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JAN FIRBAS

RETRIEVABILITY SPAN IN FUNCTIONAL SENTENCE PERSPECTIVE

Posing the problem

In this study I will attempt to throw more light on the length of the retrievability span. What do I mean by a retrievability span? Why does its length matter? Before answering the first question, let me recall two of my previous observations. As to the second question, I trust that the importance of the length of the retrievability span will be borne out by the ensuing discussion.

In Firbas 1957.36–7 and 1966.246–7, I pointed out that a piece of information may be a piece of knowledge shared by the sender and the addressee and therefore regarded as known (old), and yet in regard to the moment of utterance and/or perception, in other words, in regard to the immediately relevant communicative step to be taken, prove to be unknown (new). Let me compare the function of *the girl* in the two following sentences taken from Lawrence Hyde's translation of Karel Čapek's *Krakatit* (pp. 26).

In the passage was standing the girl with the veil, pressing the parcel to her breast and panting for breath.

The girl came in, brushing him with her shoulder as she went past.

In both sentences, *the girl* conveys a piece of knowledge shared by the writer and the reader, for some pages earlier the girl referred to was introduced into the narration with the words *a girl with a veil*. Yet in regard to the immediately relevant communicative step to be taken, *the girl* of the first sentence conveys new information, and only *the girl* of the second sentence old information. It is important to note that whereas in both sentences the information conveyed by *the girl* is retrievable from a place that occurs some pages earlier, it is only in the second sentence that it is retrievable from the immediately relevant context. Whereas the irretrievability from this section of context permits *the girl* of the first sentence to co-express the high point of the message, the retrievability from it prevents *the girl* of the second sentence performing such a function. A piece

of information retrievable from the immediately relevant context cannot convey or co-convey the high point of the message.

Retrievability implies the actual, 'tangible' presence of a piece of information in the text. The moment a piece of information actually appears in the flow of communication, it becomes retrievable from it. From a static point of view, it stays there and remains retrievable even if not re-expressed in the further development of the communication, which is constituted by a continuous sequence of immediately relevant communicative steps. These successive communicative steps constantly bring in irretrievable information and constantly change the immediately relevant context, which plays a decisive role in making a sentence function in a definite perspective. If not re-expressed, a piece of information evidently gradually loses its retrievability in regard to the ever changing immediately relevant context. It has its retrievability gradually obliterated. The qualification 'gradually' is in harmony with the fact that context is a graded phenomenon (Daneš 1974.109; cf. Firbas 1994.120). The stretch of text throughout which a piece of information remains retrievable without re-expression constitutes the retrievability span of this information. It should be noted that as in my previous writings I have used here the term 'retrievable/irretrievable' in the narrow sense, i.e. in regard to the immediately relevant communicative step to be taken. Unless further specifying, I will do so throughout the present study.

Through conveying retrievable information an element becomes dependent on the section of context in which the information has occurred. If conveying information retrievable from the immediately relevant context, it becomes dependent on this very section of context. Unless further specifying, I use the term 'context dependent — or the term 'context independent', for that matter — in this narrow sense of the word in my writings.

This brings me to the question of the length of the retrievability span. By way of introducing it, let me recall my interpretation (Firbas 1992a.3–12) of a stretch of text taken from the closing chapter of Victor Hugo's *Les Misérables*. We can read there a graphic description of the last resting place of the hero of the narration, Jean Valjean. His tombstone finds itself under a lofty yew tree, referred to in the original as *un grand if*. After seven sentences, the yew tree is re-mentioned as *l'arbre*. Comparing different translations (ib. 11–2), we find that some translators do not appreciate that *l'arbre* refers back to *un grand if*, failing to retrieve the notion of 'the yew tree' from the preceding text. For instance, an English translator uses the phrase *the trees* and a German translator employs *ein Baum*. Let me recall that the distance between *l'arbre* and *un grand if* amounts to seven sentences intervening between the two mentions of the tree. Under the circumstances, it appears that the distance of seven sentences is long enough considerably to weaken the retrievability of a piece of information. This is in harmony with my previous observations that the retrievability span is very short (Firbas 1989.38–9; 1992a.29).

I trust that my previous writings have established the existence of the immediately relevant context as well as that of the retrievability span. The fact that context is a graded phenomenon, however, implies that neither the boundary of the immediately relevant context nor that of the retrievability span can be drawn with absolute definiteness. One can safely assume that there is a borderline area between the immediately relevant context and the rest of the complex phenomenon of context (Firbas 1992a.21–3). Although one might be satisfied with this conclusion, I feel convinced that both the immediately relevant context and the retrievability span are phenomena important enough to be further inquired into. The present study is to be regarded as a specific inquiry into the relationship between the immediately relevant context and the retrievability span. The inquiry will be carried out within the framework of the theory of functional sentence perspective (FSP) as it has been developed by me and my colleagues, especially Aleš Svoboda, connected with the Brno Department of English. A synthesis of my writings has been presented in Firbas 1992a. (This publication offers references to the writings of my colleagues — Aleš Svoboda, Eva Golková, Helga Chládková, Eva Horová, Josef Hladký, Jiří Hruška and Ludmila Urbanová.) Further inquiry will have to compare the concept of ‘retrievability span’ with other concepts pertaining to the same area of research, for instance, those of ‘salience in the stock of shared knowledge’ and ‘activation’ (Hajičová, e.g. 1993.70–82), ‘referential distance’ (Givón 1983.1–41), ‘bonding’ (Hoey 1991.91–161 and 188–93). It will also have to take into account the results of Cummings’ quantitative measurements of relative givenness for items in a text by reference to the costed graph which models the text’s semantics (Cummings 1994 and forthcoming).

**On the concepts of ‘referent’, ‘co-referentiality’, ‘co-referential string’,
‘homogeneity and heterogeneity in retrievable/irretrievable information’
‘distance bridging’ and ‘perspectiver delegated’**

(i)

The immediately relevant context consists of a verbal and a situational sphere, the latter asserting itself to a far greater extent in the spoken than in the written language. As the present study deals with written texts, it is predominantly concerned with the immediately relevant context as it operates in the written language. Apart from the preceding verbal context, also the following is worth inquiring into. No particular attention, however, will be paid to it, for the present study concentrates mainly on the part of the text accumulated in the development of the communication before the moment of utterance and/or perception.

As for the problem of the length of the retrievability span, I will approach it from the point of view of distances occurring between the members of co-referential strings. As will be seen, this is a somewhat indirect way of tackling

the problem, but nevertheless apt to throw valuable light on it. What do I mean by a 'referent' and by a 'referential' string?

By a 'referent' I understand any extralinguistic phenomenon that is named or indicated by the semantic content of a linguistic element of any rank (cf. Firbas 1992a.8, 17). A phenomenon qualified as 'extralinguistic' forms part of the extralinguistic reality by which I mean all phenomena existing beyond language either in the language user's mind or outside it. By 'any rank' I mean any place in the structural hierarchy of language. Linguistic elements naming or indicating the same extralinguistic phenomenon, in other words having the same referent, are co-referential. In the flow of communication, co-referentiality links elements together, producing co-referential strings.

Co-referentiality is signalled by repetition, pronominalization, ellipsis, or close or loose synonymy; cf. the following co-referential string: *a general, this general, the general, he, [ellipsis], the brave old soldier, the frail old-timer*. The elements forming the string function as its members. Co-referentiality can coincide with retrievability or thematicity or both, but is not identical with either. It is synonymous neither with 'retrievability' nor with 'thematicity'. For instance, the opening member of the string adduced above, *a general*, is co-referential with the other members of the string; it is, however, most natural to assume that it appears in the text for the first time and therefore conveys irretrievable information. Or, any non-opening, i.e. internal, member of the a string conveys retrievable information and is therefore thematic if occurring within the retrievability span opened or kept open by its predecessor; but this condition need not always be fulfilled, for an internal member can occur beyond the retrievability span provided by its predecessor. It should also be borne in mind that it is not only elements conveying retrievable information that perform thematic functions. Such functions can also be served by elements conveying irretrievable information (Firbas 1992a.71).

Signalling co-referentiality consists in re-expressing the same referent. Mere re-expression conveys fully retrievable information. But re-expression may be linked with additional irretrievable information. For instance, in the string adduced above both *the brave old soldier* and *the frail veteran* are co-referential with *the general*, but simultaneously convey information that is irretrievable. The characteristics expressed by *brave old*, *frail* and *veteran* are certainly such information. Under the circumstances, *the brave, old soldier* and *the frail veteran* are expressions that convey both retrievable and irretrievable information. In consequence, they are heterogeneous in retrievability/irretrievability.

The relationship between heterogeneity and homogeneity in the sense indicated plays an important part in determining the thematicity or the non-thematicity of an element. An element conveying fully retrievable information is thematic. Thematic is also a heterogeneous element in which retrievability predominates. Such an element cannot operate outside the theme; this, of course, means that it cannot express the high point of the message in its sentence; it

cannot act as rheme proper. The members of the GENERAL string running through the following sequence of sentences will illustrate: *There was a general at the party. He fought both in World War One and in World War Two and had many a story to tell. Everybody took to the brave old soldier. I must say I could not help admiring the frail veteran.* The opening member, *a general*, conveys fully irretrievable information. On the other hand, *He* and its ellipsis convey information that is fully retrievable. Referring to the general, the members *the brave old soldier* and *the frail veteran* convey retrievable information. But as they simultaneously convey irretrievable characteristics of the general, they are heterogeneous in regard to the two types of information. Nevertheless, the retrievable information predominates. This enables the fully irretrievable information conveyed by *took to* and *admiring* to take the communication further beyond the information offered by the characteristics. Together with *He* and its ellipsis, *the brave old soldier* and *the frail veteran* enter into the thematic layer of the stretch of the text under discussion. (Such a layer is constituted by all the thematic elements occurring in the sentences of a given text; Firbas, forthcoming.) In this way the notion of 'the general' develops into the hypertheme of the stretch of text examined. Without going into further detail concerning the interplay of FSP signals (Firbas 1992a: 114–6), let me just point out the participation of the verb forms *took to* and *admiring* in thematizing the subjects *the brave old soldier* and *the frail veteran*. Performing the dynamic semantic function of expressing a quality (ib. 66–70 and 86–7), they participate in perspectiving their sentences away from the subjects. The latter perform the dynamic semantic function of expressing the quality bearer (ib. 86–70) and are thematic also on this account.

The different length of distances between its members make a string more or less dense or compact on the one hand, or more or less loose on the other. One can assume that a string or its section is dense or compact as long as the distances between the members do not exceed the retrievability span. This implies that the gradual obliteration of the retrievability span simultaneously results in decreasing the density, and increasing the looseness, of the string. A string may be very long, even extending throughout the entire text, on the one hand, and very short, even consisting of two members only, on the other. (As regards two members, it would perhaps be more appropriate to speak of a co-referential link; for convenience' sake, however, I will consistently use the term 'string' and speak of 'two-member strings'). A string may be entirely compact or entirely loose, or compact in some of its sections and loose in others.

(ii)

In the interplay of FSP signals, an element conveying predominantly retrievable information behaves in the same way as an element conveying information that is fully retrievable. Full or predominant retrievability is a signal of themat-

ticity. For indicating thematicity, however, the presence in the interplay of this signal is not absolutely essential if thematicity is unequivocally indicated by other signals.

Of particular importance are cases in which irretrievable information predominates. The following types have so far been established. They have been labelled ‘selection’, ‘contrast’, ‘identification’, ‘purposeful repetition’ and ‘the summarizing effect’. Let me briefly recapitulate and illustrate the characteristics of these types.

We have to decide. We can either go by train to London or by coach to Manchester or fly to Edinburgh. Where would you like to go? — Let’s fly to Edinburgh. We haven’t been there for some time.

The notion of ‘flying to Edinburgh’ is fully retrievable. In *fly to Edinburgh*, however, it is linked with a piece of information not present in the immediately relevant preceding context — that of the selection expected to be disclosed. In this way *fly to Edinburgh* becomes the virtual announcer of the selection, a piece of additional irretrievable information that under the circumstances fulfils the communicative purpose and therefore predominates.

You thought I referred to Charles. But I did not mean him; I meant you.

You and *him* convey retrievable information. Nevertheless, in the second and the third sentences, they simultaneously express the additional irretrievable meaning of contrast. Under the circumstances, contrast fulfils the communicative purpose and therefore predominates.

Once in the rain, a van turned a corner suddenly at her and she stumbled over her boots into a ditch and then she saw herself clearly: a woman in early middle age wearing rubber boots walking in the dark looking for a white car and now falling into a ditch, prepared to go on walking and to be satisfied with the sight of the man’s car in a parking lot even if the man was somewhere else with another woman. — Lydia Davies, *Break it down*

The expressions *stumbled ...into a ditch* and *falling into a ditch* relate the same event. The second conveys retrievable information. Yet it serves a particular communicative purpose: it produces a summarizing effect, a piece of irretrievable information *sui generis*. The effect is enhanced by the use of the colon.

In the beginning was the Word, and the Word was with God, and the Word was God. — *The Holy Bible, New Revised Standard Version*, John 1.1.

In the third sentence both *Word* and *God* express retrievable information. It is, however, especially *God* that conveys an important piece of additional irretrievable information. For the communicative purpose of the sentence is to establish an identification. Whereas the notion of ‘the Word’ is the one to be identified, the notion of ‘God’ is the identifier. Both features, ‘being identified’ and ‘identifying’ are irretrievable, but it is the latter that is predominating in character; it completes the message, expressing its high point. The communica-

tive purpose of the sentence examined is to state the divinity of the Word (Firbas 1992b).

He then walked over Campden Hill to the Kensington Public Library, where he could read undisturbed. Undisturbed! Refreshed after sleep, the temptation of the night returned to torment him with a new vigour. — P. P. Read, *A Season in the West*.

The piece of information concerned is conveyed by *undisturbed*. *Undisturbed!* Repetition naturally entails retrievability, but under the circumstances it serves a particular communicative purpose. It acts as a conveyer of an attitude irretrievable from what precedes. Expressing the feelings of the main character of the story, it throws passionate doubt on the preceding statement, in fact invalidating it. Its effect is heightened by the use of the exclamation mark

Possible heterogeneity in retrievable/irretrievable information is a fact to be reckoned with. I do not claim that my description of types of predominating additional irretrievable information is exhaustive. It is desirable to catalogue the signals that in texts indicate predominating additional irretrievable information. It is hoped that further research will refine the observations so far presented.

In establishing co-referentiality, one should bear in mind that two uses of one and the same expression need not be necessarily co-referential. This observation applies, for instance, to the two uses of *attitude* in the following passage.

There was a proprietorial air in his attitude. One knew that he was thinking of the repairs of the church, anxious about the gutters, the downpipe, the missing slates on the roof, the paintings of the doors and windows. He struck an attitude as he pondered the problem of the cracks in the pebble-dashed walls. — Seamus O'Kelly, *The Rector*

The two uses of *attitude* occur in the first and the last sentences of the passage. They are not co-referential. Whereas the first refers to the rector's behaviour reflecting his thinking, the second refers to a bodily posture adopted by him. Both uses convey fully irretrievable information.

On the trees there are only a few gnarled apples that the pickers have rejected. ...One nibbles at them and they are delicious ... One runs from tree to tree over the frosted ground picking the gnarled, twisted apples and filling his pockets with them. — Sherwood Anderson, *Paper Pills*

The second and the third occurrences of the word *tree* re-express the notion of 'tree' and in this way convey retrievable information. They re-express a feature of a scene. Simultaneously, however, they particularize from which to which point the movement over the scene takes place. This particularizing information is irretrievable. The information conveyed by the second and the third occurrences of *tree* is far from being fully co-referential with that offered by the first occurrence.

(iii)

Cases of special interest are those in which retrievability remains unobliterated even if the notion in question has not been explicitly re-expressed. This is

due to vicarious auxiliary signals that keep the retrievability span open. I will refer to this phenomenon as distance bridging. The following examples will illustrate.

In Herman Melville's short story *Benito Cereno*, Captain Amasa Delano is told in the early morning that a strange ship has appeared in the bay where his sealer lies at anchor. *He rose, dressed, and went on deck*, we read in the text. A separate paragraph that immediately follows offers a description of a shadowy grey morning steeped in vapour — the scene which presents itself to the Captain's eyes. The paragraph consists of seven sentences. The opening sentence of the next paragraph runs: *To Captain Delano's surprise, the stranger viewed through the glass showed no colors; ...*

The paragraph depicting the morning scene makes no mention of the Captain. Yet it is clear that the scene is viewed by him. It is his impressions that the description of the scene conveys. The mention of his going on deck and that of his viewing the bay from there efficiently frames the description presenting his impressions. This description can be looked upon as an auxiliary signal efficiently bridging the distance between *He* and *Captain Delano* created by the seven intervening sentences.

Another type of signal is yielded by what could be termed the 'bridging passive'.

(1) But the local priests, jealous of the stranger's hold on the people, had him assassinated. (2) To allay any suspicion of the crime, they had a portrait of the Great Inventor enthroned upon the main altar of the temple, (3) and a liturgy designed so that his name would be renewed and his memory kept alive. (4) The greatest care was taken that not a single rubric of the liturgy was altered or omitted. (5) The tools for making fire were enshrined within a casket (6) and were said to bring healing to all who laid their hands on them with faith. — De Mello, *The Inventor*

A stranger, referred to as the 'Great Inventor', had come to the country some time before and taught the people the art of making fire. Jealous of him, the local priests assassinated him, but kept his memory alive. The notion of 'the local priests', is expressed by *the local priests* in (1), re-expressed by *they* in (2) and indicated by ellipsis in (3). It is not explicitly re-mentioned in (4), (5) and (6), but the agency of the local priests is clearly indicated by the passive voice forms. In this way, the retrievability span started by the notion of 'the local priests' is kept open.

In the comments on the analyses of two texts to be offered presently, two further types of distance bridging will be illustrated. One is exemplified through the operation of direct speech. Direct speech vicariously signals the presence both of the speaker and of the addressee. It operates irrespective of whether the speaker or the addressee has been explicitly referred to (see p. 32). The other type of distance bridging is effected through the confluence of co-referential strings. For instance, according to the situation, *we* includes another person or other persons apart from the speaker. In this way, the WE string becomes con-

fluent with a string referring to a person covered by *we*. The notion of the other person is thereby kept in the flow of the communication (see p. 26–7).

I trust that further research will add some other types of distance bridging. (For a previous discussion of this phenomenon, see Firbas 1992a.29, where it has been described as ‘gap filling’.)

(iv)

The assessment of retrievability/irretrievability must take the perspectiver of the text into account. The constant perspectiver of a text is naturally its producer. Keeping the perspective under constant control, he can, however, embed passages in the text that are virtually perspectived by another language user or other language users. He delegates, as it were, another user or other users to perspective the passage embedded. Such a passage forms a text within a text. It in fact brings its own immediately relevant context into the flow of communication.

In a few days Mr Bingley returned Mr Bennet's visit, and sat about ten minutes with him in his library. He had entertained hopes of being admitted to a sight of the young ladies, of whose beauty he had heard much, but he saw only the father. The ladies were somewhat more fortunate, for they had the advantage of ascertaining from an upper window that he wore a blue coat and rode a black horse. — Jane Austin, *Pride and Prejudice*

Mr Bennet and *the father* are co-referential. Nevertheless, although occurring at a distance of only two (principal) clauses from its predecessor, *Mr Bennet*, the element *the father* does not convey fully retrievable information. It occurs in a sentence the perspectiving of which has been delegated to Mr Bingley. He is the entertainer of the hopes reported by this sentence. His hopes, however, originated under contextual conditions not identical with those under which the sentence reporting them is embedded in the text. Viewed in this light, the sentence embedded brings an immediately relevant context of its own into the flow of the narration. Conveying predominantly irretrievable information, *the father* is not prevented from expressing the high point of the message and actually performs this function. It must, however, be added that even in regard to the immediately relevant context offered by the text in which the sentence is embedded, *the father* conveys the high point of the message. It does so on account of contrast and selection. The latter is signalled by *only*, which has a rhematizing effect. In contrast with the example just commented on, the following example presents perspectivers delegated who can fully assert themselves.

But the republicans at Valencia put me into prison. The reason: I had come from the fascist side, and I spoke like a Spaniard. I told them that I was a Jewish refugee. But they did not believe me. Not even my passport helped: they said it was forged. “You look like a Spaniard,” they said, “You talk like a Spaniard, so you are a Spaniard — and a bloody fascist at that.” — Werner Lansburgh, *Dear Little*

In *I spoke like a Spaniard*, the phrase *like a Spaniard* serves as rheme proper. After four sentences, it recurs in the opening sentence of the direct speech. In spite of the comparatively short distance separating it from its predecessor, the re-expression of *like a Spaniard* serves as rheme proper, too. It can do so, because the direct speech brings its own immediately relevant context, together with perspectivers delegated, into the flow of the narration. In this way, *like a Spaniard* comes to convey irretrievable information in the opening sentence of the direct speech. It is only in the following sentence and in the sentence coming after it that *like a Spaniard* and *a Spaniard* respectively convey retrievable information.

Analyses of two texts

Having accounted for the concepts of 'referent,' 'co-referentiality,' 'co-referential string,' 'member of co-referential string,' 'fully retrievable, fully irretrievable, predominantly retrievable, or predominantly irretrievable, information,' 'homogeneity and heterogeneity in retrievability/irretrievability' and 'perspectiver delegated,' I am now in a position to present the results of an inquiry into the distances between the members of co-referential strings. The inquiry is based on analyses of 18 texts of Modern English fiction prose (see References on pp. 41–2) their average length amounting to 37 sentences. With one exception, the analyses were carried out under my direction by students who attended my seminars on FSP. (For their names, see Chart Seven.) Their analyses were modelled on an analysis of mine which was presented in Firbas 1992a.25–9 and covered a passage taken from Katherine Mansfield's short story *At the Bay*. As will be demonstrated, I have further developed the model, applying it to the analyses offered by the students and subjecting all 18 analyses to an overall statistical evaluation. The way I have further developed the original model will be demonstrated on two texts, a passage from William Golding's *The Spire* and a passage from Iris Murdoch's *A Severed Head*. The latter text is the exceptional one referred to above and is covered by the statistical evaluation. (The former is an additional text, not included in the overall evaluation.) I will first present my analysis of the Golding text.

William GOLDING, *The Spire*, London 1965, Faber and Faber, pp. 120–1

'(1) Now I'll tell you what no one else knows. (2) They think that I'm mad perhaps; (3) but what does that matter? (4) They'll know about it one day when I — (5) but you shall hear it now, as man to man, on this very stump of a tower, up here with no one else to listen. (6) My son. (7) The building is a diagram of prayer; (8) and our spire will be a diagram of the highest prayer of all. (9) God revealed it to me in a vision, his unprofitable servant. (10) He chose me. (11) He chooses you, to fill the diagram with glass and iron and stone, since the children of men require a thing to look at. (12) D'you think you can escape? (13) You're not in my net — (14) oh, yes, Roger, I understand a number of things, how you

are drawn, and twisted, and tormented — (15) but it isn't my net. (16) It's His. (17) We can neither of us avoid this work. (18) And there's another thing. (19) I've begun to see how we can't understand it either, since each new foot reveals a new effect, a new purpose. (20) It's senseless, you think. (21) It frightens us, (22) and it's unreasonable. (23) But then — since when did God ask the chosen ones to be reasonable? (24) They call this Jocelin's Folly, don't they?'

The members of the co-referential strings occurring in the text are recorded on Chart One. If opening a string, the member is capitalized and listed in the left-hand column on the Chart; if occurring in the rest of the string, it is listed in the right-hand column. The consecutive number of the sentence (field) in which the member appears is indicated by figures superscripted in the left-hand column or by figures within brackets in the right-hand column. (The sentence is referred to as 'field' here, because as a field of semantic and syntactic relations it serves as a distributional field of communicative dynamism in FSP; see Firbas 1992a.14–6, 17 and 19. A [basic] field is constituted by a simple sentence, a complex sentence, or a simple or complex sentence forming a sentential coordinate member of a compound sentence.)

The superscripts that precede the brackets in the right-hand column convey information of high relevance to the inquiry. They state the length of the distances occurring between the members of the strings. A distance is indicated by the number of fields in which no member of the given co-referential string occurs; in other words, in which the given referent remains unexpressed. Absence of a preposed numeral superscript indicates zero distance, which means that in the flow of communication no 'memberless' field occurs between the member concerned and its predecessor.

As for the abbreviations used, the superscripted *c* stands for 'confluent' (see below), *Th*, *Tr*, *Rh* and *RhPr* stand for 'theme/thematic', 'transition/transitional', 'rheme/rhematic' and 'rheme proper' respectively; and *NegFocA* stands for 'negation focus anticipator', a rhematizer pointing to the rheme proper (focus) of a negative field (Firbas 1992a.102).

Charts One and Two will help to answer five questions. (i) What is the number of the strings contained in the text examined? (ii) What is the total number of string members occurring in this text? (iii) What is the total number of the potential distances between the members within the strings? (iv) What is the length of these distances? (v) What are the frequencies of the variants of the length of the distances?

CHART ONE

William GOLDING, *The Spire*,
London, 1965, Faber and Faber, pp. 120-1

String	Totals of members and potential distances	Length of distances in terms of fields							
		longer than 2 fields Specification of the fields					2	1	0
							Frequencies		
I (JOCELIN) ¹ YOU	16/15	...					2	6	7
(ROGER) ¹	14/13	(1)	-3-	<i>Th</i>	(54)	...	2	2	8
A DIAGRAM ⁷	10/9	...	(11)	-5-	<i>Th</i>	(17)	-	3	5
GOD ⁹	6/5	...	(10)	-4-	<i>Rh</i>	(16)	- 6 -	-	3
			<i>Th</i>	(23)					
THEY (PEOPLE) ²	4/3	...	(4)	-20-	<i>Th</i>	(24)	-	1	1
NET ¹³	3/2	...					-	1	1
WHAT NO ONE ELSE KNOWS ¹	3/2	...					1	-	1
NO ONE ELSE ¹	2/1		<i>NegFocA</i>	(1)	-3-	<i>NegFocA</i>	(5)	-	-
KNOWS ¹	2/1	...					1	-	-
THINK ²	2/1	(2)	-17-	<i>Tr</i>	(20)		-	-	-
HEAR ⁹	2/1	...					-	-	1
[OPINION] ²	2/1	...					-	-	1
PRAYER ⁷	2/1	...					-	-	1
REVEALED ⁹	2/1	(9)	-9-	<i>Tr</i>	(19)		-	-	-
CHOSE ¹⁰	2/1	...					-	-	1
15 strings	72/57				6		5	13	29

DISTANCES BETWEEN MEMBERS OF CO-REFERENTIAL STRINGS									
20	17	9	6	5	4	3	2	1	0
1	1	1	1	1	1	2	6	13	30

(i) As Chart One shows, the text contains 15 strings.

(ii) As Chart One shows, the string members are 72 in all.

(iii) The total number of string members cannot be the same as that of the distances between them. The opening member of a string has no co-referential predecessor. Under the circumstances, this reduces the number of potential distances between the string members to 57. (As a member referred to as 'opening' may have a predecessor in the preceding text non-examined here, 'opening' is to be understood as related to the passage under examination.)

(iv) Chart One records that in 30 out of 57 cases no distance arises at all: in other words, 30 cases show zero distance. As for the rest, there are 13 cases of one-field distance, 5 cases of two-field distance, 2 cases of three-field distance and 6 single cases of four, five, six, nine, seventeen and twenty-field distances

A special case is a string opened by *our* of (8). and further made up of *We* of (17), *us* of (17). *we* of (19) and *us* of (21). In the stretch of text examined, the members of the OUR string imply the notions conveyed by the members of the I and the YOU strings and in the flow of communication become confluent with

one of the two strings or with both. (The cases of confluence are indicated by a superscripted *c* on Chart Two. Simplifying matters, I have abstained from presenting the members of the OUR string as a separate string on the Charts. This does not distort the outcome of the statistics to be presented below.) Though not explicitly re-expressed, a notion can remain in the flow of communication through confluence and in this way keep the retrievability span open. The operation of confluence can be described as distance bridging.

CHART TWO

William GOLDING, *The Spire*,
London, 1965, Faber and Faber, pp. 120-1

I (JOCELIN) ¹	I (1), I (2), I ¹ (4), My ¹ (6), our ^{c 1} (8), me (9), me (10), my ² (13), I (14), <i>Rh</i> my (15), We ^{c 1} (17), us ^{c 1} (17), I ¹ (19), we ^{c 1} (19), us ^{c 1} (21), <i>Rh</i> Jocelin's ² (24)
YOU (ROGER) ¹	you (1), you ³ (5), <i>Rh</i> My son (6), our ^{c 1} (8), <i>Rh</i> you ² (11), you (12), You (13), Roger (14), you (14), We ^{c 2} (17), us ^{c 1} (17), we ^{c 1} (19), you (20), us ^{c 1} (21)
A DIAGRAM ⁷	a diagram (7), a diagram (8), it (9), the diagram ¹ (11), this work ⁵ (17), it ¹ (19), It (20), It (21), it (22), this ¹ (24)
GOD ⁹	God (9), his (9), He (10), He (11), <i>Rh</i> His ⁴ (16), God ⁶ (23)
THEY (PEOPLE) ²	They (2), They ¹ (4), They ²⁰ (24), they (24)
NET ¹³	my net (13), my net ¹ (15), <i>Rh</i> His (16)
WHAT NO ONE ELSE KNOWS ¹	What no one else knows (1), it ² (4), it (5)
NO ONE ELSE ¹	<i>NegFocA</i> no one else (1), <i>NegFocA</i> no one else ³ (5)
KNOWS ¹	knows (1), <i>Rh</i> know ² (4)
THINK ²	think (2), <i>Tr</i> think ¹⁷ (20)
HEAR ⁵	hear (5), listen (5)
{OPINION} ²	I'm mad perhaps (2), that (3)
PRAYER ⁷	prayer (7), prayer (8)
REVEALED ⁹	revealed (9), <i>Tr</i> reveals ⁹ (19)
CHOSE ¹⁰	chose (10), choose (11)

Chart Two shows a strong tendency towards very short distances. What is striking about the text examined is the overwhelming majority of distances not exceeding the length of one field. In fact, the frequency of the zero distance outnumbers those of all the other distances taken together (see also Chart One).

(v) Out of the 15 strings recorded, only 3 have more members than 9. All the other strings are shorter; some of them are very short. Only 1 string has 6 members; and none of the remaining 11 strings has more members than 4. In fact, only 1 of the remaining 11 strings has 4 members, 2 strings having 3 members each and 8 strings only 2 each. The low number of the longer strings is striking. It is worth noticing that only four notions establish themselves as hyperthemes in the thematic layer of the stretch of text examined. It is only the notions of 'I

(Jocelin), 'You (Roger)', 'diagram' and 'God' that appear more than four times in succession in this layer. In regard to the functional perspective of the paragraph, these notions are certainly foundation-laying (Firbas 1992a.71). It is about them that the stretch of text is mainly about.

The results just presented are of course based on the analysis of one short text only, but as I have already mentioned, I will offer an analysis of another text and the results of a statistical analysis covering 18 texts in all. But before doing so, let me return to the Golding text and (a) first add some comments on string members occurring at a zero, one, or two-field distance from their predecessors and yet serving as rhemes (recorded on Chart Two), and (b) then comment on string members, thematic or non-thematic, occurring at a greater than two-field distance from their predecessors (recorded in the mid-column of Chart One).

Under (a) come *know* of (4), *you* of (11), *my* of (15), *His* of (16), *My son* of (6) and *Jocelin* of (24). Although they all undoubtedly occur within the retrievability span opened or kept open by their predecessors, they become rhematic on account of additional irretrievable information.

Know of (4) is rhematic on account of contrast. It is not, however, its notional semantic content, but rather its positive polarity that bears the contrast. The actual bearer of positive polarity standing in contrast with the negative polarity of *knows* of (1) is the short form 'll of 'll *know* of (4).

You of (11) is rhematic on account of selection, and *my* of (15) and *His* of (16) on account of contrast. The contrast is heightened through the emotively charged accompanying wording. (As *His* of (16) stands for 'God's net', it is a case of confluence, operating in the NET and the GOD strings.)

My son of (6) is a vocative co-referential with 'you (Roger)'. It forms a distributional field, being its only communicative unit at the basic level. (As a noun phrase, *My son* provides a subfield with its own second-rank communicative units; cf. Svoboda 1987, Firbas 1992a.83–5). It conveys the speaker's personal appeal to the addressee and characterizes the spiritual relationship between the two.

As for *Jocelin* of (24), the distance between it and its predecessor *us* of (21) only amounts to two fields. Nevertheless, under the circumstances, *They call it Jocelin's folly* has an immediately relevant context of its own. It is a text embedded and has its own perspectiver, or rather perspectivers, expressed by *They*. In regard to their audience, the perspectivers delegated present a piece of irretrievable information. The high point of his message is the announcement of a nickname. This irretrievable information predominates and renders *Jocelin*, together with *folly*, rhematic.

Under (b) come *you* of (5), *think* of (20), *reveals* of (19), *no one else* of (5), *They* of (24), *God* of (23) and *This work* of (17). Let me recall that they are thematic or non-thematic and the distance lying between them and their predecessors exceeds two fields. They are all recorded in the mid-column of Chart One.

The string member *you* of (5) follows its predecessor, *you* of (1), at a distance of three fields. Its retrievability is evident. Moreover, an addressee is one of the group of referents that are permanently present in the immediately relevant context (Firbas 1992a.24–5). Hence the notion of ‘addressee’ is permanently retrievable from it and the retrievability span opened by this notion unobliterable. The addressee, Jocelin, is the main character of the story, and in the stretch of text examined acts as perspectiver delegated.

Occurring at a distance of 17 fields from its predecessor, *think* of (20) conveys irretrievable information. It is transitional. Transitional is also *reveals* of (19), which occurs at a distance of 9 fields from its predecessor.

No one else of (5) is a repetition of *no one else* of (1). *No* of (1) in fact negates two notions: that of ‘another being’ and that of ‘knowing’: *no one else knows*. It is worth noticing that Czech, which implements what Mathesius has named ‘negation concord’ (Mathesius 1975.167–8.), would use two negations; cf. *co nikdo jiný neví* [‘what nobody else does-not-know’]. In a similar way, *no* of (5) negates two notions as well: that of ‘another being’ and that of ‘listening’: *with no one else to listen*. Whereas *no one else knows* of (1) conveys fully irretrievable information, *with no one else to listen* of (5) conveys information that is predominantly irretrievable. This is due to the fact that occurring in (5), at a distance of three fields from (1), the re-expression of the negation of ‘another being’ occurs within the retrievability span opened by its predecessor. As for the negation focus (rheme proper of the negative sentence), I find that potentiality permits two interpretations: (i) both in (1) and in (5), the focus is conveyed by the verbs, *knows* and *listen*, respectively; or (ii) both in (1) and in (5) the focus is conveyed by *no one else*. Case (ii), conveying the additional irretrievable notion of exclusivity specially emphasized through purposeful repetition, is definitely marked. (For the phenomenon of potentiality, see Firbas 1992a.11–2, 108–10.)

Another string member conveying a piece of information permanently retrievable from the immediately relevant context is *They* of (24). It conveys the *man*-notion, the retrievability span of which is, on account of its referent’s permanent presence in the immediately relevant context (Firbas 1992a.24–5), unobliterable. *They* remains thematic in spite of the distance between it and its predecessor amounting to 20 fields.

God of (23) occurs at a distance of 6 fields from its predecessor. Its thematicity is sufficiently signalled by its dynamic semantic function of expressing the quality bearer (Firbas 1992a.67–70). An element performing this function is thematic irrespective of whether it conveys retrievable or irretrievable information.

This work of (17) has been interpreted as a member of the DIAGRAM string. Strictly speaking, it is not fully co-referential with *the diagram* of (11), which represents the idea of building a spire. (The name of Golding’s book from which the extract examined is taken is *The Spire*.) It rather refers to the ‘filling of the

diagram', in other words to the activities leading to the implementation of the idea. Nevertheless, the notional link between the two items, *the diagram* of (11) and *This work* of (17), is very close. The distance between the two amounts to five fields. *This work* of (17) is considered to occur within the retrievability span of *the diagram* of (11) and to be thematic. It is assumed that through the notion of 'this work' that of 'the diagram' remains in the thematic layer up to the end of the stretch of text examined. This work' is re-expressed by *it* in (19), (20), (21) and (22) and by *this* in (24)

Let me now turn to the analysis of the other text.

Iris MURDOCH, *The Severed Head*, Harmondsworth 1963, Penguin Books, pp. 5-6

(1) 'You're sure she doesn't know,' said Georgie.

'(2) Antonia? (3) About us? (4) Certain.'

(5) Georgie was silent for a moment (6) and then said, 'Good.' (7) That curt 'Good' was characteristic of her, typical of her toughness which had, to my mind, more to do with honesty than with ruthlessness. (8) I liked the dry way in which she accepted our relationship. (9) Only with a person so eminently sensible could I have deceived my wife.

(10) We lay half embraced in front of Georgie's gas fire. (11) She reclined against my shoulder while I examined a tress of her dark hair, surprised again to find in it so many threads of a pure reddish gold. (12) Her hair was as straight as a horse's tail, almost as coarse, and very long. (13) Georgie's room was obscure now except for the light of the fire and a trio of red candles burning upon the mantelpiece. (14) The candles, together with a few scraggy bits of holly dotted about at random, were as near as Georgie, whose 'effects' were always a little ramshackle, could get to Christmas decorations, (15) yet the room had a glitter all the same as of some half desired treasure cavern. (16) In front of the candles, as at an altar, stood one of my presents to her, a pair of Chinese incense holders in the form of little bronze warriors, who held aloft as spears the glowing sticks of incense. (17) Their grey fumes drifted hazily to and fro until sent by the warmth of the candle flames to circle suddenly dervish-like upward to the darkness above. (18) The room was heavy with a stifling smell of Kashmir poppy and sandalwood. (19) Bright wrapping paper from our exchange of presents lay about, (20) and pushed into a corner was the table which still bore the remains of our meal and the empty bottle of Château Sancy de Parabère 1955. (21) I had been with Georgie since lunchtime. (22) Outside the window and curtained away was the end of the cold raw misty London afternoon now turned to an evening which still contained in a kind of faintly luminous haze what had never, even at midday, really been daylight.

(23) Georgie sighed and rolled over with her head in my lap. (24) She was dressed now except for her shoes and stockings. (25) 'When must you go?'

(26) 'About five.'

(27) 'Don't let me catch you being mean with time.'

RETRIEVABILITY SPAN IN FUNCTIONAL SENTENCE PERSPECTIVE

(28) Such remarks were as near as I ever got to feeling the sharper edge of her love. (29) I could not have wished for a more tactful mistress.

CHART THREE

Iris MURDOCH, *A Severed Head*
Penguin Books, Harmondsworth, 1963, pp. 5-6

String	Totals of members and potential distances	Length of distances in terms of fields						2	1	0
		Specification of the fields								
GEORGIE ¹ YOU ¹	50/49	...						1	5	43
[NARRATOR] ANTONIA'S PSYCHO- ANALYST ⁴² SHE ¹ (ANTONIA)	41/40	...	(11)	-4-	Th	(16)	...	2	4	33
HER DARK HAIR ¹¹ A TRIO OF RED CAN- DLES ¹³ GEORGIE S ROOM ¹³ [ACTION] ³⁶ ANTONIA'S SESSION ³⁰ ABOUT FIVE ²⁶ 'GOOD' ⁶ CHARACTE- RISTIC ⁷ TOUGHNESS ⁷ DRY WAY ⁸ LITTLE BRONZE WARRIORS ¹⁶ THE ... STICKS OF INCENSE ¹⁶ PRESENTS ¹⁶ AN EVENING ²² [REMARK] ²⁸ ANTONIA S ANALYSIS ³⁷ HIS TRADE ⁴⁵ GOOD ⁴⁹ SWEET AND POLITE AND GENTLE ⁵⁰	14/13	...						-	1	12
	10/9	...	(2)	-6-	Th	(9)	-21- Th (30)	-	3	3
		...	(33)	-3-	(37)	...				
	4/3	...	(12)	-21-	Rh	(34)		-	-	1
	3/2	...						-	1	1
	3/2	...						-	1	1
	3/2	...						-	-	2
	3/2	...						-	-	2
	3/2	...						-	1	1
	2/1	...						-	-	1
	2/1	...						-	-	1
	2/1	...						-	-	1
	2/1	...						-	-	1
	2/1	...						1	-	-
	2/1	...						-	-	1
	2/1	...						-	1	-
	2/1	...						1	-	-
	2/1	...						-	-	1
	2/1	...						-	-	1
23 strings	160/137					5		5	17	110

DISTANCES BETWEEN MEMBERS OF CO-REFERENTIAL STRINGS

21	6	5	4	3	2	1	0
2		1	-	1	1	5	17	110

(30) 'Antonia's session ends at five.' I said. (31) 'I should be back at Hereford Square soon after that. (32) She always wants to discuss it. (33) And we have a dinner engagement.' (34) I lifted Georgie's head a little (35) and drew her hair forward, spreading it over her breasts. (36) Rodin would have liked that.

(37) 'How is Antonia's analysis going?'

(38) 'Fizzingly. (39) She enjoys it disgracefully. (40) Of course, it's all for fun anyhow. (41) She's got a tremendous transference.'

(42) 'Palmer Anderson,' said Georgie, naming Antonia's psychoanalyst, who was also a close friend of Antonia and myself. (43) 'Yes, I can imagine becoming addicted to him. (44) He has a clever face. (45) I imagine he's good at his trade.'

(46) 'I don't know,' I said. (47) I dislike what you call his trade. (48) But he's certainly good at something. (49) Perhaps he's just good. (50) He's not simply sweet and polite and gentle as only Americans can be sweet and polite and gentle, though he *is* that. (51) He has real power in him.'

Following the pattern applied in the comments on the Golding text, I will first answer the five questions raised on p. 25.

(i) As Chart Three shows, the Murdoch text contains 23 strings.

(ii) As Chart Three shows, the string members are 160 in all.

(iii) As Chart Three shows, the number of potential distances between the string members is 137.

(iv) Chart Three records that in 110 out of 137 cases no distance arises at all; in other words, 110 cases show zero distance. As for the rest, there are 17 cases of one-field distance, 5 cases of two-field distance, 3 single cases of three, four and six-field distances, and 2 twenty-one field distances. Like Chart Two, Chart Four shows a strong tendency towards very short distances. Striking is the overwhelming majority of zero distances and likewise the overwhelming majority of distances not exceeding the length of two fields.

The text displays two types of distance bridging. It contains 4 confluences of the strings YOU (NARRATOR) and GEORGIE, as well as a number of cases of direct speech, which keep both the speaker and the addressee in the flow of communication. These cases do so even if the speaker or the addressee is not referred to explicitly. A sentence of direct speech is regarded as a signal of the presence both of the speaker and of the addressee. From the point of view of retrievability, it is regarded to perform the same function as a member of a co-referential string.

(v) Out of the 23 strings recorded, only 4 have more members than 9. All the other strings are markedly shorter: 1 string has 4, 5 strings 3, and as many as 13 strings only 2, members. As in the Golding text, the low number of the longer strings is striking. It is worth noticing that only four notions establish themselves as hyperthemes in the thematic layer of the text examined. It is only the notions of 'Georgie', 'You (Narrator)', 'Antonia's psychoanalyst' and 'She (Antonia)' that appear more than four times in succession in this layer. In regard

to the functional perspective of the paragraph, these notions are certainly foundation-laying. It is they that the text is mainly about.

CHART FOUR

Iris MURDOCH, *A Severed Head*

Penguin Books, Harmondsworth, 1963, pp. 5-6

GEORGIE ¹	Georgie (1), {Addressee} (2), us ^c (3), {Addressee} (4), Georgie (5), {Ellipsis} (6), her (7), she (8), we ^c (10), Georgie's (10), she (11), her (11), Her (12), Georgie's (13), Georgie <i>Rh</i> (14), whose (14), her (16), our ^c (19), our ^c (20), Georgie (21), Georgie (23), her (23), She (24), her (24), {Speaker} (25), {Addressee} (26), {Speaker} me (27), her (28), {Addressee} (30), {Addressee} (31, 32, 33), Georgie's (34), her (35), her (35), {Speaker} (37), {Addressee} (38, 39, 40, 41), {Speaker}, Georgie (42), {Speaker} (43, 44, 45), {Addressee} (46), {Addressee}, you (47), {Addressee} (48, 49, 50, 51)
YOU ¹ {NARRATOR}	{Addressee}, You (1), {Speaker} (2, 3, 4), us ^c (3), my (2)(7), I (8), I (9), my (9), we ^c (10), my (11), I (11), my (16), our ^c (19), our ^c (20), I (21), my (23), you (25), {Speaker} (26), {Addressee}, you (27), I (28), I (29), I (30), I (31), we ^c (33), I (34), {Ellipsis} (35), {Addressee} (37), {Speaker} (38, 39, 40, 41), myself <i>Rh</i> (42), {Addressee} (43, 44, 45), I (46), I (47), {Speaker} (48, 49, 50, 51)
ANTONIA'S PSYCHOANALYST ⁴²	Antonia's psychoanalyst (42), who (42), him (43), He (44), he (45), his (45), his (47), he (48), he (49), He (50), he (50), He (51), him (51)
SHE ¹ (ANTONIA)	she (1), Antonia (2), my wife (9), Antonia's (30), She (32), Antonia's (37), She (39), She (41), <i>Rh</i> Antonia (42)
HER DARK HAIR ¹¹	her dark hair (11), her hair (12), <i>Rh</i> her hair (34), it (35)
A TRIO OF RED CANDLES ¹³	A trio of red candles (13), The candles (14), the candles (16)
GEORGIE'S ROOM ¹³	Georgie's room (13), the room (15), The room (18)
{ACTION} ³⁴⁻⁵	{ACTION} (34-5), that (36)
ANTONIA'S SESSION ³⁰	Antonia's session (30), that (31), it (32)
ABOUT FIVE ²⁶	about five (26), at five (30), after that (31)
'GOOD' ⁶	'Good' (6), That curt 'Good'
CHARACTERISTIC ⁷	characteristic (7), typical (7)
TOUGHNESS ⁷ t	oughness (7), which (7)
DRY WAY ⁸	dry way (8), which (8)
LITTLE BRONZE WARRIORS ¹⁶	little bronze warriors (16), who (16)
THE ...STICKS OF INCENSE ¹⁶	the glowing sticks of incense (16), Their (17)
PRESENTS ¹⁶	one of my presents to her (16), presents (2)(19)
AN EVENING ²²	an evening (22), which (22)
{REMARK} ²⁸	{REMARK} (27), Such remarks (28)
ANTONIA'S ANALYSIS ³⁷	Antonia's analysis (37), it (39)
HIS TRADE ⁴⁵	his trade (45), his trade (47)
GOOD ⁴⁹	good (49), good (50)
SWEET AND POLITE AND GENTLE ⁵⁰	sweet and polite and gentle (50), that (50)

As in the analysis of the Golding text, let me now comment on (a) string members occurring at a zero, one or two-field distance from their predecessors and yet serving as rhemes (recorded on Chart Four) and (b) on string members, thematic or non-thematic, occurring at a greater than two-field distance from their predecessors (recorded in the mid-column of Chart Three). Under (a) come *Antonia* of (42), *myself* of (42), *Georgie* of (14), and *Antonia* of (2), to be discussed in that order.

In (42), both *Antonia* and *myself* are rhematized by *also*, which marks them as conveyers of additional irretrievable information. 'Addition' is an essential trait of the meaning of *also*. Conveying this trait, *also* is a marker of additional information *par excellence*.

Georgie of (14) expresses the outcome of a comparison; it completes it by expressing a characteristic feature of the phenomenon to be compared and in this way conveys additional irretrievable information.

Antonia of (2) is the second member of the SHE (ANTONIA) string, opened with *she* of (1). Both string members are worth commenting on from the point of view of the immediately relevant context. Occurring in the opening sentence of the novel and therefore having no predecessor, *she* conveys irretrievable information. The opening sentence is actually a query posed by Georgie, who of course knows to whom the pronoun *she* refers. The reader, however, is not in the know; he is 'thrown into the midst of things'. The irretrievability of *she* produces what has been termed the *in medias res* effect (Firbas 1992a.40, 68). The interlocutor's reaction to the query is meant to be understood as one of uncertainty. He mentions the name of a woman, 'Antonia', wondering, or rather pretending to wonder, whether it is she who is referred to. Like Georgie, he is of course in the know. But once again, the reader is not. The name 'Antonia' is irretrievable. *Antonia* serves as rheme proper. The functions of *she* and *Antonia* in (1) and (2) respectively demonstrate the author's adroit way of introducing Antonia into the flow of the narration.

I can now turn my attention to string members coming under (b), which are thematic or non-thematic and occur at a greater than two-field distance from their predecessors (and are recorded in the mid-column of Chart Three). Under this heading come *my* of (16), *my wife* of (9), *Antonia's* of (30), *Antonia's* of (37), and *at five* of (30), to be discussed in that order.

The four-field distance between *my* of (16) and its predecessor, *I* of (11) has not obliterated the retrievability of the notion of 'I (Narrator)'. But this notion is unobliterable in any case, for the speaker/writer is one of the referents that are permanently present in the immediately relevant context, and therefore permanently retrievable from it (Firbas 1992a.24–5). Let me just mention in passing that the fictitious narrator of the story is not identical with the author of the novel, and is therefore regarded as a perspectiver delegated. But in contrast with the cases previously discussed, the perspectiver delegated in question does not bring any specific immediately relevant context into the flow of communication.

Occurring at a six-field distance from its predecessor, *Antonia* of (2), the string member *my wife* of (9) has had its retrievability weakened. But neither its retrievability nor its irretrievability can affect the perspective of (9). Owing to the rhematizing effect of *only*, (9) is perspectived to *with a person so eminently sensible*, the string member *my wife* serving in the theme.

Both *Antonia's* of (30) and *Antonia's* of (37) are constituents of noun phrases, *Antonia's session* and *Antonia's analysis*, respectively. Both *session* and *analysis* convey irretrievable information. So does *Antonia's* of (30), but not *Antonia's* of (37). Whereas the distance separating the former from its predecessor, *my wife* of (9), amounts to 21 fields, the distance between the latter and its predecessor, *She* of (32), only amounts to 3. Now in spite of both *Antonia's* and *session* of (37) conveying irretrievable information, the notion of 'Antonia's session' could well have been in the interlocutors' minds at the moment of utterance and/or perception. Under these circumstances, irretrievable information could be presented as retrievable from the immediately relevant context and felt as a matter of immediate concern shared by the two interlocutors. Such presentation or an assumption of such presentation creates the to-be-in-the-know effect. But what is the reader's assessment of the information? The fact of the man's having to leave is retrievable information — cf. field (25) — and well appreciated as such by the reader. But it is only when reading the words *Antonia's engagement* that he is reminded of Antonia and that he learns of her engagement. The reader is not among those who are in the know. It is the tension between actual retrievability objectively signalled and retrievability merely presented as such that creates the to-be-in-the-know effect. (For the sensitivity of intonation to this effect, see Firbas 1992a.177–9.)

The time indication *at five* of (30) conveys information retrievable from (26), three fields forming the distance. Nevertheless, it is this indication that the speaker perspectives field (30) to. As the immediately following field (31) discloses, he repeats the information for a purpose. It is of vital importance for him to be at a place soon after five. The repetition induces *at five* to convey additional irretrievable information producing a kind of summarizing effect.

Having accounted for all the cases coming under the headings of (a) and (b), let me add one further observation concerning the Murdoch text. It is an observation of general significance.

It is striking that, as can be seen from Chart Three, none of the strings is opened by a verb. Chart Four even displays a total absence of verbs from the strings recorded. As for the Golding text, only 4 of its 15 strings open (and include) verbs. This remarkably low frequency of verbs in the strings is also borne out by the other 17 texts examined. (See the list on Chart Seven, and the list of the sources of the texts examined on p. 45.) Out of these 17 texts, 6 show a complete absence of verbs from the strings recorded. (They are the texts by Melville, Stevenson, Poe, O'Henry, O'Connor and De Mello.) The total number of strings that within the 17 texts open with a verb is 18. The total number of all

the strings established in these texts is 243. (Including the Murdoch text, the total number amounts to 266) The ratio of 243 to 18 (266 : 18) is striking indeed. It is also worth noticing that the length of the strings opened by a verb tends to be very short. Out of the 18 strings recorded, 13 consist of 2 members only; 3 consist of 3, 1 of 4 and 1 of 5, members.

These facts throw valuable light on the function of the verb, or rather its notional component, in the dynamics of communication. It has been established that in FSP the notional component of the verb predominantly functions in the transition, considerably less frequently in the rheme and comparatively rarely in the theme. On the other hand, the opening string members are predominantly rhematic, occasionally thematic, and very rarely transitional. These findings are in harmony with the strong tendency of the notional component of the verb to act as mediator between the theme and the rheme within the sentence, in other words, to serve as transition in the functional perspective of the sentence. In regard to the FSP of the paragraph, or the text in general, the verb is consequently by far the most frequent constituent of the transitional layer. The fact that the co-referential strings open predominantly in the rhematic, occasionally in the thematic, and very rarely in the transitional layer, is not at variance with the fact that the notional component of the verb, which predominantly operates in the transitional layer, rarely opens a co-referential string, in other words, acts as its opening member. These two facts corroborate the very strong tendency of the verb to operate in the transition.

An overall view of the results of the analyses

Let me now give an overall view of the analyses offered. Although it must be borne in mind that the analyses cover only Modern English fiction prose and that analyses of non-fiction prose remain pending, I believe that the results of the analyses have a wider significance.

The tendency to keep the distances between the string members very short established by the analyses of the Golding and the Murdoch texts are corroborated by the analyses of 17 other texts. Chart Five, covering these 17 texts as well as the Murdoch text, tabulates the frequencies of distances of various length. The frequency of the zero distance strikingly outnumbers the frequencies of all the other distances taken together. Whereas the total number of the cases of non-zero distance is 368, the total number of the cases of zero distance is 1085. This justifies our speaking of a tendency. The fact that the one, two and three-field distances taken together (240 in all) outnumber all the distances exceeding the length of three fields (128 in number) justifies our qualifying the tendency as very strong.

RETRIEVABILITY SPAN IN FUNCTIONAL SENTENCE PERSPECTIVE

CHART FIVE

DISTANCES BETWEEN MEMBERS OF CO-REFERENTIAL STRINGS

0	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	8	9	20	1	2	3	4	5	6	7
1077	128	65	41	17	14	10	10	3	2	3	2	-	3	2	-	3	-	1	-	1	-	2	-	1	-	-	-
THEMATIC ELEMENTS																											
1384																											
RHEMATIC ELEMENTS 0																											
8	4	4	3	1	2	3	3	3	1	1	1	1	1	1	1	1	1	1	2	1	2	1	1	1	1	1	1
44																											
RHEMATIC ELEMENTS I																											
8	3	2	1	3	5	1	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25																											
1085	131	67	42	20	19	19	15	8	5	4	4	4	3	6	3	1	4	2	-	2	2	3	2	2	1	1	1
1453																											

The statistics also throw interesting light on the thematicity or rhematicity of the string members involved. They cover only the non-opening members of the strings, for it is these members that terminate the distances. The thematicity or rhematicity of the non-opening string members can be accounted for as follows. A string member occurring within the retrievability span opened or kept open by its predecessor is thematic if conveying fully retrievable or predominantly retrievable information. If retrievability has been weakened or even obliterated, the string member can still be thematic if linear modification and the semantic factor induce it to be so. These factors can fully assert itself when the string member operates outside the retrievability span and conveys fully or predominantly irretrievable information. (The interplay of FSP factors is the main concern of Firbas 1992a) Under this contextual condition they are not overridden by the contextual factor. String members becoming rhematic in this manner form a group referred to on Chart Five as 'Rhematic Elements O (i.e. occurring outside the retrievability span)'. String members conveying additional irretrievable information on account of which they become rhematic form a group referred to on Chart Five as 'Rhematic Elements I (occurring inside the retrievability span)'.

Whereas the rhematic elements of the I-group are linked with distances extending from zero to eight, the rhematic elements of the O-group are linked with distances extending from six onwards. It is worth noticing that the two groups of rhematic elements overlap within the area of six, seven and eight-field distances. This area appears to be the sphere in which a piece of information that has not been re-expressed seems to lose, or is on the verge of losing, its retrievability. Further investigation may throw more light on string members operating within this area. But as context is a graded phenomenon, which I trust has been amply corroborated by the present study, I do not think that it will be possible to delimit the area in terms of fixed numbers. The area naturally opens the door to potentiality (Firbas 1992a.11–2, 108–10, 183–6), which permits of at least two possible interpretations of the outcome of the interplay of FSP factors.

The analysis further points to a very strong preponderance of irretrievable information in the texts. Two facts are worth particular attention: (i) the comparatively very low number of co-referential strings in relation to the number of words used, and (ii) the comparatively very low frequency of long co-referential strings, i.e. strings that in contrast with other strings show a strikingly higher number of members.

Observation (i) is illustrated by Chart Six. This chart presents an assessment of the retrievability/irretrievability of the information conveyed by the communicative units of the first eleven fields of the Golding text. (Following Svoboda, I consider the syntactic constituents of a field to serve as communicative units; Svoboda 1968, Firbas 1992a.17–9.) The left-hand column of the Chart lists units conveying fully or predominantly retrievable information. The right-hand column lists units conveying fully or predominantly irretrievable information. Un-

derlining indicates irretrievable information present in a unit conveying predominantly retrievable information, and vice versa retrievable information present in a unit conveying predominantly irretrievable information.

CHART SIX

1 I, You	1 Now, 'll tell, what no one else knows
2 They	2 think, that I'm mad perhaps
3 that	3 but, what, does matter
4 They, know, about it	4 one day, when , when I
5 you, it	5 But, shall hear, now, as man to man, on this very stump of a tower, up here, with no one else to listen
6	6 My son.
7	7 The building, is, a diagram of prayer
8	8 and, our spire, will be, a diagram of the highest prayer of all
9 it, to me	9 God, revealed, in a vision, his unprofitable servant
10 He, me	10 chose
11 He, chooses	11 you, to fill the diagram with glass and stone, since the children of men require a thing to look at

A note should be added on the verb forms. For reasons presented, for instance, in Firbas 1992a.91, the verb is regarded as implementing two communicative units, one being formed by the notional component of the verb and the other by the categorial exponents. Strictly speaking, the categorial exponents are frequently heterogeneous in regard to retrievable/irretrievable information. Simplifying matters, I place all the categorial exponents in the right-hand column. I do so on account of their invariably performing — mainly through their TMEs (temporal and modal exponents) — the function of transition proper (ib. 71, 90). In doing so, the TMEs provide a link between the theme and the non-theme, the link conveying a piece of irretrievable information *sui generis* (cf. Adamec 1966.22–3, Daneš 1974.111, Firbas 1992a.90). The function of conjunctions is interpreted as coming close to that of the TMEs. In FSP they are transition proper oriented (Firbas 1992a.93).

A comparison of the two columns demonstrates the preponderance of the irretrievable information in the part of the text analysed. An analysis of the rest of the text would yield the same results. So would an analysis of the Murdoch text and the other texts examined. It is the right-hand column that represents the information that develops the communication.

CHART SEVEN

	40(+)	30(+)	20(+)	10(+)	9	8	7	6	5	4	3	2
1 Davies	1	–	1	1	–	–	–	–	1	4	3	6
2 Melville	–	–	1	1	–	–	–	–	–	–	–	7
3 Stevenson	–	–	1	1	–	–	–	–	–	4	2	6
4 Anderson	1	–	–	2	–	–	–	–	3	5	3	15
5 O'Kelly	1	–	–	1	–	–	–	3	–	1	3	9
6 Murdoch	2	–	–	2	–	–	–	–	–	1	5	13
7 Austen	1	–	1	1	–	1	–	2	1	–	2	7
8 Carver	1	1	1	1	–	–	–	6	5	2	–	10
9 Poe	–	1	1	1	–	–	–	–	5	–	2	11
10 Read	1	1	–	–	–	–	–	–	1	1	4	10
11 Lawrence	–	1	1	–	–	1	2	–	–	2	3	7
12 O'Henry	–	–	1	–	–	–	1	1	1	–	3	3
13 Carter	–	1	–	1	–	1	–	1	–	–	–	11
14 Hemingway	–	1	–	1	–	–	–	1	–	–	3	6
15 Twain	1	–	1	–	–	–	–	–	1	2	2	5
16 O'Connor	–	–	–	1	–	–	–	1	1	–	3	3
17 De Mello	–	–	–	2	–	–	–	1	1	–	2	3
18 Lansburg	–	–	1	–	–	–	–	–	3	–	1	7
	9	6	10	16	–	3	3	10	18	21	31	139

1 (M. Foltová), 16; 2 (Z. Graubnerová), 9; 3 (M. Křístek), 12; 4 (J. Chovanec), 19; 5 (K. Layer), 18; 6 (J. Fibas), 18; 7 (K. Gamrotová), 16; 8 (K. Macáková), 16; 9 (V. Válková), 17; 10 (M. Jurák), 18; 11 (L. Adamcová), 18; 12 (K. Láničková), 10; 13 (A. Černušková), 14; 14 (M. Šácha), 12; 15 (P. Kovařík), 12; 16 (A. Hasselbarthová), 9; 17 (D. Skotnicová), 9; 18 (A. Studená), 12.

I can now turn my attention to observation (ii), concerning the comparatively very low frequency of long co-referential strings, i.e. strings that in contrast with other strings show a strikingly higher number of members. Chart Seven illustrates this observation. It covers eighteen texts consisting of 37 fields on average. It tabulates the frequencies of the co-referential strings occurring in them and does so according to the length of the strings, in other words, according to the number of members they consist of. Strings consisting of less than ten members (2, 3, ...9) are presented in eight separate groups, the rest of the strings having been divided up into four groups (10 [+], 20[+], 30[+] and 40[+]) only. The note at the bottom of the Chart specifies the numbers of the strings occurring in each of the texts examined. It also states the names of the collaborators who analyzed the texts in the way described here on p. 000.

The total number of strings recorded is 266. Whereas the total of strings consisting of less than 10 members is 221, that of strings consisting of ten members and more only 41. This shows that the shorter strings heavily outnumber the longer strings. The highest frequency is shown by two-member strings; they are 139 in number. They outnumber all the other strings taken together, the frequency of the latter being only 127. The total frequency of the three-member, four-member and five-member strings is 70. It is considerably lower than that of the two-member strings, but still higher than the total frequency of the strings consisting of more than five members, which amounts to 57. The figures pre-

sented point to the tendency to increase the number of short strings on the one hand, and the tendency to decrease the number of long strings on the other.

The figures presented throw interesting light on the formation of the thematic layer within the text. As has been discussed in other places (Firbas, e.g., 1986.58–67; 1992a.79, forthcoming), all the thematic elements of a text form its thematic layer. Roughly speaking, repeated re-expression induces an element first to serve as diatheme, then as theme proper and eventually as hypertheme. Through repetition, a hyperthematic element becomes gradually more and more established in the thematic layer and capable of indicating what a shorter or a longer stretch of text is about (Svoboda 1983). The longer the string, the greater the stabilizing effect produced by it. The longer the string, the more efficiently it directs the addressee's attention to the notion concerned, in other words, the matter in hand. The varying length of the strings reflects varying degrees of dynamicity. It reflects a tension between the stabilizing effect on the one hand, and the drive towards the further development of the communication and eventually its completion on the other. But the flow of the communication is a dynamic phenomenon *par excellence*, constantly bringing in irretrievable information. This is borne out not only by the comparatively low number of co-referential strings in relation to the comparatively high number of words conveying irretrievable information, but also by the fact that the long strings are outnumbered by the short strings and that among the latter it is the two-member strings that strikingly predominate.

The shortness of the retrievability span is a consequence of the continuous influx of irretrievable information and hence of the dynamic character of the communication. So is the ever changing immediately relevant context. A generally valid exact and fixed figure indicating the length of the retrievability span can hardly be presented. As context is a graded phenomenon, one has to reckon with a varying extent of the retrievability span, however comparatively small the range of variation may be, and further with a borderline area between the immediately relevant context and the rest of the of context. The very existence of the borderline area naturally opens the door to the phenomenon of potentiality, permitting equivocal interpretations as to the retrievability or irretrievability of a piece of information. But the existence of the retrievability span and that of the immediately relevant context are facts borne out by analyses of texts. An appreciation of the relationship between the two helps to understand the structure of the complex phenomenon of context, and the way in which at the moment of utterance and/or perception a sentence structure comes to serve a particular communicative purpose and hence is induced to function in a definite perspective. The analyses of texts lead me to the conclusion that the immediately relevant context is constituted by all live retrievability spans, that is such as are open at the moment of utterance and/or perception. I trust that this conclusion helps to capture the phenomenon of the immediately relevant context that plays a crucial role in effecting functional sentence perspective.

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