the verification of the analysis. Indeed, this coherence analysis is verified when at each level of analysis (i.e., between sentences of the same paragraph, or between the macrostructures of paragraphs that belong to a same section of a text), a summary of the text can be generated on the basis of the themes (aboutness of the argumentation) and macrostructures (gist of the argumentation) (see Le 2002c). These summaries require only a few modifications of the original sentences (e.g., to make anaphoric relations explicit).² If the analysis does not result in acceptable summaries of the original text, then the text coherence has not been rightfully constructed by the reader/analyst.

A summary is generated by putting the themes and macrostructures that are obtained at the same level of analysis one after the other in the order in which they appear. (The summary length varies according to the number of suprasentential units). For example, in our *Washington Post* editorial, sentences 1.1, 1.3, 1.5, 2.6, 2.8, 3.9, 3.10, 3.14, 4.15 and 4.18 represent its summary (see Appendix B).

The analysis being recursive, the links between the macrostructures can also be analysed in terms of coordination, subordination and superordination. In our editorial, the macrostructures are 1.5, 2.8, 3.14 and 4.18. They are related as shown in Figure 2.

The representation in Figure 2 shows that 1.5 is coordinated by parallelism to 4.18, that 2.8 is coordinated by opposition (the opposite relation of elaboration) to 3.14, and that 3.14 is coordinated by elaboration to 4.18. These four sentences are situated at the same hierarchical level, and their chain is broken after 1.5, as 1.5 is coordinated by parallelism to 4.18 and is not related to any

Figure 2. Coherence graph of the entire text

other sentence. The same rules that define the macrostructural basis can be applied at this higher level. In this text, they define two suprasentential units of analysis, superior to the macrostructural bases, which we will call text divisions. These text divisions contain their own theme (or 'megatheme' as theme of a text division) and a macrostructure (or 'megastructure' as macrostructure of a text division). In our editorial, sentence 1.5 represents a text division in and of itself; the theme of this sentence is the megatheme and its rheme is the megastructure (Daneš 1974); 2.8 is the megatheme of the second text division, and 4.18 is its megastructure. Thus, this editorial has two megathemes, one (in 1.5) corresponds directly to the editorial's title ("A city in ruins"), and the other (2.8 of the second text division) to the cause of "Russia's strategy", while the megastructure of the second text division represent the newspaper's position towards "Russia's strategy". Sentences 1.5, 2.8 and 4.18 constitute an abstract of the text (see section 3. Because of the length of such analyses, only the results are given here. See Appendix B for the details of the analysis of paragraph 1). This type of analysis can be taken yet one step further with longer texts that are divided into units containing several paragraphs.³

Thus, the application of this model of analysis brings out the hierarchical structure of the text at different levels. It shows which sentences are most important within the macrostructural basis, within the text division and within the entire text. The higher the type of unit (macrostructural basis, text division or entire text) of which these sentences are the macrostructures, the more likely their chance of being retained in long-term memory. The boundaries of these units appear, therefore, to be determinant in the construction of the text meaning.

3. Paragraph boundaries and text meaning

Let us now illustrate how paragraph boundaries affect the general meaning of the text by examining two cases where the typographical structure of the *Washington Post* editorial has been modified (see example [2]).

In the first case (example [2b]), sentence 9 has been taken away from paragraph 3 and attached to the end of paragraph 2 (cf. Appendix B). As sentence 9 is coordinated by parallelism to sentence 10, this is not an unlikely trans-

fer. Sentences 8 and 9 are coordinated by opposition (the opposite relation of elaboration); therefore, sentence 9 becomes the macrostructure of paragraph 2 instead of sentence 8. With this new configuration, all macrostructures are coordinated by elaboration, and the coherence graph of the entire text gives sentence 1.5 as the theme and sentence 4.18 as the macrostructure of the entire text. Together, they form the abstract of the entire modified text.

In the second case (example [2c]), all marks of paragraph division in the editorial have been suppressed. It is after all a rather short text (310 words) and it could very well be presented in a continuous way. In this case, all sentences are analyzed one after the other. Thus, we have to add relations to link the last and first sentences of the original paragraphs. The analysis reveals the following: sentence 6 is subordinated to sentence 5; sentence 9 is coordinated by opposition to sentence 8; and finally, sentence 15 is subordinated to sentence 14. From the coherence graph of the entire text, it appears that the text theme is sentence 1.1 and the text macrostructure is sentence 1.5. Together, they form the abstract of the entire text when it consists of only one paragraph.

By keeping the sentences in the same order, but by grouping them in alternative ways, three different abstracts for the text entitled 'A City in Ruins' have thus been generated, as shown in example (2).

- (2) a. Version A (original text)⁴ Grozny resembled nothing so much as Stalingrad, reduced to rubble by Hitler's troops before the Red Army inflicted a key defeat that Russian schoolchildren still celebrate. These Real and alleged provocations won Russia a fair amount of sympathy for its stated goal of routing Chechen terrorists. [However], all in all, this the overall Russian strategy is not likely to be a victory that Russian schoolchildren will celebrate generations hence.
 - b. Version B (sentence 9 of paragraph 3 is transferred to paragraph 2)
 Grozny resembled nothing so much as Stalingrad, reduced to rubble by Hitler's troops before the Red Army inflicted a key de
 - rubble by Hitler's troops before the Red Army inflicted a key defeat that Russian schoolchildren still celebrate. All in all, this the overall Russian strategy is not likely to be a victory that Russian schoolchildren will celebrate generations hence.
 - c. Version C (one paragraph only)
 RUSSIAN LEADERS announced with pride Sunday that their armed forces had captured Grozny, the capital of Chechnya, five months into their war to subdue that rebellious province. Grozny resembled nothing so much as Stalingrad, reduced to rubble by Hitler's troops before the Red Army inflicted a key defeat that Russian schoolchildren still celebrate.

266 Elisabeth Le

These abstracts do not differ completely, and they should not, because they represent distinct readings of the same sentences (although not of the same text). However, their differences are noticeable. Indeed, the entire text macrostructure (in italics), i.e., the most important sentence(s) with regards to longterm memory, is different in the three cases. For version A, it is 1.5 and 4.18; for version B, 4.18; and for version C, 1.5. In version B, the emphasis is on 'the overall Russian strategy' that functions as the sentence theme (in the Functional Sentence Perspective; see Daneš 1974). In version C, 'Grozny' is the theme. Version A presents a combination of B and C. While the description of Grozny is supposed to be more objective than subjective, the qualification of an 'overall strategy' can only be subjective. Thus, version C (transfer of a single sentence from one paragraph to another) would leave the impression that the editorial concerns objective facts, while version B (one paragraph) would give the idea that the editorial represents its author's subjective opinion. In contrast, version A (original) would appear more balanced as a subjective opinion based on objective facts, although the combination of the coherence analysis with a detailed analysis of the lexis and voices appearing in the original text would reveal its very high subjectivity under the disguise of objective methods (e.g., physical descriptions, quotations of people and from reports).

This example illustrates how the composition of the paragraphs can affect the reception of a text by its readers. Differences in the text typographical structure changed the nature of this particular editorial from an informative text (version C) to an argumentative one (version B), to a mixture of both (version A – original text). In other words, the text function can be perceived differently by the reader according to the composition of the paragraphs. It is important to note that it is precisely the text function that allows translators to choose between one way of translating over another when they transfer the coherence of a text into another language and culture. The question that arises now is the extent to which this formal model of linguistic analysis is directly relevant and applicable to the translation process.

4. Text linguistics and translation

Newspaper editorials can be considered as prototypes of argumentative texts. In the example analyzed above, 'objectivation' processes (physical descriptions, quotations, reports) are used as a strategy to better convince the readers: "my opinion is based on objective facts, therefore it is valid". If we adopt the position that translators should reflect this in their writing, we must ask how they are to do so. They will, of course, translate the physical descriptions and the various quotes, but this is not sufficient. Indeed, we have seen how the paragraph division in the original text contributes to the argumentative strategy, and how a change in the paragraph division affects the text type. The

application of a formal linguistic model has revealed the role of coherence at a macrolevel. This coherence analysis is an example of what text linguistics can offer to translation studies in that it has provided a solid background on which to base practical translation decisions.

Thus, it seems to appear that translators would be safer to respect the paragraph boundaries of the source text. However, strictly speaking, it is macrostructural bases, and not paragraphs, that are relevant for text interpretation. Here we meet the first practical limitation in terms of the relevance of text linguistics to translation, its complexity. The type of coherence analysis conducted above is much too complex and time-consuming to be expected of translators who have deadlines to meet. Fortunately in this case, however, it seems safe to speak of paragraphs instead of macrostructural bases. Indeed on the one hand, macrostructural bases are contained within paragraphs by definition, and on the other hand, in the analysis of two corpora of academic writing (Le 1999), a paragraph corresponded to a macrostructural basis 8 times out of 10.

Although the above linguistic analysis seems to advocate the use of paragraphs as translation units, other linguistic considerations inform us of two caveats. First, the basic unit of coherence analysis is the syntactical sentence that functions as a psychological unit (Kintsch 1998: 69). Therefore, if the sentence boundaries within a paragraph differ between a source and a target text, the meaning of the paragraph might very well also differ between the two texts, even if its boundaries do not. Respecting the sentence boundaries of the source text could solve this problem. However, the second caveat is more challenging. Coherence analysis shows that a particular culture might tend to privilege the use of one type of paragraph over another in a specific domain (Le 1999). At this point, it is important to recall that the translators' task is not only to render the meaning of a source text, but also to do it in such a way that it will be understandable, in cultural terms, to the target readers. Thus, translators are torn between the apparent need to respect sentence and paragraph boundaries and the risk of sounding unnatural in the target language. The fact that very few linguistic studies have been conducted on the topic of cultural preferences in sentence and paragraph types makes informed decisions in translation even more difficult. This lack of knowledge in linguistics represents a second important practical limitation in terms of what text linguistics is currently able to offer translation practitioners.

Thus, the question arises as to what translators do. As a linguist, I am neither in the position to tell translators what to do, nor to take sides in the debate on translation units. Translation specialists, with their specific practical and theoretical knowledge in their field and their knowledge from adjoining fields, are those who can most competently decide when and how to apply the principles that derive from text linguistics. Nord (1997), for example, proposes to adopt a "vertical" instead of a "horizontal" translation unit. "In this view, the text is

268 Elisabeth Le

seen as a hyper-unit comprising functional units that are not rank-bound, with each unit manifested in various linguistic or non-linguistic elements that can occur at any levels anywhere in the text" (Nord 1997: 69). In the text analyzed above, physical descriptions, quotations, and the composition of paragraphs should all be considered as elements of a functional vertical unit of translation. Nord's proposition is particularly interesting in that it seems to hold the key to a fruitful reciprocal relationship between text linguistics and translation practices. Text linguistics provides part of the essential background on which to base practical decisions in translation, but in the present state of knowledge, translators cannot yet expect directly applicable principles from applied linguists. In other words, translators need applied linguists to systematize their practice, and reciprocally, applied linguists should refer to translators to orient their research into text meaning.

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Appendix A

Relations of coherence

In the following three tables, relations marked with an asterisk (*) are Hobbs' (1985, 1990) relations of expansion.

Table 1. Relations of coordination

Units of analysis		Relations	Relations	
(1)		* Elaboration	* Opposition	
	S1	p(a)	p(a)	
	S2	p(a)	non-p(a)	
(2)		* Parallelism	* Contrast	
	S1	p(a)	p(a)	
	S2	p(b)	non-p(b)	
		and $\exists \Sigma / a \subset \Sigma$ and $b \subset \Sigma$	and $\exists \Sigma / a \subset \Sigma$ and $b \subset \Sigma$	
(3)		Parallelism	Contrast	
	S1	p(a)	p(a)	
	S2	p(B)	non-p(B)	
		and p(A) implied	and p(A) implied	
		and $a \subset A$	and $a \subset A$	
		and $\exists \Sigma / A \subset \Sigma$ and $B \subset \Sigma$	and $\exists \Sigma / A \subset \Sigma$ and $B \subset \Sigma$	
(4)		Parallelism	Contrast	
	S1	p(A)	p(A)	
	S2	p(B)	Non-p(B)	
		and $\exists \Sigma / A \subset \Sigma$ and $B \subset \Sigma$	and $\exists \Sigma / A \subset \Sigma$ and $B \subset \Sigma$	
(5)		Parallelism	W/O	
	S1	p(a)		
	S2	p'(b)		
		and $\exists R / p R$ a and $p' R b$		
		and $\exists \Sigma' / p \subset \Sigma'$ and $p' \subset \Sigma'$		
		and $\exists \Sigma / a \subset \Sigma$ and $b \subset \Sigma$		

270 Elisabeth Le

 ${\it Table 2. Relations of subordination}$

Units of analysis		Relations	Relations
(6)		* Subordination	Contrast
	S 1	p(A)	p(A)
	S2	p(a)	non-p(a)
		and $a \subset A$	and $a \subset A$
(7)		Subordination	Contrast
	S 1	P(A)	P(A)
	S2	p(a)	non-p(a)
		and a \subset A and p \subset P	and a \subset A and p \subset P
(8)		Subordination	Contrast
	S 1	p(A)	p(A)
	S2	p'(a)	non-p'(a)
		and a \subset A	and $a \subset A$
		and $\exists \; \Sigma / \; p \subset \Sigma$ and $p' \subset \Sigma$	and $\exists \; \Sigma / p \subset \Sigma$ and $p' \subset \Sigma$

Table 3. Relations of superordination

Units of analysis		Relations	Relations	
(9)		* Superordination	Contrast	
	S1	p(a)	p(a)	
	S2	p(A)	non-p(A)	
		and $a \subset A$	and $a \subset A$	
(10)		Superordination	Contrast	
	S 1	p(a)	p(a)	
	S2	P(A)	non-P(A)	
		and a \subset A and p \subset P	and a \subset A and p \subset P	
(11)		Superordination	Contrast	
	S 1	p(a)	p(a)	
	S2	p'(A)	non-p'(A)	
		and $a \subset A$	and $a \subset A$	
		and $\exists \; \Sigma / \; p \subset \Sigma \; \text{and} \; p' \subset \Sigma$	and $\exists \Sigma / p \subset \Sigma$ and $p' \subset \Sigma$	

Appendix B

A City in Ruins (The Washington Post, 8 February 2000)

- 1.1 RUSSIAN LEADERS announced with pride Sunday that their armed forces had captured Grozny, the capital of Chechnya, five months into their war to subdue that rebellious province.
- 1.2 Reports from the battle zone suggested that the Russians had not so much liberated the city as destroyed it.
- 1.3 Russian generals were having trouble finding a building intact enough to serve as temporary field headquarters,
- 1.4 and a senior Russian official suggested that Grozny will never be rebuilt.
- 1.5 Grozny resembled nothing so much as Stalingrad, reduced to rubble by Hitler's troops before the Red Army inflicted a key defeat that Russian schoolchildren still celebrate.
- 2.6 Chechen guerrillas provoked this war by attacking a village in Daghestan, a province of Russia that borders Chechnya.
- 2.7 That August attack was followed by several apartment-building bombings in Moscow and other cities that Russian officials blamed on Chechen terrorists, though no evidence to that effect has been produced.
- 2.8 These real and alleged provocations won Russia a fair amount of sympathy for its stated goal of routing Chechen terrorists.
- 3.9 But Russia's methods quickly lost it any sympathy.
- 3.10 The goal seems to have been to destroy not just Chechnya's independence fighters but Chechnya itself.
- 3.11 Hundreds of thousands have been rendered homeless;
- 3.12 thousands are presumed dead.
- 3.13 Civilians are caught in the crossfire of every war,
- 3.14 but in this case cold-blooded executions, looting, roundups of adult males and attacks on civilian convoys seem consistent with an overall strategy.
- 4.15 The capture of the ghost capital did not appear to temper this approach.
- 4.16 The Post's Daniel Williams reported from Chechnya that indiscriminate attacks on towns and villages outside Grozny seem to have accelerated yesterday.
- 4.17 A Russian reporter for Radio Free Europe/Radio Liberty, Andrei Babitsky, whom Russian forces detained and now will not account for, still has not surfaced.
- 4.18 All in all, this is not likely to be a victory that Russian schoolchildren will celebrate generations hence.

1.2

1.5

Analysis of paragraph 1

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1.1
         p1= their armed forces (a1= captured Grozny)
         p2= Russians (a2= not so much liberated the city, as destroyed it)
1.2
              and p1 = p2 and a1 = a2
                   Relation 1: coordination (elaboration)
1.2
         p1= Russians (a1= destroyed it)
1.3
         p2= Russian generals (a2= having trouble finding a building intact
         enough)
              and p1 = p2 and a1 = a2
              → Relation 1: coordination (elaboration)
1.2
         p1= destroyed it (a1= Russians)
         p2= Grozny will never be rebuilt (a2= a senior Russian official)
14
              and p1 \subset \Sigma and p2 \subset \Sigma, \Sigma = followings of the Russian army
              actions in Grozny; and a2 \subset a1
                     Relation 8: subordination
1.3
         p1= having trouble finding a building intact enough (a1= Russian gen-
1.4
         p2= Grozny will never be rebuilt (a2= a senior Russian official)
              and p1 \subset \Sigma and p2 \subset \Sigma, \Sigma = followings of the Russian army
              actions in Grozny; and a2 \subset a1
               → Relation 8: subordination
1.3
         p1= Russian generals (a1= [Grozny – implied element])
         p2= Hitler's troops (a2= Stalingrad)
1.5
              and p1 \subset \Sigma and p2 \subset \Sigma, \Sigma = armies; and a1 \subset \Sigma' and a2 \subset \Sigma',
              \Sigma' = cities destroyed in war time; and a1 destroyed by p1 and a2
              destroyed by p2
                     Relation 5: coordination (parallelism)
1.4
         p1= Grozny will never be rebuilt (a1= a senior Russian official)
1.5
         p2= Grozny resembled nothing as much as Stalingrad, reduced to rub-
         ble by Hitler's troops (a2= Red Army)
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and p1 $\subset \Sigma$ and p2 $\subset \Sigma$, Σ = followings of the Russian army actions in Grozny; and a1 \subset a2 [the Red Army represents here the Russian army in general, and not uniquely the Soviet army]

p2= Red Army (a2= Grozny resembled nothing as much as Stalingrad,

and p1 = p2 [p1 represents the Russian Army, and p2 represents here the Russian army in general, and not uniquely the Soviet

army]; and a1 = a2

Relation 11: superordination

p1= Russians (a1= destroyed it)

reduced to rubble by Hitler's troops)

 \rightarrow Relation 1: coordination (elaboration)

Coherence graphs at the paragraph level

In Figure 3 the themes are underlined and the macrostructures are in italics.

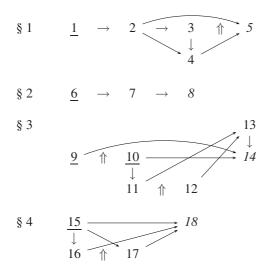


Figure 3. Coherence graphs at paragraph level

Paragraph 3 corresponds to one of the three exceptions to the general principle for the definition of themes and macrostructures (see Le 1996). Here, 3.13 is not taken into consideration in the determination of the theme and macrostructure of the paragraph as it represents a general assumption, in the particular argumentation of that paragraph. Graphically, this appears as 3.13 being superordinated to the two preceding coordinated sentences (3.11 and 3.12) and to the following sentence (3.14). In this paragraph, the chain of sentences at the highest hierarchical level is constituted of 3.9, 3.10, and 3.14. The chain is broken by the parallelism relation between 3.9 and 3.10, but this break is repaired by the elaboration relation between 3.9 and 3.14 that dominates the parallelism relation. Thus, there is only one macrostructural basis, with 3.9 and 3.10 as its two themes (as the two parallel "beginnings" of the chain) and with 3.4 as its macrostructure.

Generated Summary

RUSSIAN LEADERS announced with pride Sunday that their armed forces had captured Grozny, the capital of Chechnya, five months into their war to subdue that rebellious province. Grozny resembled nothing so much as Stalin-

grad, reduced to rubble by Hitler's troops before the Red Army inflicted a key defeat that Russian schoolchildren still celebrate.

Chechen guerrillas provoked this war by attacking a village in Daghestan, a province of Russia that borders Chechnya. [These] Real and alleged provocations won Russia a fair amount of sympathy for its stated goal of routing Chechen terrorists.

But Russia's methods quickly lost it any sympathy. The goal seems to have been to destroy not just Chechnya's independence fighters but Chechnya itself. but in this case Cold-blooded executions, looting, roundups of adult males and attacks on civilian convoys seem consistent with an overall strategy.

The capture of the ghost capital did not appear to temper this approach. All in all, this is not likely to be a victory that Russian schoolchildren will celebrate generations hence.

Notes

- * My sincere thanks to Anne Malena, Jeanne Dancette and an anonymous reviewer for their insightful comments. My gratitude extends to Valerie Wust for her valued editorial assistance.
- 1. On paragraphs and macrostructural bases, see Le (1999).
- It is understood that there are different manners of writing summaries. The summaries generated in this type of analysis represent only some of the possible summaries.
- 3. Such analyses have been conducted on twelve academic texts in French and English ranging from 5,000 to 10,000 words and on about a hundred French and American editorials. See Le (1996, 2002a, 2002b, 2003).
- 4. Underlined words and words inside square brackets have been added to facilitate inference making in the text processing. Words simply underlined are those to which the crossed-out words refer by cohesive links. Underlined letters have been changed from lower to higher case, or vice versa.

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