

**TWO PERSPECTIVES TO TEXT STRUCTURE
REPRESENTATION**

Riitta Sallinen

**UNIVERSITY OF JYVÄSKYLÄ
Department of English
1998**

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ABSTRACT

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Yhteenveto: Kaksi näkökulmaa tekstirakenteen kuvaukseen

Diss.

This study outlines a two-layered system of text-structure representation for factual English texts. Because the study focuses on factual texts, it defines text as consisting of a group of propositions which relate to each other so that an identifiable discourse topic emerges. For practical purposes text is also described as a textual topic-comment message. Text structure is, accordingly, defined as the set of relations by means of which the propositions of the textual comment are joined to each other and, directly or indirectly, to the discourse topic.

The text is assumed to contain both informatively indispensable propositions and those which do not increase information in their context but are included in the text to make it more comprehensible, convincing or attractive to the reader. To account for this textual feature text structure is approached from the two perspectives of *message structure* and *message strategies*. The message structure consists of the relations joining the informatively indispensable propositions of the textual comment to each other and, directly or indirectly, to the discourse topic. The message strategies are defined by the relations existing between the indispensable and the dispensable propositions.

The message structure shows two kinds of relations: *message-core relations* and *logical relations*. The top-hierarchy propositions of the textual comment relate to the discourse topic by means of a dominant type of message-core relation. The various types of message-core relations result from the various illocutionary purposes that the text may show as one speech act by the writer. Logical relations carry the meaning of clause-connecting conjunctions. Various types are distinguished also among message-strategic relations. Thus a number of more specified text-structural functions/relations are derived from each of the above three main categories of text-structural relations. Stereotypical patterns of message structure are then suggested for the various text types.

Finally, the model is tested on a corpus of 18 authentic texts/extracts of texts including scientific articles, textbook texts, and press reportage. The two levels of analysis are carried out side by side so that a group of propositions is coded for its message-core function and for the message-strategic pattern by means of which the message core function is realized.

To my family

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The subject of this study was brewing in my mind over the swiftly passing years when I was raising a flock of three lively children and could not think of undertaking a research task. Now that it is completed I find myself a grandmother of two - and I feel very grateful for having had an opportunity to concentrate on such work at this stage of my life.

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Finally, thank you, all of you, my nearest friends, my parents, my sister and brother, and my children. Like to anybody, friends and family, have been to me the ultimate source of strength. And on top of all that has been the secure presence of my husband.

Oulu, October 27, 1998

Riitta Sallinen

LIST OF FIGURES

A situation - evaluation sequence constituting a topic - comment structure.....	7
The MSU- MSA model of text structure.....	8
Determinants of text structure.....	93
Determinants of message structure.....	94
Basic attributive message structure.....	100
Basic attributive message structure with constituent attribution.....	100
Basic elaborative structure.....	109
Basic elaborative structure with constituent attribution.....	109
A matching relation joining two sets of top-hierarchy message-core propositions which relate to different discourse-topical nuclei.....	141
Matching attributions/evaluations relate to both/all discourse-topical nuclei	142

LIST OF TABLES

Searlian illocutionary acts.....	18
Derivation of logical functions.....	89
Derivation of textual illocutionary purposes.....	97
The distribution of message-core, logical and message-strategic functions in scientific articles, textbook texts, and press reportage.....	196
The distribution of message-core functions in scientific articles, textbook texts, and press reportage.....	196
The distribution of logical functions in scientific articles, textbook texts, and press reportage	197
The distribution of message-strategic functions in scientific articles, textbook texts, and press reportage.....	198

CONTENTS

ABSTRACT

ACKNOWLEDGEMENTS

LIST OF FIGURES

LIST OF TABLES

1 INTRODUCTION	1
2 AN OVERVIEW OF THE MSU-MSA SYSTEM OF TEXT STRUCTURE REPRESENTATION	4
2.1 THE PERSPECTIVES OF MESSAGE STRUCTURE AND MESSAGE STRATEGIES: THE PREMISES FOR THE CONSTRUCTION OF THE MODEL	4
2.2 DIAGRAMMATIC REPRESENTATION OF THE MODEL.....	8
3 PREVIOUS RESEARCH ON TEXT STRUCTURE	12
3.1 THE STATE OF ART	12
3.2 THE DISTINCTIVE FEATURES OF THE MSU-MSA SYSTEM IN COMPARISON WITH EARLIER MODELS	13
3.3 NOTIONS OF TEXTUAL MEANING	14
3.4 TOPIC, COMMENT, AND DISCOURSE TOPIC: THE CONCEPTS.....	15
3.4.1 <i>The topic-comment set versus the theme-rheme set: A choice of concepts</i>	15
3.4.2 <i>Discourse topic: The concept</i>	16
3.5 DEFINITIONS OF TEXT STRUCTURE AND SOURCES OF TEXT-STRUCTURAL VARIATION	17
3.5.1 <i>Text structure as action</i>	17
3.5.2 <i>How is text structure seen as action in the MSU-MSA analysis ?</i>	18
3.5.3 <i>Text structure as a question-answer dialogue between the writer and the reader</i>	19
3.5.4 <i>Questions to identify the components of text structure in the MSU-MSA analysis</i>	20
3.5.5 <i>Text structure as interpropositional relations</i>	20
3.5.5.1 <i>How are propositions manifested in the surface structure of the text ?</i>	22
3.5.6 <i>The role of interpropositional relations in the MSU-MSA definition of text structure</i>	23
3.6 CATEGORIZATION AND SOURCES OF TEXT-STRUCTURAL RELATIONS: A COMPARISON OF SOME PREVIOUS MODELS AND THE MSU-MSA SYSTEM	24
3.6.1 <i>Grimes: 'Hypotactic' ('identification', 'setting', and 'supportive'), 'paratactic' and 'neutral' relations resulting from textual subordination/co-ordination and the presence of various kinds of information</i>	25
3.6.2 <i>Longacre: 'Basic' and 'elaborative' relations from an expanded statement calculus</i>	25
3.6.3 <i>Gray: 'Descriptive', 'explanatory', and 'rhetorical' relations from clause-connecting conjunction and question-and-answer dialogue</i>	26
3.6.4 <i>Mann and Thompson: 'Subject-matter' and 'presentational' relations based on subordination and communicative purpose</i>	26
3.6.5 <i>Callow and Callow: Reference, communicative-purpose-based 'schematic' relations, clause-connecting-conjunction-based 'coherence' relations, and audience-awareness-based 'orientational' materials as elements of text structure</i>	26
3.7 GLOBAL UNITS OF TEXT-STRUCTURE ANALYSIS /LEVELS OF ANALYSIS.....	28
3.8 TEXT TYPES.....	30
3.8.1 <i>The role of text-type descriptions in the construction of the MSU-MSA model</i>	30
3.8.2 <i>An overview of text typologies</i>	31
3.8.3 <i>Werlich's text type descriptions modified for the construction of the MSU-MSA model</i>	33
3.8.4 <i>An empirically founded typology to define the sample of texts used for the testing of the MSU-MSA model</i>	37
3.9 FRAME	39
4 DESCRIPTION OF THE COMPONENTS OF THE MSU-MSA MODEL	41
4.1 TYPES OF DISCOURSE TOPIC.....	41
4.2 TYPES OF INTRODUCTION	44
4.2.1 <i>Text-structurally unmarked introductions</i>	45
4.2.2 <i>Text-structurally marked introductions</i>	46
4.3 THE CHOICE OF THE TEXT SAMPLES TO ILLUSTRATE TEXT-STRUCTURAL FUNCTIONS	51

4.4 WHEN DOES A GROUP OF PROPOSITIONS CONSTITUTE A UNIT OF TEXT STRUCTURE?.....	51
4.5 THE CODING SYSTEM FOR TEXT-STRUCTURAL REPRESENTATION.....	52
5 MESSAGE STRATEGIES	56
5.1 GENERIC AND SPECIFIC AS LEVELS OF INFORMATION TRANSFER	57
5.1.1 <i>Background creating generic - specific</i>	59
5.1.2 <i>Topic controlling generic - specific</i>	60
5.1.2.1 A grey area of analysis in the generic - specific continuum.....	63
5.1.3 <i>Text organizing generic - specific</i>	66
5.1.4 <i>Strategies with interest arousing specific</i>	70
5.1.5 <i>Strategies with explanatory specific</i>	72
5.2 INFERENTIAL STRATEGIES: EVIDENCE-CONCLUSION AND ASSERTION-EVIDENCE-CONCLUSION	76
5.3 REFORMULATION.....	78
5.4 METASTATEMENT.....	79
5.5 QUESTION AND ANSWER.....	81
5.6 SUMMARIZING STRATEGY.....	84
5.7 CONCLUDING REMARK ON MESSAGE STRATEGIES AS AN ELEMENT OF TEXT STRUCTURE	86
6 MESSAGE STRUCTURE	87
6.1 LOGICAL FUNCTIONS.....	87
6.1.1 <i>Message-strategic choices involved in the manifestation of logical functions</i>	92
6.2 STEPS FOR SPECIFYING MESSAGE-CORE FUNCTIONS.....	92
6.2.1 <i>Establishing illocutionary purpose as a determinant of the dominant message-core function of the textual comment</i>	92
6.2.2 <i>Questions specified for the elicitation of message-core functions and logical functions</i>	94
6.2.3 <i>Specification of textual speech acts from sentential speech acts</i>	95
6.2.4 <i>Further specification of textual speech acts on the basis of text type descriptions</i>	95
6.2.5 <i>Derivation of textual illocutionary purposes from textual speech acts</i>	96
6.3 MESSAGE-CORE FUNCTIONS	98
6.3.1 <i>Attribution</i>	98
6.3.1.1 Types of attribution.....	98
6.3.1.2 Two basic types of message structure with attribution as their dominant message-core function	100
6.3.1.3 How attributions relate to each other	101
6.3.1.4 Discourse topic of an attributive sequence	101
6.3.1.5 Message-structural patterns with attribution as a dominant message-core function.....	101
6.3.2 <i>Elaboration</i>	106
6.3.2.1 Reasons for defining a message-structural umbrella category.....	107
6.3.2.2 Elaborative determinants.....	108
6.3.2.3 Two basic elaborative patterns	109
6.3.2.4 The discourse topic of an elaborative sequence.....	110
6.3.2.5 Message-structural patterns with elaboration as a dominant message-core function.....	110
6.3.3 <i>Basis</i>	114
6.3.3.1 Basis through deduction	115
6.3.3.2 Basis through induction.....	117
6.3.3.3 Text-structural logic versus propositional logic.....	118
6.3.4 <i>Evaluation</i>	119
6.3.4.1 The evaluation function specified in terms of agent and object.....	120
6.3.4.2 Derivatives of the evaluation function.....	120
6.3.4.3 The place of the evaluation function within message structure	121
6.3.4.4 Argumentative evaluations	121
6.3.4.5 Message-structural patterns with evaluation as a discourse topic or as a message-core function of the textual comment.....	123
6.3.5 <i>Motivation</i>	132
6.3.5.1 Message-structural patterns with motivation as a top-hierarchy message-core function of the textual comment.	133
6.3.6 <i>Instruction</i>	135
6.3.6.1 Message-structural patterns with instruction as the dominant message-core function of the textual comment....	135
6.3.7 <i>Commitment</i>	138
6.3.8 <i>Matching</i>	139
6.3.8.1 Two ways for the matching function to manifest itself	140
6.3.8.2 Models for matching structure representation	143

6.3.8.3 Message-structural patterns with matching.....	144
6.4 A TEXT-TYPOLOGICAL CATEGORIZATION OF THE PATTERNS OF MESSAGE STRUCTURE.....	149
7 TESTING OF THE MODEL.....	157
7.1 HYPOTHESIS ABOUT THE APPLICABILITY OF THE MODEL.....	157
7.2 BIBER'S TEXT TYPOLOGY AS A FRAMEWORK FOR COLLECTING A CORPUS TO TEST THE HYPOTHESIS.....	157
7.3 CRITERIA FOR THE CHOICE OF THE GENRES AND GENRE SUBCATEGORIES TO BE INCORPORATED IN THE CORPUS....	158
7.4 SAMPLING	160
7.5 THE CONDITIONS OF VALIDITY FOR THE HYPOTHESIS	162
8 COMMENTS ON THE ANALYSIS OF ONE TEXT IN THE CORPUS.....	163
8.1 ANALYSIS OF THE TEXT 'CITIZENSHIP AND THE PLACE OF PUBLIC SPHERE: LAW, COMMUNITY, AND POLITICAL CULTURE IN THE TRANSITION TO DEMOCRACY' BY MARGARET R. SOMERS.....	163
8.2 CONCLUDING REMARKS	172
9 FINDINGS FROM THE TESTING OF THE MODEL	173
9.1 THE GENERIC APPLICABILITY OF THE MODEL	173
9.2 A QUANTITATIVE SURVEY OF THE TEXT-STRUCTURAL FUNCTIONS FOUND IN THE CORPUS	174
9.2.1 <i>The distribution of message-core, logical and message-strategic functions in scientific articles, textbook texts and press reportage</i>	<i>176</i>
9.2.2 <i>The distribution of message-core functions in the three genre samples.....</i>	<i>176</i>
9.2.3 <i>The distribution of logical functions in the three genre samples</i>	<i>177</i>
9.2.4 <i>The distribution of message-strategic functions in the three genre samples</i>	<i>178</i>
9.3 OTHER OBSERVATIONS RESULTING FROM THE ANALYSIS OF THE CORPUS.....	179
9.4 CONCLUSIONS	182
BIBLIOGRAPHY	183
APPENDICES	195
YHTEENVETO.....	199

1 Introduction

The purpose of this study is to suggest a two-layered system of text structure representation that would account for both text semantics-based, i.e. content-related, and text pragmatics-based, i.e. way of writing -related, structural phenomena in factual English texts.¹ The text semantics -based structural analysis reveals the frame of the message involved, *the message structure* of the text, by pointing out the discourse topic and the structural functions of the propositions that convey the informatively indispensable core of the message. The text pragmatics -based analysis, on the contrary, elicits *message-strategies* which originate in the writer's concern for the readability / convincingness / attractiveness of the text. An attempt is also made to provide explanations for the structural variation that can be found in texts.

Originally, the present writer's interest in text structure sprung up from a need to provide EAP reading comprehension students with a kit of effective tools for tackling textual meaning. As readers in a foreign language can seldom achieve a native-like proficiency in the language itself they should compensate for it by being as well informed as possible about those textual properties whose recognition may crucially contribute to comprehension. Van Dijk and Kintsch's model of discourse comprehension (1983) and the view of the process by a few other theoreticians suggest that the reader's ability to recognize text organization is one of the relevant tools.

Van Dijk and Kintsch identify five sets of strategies that the reader is supposed to make use of when processing written discourse: propositional strategies, local coherence strategies, macro strategies, strategies for the use of knowledge, and schematic strategies. Schematic strategies include the reader's ability to identify text-structural patterns. Black (1985) also concludes that an awareness of text-structural organization plays a role in the process of discourse comprehension. Approaching discourse comprehension from the point of view of cognitive psychology, he discusses memory retrieval structures as one factor which affects it. He points out that memory retrieval structures are roughly equivalent to the macro structures as introduced by van Dijk and Kintsch (1983). They contain cognitive unit networks and rhetorical networks. Rhetorical networks are structures that link cognitive units by indicating complex interactions between them. In general, especially those linguists, cognitive psychologists and researchers of artificial intelligence who see schema application as an inherent part of the process of inferring meaning from a text tend to regard the recognition of text structure as a process that contributes to schema-based comprehension (see Minsky 1975, Schank and Abelson 1977, Rumelhart 1980, Rosenberg 1980, Graesser and Nakamura 1982, and Voss and Bisanz 1985).

However, before the reader can be provided with a relevant set of text-structural schemata, appropriate ways must be found for the description of text structures. Thus a need was felt for a descriptive apparatus that would contribute to the understanding of a written message by eliciting from the text its main components of information and pointing out their text-structural functions in the construction of the message. In addition, the model was also required to account for those propositions in the text which are redundant or optional from the point of view of topical development.

In spite of the original idea that the model should be pedagogically applicable, curiosity about the essence of the text urged the present writer to develop the above approach to a thorough propositional analysis. As a result a fairly complex model emerged, which translates the text into a metalanguage telling what the writer has done to communicate a message. In its entirety the

1

The terms 'semantic' and 'pragmatic' as used above coincide with Leech's (1983) notion of the semantic/pragmatic distinction. Van Dijk (1977) associates the terms with text-structural relations in a more restricted way when referring to conjunction-based sentence-internal cohesion as semantic relatedness and to speech act -based coherence as pragmatic relatedness.

apparatus seeks to map all the text-structural functions that can contribute to the construction of messages. For its original purpose, however, the model seems to suit best when used at the level of its main categories as an awareness-raising explanation for the construction of the textual message. This observation is based on the present writer's experience of having used it in a reduced form in EAP classes for several years. The actual testing of the model for its pedagogical applicability was never intended to be part of this study because the task of finding out about the structural features of texts as such was known to be immense.

Most of the previous models of text structure representation seem to be more concerned with the immediate interactional value of adjacent parts of the text and their mutual hierarchy (see Grimes 1975, Aston 1977, Longacre 1983, Tirkkonen-Condit 1985, and Mann and Thompson 1988) than with the functions that the various propositions of the text serve in conveying its message.

There are indeed, among the previous systems, models for the description of complete messages, e.g. the *problem - solution* and *situation-evaluation* patterns (see Winter 1986 and Hoey 1983), and the *tree-diagram*, *the matrix*, and *flow chart models* of text structure which are recommended as practical aids for reading comprehension in some EAP reading comprehension textbooks (e.g. the *Focus* series edited by Widdowson and Allen, the *Nucleus* edited by Bates and Dudley-Evans). These patterns do not, however, exhaust the text-structural variation at the global level, nor explain it at a more local level. There are also systems which establish reference as one of the levels of text-structural analysis (Beekman and Callow 1974, Jordan 1992, and Callow and Callow 1992), and therefore might end up with a model pointing out a message with a discourse topic and a comment made on it. They cannot, however, reveal the basic framework of the message when a distinction is not made between the propositions indispensable for topical development and those which are reader-oriented and in their context informatively dispensable. Even though some systems recognize reader-oriented or presentational elements (Callow and Callow 1992), they do not approach them from the point of view of their informative dispensability or indispensability. Thus the major problem with the previous approaches is that they do not simultaneously elicit the message, and account for the structural functions of those propositions which are dispensable in terms of the development of the topical idea.

The system to be presented here is restricted, due to its original source of motivation, to the description of factual (i.e. non-fictional) English texts. It was first constructed on a theoretical basis. The process of construction basically drew from two sources: the writer's experience of texts gained during several years of teaching English reading comprehension and a critical review of the previous systems of text structure analysis. The text-structural functions defined for the system are illustrated by means of short extracts of authentic texts. The whole descriptive apparatus was then tested on a corpus of 18 texts from the genres of academic prose and press reportage. A quantitative survey of the instance of the various text-structural functions was carried out to find out about their relevance to structural description. Such testing enabled also an evaluation of the adequacy of the range of the functions included in the model. Moreover, a still deeper understanding of the functioning of the model and of the nature of text structure was gained through the analysis of the corpus.

An overview of the model will first be presented in the following chapter. In chapter 3 relevant literature is reviewed and comparisons are made between the present and the previous approaches to show how the present system, on the one hand, draws from previous ideas, and on the other, tries to make a contribution of its own. The two perspectives of message structure and message strategies are then dealt with in detail and the text-structural functions recognized by the system are defined in chapters 4, 5, and 6. Chapter 7 introduces a hypothesis concerning the range of the applicability of the model and discusses the methodological issues relating to the collection of the corpus. In chapter 8 a detailed account of one of the text analyses is provided. Moreover, chapter 8 provides on the basis of the analysis of the corpus an assessment of the applicability of the model for the purposes defined by the hypothesis and final conclusions on the topic. The system of analysis to be described

will be referred to as an MSU-MSA system using abbreviations from the names of the message structure and message strategy perspectives.

2 An overview of the MSU-MSA system of text structure representation

In this chapter an overall description of the present two-layered model will be provided. The premises adopted concerning the definitions of text and text structure, and the origin of text-structural variation are discussed first because these are the considerations that determine the basic properties of the descriptive model. The two perspectives of message structure and message strategies will then be outlined. The various message-structural and message strategic components of text structure will be named, so that the reader can get an overall idea of the model, but they will not be defined yet. Their definitions will be contained in the detailed discussion of each of the above perspectives in chapters 5 and 6. Similarly, to avoid complicating the description of the model too much at this stage the premises are not reasoned for in this chapter but in the literature review part (chapter 3), where connections between this model and previous theory are pointed out. At the end of this chapter a diagram of the model is presented to illustrate those regularities that text structures are assumed to show.

2.1 The perspectives of message structure and message strategies: the premises for the construction of the model

The construction of the present model is based on seven major premises:

(1) The text is a topic-comment message which consists of two or more propositions

A text is created when a number of propositions interrelate so that a shared topical idea emerges and all the propositions participate, directly or indirectly, in commenting on that idea. This definition of text is appropriate for the present study where the focus is on conventional factual texts (e.g. textbook texts, scientific articles and press reportage) even though some marginal textual phenomena such as colony texts (see Hoyer 1986) and single proposition and one word texts are excluded. By the above definition texts may be looked at as messages which like sentence-level propositions consist of *a topic* and *a comment* made on it (for a discussion of the notions of topic and comment see section 3.3). This means that there is a distinct 'aboutness' in texts. They are governed by an identifiable discourse topic, single or multi-nuclei, about which information is provided in the textual comment. The topic-comment division constitutes in this system the fundamental framework of text structure.

(2) Text structure consists of the various functions that the propositions/groups of propositions of a text show in relation to their immediately or intermediately preceding propositions/groups of propositions and the discourse topic

(3) The meaning of a text consists of the meaning of the propositions contained in it and the meaning of the text-structural relations existing between those propositions

(4) The purpose of the text as one speech act by the writer determines the nature of the textual topic-comment relation

It is postulated that texts correspond to sentence-level speech acts in that they show similar illocutionary purposes as speech acts do. It is, moreover, postulated that the relation between the

textual topic, i.e. the discourse topic, and the top-hierarchy propositions of the textual comment, i.e. propositions which relate directly to the discourse topic, is determined by the illocutionary purpose of the text as one speech act by the writer. The writer (/the text) is expected to have a purpose both with respect to the reality that the message is concerned with and with respect to the effects that the message is expected to have on the reader. These purposes will be referred to as the writer's *representational and communicative purpose*, respectively. The textual representational and communicative purposes are derived from those of sentence-level speech acts. Representational purposes are further specified by reference to the various 'modes of description' (for modes of description see section 3.7.2)

(5) The text contains both informatively indispensable and way-of-writing - related informatively dispensable propositions. The text-structural relations existing between the informatively indispensable propositions constitute the message structure of the text. The text-structural relations existing between the informatively indispensable propositions and the dispensable ones constitute the message strategies² by means of which the message is communicated.

It is postulated that the textual message may incorporate redundant and discourse-topically dispensable information so that while a certain core of the propositions of the textual comment contribute directly to the formation of the message, i.e. to the topical development of the text, there may be others which contribute rather to its conveyance. This amounts to saying that both text-semantic, i.e. informatively indispensable, and text-pragmatic, i.e. informatively redundant or otherwise auxiliary way-of-writing-related elements affect the formation of text structure (for the semantics/pragmatics distinction see Leech 1983). It must, however, be noted that redundancy and informative dispensability as used above are context-bound notions: in isolation the propositions defined as message-strategic in a certain context would (except for a type of metatext: for metatext see section 5.4) be just as informative as the message-structural ones. The above assumption about the contextual informative indispensability and dispensability of the propositions constituting a text has resulted in the construction of the two perspectives of message structure and message strategies to text structure analysis. These perspectives have been combined in the model as two layers of description running parallel throughout the process of text structure representation.

(6) Text-structural components can be elicited by three basic compositional questions

Consistently with the above conceptions stressing the text as a message and as a manifestation of the writer's semantics-related and pragmatics-related purposes, the fourth premise postulates that, in practical terms, structural features are brought about as a result of three basic compositional decisions/choices that the writer must have made at least by the time the text is produced. Before or in the course of writing the writer must find an answer, at some level of awareness, to the following three questions:

²The argumentative evidence - conclusion pattern which is presently classified as a strategic manifestation of the basic argumentative pattern involving an evaluation - basis sequence does not fit within this definition of message strategies in that it does not contain any informatively dispensable elements. Yet it is included in the strategies on the grounds that it provides an alternative way of saying things with a definite reader-related effect and does not increase the information content carried by the basic evaluation - basis sequence. Another exception, which similarly carries indispensable information while it provides an alternative way of communicating it, is a variety of the generic-specific sequence which describes the topical idea partly by assigning attributes to the class that the topic is a member of (see text sample 13). All the other approaches described here as strategies are consistent with this definition.

- (1) What am I going to write about?
- (2) What am I going to say about my topic?
- (3) How am I going to say what I want to say so as to get my message across to the reader in an optimal way?

The first two questions are seen as eliciting the semantics-based message structure. The message structure consists of the various relations by means of which those propositions of the textual comment which in their context carry discourse-topically indispensable information relate to each other and to the discourse topical proposition (i.e. the proposition which carries the discourse topic). In contradistinction to such propositions stand those which exist for way-of-writing related, i.e. pragmatic reasons. The semantically indispensable propositions relate to the discourse topic and to each other by means of either *message-core relations* or *logical relations*. Accordingly, these message-structural propositions are called *message-core propositions* and *logical propositions*. Message-core relations, which are expressed in operational terms, i.e. in terms of what the writer does to communicate an idea about the discourse topic, are determined by the writer's representational and communicative illocutionary purpose. As pointed out above, the various textual representational and communicative purposes are derived from the illocutionary purposes of sentence-level speech acts and the different modes of description. The message-core relations specified in the above way are *attribution, elaboration, evaluation (with interpretation and implication as its specifications)/evaluation with basis, instruction/instruction with basis, motivation, basis, and commitment*. Moreover, the proposition/group of propositions which introduces the discourse topic is also categorized as a message-core proposition/group of propositions because of its informative indispensability. The coding used is *introduction*.

The representational purpose of the text frequently, though not regularly, results from the choice of discourse topic (the abstract/concrete distinction being then a relevant feature). Thus the conclusion can be made that the choice of the discourse topic frequently determines the message-structural relation by means of which the top-hierarchy propositions of the text are bound to it. Moreover, the construction of the discourse topic, i.e. whether it shows a single or multi-foci structure, has further message-structural implications (see section 4.1).

Logical relations derive their meanings from those of clause-connecting conjunctions. As text-structural relations, they usually are, however, signalled by various kinds of lexical items or just by the canonical order of successive propositions. As logical relations determine the ways in which the propositions of the text are connected in terms of conjunctive logic, they pertain to the semantics of the text and can also be elicited by the second of the above compositional questions (for a more detailed study of message-core functions and logical functions, four more specific eliciting questions are derived from the second question, see section 6.2.2). Logical propositions may relate directly to the discourse topic itself or to a lower-level topical node. Moreover, logical relations may explain how message-core propositions which relate directly to the discourse topic are linked to each other.

It is also expected to be possible that texts do not show any explicit links between their various topic-related message-structural propositions. This does not, however, result in incoherence as it may be assumed that these propositions relevantly pertain to *the frame* of description that is conventionally applied to the discussion of the topical class in question. The concept of frame, which is thus introduced as a tool of message-structural description, denotes the set of relevant topic-specific determinants by means of which an object, a state of affairs or an event can be represented. It restricts the choice of the propositions to be applied to the discussion of a particular topical idea.

To sum up, message structure representation specifies the type of the discourse topic, the operational message-core relations and/or logical relations prevailing between the discourse topic and the semantically indispensable propositions, and the operational and/or logical relations connecting the semantically indispensable propositions to each other.

The third question above seems to be justified as one of the basic compositional questions on the grounds of the assumption that it is urgent for the writer to show a concern for the reader's ability and willingness to receive the message. Getting a message across to the reader is crucial because a message which is rejected for lack of interest or because of its incomprehensibility does not serve any purpose. The third question is assumed to elicit propositions which, in a given context, are of secondary importance from a strictly informative point of view but serve a pragmatic function by rendering the text more interesting, convincing or comprehensible to the reader. As pointed out above such propositions are presently considered to be manifestations of message strategies. They may, for example, reformulate, illustrate and summarize previous information, or focus the reader's attention on certain points by presenting information in a question-answer sequence. (In two exceptional cases text-structural patterns which provide alternative ways of saying things without entailing any redundancy are identified as message strategies, see footnote 2 on page 5). A criterion for the identification of a message-strategic pattern is that a proposition could be left out without depriving the text of any relevant macro-level information or that the pattern could be replaced by a text-structurally different way of saying.

The various message-structural and message-strategic roles carried by propositions will be referred to, when specified, as *functions*. This is because propositions perform these various text-structural functions in relation to each other. Thus we speak, for example, of attribution, elaboration, and reformulation functions. Moreover, propositions themselves are referred to in text structural description by the names of the text-structural functions that they perform.

(6) The text as one global speech act may include another

The fifth premise adopted in this study is that it is also possible for texts which at the topmost level of analysis constitute one speech act to consist of two overlapping speech acts, so that the first topic - comment construction constitutes a topic for the comment of the top-level speech act. The double-speech-act-type of text is typically brought about when the writer first describes some factual situation and then comments on it. Winter (1986) introduced this phenomenon as one of two basic textual information structures and referred to it as *a situation-evaluation pattern*. In the present study a need to report facts and a need to evaluate them are acknowledged to be the two major urges of communication, providing that the term evaluation is understood as an umbrella term that embraces such modifications of the evaluation function as argumentative and non-argumentative evaluation (the difference being that argumentative evaluations are followed by a supporting basis), instruction, commitment, interpretation, and implication (for a definition of the term evaluation in this study see section 6.3.4). The diagram below illustrates how Winter's basic textual pattern is presently seen in the frame work of a topic - comment structure, i.e. as a message:

$$\begin{array}{l} \text{TOPIC} = \text{SITUATION} (= \text{TOPIC} + \text{COMMENT}) \\ \uparrow \\ \text{COMMENT} = \text{EVALUATION} (+ \text{BASIS}) \end{array}$$

Figure 1: A situation - evaluation sequence constituting a topic - comment structure

The contribution of this model to Winter's way of thinking is that it offers means for a propositional analysis of the situation member consisting of a group of propositions which report

facts and correspond to one speech act by the writer. Although the situation unit as a whole constitutes the topic part for the evaluation function, it follows from the facts that the situation is about a topic of its own and the evaluation is about the situation that the semantically relevant discourse topic of the whole sequence is that of the situation member. Thus in such texts a message-structural topic is distinguished besides the proper semantic discourse topic of the sequence. The message-structural topic, i.e. the situation, must be seen as a text-analytical construct that is needed to explain how the evaluation relates to the preceding text.

2.2 Diagrammatic representation of the model

The premises adopted in 2.1 enable the construction of a model of text structure as shown in figure 2. The point of departure for the MSU-MSA analysis is always the identification of the proposition which carries the discourse topic, i.e. *the discourse-topical proposition*, which may or may not be accompanied by message-strategic propositions. The rest of the propositions whether message-structural or message-strategic constitute the comment-part of the text. The message structure of the text consists of the relations represented by arrows in the diagram.

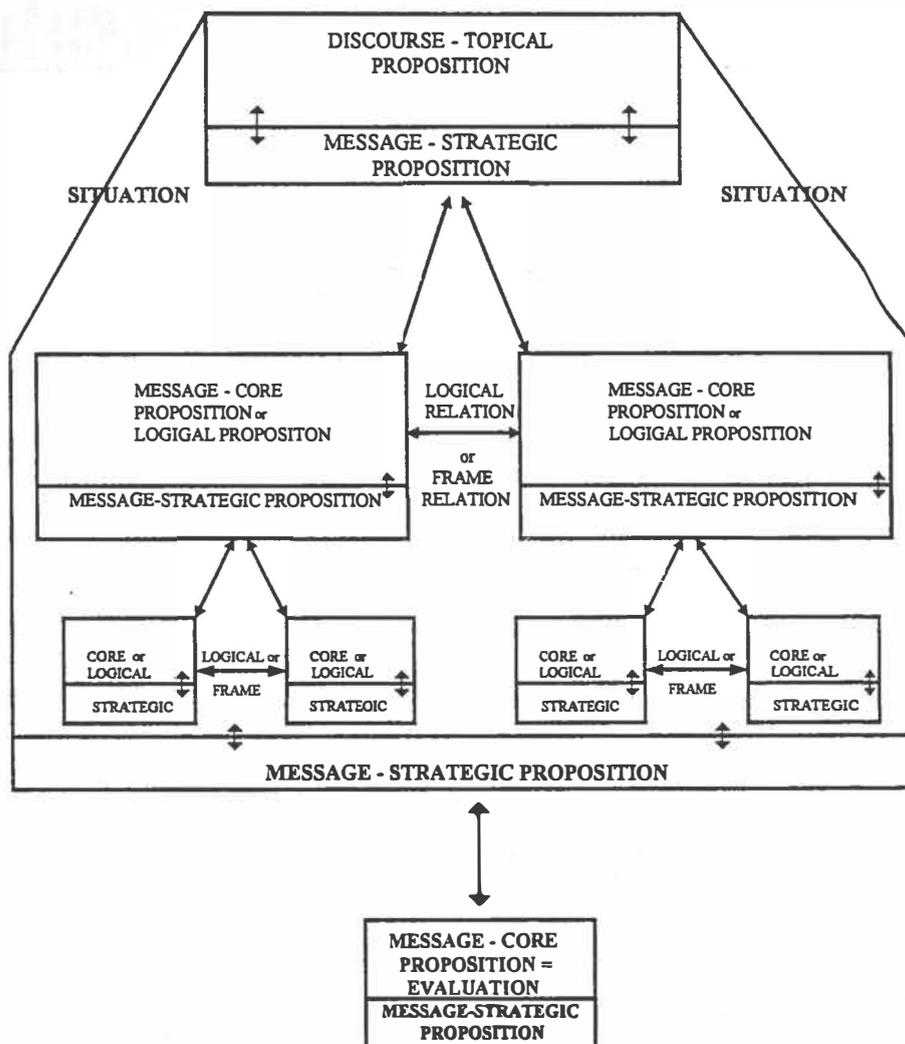


Figure 2: The MSU- MSA model of text structure

The diagram shows the following regularities in the model:

1. The discourse-topical proposition, every message-structural proposition, i.e. message-core proposition and logical proposition, and relevant groups of message-structural propositions can be accompanied (followed or preceded) by a message-strategic proposition. The short arrow placed between the message-structural propositions (core or logical) and the message-strategic ones indicate a message-strategic relation (The coding with a message-strategic proposition incorporated in a message-structural one is used to refer also to the one occasion on which a message strategy does not involve separate message-strategic propositions but is a matter of the order of presentation, i.e. the inferential evidence-conclusion strategy.)
2. Message-structural propositions, i.e. both message-core propositions and logical propositions may relate directly to the discourse-topical proposition.
3. Every message-structural proposition may serve as a node for lower-level message-core and logical propositions. The same is expected to be occasionally true also of message-strategic propositions. The diagrammatic coding of nodes for lower-level propositions is meant to allow for three interpretations. The node for lower-level message-structural propositions is constituted either by the group of propositions needed to convey a message by means of a given strategy, or by the plain message-structural proposition, or by the message-strategic proposition.
4. Several message-structural propositions relating directly to the discourse topic or the same lower-level node (i.e. message-structural proposition) are connected to each other by means of either logical relations or by pertaining to the relevant topic-specific frame of description, i.e. by means of a frame relation. (A message-core relation can join propositions relating directly to the discourse topic in a special case of matching where a topical idea/object is matched with itself in different settings. The joining message-core relation is in that case a matching relation. See 6.3.8.1)
5. Every proposition in the text, even message-strategic propositions, can in theory be followed by the writer's subjective comment, i.e. an evaluation. The diagram allows for this observation by providing each node with a link to a potential message-core proposition. Similarly a group of propositions constituting an ideational and functional whole, i.e. a speech act, within text structure can constitute the factual situation that is being evaluated by the writer.
6. Because the model is based on the elicitation of the textual topic - comment structure and the hierarchical significance of the propositions of the textual comment with respect to the discourse topic, the model gives different structural representations of the same passage depending on whether it is analysed as an independent extract or as a part of a larger textual whole.
7. The structural representation of a sequence of text emerges alongside with the development of the discourse-topical idea. The model does not allow the analysis to be started from global units.

The system of text structure representation outlined above is, however, yet too generic to give the analyser much information about the structure of individual texts. More specific patterns must be derived from it by identifying the different types of discourse topic, the various message-structural (i.e. message-core and logical) functions that propositions may perform in relation to one another, and by specifying the message-strategies of factual writing.

The specified text-structural functions contained in the model will be introduced at this stage in the form of a list for two reasons. First, even though the exact definitions are pending until chapters 5 and 6, it is assumed that the labels of the functions enable the reader to construct a working preconception of the model: while one aspect of the model is being described the reader has an idea of the whole of which the aspect in question is a part. Second, a preliminary introduction of all the components of the model is necessary because text-structural functions will be described by means of reference to authentic text samples, and such functions do not exist in a text-structural vacuum: for one function to be illustrated identification of another or several others is needed. Thus, for the reader to be able to follow the detailed discussion of the functions he must first be provided with an adequate knowledge of the whole system. For the present model the following types of discourse topic and text-structural functions are identified:

1. Types of discourse topic:

- Topical participant (in Setting/Settings 1-n)
- Setting
- Topical event
- Topical concept
- Topical phenomenon
- Topical participant and product/possession
- Evaluation
- Situation
- Problem
- Instruction

2. Message -structural functions:

a) Message-core functions:

- Introduction
- Attribution
- Elaboration (for the determinants of the elaborative frame see section 6.3.2)
- Evaluation (Implication/Interpretation/Hypothetical evaluation)
- Basis
- Evaluation (Interpretation) with basis
- Motivation
- Instruction
- Instruction with basis
- Commitment
- Matching

b) Logical functions/relations:

- Addition
- Hypothesis - Affirmation
- Succession, Overlap, Setting
- Cause - Consequence
- Causal explanation
- Purpose - Result

- Purpose
- Result
- Condition - Consequence
- Condition
- Conditional evaluation
- Ineffective cause - Concession
- Concessive aspect
- Contrast
- Wish - Frustration
- Intent - Frustration
- Hypothesis - Frustration
- Restriction
- Rejection - Replacement
- Hypothesis - Alternative
- Alternative

3. Message-strategies:

- Background creating generic - Specific
- Topic controlling generic - Specific
- Text organizing generic - Specific
- Generic - Interest arousing specific (- Topic resuming generic)
- Interest arousing specific - Generic
- (Labelling) generic - Explanatory specific (- Topic resuming generic)
- Explanatory specific - Labelling generic
- Evidence - Conclusion
- Assertion - Evidence - Conclusion
- Reformulation
- Metastatement
- Question - Answer
- Summary

In this chapter the basic premises of the present text-analytical approach have been introduced and the framework of the model itself outlined. Before the text-structural functions listed above are discussed in detail, the theoretical background of the model will be studied in the following chapter to see how it, on the one hand, draws from previous research and, on the other, deviates from it.

3 Previous research on text structure

3.1 The state of art

The study of text structure was at its most active during the period from the late 1970's to the late 1980's though some interest in it can be spotted as early as in the 1950's and late 1960's. Especially the work done during the 1970-1980 period sought to define the notion of text structure, identify the source or sources of text-structural variation and establish a model for its description. It was prompted by the notion that the meaning of a written text, as far as a text was assumed to be a coherent piece of writing, was not simply a sum of its propositions but consisted instead of the totality of meanings which contained both the propositions and the relations by means of which they were understood to be linked. Thus the study of text structure has largely concentrated on specifying the meaning of such relations (Fuller 1959, Winter 1968, 1971, 1974, 1977, 1979, 1982, 1986, 1992 Longacre 1968, 1979, 1983, Grimes 1975, Meyer 1975, 1985, Gray 1977, Aston 1977, Jordan 1978, 1984, Hoey 1979, 1983, Tirkkonen-Condit 1985, Fox 1987, Mann and Thompson 1988). Some researchers have also assigned text-structural functions to the propositions joined by such relations (Aston 1977, Jordan 1984, Mann, Mathiessen, and Thompson 1982, 1992, Tirkkonen-Condit 1985, Fox 1987, Mann and Thompson 1988). Moreover, as many text-analysts believed that such relations also joined sequences of propositions in a meaningful way, their analyses lead to the identification of more global textual patterns and accordingly to a more holistic view of text structure (Aston 1977, Winter 1977, Jordan 1984, Hoey 1983, Tirkkonen-Condit 1985, Mann and Thompson 1988). Other attempts to describe text structure in more holistic terms have been based on genre and text-type analyses (Longacre 1992, Dudley - Evans 1994). A mention must also be made of some earlier studies pertaining to the latter category which have sought to identify the universals of the narrative plot structure (Bremond 1970, Labov 1972, Longacre 1974, Rumelhart 1977a). Hutchins (1977) suggested that the basic narrative text structure can be revealed also in expository and argumentative writing, and that it is possible that there is for prose only one basic text-structural pattern that all text-structural phenomena can be traced back to.

In Europe the scene for text-structural study has been largely set by Winter, whose notion of 'clause relation' laid the foundations for much of the work of the Birmingham school of written text analysis, especially that of Hoey and Jordan. Much of the American work in the field, on the contrary, seems to draw from Grimes' notion of ' rhetorical proposition', e.g. Meyer's (1975, 1985, 1992) and Meyer's and Freedle's (1984) analyses are based on the 'rhetorical predicates' identified by Grimes. They are the starting point also for Tirkkonen-Condit's work (1985).

Text structures have also been studied in terms of theoretical frameworks other than those provided by text linguistics. Young, Becker and Pike (1970), Kinneavy (1971), D' Angelo (1975) and Dillon (1981) have approached text structure from the point of view of rhetoric. This means that text-structural phenomena are explained by reference to their relevant rhetorical effects. Cognitive psychology has offered a frame of reference to the work of Bransford (1979), De Beaugrande (1980), Sandford and Garrod (1981), Meyer and Rice (1982), Britton and Black (1985), and Graesser and Goodman (1985). Moreover, the study of artificial intelligence has stimulated research in the field of text organization, e.g. McKeonwn (1982), Schank (1982), Meyer and Rice (1984) and Brown (1985).

As the above review shows the boom of text-structural study in the 1970's and 80's did not produce any agreement as to a single workable method to text structure analysis in spite of the fact that the researchers shared many basic premises concerning the notion of text structure. That this is still the case has been shown by two recent reviews of systems of text structure analysis (Mann and

Thompson, eds. 1992 and Coulthard, ed. 1994) with mostly revised versions of the earlier models. Apart from the Callow and Callow model (1992), which looks at text structure as the framework of a message and accordingly bears a great resemblance to the present one, the more recent studies do not aim at a systematic explanation of text structure. Such more restricted studies of text-structural phenomena have been presented by Hunston (1994), who regards the writer's evaluative judgement as a text-structuring factor in academic discourse, and Tadros (1994), who proposes a system of analysis that sees 'prediction' and 'writer agreement'/'writer detachment' as major text-structure-creating factors.

Meyer (1992) points out that the side by side existence of several slightly different descriptions of text structure is understandable and even justified for a number of reasons. First, as mentioned previously, motivation for the study of text structure has sprung from a variety of disciplines including rhetoric, folklore, linguistics, education, psychology, and artificial intelligence with widely different aims and uses for the knowledge rendered by the study. Second, even within one field such as linguistics text-structural study may be urged by a variety of purposes, e.g. the aim may be to study the textual phenomenon as such or to construct an approach that would facilitate reading comprehension. The different purposes that the analyses serve naturally affect the way text structure is approached. Moreover, as text structure is not always explicitly signalled, it necessarily remains a perception that is up to a point transient and dependent on the reader's interpretation. Because readers' interpretations are always a function of their individual cognitive structures and stores of knowledge, variety can be expected to exist among such interpretations. Apart from influencing the way in which different analysts may look at the text within the framework of one system of analysis, the latter factor may also affect the construction of such systems.

As pointed out above, the latest developments in the field include the Callows's (1992) three-layered message-based model for thorough text-structural analysis. The model shows remarkable similarity to the system proposed in this study in all those respects in which the present system is claimed to deviate from the previous ones. Yet, it was not known to the present writer at the time when this system was first outlined (for the earlier version of this system see Sallinen 1994). Comparisons will be made in the following chapters between the Callows's system and the present one especially where they are seen to differ from the earlier notions of text structure.

3.2 The distinctive features of the MSU-MSA system in comparison with earlier models

In the following sections the previous systems of text-structure representation will be studied in greater detail to show how the present system is rooted in them, and to point out the contributions of the present system to earlier text-structural description. This is done by first discussing the treatment of relevant aspects of text analysis in earlier literature and then comparing it with the views adopted in this study.

The distinctive features of the MSU-MSA model lie in that it

- incorporates the notion of discourse topic in the definition of text structure by singling out the proposition (or group of propositions) which introduces the discourse-topical idea as the core node to which all the propositions of the text relate either directly or indirectly;
- distinguishes between propositions which are informatively indispensable for the message and those which are there for reader-related reasons, i.e. it distinguishes between message-structural and message-strategic elements in the text;

- explains the function of the informatively indispensable propositions in relation to the discourse topic or lower level topical nodes by reference to the writer's representational and communicative illocutionary purposes;
- presumes that besides describing a state of affairs the writer may also evaluate it, give an instruction/instructions relating to it, or commit himself to relevant action. This results in a structure where a group of preceding propositions serve as a topical node for the evaluative, instructive or commissive proposition/group of propositions. At the specific conceptual level, however, the discourse topic of the descriptive sequence claims a topical status over the whole text.

Thus there are four areas of special interest for the present discussion of earlier text-structural studies:

- (1) the definition of text structure, which in the MSU-MSA system involves the recognition of the discourse topic;
- (2) the source of text-structural variation, which is presently explained by reference to the purpose of the text as one speech act by the writer;
- (3) the categorization of text-structural relations/functions, which in this study amounts to the construction of the two text-analytical layers of message structure and message strategies; and
- (4) the analysis of the text into groups of interrelated propositions.

In addition, relevant literature will in this chapter be referred to for a discussion of how textual meaning is seen to be constructed and for the definition of such necessary conceptual tools as topic and comment, discourse topic, speech act types and their illocutionary purposes, frame, and text type. The notion of textual meaning which enables the present approach to text-structural description is discussed first.

3.3 Notions of textual meaning

The present model introduces text-structural functions/relations as components of textual meaning which can be inferred from the text. In other words, the model is based on the position that components of textual meaning can be found by studying texts.

Varying notions of textual meaning are involved in the models of reading introduced in text-linguistic literature. Pitkänen-Huhta (1997) categorizes these models as the bottom-up, the top-down, the interactive, and the transactive types of models according to the way they see the process of reading. The bottom-up (Gough 1972, LaBerge & Samuels 1974, Carver 1977-78), the top-down (Goodman 1967, Smith 1978), and the interactive (Rumelhart 1977b, Kintsch & van Dijk 1978), models regard meaning as being embedded in the text by the writer. The oldest bottom-up models consider the construction of meaning to be a cumulative process at the surface of the text from words to textual meaning. The top-down and interactive models postulate that meaning is embedded in the deep structure of the text and must be found there by the reader. The transactive models (Harste 1985, Rosenblatt 1988, Goodman 1994), on the contrary, presume that meaning is created

during the process of reading as a result of a text - reader transaction. Thus meaning, according to the latter group, is a relational notion that varies from one reading event to another.

The position taken in the present study is between the two extremes implied by the bottom-up and the transactive theories. It is believed, on the one hand, that texts can carry universal and unambiguous categories of meaning, and that these categories can be found by studying texts. On the other hand, texts can never be complete so that all the information relevant to a message could be communicated. Thus texts tend to leave scope for interpretation by the readers who use their varying world knowledge to fill in the gaps in textual information. Thus it is postulated here that the categories of meaning, i.e., in this case, the text-structural functions identified for the present model, are real (many of them even universal) because texts can be found in which their presence is indisputable. In practice, however, their degree of explicitness varies, which results in interpretational variety in the construction of textual meaning.

3.4 Topic, comment, and discourse topic: The concepts

Because the present system of text-structure representation hinges on the idea that the information conveyed by a text can most fundamentally be organized by applying to it the same kind of topic - comment division by means of which sentential information has conventionally been categorized, it is necessary to define the meaning of these concepts and to find out how they are modified when transferred to text analysis. Van Dijk's (1977, and van Dijk and Kintsch 1983:190) observation that texts can be reduced to a terminal (complex) macro proposition by applying to them the macro rules of zero (leaving a proposition intact), deletion (leaving propositions out), generalization (including several specific ideas in one generic concept), and construction (incorporating ideas into existing structures of knowledge) implies a parallel between a sentence and a text, which suggests that a parallel might be drawn also between the basic information structure of a sentence and that of a text. Renkema (1993:62) takes for granted the above hierarchical shift in the application of the topic - comment set. Similarly, Daneš (1995) extends the use of the notion of 'theme', which is closely related to that of 'topic,' from sentences to texts as well.

3.4.1 The topic-comment set versus the theme-rheme set: A choice of concepts

Following Renkema (1993) the topic is presently understood to be 'what a discourse, discourse fragment or sentence is about'. What is then stated about the topic is called a comment. A parallel representation of the information structure of (originally) a sentence is provided by the theme-rheme set (Daneš 1974, Halliday 1967, 1976, 1985). At the sentence level various characterizations have traditionally been associated with the notions of theme and topic. Topic-comment as well as theme - rheme distinctions have been made variably by reference to what is given and what is new, what is presupposed and what is asserted, what is foregrounded and what is backgrounded, or what is the point of departure and what is the core of the message. Halliday (1985) identifies different types of theme. A theme which, consistently with the above definition of topic, states what a sentence is about corresponds to what Halliday (1985: 53-56) calls 'ideational theme'. Also Daneš (1995) and Mauranen (1993) use the concept in that sense.

Renkema (1993) points out that the notions of theme and rheme are frequently associated with the subject and predicate of a sentence even though what is being talked about is not necessarily the subject of the sentence. Thus because the topic-comment set of terms may not carry such close associations with sentence-level syntax as the theme-rheme set and because the notion of a textual comment is consistent with the notion of discourse topic, which is well established in text linguistics, the terms topic and comment are preferred in this study.

3.4.2 Discourse topic: The concept

The term discourse topic was originally introduced by Keenan and Schieffelin (1976) who suggested that the crucial difference between a sentential topic and a discourse topic is that while the sentence topic is usually represented by a noun phrase the discourse topic is a proposition expressed within a phrase or sentence. In this study it is postulated that the discourse-topical position can be occupied by a single concept or a set of parallel concepts just as well as by a proposition.

Van Dijk defines 'discourse topic' or the 'being about' of a text or a fragment of a text as the concept or proposition entailed or 'satisfied' by the joint set of propositions contained in that text/fragment (Van Dijk 1977: 133-136). He allows for the possibility that there may be more than one proposition meeting this requirement, and refers to these alternative topics as the topic set of the sequence. Brown and Yule (1983) refer to the same phenomenon by using the term 'topic framework'. They seem to be more reluctant to identify any single item within the topical framework as the discourse topic proper. They claim that 'for any practical purposes, there is no such thing as the one correct expression of the topic of any fragment of discourse' (Brown and Yule 1983:74). One reason for this conclusion may be that they are more concerned with spoken discourse where shifts in what is being talked about can more easily be brought about when turns are taken by the interlocutors. It can be assumed that in spoken discourse a topical framework is more likely to be developed during the course of conversation under such constraining factors as the physical context including time and place, and the knowledge shared by the interlocutors. In a written monologue, on the contrary, the topic of the discourse can be assumed to be determined mostly before the construction of the text. For this reason it seems to be justified to claim that in most written genres a discourse topical concept or proposition can be singled out from among the competing ideas of a 'topic set' or 'topical framework'. Although from the writer's and from an analyst's point of view factual texts usually show an identifiable discourse topic, the possibility that various readers may read the same text for varying discourse topics is not excluded. This is always possible, because readers may read texts for what information they are looking for, or for what they are interested in. For them then the comment of the text may focus on a topic different from that chosen by the writer or linguistically identified by an analyst.

The emergence of the topic set is due to the fact that the topic can be determined at various levels of generality. Van Dijk (1977: 133-136) points out that for the most satisfying topic to be identified the level of identification must be kept as specific as possible. This means that there is a hierarchy among the alternatives of the topic set in that the most specific proposition that has the capacity to dominate all the information of the sequence is identified as the proper discourse topic.

Van Dijk also shows that there may be a coincidence of the top level macro structure of the text and its discourse topic. This is the case on occasions where the text shows a generic-to-specific approach and the discourse topic is either a statement elaborated in terms of its specifics, or an argumentative generalization that is supported by reference to the facts on the basis of which the generalization has been made. On other occasions, however, to be able to identify the 'aboutness' of a text, a distinction should be made between the top-level macro proposition and the concept of discourse topic. The discourse topic provides an answer to the writer's initial compositional question 'What am I going to write about?'. The answer may consist of a concept or a set of parallel concepts (see e.g. matching structures in section 6.3.8.1) which may or may not incorporate a temporal or spatial modifier, or of a proposition. The terminal macro proposition of the text (i.e. its top level macro structure), on the contrary, contains information satisfying both of the writer's major compositional questions, i.e. *What am I going to write about?* and *What am I going to say about my topic?*

In view of the above considerations it is presently postulated that the discourse topic of a text is the most specific concept/set of concepts/proposition that states what the propositions of the text are combinedly about.

3.5 Definitions of text structure and sources of text-structural variation

3.5.1 Text structure as action

Speech act theoreticians since Morris (1938) and Austin (1962) have held the view that discourse consists of actions performed with utterances (Searle 1976, Searle and Vanderveken 1985). This view is shared by most analysts of spoken discourse (e.g. Labov 1972, Sinclair and Coulthard 1975, Edmondson 1981, Levinson 1983, Stubbs 1983). Labov (1972) associates the notion of discourse structure with the view of discourse as action by claiming that the organization of discourse is not based on what is *said*, but on what is *done*. There may not be a relation between the propositional contents of two adjacent utterances or parts of discourse. Yet they constitute a coherent piece of discourse, if there is a relevant text-structural relation between the illocutionary acts realized by those utterances or parts of discourse, e.g.

- Are you going to work tomorrow?
- I'm on jury duty. (Labov 1972: 121)

In the above example the latter remark relates to the preceding question as a reason given for an elliptical negative answer.

Yet despite the speech-act-theoretical view suggesting that 'complete illocutionary acts (and not only propositions or truth conditions) are the primary units of literal meaning in the use and comprehension of natural languages' (Vanderveken 1990:11), a thorough speech act analysis of texts does not reveal the logic of the text in its totality. It can be claimed that the meaning of a text is not a sum of the propositions it consists of, nor of the speech acts they constitute. Instead it seems that the meaning of a text is a sum of the propositions contained in it and the relations holding between these propositions. On some occasions these relations are relations between speech acts (i.e. when two speech acts stand in a reciprocal relation to one another like e.g. in a question - answer sequence), on others, however, interpropositional coherence can rather be explained by reference to other kind of relations such as sentence calculus -based conjunction or the generic -specific variation. Also van Dijk (1977) has made this observation. He refers to speech act -based relations as 'pragmatic' while calling the rest of text-structural relations 'semantic'. Thus, although the speech act -quality of a proposition must be coded when it is the only explanation for its adjacency to another proposition, a speech act analysis of all the propositions of a text alone does not explain its text structure. This view is adopted also by Aston (1977) and Tirkkonen-Condit (1985), who apply the idea of speech act (illocutionary act) to the analysis of written discourse. They analyze text structure in terms of illocutionary acts and the interactive relations holding between them.

Because the properties of an illocutionary act are determined by its illocutionary purpose (Searle and Vanderveken 1985), the text structure theories which refer to the communicative purpose of the writer/text as the source of text-structural variation by definition also pertain to the above line of thought. Callow and Callow (1992), Mann, Matthiessen and Thompson (1992), and Longacre (1992) assume that the communicative purpose of the writer determines the structure of the text. Mann & et al. do not present any categories of communicative purposes although when defining their 'rhetorical relations' they describe the assumed effect of each relation on the reader, which, indeed, reflects the writer's communicative purpose with respect to the reader. Callow and Callow, on the contrary, distinguish an 'informative' (aiming at an exchange of knowledge about the

world), 'expressive' (aiming at an exchange of emotions, attitudes, and evaluations) and 'conative' (aiming at bringing about changes in the course of events) communicative purpose or 'import'. They define each proposition in the text in terms of its 'import' but those propositions which are assumed to show 'natural prominence' determine the communicative purpose of the whole text. Longacre makes a connection between the structural schema of the text and the type of discourse it represents implying that the type of discourse arises from a certain communicative purpose.

Related to the above thinking which attributes text-structural variation to variation in the communicative purpose of the text are ways of text-structure representation which are based on genre analyses (Swales 1981, 1990, Dudley-Evans 1986, 1994). The communicative purpose that determines the structural and stylistic quality of the text is now 'external' in that it is assumed to come from the discourse community that uses the text (see section 3.7.2 for a definition of 'genre' by Swales 1990). Such analyses use as their units of analysis 'moves' whose size may vary from a proposition to a group of several propositions. Thus a genre-based moves analysis does not necessarily produce a propositional analysis.

3.5.2 How is text structure seen as action in the MSU-MSA analysis ?

The notion of text structure as action is relevant to the development of MSU-MSA analysis in that a text is presently seen as representing one global speech act by the writer. This parallel between a sentence-level speech act and a text is grounded on the assumption that if a parallel can be drawn between a proposition and a text (see van Dijk 1977 and van Dijk and Kintsch 1983:190 for the reduction of a text to a terminal macro proposition; also section 3.3 in this study), a parallel also exists between a sentence-level speech act and a text. This conclusion can be supported by reference to Searle and Vanderveken (1985), who point out that the performance of a propositional act always coincides with the performance of an illocutionary act. If a text is thus assumed to represent one speech act by the writer, it follows that the text like any sentence-level speech act shows an illocutionary purpose. It is postulated in this study that as the illocutionary purpose of a sentential speech act is manifested in a particular kind of sentence structure that of a text must show itself correspondingly in the form taken by the text structure. Accordingly, textual illocutionary purpose is in this study postulated to be a major determinant of text structure. This means that the overall illocutionary purpose of the text determines the way in which the top-hierarchy propositions of the textual comment relate to the discourse topic.

Presuming that text structure is brought about by the illocutionary purpose of the text, text-structural features can theorywise be studied by looking at the various speech acts with their respective illocutionary purposes. For this purpose the illocutionary act theory by Searle and Vanderveken (1985) is presently cited. The theory is relevant because it defines illocutionary acts by reference to their illocutionary point or purpose which is regarded as the major determinant of each speech act type. It singles out five types of speech acts with respective illocutionary purposes as indicated by Table 1:

Table 1: Searlian illocutionary acts

Illocutionary Act	Illocutionary Point
assertives (assertives were called 'representatives' in Searle, 1976)	to say how things are
commissives	to commit the speaker to do something
directives	to try to get other people to do things
declaratives	to change the world by saying so
expressives	to express feelings and attitudes

The theory suits the present purpose also because it introduces an exhaustive set of illocutionary acts. The five categories of assertives (in 1976 Searle used the term 'representatives', which will be used in the present study to avoid a later confusion of terms), commissives, directives, declaratives, and expressives are generic ones, which allow for subcategories to be created. Because this study is concerned with factual texts only, representatives, commissives and directives are presently the relevant classes. The class of representatives seems, however, to be too generic to point out structural variation among texts with the illocutionary purpose of saying how things are. For this reason it is subdivided into descriptive, narrative, expository, and argumentative types, which are derived from the Werlichian (1976, 1982) text types of description, narration, exposition, and argumentation (see section 3.7.3). Thus in the present study a text is seen as a descriptive, narrative, expository, argumentative, commissive, or directive speech act with a text structure derived from the respective illocutionary purpose, which shows in each case both a representational and a communicative component (see section 6.2.5). The illocutionary purpose of a given textual speech act then determines the function that the top-hierarchy propositions of the textual comment serve in relation to the discourse topic, i.e. the dominant message-core function of the text.

Besides looking at texts as global speech acts by the writer, the present study assigns linguistic action an organizing function also at a lower level of text-structural hierarchy. The message-core functions which are derived from the writer's/a textual participant's representational (with respect to the discourse topic) and communicative (with respect to the reader) illocutionary purposes are expressed as linguistic actions (i.e. attribution, evaluation, elaboration, instruction, commitment, motivation, and providing a basis) directed by the writer or some textual participant at the discourse topic or a lower-level topical node. Thus in this system sentence-level speech act analysis is seen to be relevant in so far as it contributes to the construction of the textual message. Instead of systematically coding each proposition as an illocutionary act with a specific illocutionary purpose, this system codes propositions as illocutionary-point-based functions only when they denote actions by the writer/a textual participant to complete a message about the discourse topic or a lower-level topical node.

3.5.3 Text structure as a question-answer dialogue between the writer and the reader

Gray (1977:12) assumes a more interactive view of text structure, conceiving it as a consequence of an implicit question-and-answer dialogue between the writer and the imaginary reader. A written monologue consists of the answers that the author decides to give to the questions that are assumed to be presented by the imaginary reader. From the point of view of the real reader this means that if a text is carefully composed, the reader can always insert questions into it and expect them to be answered by the text. These questions, which are in the minds of both the writer and the reader, reveal the relations existing between propositions or larger parts of the discourse. Questions have been used to elicit text-structural relations also by Winter (1968 and elsewhere), Widdowson (1978), Edmondson (1981), Hoey (1983), Jordan (1992 and earlier) and Tirkkonen-Condit (1985).

The idea that text-structural relations can be identified by constructing the questions to which answers are given by the various propositions /groups of propositions of the text, is very acceptable indeed, as far as the questions naturally arise from the text. An opposite process for the identification of text-structural relations has been developed from the above idea by those researchers who approach the text with a fixed set of questions to locate predetermined text-structural relations (e.g. Tirkkonen-Condit 1985). Questions are then used to identify previously known relations, not to find new ones.

Still another approach to text structure by using a question - answer technique is posed in tagmemics. Pike (1992) applies the tagmemic system to text structure analysis and asks about a unit

of text structure, i.e. a proposition or group of propositions, the following questions 'What is it / its class?', 'Where is it in relation to the immediately larger structure and what is its relative prominence?', 'Why does it occur and what is its function in that structure?', and 'How does it govern another unit or how is it governed by another unit in any part of the total context?' These questions point out the text-structural determinants of each proposition/group of propositions within a text. They are to be posed by an analyst who can answer them in terms of a fixed set of text-structural categories. A definition of text structure is implicitly contained in such a set of questions.

3.5.4 Questions to identify the components of text structure in the MSU-MSA analysis

In the MSU-MSA analysis questions are used to construct the framework of a textual message. It is assumed that the questions by means of which an analyst and any reader can seek to identify text-structural components are those resulting in the recognition of the text-analytical perspectives of message structure and message strategies, i.e. *What topic is the writer talking about?*, *What does he say about this topic?*, and *How does he say what he wants to say?* These questions are transcribed from the original compositional questions that writer is assumed to have posed to himself. In the above form they serve as the basic tools by means of which the reader can try to organize the flow of information that he encounters.

It can be assumed that readers and writers universally share the topic-comment scheme as a basic categorization of the information content of a text. For this reason, *What topic is the writer talking about?* and *What does he say about his topic?* seem to be the fundamental message-structural, i.e. content-related questions that can authentically be attributed to any reader. By means of these questions the reader is capable of eliciting the major message-structural components of discourse topic and textual comment. The answer to the latter question must be given, when the structure of the text is being elicited, not in content-related, but in structural terms, e.g. *the writer is assigning attributions to the discourse-topical idea, elaborating or evaluating it, or claiming that it is true and reasoning for it*. To approach the level of propositional analysis the reader/analyst may pose to himself the message-structural subquestion *How do the ideas of the topical comment relate to each other?*, which elicits the logical/message core or frame relations that join the top-hierarchy propositions of the textual comment. The authenticity of this question is based on the premise that the text makes a coherent message.

For a thorough propositional analysis it is necessary to elicit the text-structural function of those propositions too which are informatively dispensable. These message-strategic propositions can be elicited if the reader/analyst for each informatively indispensable (i.e. message-structural) proposition asks the question *How does the writer say what he wants to say?*

The above four questions help to identify text-structural components without imposing any predetermined expectations on them. Thus they do not interfere with what can be found in the text in terms of text structure. Moreover, any reader, irrespective of his or her familiarity with text-structural phenomena, can pose these questions and elicit in this way the basic text-structural framework of any text.

3.5.5 Text structure as interpropositional relations

A fundamental model of text structure that many of the later developments (e.g. Meyer 1975, 1985, 1992, Meyer and Freedle 1984, Tirkkonen-Condit 1985) are based on was introduced by Grimes (1975) within his semantic grammar of propositions. Using notions of formal logic, Grimes developed a model of proposition which also serves as a model of 'rhetorical proposition', i.e. text structure. The semantic grammar of propositions operates on two basic rules:

- (1) The Predicate Rule: a proposition is made up of a predicate and its arguments.
- (2) The Argument Rule: an argument can be a terminal content word or it may represent the semantic content of any proposition or any number of propositions.

The term 'predicate' is used here as in formal logic to denote a relation. Grimes distinguishes lexical predicates and rhetorical predicates. Lexical predicates mainly dominate arguments that are content words and they impose certain roles on their arguments. These relations prevail mainly inside propositions. Rhetorical predicates join propositions or groups of propositions. Their function is to organize the propositional content of the text. Meyer (1975, 1982, 1992), whose own work on text structure is based on Grimes's 'rhetorical proposition', explains the idea as follows:

— a rhetorical proposition is usually used to relate together larger segments of text than the segments of a simple sentence, and its arguments are often other propositions represented as sentences or paragraphs in the text. Thus, rhetorical relations often relate together the information in a number of sentences or even paragraphs or chapters. Their arguments are top level subordinate propositions. Thus an entire passage can be thought of as one very complex proposition which is composed of subordinate propositions. This chaining of propositions continues to the depth necessary for a particular passage. (Meyer 1975:25)

A similar view of text structure has been under development by Winter (1971, 1986, 1994), whose definition of 'clause relations' emphasizes interpropositional relations as tools used for the semantic interpretation of the meaning of adjacent parts of the text. Thus for Winter clause relations are

the shared cognitive process whereby we interpret the meaning of a clause or a group of clauses in the light of their adjoining clause or group of clauses (Winter 1986:91).

He points out that where the clauses are independent, we can speak of 'sentence relations'. Winter's model has since provided a basis for the work of Hoey (1983) and Jordan (1984, 1992). A comparison of Grimes's 'rhetorical proposition' and Winter's 'clause relation' shows a direct analogy between the two researchers' ideas about the basic model of text structure. The only difference in their thinking lies in that Grimes stresses the organizing function of text-structural relations while Winter focuses on their interpretative power.

Van Dijk and Kintsch (1983) follow the same line of thought but are more interested in the top-hierarchy text-structural relations when they use the term 'superstructure' to refer to the overall organization of a text. They define superstructure as a network of relations prevailing among the macro propositions of the text. They postulate macro propositions as global statements which are drawn from the text base through the processes of zero, deletion, generalization, and construction (van Dijk 1977, van Dijk and Kintsch, 1983: 190). The global content of discourse, i.e. its macro structure, then consists of macro propositions and superstructure. Thus superstructure forms a kind of macro-level syntax of the text.

Mann and Thompson (1988), Fox (1987), and Mann, Mathiessen and Thompson (1992) also define rhetorical structure in terms of the relations that hold between two non-overlapping text spans. Such spans of text are called 'nucleus' and 'satellite', which implies that the authors see subordination as an essential text-structural quality. This way of thinking is reflected also in the fact that a major parameter by means of which each of the relations is determined is the effect of one member of the relation on the reader's ability to interpret the meaning of the other member.

As pointed out above, the notion that text structure consists of a set of relations which join adjacent units of the text in a meaningful way has been present either explicitly or implicitly in most models since the 1970s. Text-structural relations have been identified also by Gray 1977, Aston 1977, Longacre 1983, Tirkkonen-Condit 1985, and Callow and Callow 1992. Even those linguists who see text structure primarily as speech acts must assume that adjacent speech acts relate to each other in a logical way if they are to constitute a coherent text.

3.5.5.1 How are propositions manifested in the surface structure of the text ?

Following Grimes (1975), Meyer (1975), Longacre (1983), van Dijk and Kintsch (1983) it has been suggested in the present study that proposition is the smallest unit of text structure analysis. The notion of proposition is, however, problematic because it has been given in linguistic literature several slightly different meanings. Lyons (1977:141), for example, comments on its ambiguous nature:

Some authors think of propositions as purely abstract, but in some sense objective, entities; others regard them as subjective or psychological. -- Further difficulties are caused by the use of 'proposition' in relation to 'sentence' and 'statement': some writers identify propositions with (declarative) sentences, others identify them with statements, and others with the meanings of (declarative) sentences; and there is little consistency in the way in which 'statement' is defined. (through Brown and Yule 1984:107)

In this study the term is understood to denote an entity of meaning which consists of a predicate and its arguments (see Grimes's definition of proposition in section 3.4.5) and differs from the notions of clause and sentence in that it is a semantic equivalent of a message rather than a syntactic one. It is preferable to use the term proposition instead of those denoting syntactic units for two reasons. First, the idea that a proposition consists of a predicate and its arguments and itself constitutes an argument for a higher-level textual predicate creates an easy-to-handle image of text structure as a system with identical units recurring at the different levels of structural hierarchy. Second, text-structural relations are frequently created through anaphoric and cataphoric references to separate lexical items in the adjacent parts of the text. Thus these relations seem to exist between ideas within semantic units of message transfer rather than between complete syntactic units.

Although the notion of proposition is a handy tool for the construction of a model of text structure on a theoretical level, practical text analysis requires that the smallest unit of text-structure analysis be defined in syntactic terms because only such units can be identified on the surface of the text. Thus a text-analytically relevant question is how a proposition is supposed to be manifested at the surface of the text as a syntactic entity.

Longacre (1983) makes the point that the minimal expression of a text-structural relation is normally a sentence consisting of at least two clauses, whereas the minimal expression containing 'a lexical predicate' is usually a clause. This means that for Longacre the clause constitutes the smallest unit of text structure analysis. For Grimes (1975) 'a rhetorical proposition' is every proposition whose arguments do not relate to its predicate via 'semantic roles' (according to Grimes's semantic grammar of propositions only lexical predicates impose semantic roles on their arguments). This definition implies that also in Grimes's thinking clauses are combined through 'rhetorical predicates', and accordingly they must be regarded as the smallest text-structural units. Similarly, Winter's (1986) work postulates that clauses are the basic units between which text-structural relations are to be identified.

Gray (1977), on the contrary, who uses the term 'assertion' as an equivalent for 'proposition' but rejects the idea that a proposition is the basic unit of text structure, seems to presume that text-structural relations only exist between sentences or larger sequences of the text when he writes:

The concept of inter-assertional relations is very much a transitional notion: it is a matter of grammar insofar as multiple assertions are integrated into single sentences; it is a matter of rhetoric insofar as multiple sentences are involved. And insofar as the decision to make multiple assertions multiple sentences or to integrate them into single sentences can be more or less arbitrary, so the distinction between grammar and rhetoric can be more or less arbitrary.

Van Dijk and Kintsch's (1983) definition of text structure (or superstructure in their terminology) as a network of relations combining the macro propositions of a text suggests a similar view, i.e. sentences are the smallest unit of text-structure analysis. This position is supported by van Dijk's (1977) study of the pragmatic consequences of a writer's decision to communicate a message either in a compound sentence or in two (or more) single sentences. He shows, for example, that a distinction between presupposed and asserted information can be observed in a compound sentence with a causal relation (signalled by a conjunction such as *so, because, since, therefore, for* etc.) but not in a sequence of two independent sentences. The presupposition-assertion distinction means that the sentence initial element is assumed to be common knowledge between the sender and the receiver of the message, while the second element is introduced as new information. This distinction is related to the topic - comment logic because the topic when defined as what is being talked about necessarily implies an element of what is known while the comment conveys the new information which constitutes the core of the message and gives the impetus for the whole act of communication, e.g.

1. Peter is in hospital, because he had an accident.
2. Peter is in hospital. He had an accident.

In the compound sentence of the first example the speaker and hearer are supposed already to share the knowledge of Peter's hospitalization. No such connotation is present in example 2. Accordingly, the compound sentence above must be interpreted as one speech act which states or asserts a causal explanation, while the sequence of sentences in example 2 consists of two speech acts, i.e. a statement of fact followed by a causal explanation. Thus Van Dijk (1977) concludes that sentence boundaries are very often used by writers to mark speech acts. This means that a sentence is the minimum manifestation of a speech act. From this it can be concluded that a sentence is the minimum syntax-level manifestation of a complete message, i.e. of an entity of meaning, which is presently referred to as a proposition. Accordingly, sentences will constitute the surface-level units of analysis for the MSU-MSA system except for cases where the presupposition-assertion logic does not operate as above and both (or all) clauses of a compound sentence communicate new information about the discourse topic which cannot be explained by one text-structural function only. In such exceptional cases a sentence must be coded as two (or more) separate text-structural functions. Moreover, if a sentence incorporates text-structurally significant parts as syntactically independent sequences which are placed within brackets or between dashes two speech acts are likely to be coded. Otherwise, it seems to be an appropriate practical decision also with the structural analysis of more extended written discourses in view to regard a sentence as the smallest surface-structure unit of text analysis.

3.5.6 The role of interpropositional relations in the MSU-MSA definition of text structure

The notion of text-structural relation is at the core of the present model of text structure, too. It differs, however, from those referred to above in that this model seeks to regard the text as a

message with an identifiable topic and a comment. This means that meaningful relations are looked for not only between adjacent propositions or groups of propositions (or between a proposition and any of the non-topical preceding propositions) but also between the propositions of the textual comment and the discourse topic.

Earlier a similar kind of view was presented by Beekman and Callow (1974:283), who suggested that each proposition is related to another proposition or to the 'theme' that is being developed, i.e. the discourse topic. More recently, Callow and Callow (1992) have introduced a system of text structure representation with reference as one of its three layers of analysis. Although the identification of the discourse topic is not explicitly discussed, a systematic coding of reference in the text results in a discovery of the topical idea. Compared with the present system, in which both the discourse topic and the interpropositional relations are elicited by means of a set of fairly generic compositional questions, the coding of reference throughout the text in the Callows's model results in a more systematic discovery of both the discourse topic and propositional interdependence all over the text. This is certainly an asset. They deal, however, with reference as a separate level of analysis, which means that they identify the elements of a message but do not bring them together to construct the framework of a message. It can be said in favour of the present system that the explicit search for the textual topic and comment outlines the message in a comprehensible way especially for a non-analyst reader whose interest in text structure is prompted by his desire to understand the logic of the text.

The discourse topic is explicitly defined also in Jordan's (1992) three-layered analysis, which uses interpropositional relations. Jordan identifies it by means of a 'lexical connection' analysis based on the early work of Hawkins (1978) and Jordan himself (1981, 1982 a/b, 1984, 1985a, 1985b, 1986). The lexical connection analysis establishes the discourse topic of the text and its 'sub-topics' on the grounds of the assumption that a large number of the lexical references relate to the topical ideas. Jordan's analysis of lexical connection is very subtle because it distinguishes between 'basic lexical continuity' (which is brought about by means of such cohesive devices as repetition, substitution, ellipsis, acronyms, synonyms, naming and generic references), 'associated lexical connection' (e.g. the connection between *the U.S.* and *the U.S. economy*), 'multi-stage associated connection' (e.g. the connection between *the U.S.* and *the present state of the U.S. economy*), and 'grammatical connection' (e.g. by means of relative clauses) (Jordan 1992). As, however, the lexical connection analysis constitutes one of the three layers of analysis to be applied to the text in Jordan's system (1992) and is kept separate from the other two, i.e. a clause relational analysis and a global problem-solution analysis, it does not contribute to the understanding of the text as a message.

Perceiving text structure as a set of relations connecting the discourse topic and the propositions of the textual comment imposes, however, certain restrictions on the model, because there are some mostly non-factual genres where texts cannot be expected to be regularly governed by a single topic, e.g. private letters, diaries, and causeries. As, however, this system of analysis has been developed in view of facilitating the comprehension of factual texts, it seems to be justified to trade this restriction off against the benefit that is to be gained by a system of analysis that points out the core of the textual message.

3.6 Categorization and sources of text-structural relations: A comparison of some previous models and the MSU-MSA system

As the definition of the perspectives of text-semantics-based message structure and text-pragmatics-based message strategies constitutes the corner stone of the present system it is relevant to know whether such views are involved in the previous descriptions of text structure. Since in this system the distinction between the informatively indispensable (text-semantic) propositions and those which are informatively dispensable but pragmatically relevant goes back to the present perception of the

sources of text-structural variation, it can be expected that such distinction, if made in other systems, can be spotted by studying how the sources of text-structural differences are explained in them. In practical terms, the analysts' ideas about the sources of text-structural variation can in most cases be seen in the ways in which text-structural relations have been categorized. For this reason this section will review the bases of identifying and categorizing text-structural relations in some of the approaches mentioned above. Comparisons are made between the MSU-MSA system and the previous approaches.

3.6.1 Grimes: 'Hypotactic' ('identification', 'setting', and 'supportive'), 'paratactic' and 'neutral' relations resulting from textual subordination/co-ordination and the presence of various kinds of information

The identification of 'rhetorical relations' by Grimes (1975) rests on the notions of textual subordination and co-ordination, on the one hand, and, on the other, on the observation that there are different kinds of information which was originally introduced by Gleason (1968). The idea behind identifying such categories of information as 'event', 'identification', 'setting', 'background', 'performative' and 'collateral' is in some sense similar to that resulting in the distinction of the four modes of discourse, i.e. narration, description, exposition and argumentation (for modes of discourse see Kinneavy 1971), which have been conventionally referred to in the discussion of text types. The latter criterion is used in the present system too in that the definition of the various message-structural functions is based on a recognition of mode-related types of information.

Grimes (1975) divides rhetorical relations into three major categories on the grounds of the subordination/co-ordination criterion. Thus he distinguishes 'hypotactical' (involving subordination), 'paratactical' (involving co-ordination), and 'neutral' (realizable in both subordinating and co-ordinating form) predicates. The hypotactical category is further subdivided into 'supplementary' (also called supporting predicates), 'setting' predicates, and 'identification' predicates. The fact that Grimes describes a number of rhetorical predicates (i.e. attributive, equivalent, specific, explanation, evidence, analogy, and manner) as supplementary in comparison with others (i.e. setting and identification predicates) implies that he too may have seen the informative significance of propositions as a text-organizational consideration, but he uses different criteria to define what is informatively significant. Grimes does not, however, use this observation to explain further the essence of text structure.

3.6.2 Longacre: 'Basic' and 'elaborative' relations from an expanded statement calculus

Longacre (1983) suggests that text-structural relations can be explained by reference to an expanded statement calculus and places them under two main headings: 'basic predications' and 'elaborative predications'. The category of basic predications includes relations which correspond to the semantics of clause-connecting conjunction, i.e. conjoining, alternation, temporal, frustration, and implication, while the rest of the relations, i.e. paraphrase, illustration, deixis, and attribution, constitute the category of elaborative relations. Thus Longacre singles out conjunction-based relations in the same way as is done in the present system but does not see any differentiation among the rest of the relations. A question that remains open in Longacre's way of thinking is how elaborative predications can be seen as an extension of the statement calculus, which is referred to as the basic sentence-level counterpart of text-structure.

3.6.3 Gray: 'Descriptive', 'explanatory', and 'rhetorical' relations from clause-connecting conjunction and question-and-answer dialogue

Gray's (1977) way to categorize 'inter-assertional', i.e. text-structural relations, as 'descriptive' (including 'continue' and 'contrast' relations), 'explanatory' (including 'conclude' and 'support' relations), and rhetorical (including the 'question-answer' relation) implies, on the one hand, a recognition of text-structural subordination and, on the other, a distinction between semantic and pragmatic text-structural phenomena. Thus there is a semblance between Gray's category of 'rhetorical' relations and what is defined as message strategies in the present system. Besides the 'question-answer' sequence Gray does not, however, incorporate any other relations in the category of rhetorical relations. Nor does he draw any conclusions from the 'descriptive' / 'explanatory' / 'rhetorical' quality of text-structural relations to describe text structure as a whole.

The formation of text-structure is explained, on the one hand, by reference to a question-answer dialogue between the imaginary reader and the writer. The text consists of the answers given by the writer to the questions he assumes to be posed by the imaginary reader. On the other hand, Gray assumes that the semantics of inter-assertional relations largely corresponds to the meanings of clause-connecting conjunctions. An interesting observation about the 'descriptive' and 'explanatory' categories is that the labels of these classes imply the functional context in which particular kind of conjunction typically occurs (e.g. addition, temporal, and adversative conjunction in a descriptive context), but such labels are not assigned to the propositions which perform such functions. This means that such a system of text-structure analysis can explain how functional propositions relate to each other but it does not explain their relevance with respect to the discourse topic and any lower-level topical node. In other words, no message can be outlined in text-structural terms.

3.6.4 Mann and Thompson: 'Subject-matter' and 'presentational' relations based on subordination and communicative purpose

The criterion on the grounds of which Mann and Thompson (1988) divide 'rhetorical relations' into 'subject matter relations' and 'presentational relations' is the effect that such relations exert on the reader. In more generic terms they speak of communicative purpose as the determinant of text-structural relatedness. Subject matter relations are those 'whose intended effect is that the reader recognizes the relation in question' (Mann and Thompson 1988:275), while the intended effect of presentational relations is to 'increase some inclination in the reader, such as the desire to act or the degree of positive regard for, belief in, or acceptance of the nucleus' (Mann and Thompson 1988: 257). Thus Mann and Thompson recognize the reader-oriented element in the text but they do not use informative redundancy as its criterion. The present system recognizes reader-orientedness also in the informatively indispensable propositions by defining both a representational and a communicative illocutionary purpose for each speech act but claims that the informatively dispensable propositions are there solely for reader-related purposes, because their representational purpose has become redundant. The present way to understand reader-orientation enables the core of the message to be separated from the expanded text.

3.6.5 Callow and Callow: Reference, communicative-purpose-based 'schematic' relations, clause-connecting-conjunction-based 'coherence' relations, and audience-awareness-based 'orientational' materials as elements of text structure

A categorization of text-structural functions that is closest to the present idea of the two text-structural perspectives of message structure (with the subcategories of message-core functions and

logical functions) and message strategies is presented by Callow and Callow (1992). They analyze the text with respect to four textual phenomena. First, they point out reference in the text, which in terms of the terminology used in this study necessarily results in identifying the discourse topic as well as lower-level topical nodes. Second, they identify the 'purposive significance' of each proposition, separate textual configuration, and the whole text as one message, i.e. whether a proposition / a configuration / a text is 'informative', 'expressive', or 'conative' in character. Third, they carry out an interpropositional analysis by identifying 'coherence relations' or 'schematic relations' between the propositions. Fourth, they single out 'orientational elements' in the text. 'Orientational elements' are textual phenomena which are brought about as a result of the writer's 'audience awareness'. Callow and Callow distinguish between 'message-supporting orientational materials' and 'message prosodies'. 'Message support' materials are context-providing, i.e. being neutral to the purposive significance of the text (i.e. its 'import') their task is merely to illuminate in the reader's mind an adequate context for him to be able to process the message itself. 'Message prosodies' are (lexical or syntactic) manifestations of the writer's orientation towards the knowledge and values of the reader throughout the text, which do not necessarily constitute identifiable text-structural units. There are two kinds of prosodic features: 'information prosodies' relate to the way in which information is presented to the reader (e.g. what is assumed to be new and what is assumed to be familiar to the reader), while 'value prosodies' express the writer's awareness of and concern for the reader's values and attitudes.

To start comparing the Callows's system with the present one the observation must first be made that they share the idea of audience-awareness as a text-structurally significant consideration. Yet there are differences in the way it is understood to be manifested in texts. In the present study a perspective of message strategies is outlined to identify propositions which are informatively dispensable because they are redundant or otherwise serve way-of-writing-related purposes rather than immediately contribute to the development of the topical idea. Such propositions are assumed to make the text more comprehensible, convincing or attractive to the reader. Thus a parallel can be seen between 'message-prosodic elements' and message-strategies because they are both assumed to be brought about by audience-awareness. In more definite terms, however, there is a difference in the way in which audience-awareness is expected to be manifested in the text. While the present system codes whole propositions with reader/audience orientation as message-strategic components, Callow and Callow code message-prosodies as textual elements 'independent of message-structural hierarchy' (Callow and Callow 1992:14).

Message-supporting orientational elements, on the contrary, which carry background information and constitute in the Callows's system another audience-awareness-based group of textual features, do not fit within the definition of message strategies. This is because the criterion for message strategies in the present system is that they are textual elements which do not increase the information content of the message. The conclusion can be made that as a text-structural category message strategies are more clear-cut than the category of 'orientational elements' in that they are defined by the single criterion of message-related non-contributiveness.

Moreover, a comparison of the two models reveals partly similar thinking also in the way in which Callow and Callow define 'schematic' relations and 'coherence relations', on the one hand, and in which message-core relations and logical relations are defined in the present one. In this study, a distinction is made between message-structural relations which are functional in character, i.e. message-core relations, and those whose semantics corresponds to that of clause-connecting conjunctions, i.e. logical relations. Message-core relations are functional in that they express what the writer/textual participant does in relation to the discourse-topical idea or lower-level topical node to complete a message. The functions of the propositions which relate in this way to the discourse topic/lower-level topical node are specified from speech act and text type descriptions (see sections 6.2.3-6.2.5), and are accordingly based on the notion of illocutionary purpose. Such functional

relations stand out against logical ones, which instead of expressing action by the writer or any textual participant indicate logical connections between ideas. Similarly, Callow and Callow, who also distinguish conjunction-based relations as a separate category, i.e. as 'coherence relations', refer to those based on function as 'schematic relations' and explain them as resulting from the various purposes, 'imports', that the propositions of the text may carry. There is, however, a difference between the present system and the Callows's model at this point. In this system the various message-core functions (the term function denoting both the abstract relation joining the two propositions and the functional quality that a proposition/group of propositions has in relation to a preceding proposition/group of propositions) are so formulated that they indicate what the writer does to communicate a message about the discourse topic or lower-level topical node. In the Callows's system, on the contrary, the label indicating the 'purposive significance' or 'import' of a proposition does not directly point out the way in which the proposition relates to its adjacent propositions. Instead they postulate that the various imports evoke import-specific schematic patterns. A proposition with an 'informative import', for example, may be surrounded by (other informative) propositions which relate to it by means of schematic relations such as comparison, evidence, or illustration.

All of the previous models of text structure which are based on the identification of interpropositional relations acknowledge logical relations as defined in the above two systems. In addition, most of them include also relations which express action through language, even though those systems which claim extended statement calculus as the source of propositional relatedness tend to be more restricted when specifying functional relations (e.g. the only functional relation identified by Gray 1977 is the question - answer relation). Yet apart from the Callows's model (1992) (and a rather vague reference by Grimes to the various types of information as a source of the variety of text-structural relations in general), such models do not specify the origin of the functional relations that they identify.

Thus five conclusions can be drawn from the above comparison of the Callows's model with the present one. First, there is a similarity of outlook concerning the tendency to see the text as a purposive message in which reader-oriented elements can be distinguished from the core of the message whose structure is analysed in terms of logical and functional relations. Second, there are differences in the ways reader-oriented elements are recognized in these two systems. The present system tends to identify such elements only when they are relevant for propositional analysis. Third, this system uses speech act analysis to explain what the writer does to communicate a message (i.e. the informatively indispensable propositions) about the discourse topic or any lower-level topical node (when no logical relations hold between the topical idea and the comment proposition) while the Callows's model codes all propositions for their 'imports' and interpropositional relations for their schematic effect (at this point the Callows's system comes very close to Aston's (1977) and Tirkkonen-Condit's (1985) idea of coding each proposition for its 'illocutionary value' and 'interactive role'). Fourth, both models recognize also clause-connecting-conjunction-based 'coherence' or logical relations. Fifth, a major practical difference between the two systems is that the Callows carry out all the different partial analyses separately, while in the present system all the text-structural elements are presented within one frame of analysis.

3.7 Global units of text-structure analysis /levels of analysis

Many of those systems of text-structure analysis which define text structure as relations joining adjacent propositions or groups of propositions (Grimes 1975, Meyer 1975, 1992, Mann and Thompson 1988, Mann, Matthiessen and Thompson 1992) assume that the same set of text-structural relations can govern textual units of any size. The final stage of analysis is reached when the relation of every proposition to its adjacent proposition is defined and relations between larger

and larger groups of propositions are identified until the text can be seen in Grimes's and Meyer's terms as one 'rhetorical proposition' with two global 'arguments', or in terms of Mann et al. as one 'nucleus' and 'satellite'. Analyses of the above type imply three basic levels of description: the global structural components of the whole text, the groups of propositions which relate to each other in a meaningful way, and the relations of individual propositions. Meyer (1992) suggests that the analysis should follow a top-down procedure starting by identifying the top-level structure, which is the relation whose members cover the largest amounts of the text, and proceeding to the analysis of the relations next in the structural hierarchy. Mann et al. (1992) do not fix a way of proceeding for the analysis; they leave the top-down or bottom-up choice at the analyst's discretion.

Other systems which may also aim at eliciting the propositional structure of a text refer to its genre or discourse type, to identify top-hierarchy global structural units. Longacre (1992) applies the structural schema of a relevant discourse type to the text to divide it into high-level moves. Swales (1981, 1990) and Dudley-Evans (1986, 1994) use genre-based moves for the same purpose. The difference between the notions of discourse type and genre as they are used by the above writers lies in that the definition of discourse type is based on text-internal criteria (e.g., Longacre 1983 uses parameters such as 'agent / participant orientation', 'contingent temporal succession', 'tension', and 'projection'), while the genre of a text is determined by the communicative purpose for which it is used by a discourse community.

Still another approach to identifying global text-structural units has been presented by Winter (1982, 1986, 1992), who distinguishes two 'basic text structures', 'situation - evaluation' and 'hypothetical - real', which convey the more local 'basic clause relations'. The 'situation' member of the first pattern introduces the facts that the writer/speaker knows and the 'evaluation' member expresses what he thinks about those facts. The second member may also incorporate a justification, in Winter's terms a 'basis'. The first of the above patterns is more important than the second because the second is a reversed version of the first in that the writer/speaker first presents a past evaluation of a future state and then states the factual situation that came to be.

The present definition of text-structure rests on the basic assumption that the writer's/speaker's message may show the double task of first describing a situation and then evaluating it. In the present system, however, Winter's fundamental idea is modified in two respects. First, it is taken for granted that a text may serve also a plain representative purpose. This means in Winter's terms that the text consists of a description of a situation only. The present study contributes by providing means for outlining the structure of such representative sequences (i.e. message structures with attribution or elaboration as their dominant message-core functions). Second, in this study the notion of 'evaluation' is understood in a broad way so that it involves also instructions and commitments. This means that (the description of) a situation may prompt any of the above subjective responses.

It is also assumed that evaluation and instruction or/and commitment may follow in a sequence so that after a situation has been described it is first evaluated as to its merits or disadvantages, and then action is suggested in the form of an instruction or a commitment, or both, either to maintain the state of affairs or to change it. Callow and Callow (1992) also suggest that the informative (aiming at an exchange of knowledge about the world), expressive (aiming at an exchange of emotions, attitudes, and evaluations), and conative (aiming at bringing about changes in the course of events) imports may constitute a progression or 'purposive chain'. They emphasize, however, that in the purposive chain propositions with the above imports do not necessarily follow each other in a linear way; instead propositions may carry overlapping imports. This is true indeed. In the present system the possibility of functional overlap is heeded by incorporating the notion of *embedding*. This means that the linguistic action which is more explicit is coded as the primary function while the other is referred to as an embedded one.

A crucial observation relating to the idea of the 'purposive chain' or succession of different types of evaluations is that, when an instruction or a commitment follows an evaluation of a

situation, it does not anymore relate directly to the global situation component. Instead it is joined to the preceding evaluation by means of a cause - consequence relation. This means that, despite the existence of a purposive chain, text structure in its widest expression can be dealt with as a construction of two overlapping global speech acts (topic-comment structures) the more extensive of which (the situation - evaluation sequence) includes the other (the situation). Thus the situation with its own topic - comment structure functions as a topic to the following comment, which is evaluation.

While Winter claims that the situation-evaluation pattern represents a basic text structure some other researchers refer to the problem-solution sequence as the overall plan governing the informative content of the text. Van Dijk and Kintsch (1983) regard the problem-solution sequence as the 'superstructure' of the text. Also Hoey (1983) and Jordan (1984, 1994) seem to rely on the fairly large applicability of the problem - solution pattern as the top-most global structure of the text. Tirkkonen-Condit (1985) assumes that the 'compositional plan' of an argumentative text can be described in terms of the problem - solution sequence. She bases her assumption on the observation by Kummer (1972:29) that the argumentative situation inherently involves a problem because at the initial stage of the interlocutory situation the reader/speaker is assumed to be unwilling to accept the writer's/speaker's evaluation of a state of affairs as a truth. The problem is then solved by providing relevant evidence to support the writer's/speaker's view. This is an acceptable analysis of the argumentative situation indeed, but it cannot justifiably be applied to the semantic content of an argumentative text. An argumentative evaluation may convey a positive content which cannot be turned into a problem in text-analytical terms, because text analysis is concerned with the linguistic manifestation of argumentation, not with the cognitive processes preceding its manifestation. Presently the view is adopted that the problem - solution pattern is a variation of the basic situation - evaluation sequence in which a situation has been evaluated as a negative one and is subsequently followed by another evaluation as to its possibilities of being solved. Thus the problem - solution pattern is recognized as one variant of global message-structural patterning.

3.8 Text types

3.8.1 The role of text-type descriptions in the construction of the MSU-MSA model

The notion of text type is essential for the present study because text type descriptions have been used to specify further illocutionary purposes from those identified by Searle and Vanderveken (1985). A set of message-core functions, i.e. a set of ways in which the informatively indispensable propositions of the textual comment relate to the discourse topic and lower-level topical nodes, has then been derived from those specific illocutionary purposes. Thus, as text-type descriptions have a key role in the construction of the present system, it is relevant to review briefly various text typologies and explain why Werlichian (1982) text types were chosen.

Another reason why a study of text types is relevant concerns the testing of the model. For the scope of the applicability of the system to be stated the text types must be defined that are represented in the sample of texts on which the system is tested. It is essential when describing the texts of the test sample not to use the same text typology which has contributed to the construction of the model. Because the testing of the model involves also the testing of the scope and premises of the text typology used for its construction, the texts included in the sample must preferably be identified on the basis of criteria other than those implied by that typology. If the sample texts were collected from the textual categories pointed out as natural language representatives of a certain Werlichian text type, the model would be likely to provide the structural description of such texts

because it has been constructed with such texts in view, but the test would not tell us whether the system has any validity beyond the categories of texts identified by that typology.

3.8.2 An overview of text typologies

Texts have been categorized on the grounds of text-external and text-internal, i.e. linguistic, criteria, or of a combination of the two (Virtanen 1992). When texts are classified text-externally on the grounds of the purpose and function that the surrounding community assigns to them (e.g. a judicial case report is a distinct text type due to the fact that it serves a definite purpose within the legal community which accordingly imposes certain controls on its form and content), we speak of *genre* as the determinant of typological features. The difference between text-external and text-internal criteria can be seen if the definition of genre by Swales (1990:58) and the definition of text-type by Werlich is compared. A genre by Swales

comprises a class of communicative events, the members of which share some set of communicative purposes. These purposes are recognized by the expert members of the parent discourse community, and thereby constitute the rationale for the genre. This rationale shapes the schematic structure of the discourse and influences and constrains choice of content and style. Communicative purpose is both a privileged criterion and one that operates to keep the scope of a genre as here conceived narrowly focused on comparable rhetorical action. In addition to purpose, exemplars of a genre exhibit various patterns of similarity in terms of structure, style, content and intended audience. If all high probability expectations are realized, the exemplar will be viewed as prototypical by the parent discourse community.

A text type by Werlich's definition is

an idealized norm of distinctive text structuring which serves as deep structural matrix of rules and elements for the encoder when responding linguistically to specific aspects of his experience. (Werlich 1982:39)

Swales's definition suggests that genre is a collective product by a discourse community with text-externally defined standards. The conclusion can be drawn from the fact that it is characterized as a communicative event with a communicative purpose which is recognized by the members of the respective discourse community and which controls not only the structure and style of the communicative event but also its content. A text type as defined above is rather a psycholinguistic notion denoting a cognitive scheme applied when people 'respond linguistically to specific aspects of their experience'. Thus text types are not brought about by external collective standards but rather by schema-based psycholinguistic responses to various aspects of reality. They are not recognizable, as genres may be, on the basis of content, style or lay-out, features which are on the surface of discourse. Text-types take a closer linguistic analysis to be identified.

A genre-based analysis of text-structure is necessary for texts which because of their genre-specific content incorporate sequences with uninterrelated discourse topics (minutes, for instance, show several discourse topical sequences).

As text-typological descriptions are in this study used for the construction of a system of propositional text analysis, the typology chosen for such purpose must be based on text-internal criteria. In the following some text-internal-criteria-based typologies will be reviewed and the choice of Werlich's (1982) typology for the present study will be reasoned for.

Longacre (1983) uses a set of four parameters to identify the categories of narrative, procedural, hortatory, and expository texts. By means of two basic parameters, 'contingent temporal succession' and 'agent/participant orientation', four major types of text are distinguished. A discourse

which shows both contingent temporal succession and agent/participant orientation is described by Longacre as 'narrative'. A discourse with contingent temporal succession but no agent/participant orientation is called 'procedural'. A further variety, which is minus in contingent temporal succession but plus in agent/participant orientation, constitutes 'hortatory discourse'. The point of hortatory discourse is to exert an influence on the behaviour or attitudes of the reader/listener (e.g. an exhortation or a political speech). The last of the basic text types is 'expository discourse', which is minus in both temporal succession and agent/participant orientation because it is primarily theme-related. In addition, Longacre introduces two secondary parameters to be able to identify subtypes in these main categories. The first is 'projection', which 'has to do with a situation or action which is contemplated, enjoined, or anticipated but not realized' (Longacre 1983:6). If a narrative, for example, is plus in projection, it is a prophecy, while a minus projection narrative can be, for example, a story or a history. The other secondary parameter is 'tension'. Tension suggests that there may be polarized or conflictual elements in the text. An expository text with tension probably equals an argumentative one. Longacre's criteria do not characterize in a very exhaustive way the types of discourse that he introduces as a result. Thus it can be assumed that the makings of 'hortatory discourse', for instance, must include other, perhaps even more relevant criteria, such as persuasion, than just the absence of temporal succession and presence of agent/participant orientation. Moreover, it is possible for a hortatory sequence to propose a series of temporally successive actions. Longacre's categories are an example of a text-internal-criteria-based typology in which the categories themselves are based on the recognition of the various representational and communicative purposes of texts and an attempt is made to identify the linguistic parameters which bring about such effects. The recognition of the above parameters does not, however, exhaustively contribute to the structural description of the text.

The text-type descriptions which are more relevant for the study of text structure are those which identify the basic 'modes of discourse', i.e. narration, description, exposition, and argumentation (Jakobson 1960, Housenblas 1966, Barthes 1970, Benveniste 1971, Kinneavy 1971, Dolezel 1973, and Werlich 1976). Such categorization derives from a recognition of the reality-related representational purposes of texts. The 'modes' are text-structurally relevant because they point out in structural terms what can be said about the discourse-topical idea. These four modes of discourse must be seen as subclasses of the Searlian representative/assertive speech act (as defined by Searle and Vanderveken 1985) because they all say 'how things are' (for the Searlian speech acts see chapter 3, section 3.4.2).

Argumentation is not a 'pure' mode of discourse in the same sense as the other three. It does not introduce a specific way of reporting on reality as narration, description and exposition do. Instead it uses time-related (narration), spatially observable (description) or conceptual (exposition) information for its realization in the same way as the other modes. It differs from them, however, in terms of its modality aspect, i.e. the writer's intuition that the truthfulness of the message may not be immediately accepted by the reader. This consideration results in the use of persuasion, which is manifested in the presence of evidentiary information which again may represent any of the three 'pure' modes of discourse.

This point seems to be recognized by Brewer (1980), who distinguishes only three main categories of discourse: description, narration, and exposition. To complete the analysis, however, Brewer identifies four purposes of communication: informing, persuading, entertaining, and providing aesthetic experiences. The inevitable coincidence of representational and communicative purposes in real texts results in a further differentiation of texts. It can also be expected to produce the argumentative type when a persuasive communicative purpose is involved in a representational one. Thus Brewer's analysis provides a theoretically sophisticated basis for the identification of text-typological variation. Yet, all text-type descriptions which are based on the recognition of modes of

discourse instead of speech acts necessarily fail to recognize texts with directive, commissive, and declarative illocutionary purposes.

Kinneavy (1971) presents a multilevel categorization of text types incorporating also a modified version of the modes of discourse. He identifies 'reference discourse', 'persuasive discourse', 'literary discourse', and 'expressive discourse'. Reference discourse is further subdivided in 'scientific', 'informative', and 'exploratory' types of discourse. These types of discourse are defined in terms of their 'aims'. The aim of discourse may relate either to reality, encoder, decoder, or discourse itself. Reference discourse shows reality-directed aims, persuasive discourse has aims with respect to the decoder, literary discourse is concerned with the language for its own sake, and expressive discourse has aims with respect to the encoder. Moreover, Kinneavy derives the descriptive modes of narration, classification, description, and evaluation from the traditional ones discussed above. They are then used as further determinants in the description of the above types of discourse. The fact that classification is specified in Kinneavy's system to represent all expository writing is likely to narrow the explanatory power of the typology, because for the four modes of discourse to be representative over the variety of authentic texts the expository category must allow a wide range of conceptual determinants to be assigned to the discourse topic - not only that of class. Substituting evaluation for argumentation, on the contrary, seems to considerably widen the category, because it then incorporates both argumentative and non-argumentative inferences and value-evaluations (i.e. both assertions which are reasoned for and opinions left with a subjective status). Moreover, as also instructions and commitments can be transformed into (desirability) evaluations by the speaker (e.g. *You (X) must do Z. ⇒ It is desirable that you (X) do Z, and I will do Z. ⇒ It is desirable that I do Z*), the category of evaluation can be interpreted as covering also texts representing the Searlian directive and commissive speech acts. (In the present study evaluation is introduced as a message-core function which may either state an inference/ a value evaluation to be argued for or an opinion with no claim of validity beyond the writer's subjective judgement.)

3.8.3 Werlich's text type descriptions modified for the construction of the MSU-MSA model

Werlich's typology of texts is used to define the textual illocutionary purposes from which definitions can be gleaned for the various message-core functions. A justification for the use of text type theory to specify further textual illocutionary purposes can be found if two separate lines of thought in text-analytical literature are combined. Grosse (1976), Aston (1977), Hatim (1983), and Tirkkonen-Condit (1985) hold that the overall illocutionary purpose of a text determines its text type, while Werlich (1982:39) defines text type as 'an idealized norm of distinctive text structuring'. If the validity of both of the above positions is adopted, text types can be seen as structural manifestations of the illocutionary purpose of the text.

Werlich (1976 and 1982) identifies five types of texts: descriptive, narrative, expository, argumentative, and instructive. There are three reasons why Werlich's definitions of text types are used in this study even though there are, as pointed out above, several other typological studies based on the 'modes of discourse'. First, the equation drawn by Werlich between text type and text structure implies that the aspects of text that are referred to as determinants of its text type are relevant also for the description of its text structure. Second, while all the typologies which identify narration, description, and exposition as distinct text types or modes of discourse necessarily recognize also the corresponding reality-related descriptive purposes (called *representational purposes* in this study), Werlich, in addition, defines a related cognitive process for each mode, i.e. a cognitive process that is undergone by the writer and that can be expected to be evoked also in the reader's mind. The writer's intention to evoke a certain cognitive process in the reader's mind constitutes what is presently called *a communicative purpose*. Thus it can be claimed that the overall

illocutionary purpose of a text consists of a reality-related representational purpose and of a decoder-related communicative purpose. Both of these factors act as determinants of text type, and because an equation is drawn (by Werlich 1976 and 1982) between text type and text structure, the same factors can also be expected to determine text structure. Moreover, Werlich seems to recognize also the speech-act-like character of texts in that he distinguishes the instructive text type. It would even seem to be justified to claim that an inclusive typology of texts should define text types so that all the basic (Searlian) speech acts are represented among them. Werlich's typology covers the representative and directive types of speech act, which indisputably constitute the bulk of all texts, but the typology would have still a wider coverage if also texts of the expressive, commissive and declarative types were included.

As pointed out above, also Brewer's typology suggests that text types are brought about as a result of different combinations of representational and communicative illocutionary purposes. Because, however, Werlich provides his five text types with very detailed definitions, it is practical to refer to them when message-core functions are derived from specified textual illocutionary purposes. At some points, however, Werlich's ideas are slightly modified for the present purposes. Thus in the following Werlich's text-typological definitions will be discussed in detail and their relevance for the construction of the various message-core functions will be pointed out.

Werlich (1976 and 1982) defines each text type by reference to its related cognitive process, reduced (sentence-level) text base, and text-type specific text structuring. He also points out the text forms of each text type, i.e. their conventional manifestations in authentic texts. The descriptive text type is defined as follows:

Description is the type of textual communication in which the encoder more or less selectively deals with factual phenomena in space. It is the text type related to the cognitive process of perception in space. The text base of a descriptive text can be reduced to the length and structural constituents of the simple phenomenon registering sentence, e.g. 'Thousands of glasses were on the tables'. (Werlich 1976:39)

The text-type specific text structuring of a descriptive text is 'spatial'. The text forms of the descriptive text type are 'impressionistic' description and 'technical' description.

One possible interpretation of the above definition is that the descriptive text type is limited to stating that *something is somewhere*. Yet this would seem to be an irrelevant restriction. Kauppinen and Laurinen (1988), who use Werlich's categories, provide his definition of description with a broader interpretation that incorporates in that category not only the description of what is in space but also the description of the spatial (physical) properties of things. They write:

— descriptive texts move in space. The object of description can be, for instance, a plant, animal, city, or a human being. — Typical examples of descriptive texts are descriptions of characters, scenery or other milieu in fiction. Botanical and zoological guides and encyclopaedias serve as further examples of the descriptive function. Reports, background stories, and interviews in journalistic writing also often include descriptive sequences. (Kauppinen and Laurinen 1988:59-60.)³

In the present study, the latter wider interpretation is preferred. In addition, it is understood that a description of what is in space incorporates also states of mind and action that are observable in space. For an in-depth study of space descriptions see Linde and Labov (1975).

Following Werlich, narration is

³ Translation by the present writer.

the type of textual communication in which the encoder more or less selectively deals with factual and/or conceptual phenomena in time. It is the text type related to the cognitive process of perception in time. The text base of a narrative text can be reduced to the length and structural constituents of a simple (non-continuous) action-recording sentence, e.g. 'The passengers landed in New York in the middle of the night'. (Werlich 1976:39.)

The text-structuring characteristic of narration is 'temporal'. The text forms of the narrative text type are 'narrative', 'report' and 'news story'. In this study, the message-core function called *attribution* is derived from the illocutionary purposes of the descriptive and narrative text types (see section 6.2.5).

Exposition, according to Werlich,

is the type of textual communication which the encoder chooses for presenting either constituent elements which can be synthesized into a composite concept (manifested in a 'term') or a mental construct (manifested in a 'text'), or those constituent elements into which concepts and mental constructs of phenomena can be analyzed. The encoder thus explains how the component elements interrelate in a meaningful whole. This is the text type related to the cognitive process of comprehension. The text base of an expository text can be reduced to the length and structural constituents of either the simple phenomenon-identifying sentence (1), or the simple phenomenon-linking sentence (2), e.g. 'One part of the brain is the cortex or rind.', and 'The brain has ten million neurons.' (Werlich 1976:39.)

The text structuring marking the expository text type is 'analytical' and the introduction of information typically follows a 'general-to-particular' patterning. The text forms of exposition are 'expository essay', 'definition', 'explication', 'summary', 'summarizing minutes', and 'text interpretation'.

In the light of the wider interpretation of Werlich's definition of 'description' it seems that the major differences between an expository and a descriptive text are the following:

- (1) A descriptive text describes a concrete object, while an expository text describes an abstract concept/phenomenon or a concrete but not immediately observable one which is defined by means of a set of conceptual determinants (e.g. the brain described by reference to neurons).
- (2) The description in a descriptive text is based on knowledge obtained through immediate or reported spatial perception, while in an expository text it is based on knowledge obtained through a cognitive process of analysis/synthesis, inference, comparison, etc.

Expository and descriptive texts are similar in that they both report facts, i.e. they describe the world as it is generally believed to be. The writer does not feel a need to reason for the points he makes. The message-core function derived from the illocutionary purpose of the expository text type is *elaboration* (see section 6.3.2 for elaboration).

The sentences that Werlich uses to illustrate the text base of an expository text *One part of the brain is the cortex or rind*, and *The brain has ten million neurons* (Werlich 1982:39) seem to imply that the whole - part / part - whole message is characteristic of expository writing. In this study it is not assumed to fall mechanically into the expository domain. Instead, the whole - part / part - whole way of description is regarded as a text-type-independent construction, in which the compositional organization of an object/idea is reflected in the structure of the text.

Argumentation is defined by Werlich as follows:

Argumentation is the type of textual communication in which the encoder proposes relations between concepts or phenomena. The encoder makes his propositions in explicit or implicit opposition to deviant or alternative propositions. Argumentation is the text type related to the cognitive process of

judging in answer to a problem. The text base of an argumentative text can be reduced to the length and structural constituents of the negated quality-attributing sentence, e.g. 'The obsession with durability in the arts is not permanent.' (Werlich 1976:40.)

The types of text structuring to be found in an argumentative text are 'inductive', 'deductive', 'dialectical', and 'general-to-particular'. The text forms of argumentation are 'comment' and 'scientific argumentation'.

Werlich's definition implies two essential points about argumentation. First, the writer's problematic situation with respect to the validity of his assertion; on the one hand the writer is convinced that what he says is true, while, on the other hand, he assumes that his audience entertains an opposite view. Second, the opposite view may be stated explicitly as a starting point for argumentation, or it may be only in the writer's imagination. In the present study a third distinguishing feature is postulated for an argumentative text: to solve the problem of validity the writer must persuade the reader to adopt his view. This is done by providing evidence in support of it. This consideration may or may not be implied when Werlich describes the related cognitive process as 'judging in answer to a problem'. Yet, Werlich's definition of the reduced text base of an argumentative text does not support the first interpretation. It is presently assumed that the reduced text base of an argumentative text necessarily incorporates also a slot for the supporting evidence, i.e. in addition to the quality-attributing sentence it takes a member whose function can be made explicit by inserting the introduction *I claim this to be true on the grounds that ...* (see also Tirkkonen-Condit 1985:57-58). Also van Eemeren's et al. (van Eemeren et al. 1987:7) definition of argumentation hinges on the idea of persuasion through justification:

Argumentation is a social, intellectual, verbal activity serving to justify or refute an opinion, consisting of a constellation of statements and directed towards obtaining the approbation of an audience.

Similarly, but with an opposite inferential process in mind, van Dijk points out that the global structure of an argumentative text consists of 'premises' and a 'conclusion' (van Dijk 1980:118).

Still another point in Werlich's definition of the reduced text base of an argumentative text deserves a comment. He claims that the text base of an argumentative text can be reduced to 'the length and structural constituents of the *negated* quality-attributing sentence'. According to this definition the thesis part should always be negated. This cannot be the case. The only possibility to accept Werlich's definition at this point is to interpret it as implying that the thesis is negated with respect to the explicit or implicit view that it is to challenge. This interpretation is supported by several text samples with the thesis member in the affirmative form that Werlich himself introduces as representatives of the argumentative text type (see Werlich 1982:112).

To sum up, in this study it is assumed that it is the writer's anticipation of a disagreeable audience and his desire to convince them of the validity of his point through reasoning that creates an argumentative text. Consequently, the distinctive constituents of an argumentative text are a thesis and the evidence provided to support it. From the illocutionary purposes involved in the argumentative text type the message-core functions of *evaluation* and *basis* are presently derived (see sections 6.3.3-6.3.4).

The text type of instruction is described by Werlich as

the type of textual communication in which the encoder tells himself (in sender-directed instruction) or others (in receiver-directed instruction) what to do. He uses linguistic communication in order to plan the future behaviour of himself or others. Instruction is the text type related to the cognitive process of planning. The text base of an instructive text can be reduced to the length and structural constituents of the action-demanding sentence, e.g. 'Stop! Don't move!' (Werlich 1976: 40-41.)

Werlich distinguishes 'directions', 'rules', 'regulations', and 'statutes' as text form variants of the instructive text type. He does not comment on any text form variants of 'sender-directed instruction'. By including 'sender-directed instructions' and 'receiver-directed instruction' into the same category Werlich ignores the fact that these two kinds of texts serve partly different illocutionary purposes in spite of the fact that they both relate, as Werlich points out, to the cognitive process of 'planning'. According to Searle and Vanderveken (1985), the speaker's intentions, which are what Werlich means by sender-directed instructions, show a commissive illocutionary point. Receiver-directed instructions, on the contrary, express a directive illocutionary purpose. These two illocutionary purposes are similar in that they both involve an expression of the speaker's or some other person's desire or want as to a future action. Yet they have different text-structural implications. The latter type of instruction, when constituting a whole text or textual sequence, normally incorporates information that justifies the suggestion/order/command (apart from cases where the encoder speaks with absolute authority). On the contrary, when a person expresses his own intention, no persuasion as to the realization of that intention is normally needed. Thus directive and commissive speech acts result in different text structures. For this reason in this study separate message-core functions are derived from these text types/speech acts. Werlich's categorization can be understood theoretically in the light of the fact that both intentions and instructions express a desire or want with respect to some future action. Yet the fact that they result in different text structures conflicts with Werlich's maxim stating that 'a text type is an idealized norm of distinctive text structuring' (Werlich 1982: 39).

Another point at which the present system is not consistent with Werlich's way of thinking is the definition of the cognitive process related to instruction. Werlich speaks of 'planning', which indeed involves the idea of imposing one's will on reality, but completely ignores persuasion which is an essential element of the communicative purpose of both argumentation and instruction. This omission may result from combining the sender-directed and receiver-directed forms of instruction, because persuasion is not present in the former type. In this study persuasion is seen as the communicative purpose of the instructive type of text, while planning pertains to the commissive type. From these communicative purposes (when combined with relevant representational purposes) the message-core functions of *motivation*, *instruction*, and *commitment* are derived (see sections 6.3.5-6.3.6).

In spite of the fact that textual sequences conforming with the above text-type descriptions can indisputably be identified, text types are, however, theoretical constructions in that texts are not likely to be purely of any one type with no sequences representing any other type. It is justified, however, to claim that there is such a phenomenon as text type on the grounds of the observation that in most texts a dominant text type can be distinguished. Because of the theoretical nature of the notion of text type, text-type specific models of text structure remain also abstractions with restricted practical applicability. Therefore, although type theory serves an essential purpose in this study when applied to the identification of the functional categories of the dominant propositions of the textual comment, i.e. the message-core functions, the text-type specific patterns introduced in section 6.4 are only stereotypical constructions.

3.8.4 An empirically founded typology to define the sample of texts used for the testing of the MSU-MSA model

A study to identify text-internal-criteria-based text types on empirical grounds was carried out by Biber (1988). He distinguished eight types by applying a five-dimensional model of variation to a corpus of 481 texts in English. The sample texts were categorized into 23 different genres on the grounds of their text-externally imposed purpose. The dimensions, each of which comprised a set of lexical and syntactic features, were derived from a co-occurrence study of linguistic features (Biber 1988). They were identified as (1) involved versus informational production, (2) narrative versus

non-narrative concerns, (3) elaborated versus situation-dependent reference (which means 'highly explicit, context-independent reference versus non-specific, situation-dependent reference', Biber 1988: 10), (4) overt expression of persuasion, and (5) abstract versus nonabstract style. The clustering of the texts on these five dimensions produced the following eight text types, both written and spoken: 'intimate interpersonal interaction', 'informational interaction', 'scientific exposition', 'learned exposition', 'imaginative narrative', 'general narrative exposition', 'situated reportage', and 'involved persuasion'. In addition, it showed that the genres run across the different text types; the same genre is represented in several text types. Also a quantitative analysis (expressed in percentages) of the distribution of the various genres across these text types was provided. Although the empirically found dimensional criteria used for the classification are largely consistent with the distinguishing features of the traditional 'modes' of discourse, Biber's study makes a contribution in that using a large corpus of texts it is likely to reveal most of the possible combinations of such typologically distinguishing features.

Biber's typology is relevant for the empirical testing of the present system of text structure analysis for three reasons. First, because it provides a matrix of texts by identifying them on both text-internal (text type) and text-external (genre) criteria, it can be used for identifying the sources from which texts representing a certain text type can be found. This is because genre definitions usually imply also the literary sources of the texts. Once the genres represented in the test sample are known the Biberian matrix can be read also the other way round. It then helps to formulate a hypothesis about the text types to which this system of text-structure representation can be applied. Second, because this system has been constructed by using Werlich's text-type descriptions and the testing of the descriptive system entails also a testing of the text typology, the test might give invalid results if the sample texts were chosen to represent the text forms or text form variants that Werlich himself points out as the concrete manifestations of each text type. In other words, such a setting for the testing procedure would exclude the possibility that the tester might come across texts that could not be described by means of the present model. Thus Biber's typology was used to ensure a greater validity for the test. Third, it is also expected that the final statement about the applicability of the descriptive system is more reliable if the text types to be referred to are defined on an empirical basis.

As the written non-fictional text types of 'scientific exposition', 'learned exposition', 'general narrative exposition', and 'involved persuasion' are those which will be referred to when the methodology of the testing is discussed, they will be briefly described below. The texts representing the text types of scientific exposition and learned exposition are similar in that they are nonnarrative (dimension 2), nonpersuasive (dimension 4), highly informative in production (dimension 1), and elaborated in reference (dimension 3). Both types are abstract in style (dimension 5), the texts defined as scientific exposition being, however, considerably more abstract than those identified as learned exposition. An additional observation contributing to the differentiation of the two groups was that the academic prose of natural sciences, engineering, and medicine tended to be more abstract in style and more technical in content than that of humanities, social sciences, and education. Accordingly, the former constitutes the core of scientific exposition, while the latter with its more humanistic approach represents learned exposition. General narrative exposition, which is the largest cluster of texts in Biber's corpus, is informational and noninvolved (dimension 1) with narrative concerns (dimension 2). On dimensions 3, 4, and 5 it is unmarked. The text type of involved persuasion consists of texts which are markedly persuasive (dimension 4), moderately involved (dimension 1), and elaborated in reference (dimension 3), but nonnarrative (dimension 2) and nonabstract in style (dimension 5).

3.9 Frame

A further tool that is needed for message-structure description is the concept of *frame*. Because the notion as defined in this study draws on previous literature but is still used in a slightly different sense, it is necessary to review some meanings associated with it by other writers.

In the present study, the idea of frame springs from the perception that every concept and phenomenon has a specific set of determinants in terms of which it is conventionally represented. For example, the determinants conventionally applied to the description of a bomb explosion differ from those used for the survey of a political system. Thus frame can be defined as a linguistic manifestation of a mental topic-specific principle that restricts the determinants feasible in the representation of a given topical idea. The notion of frame is needed to explain how the informatively indispensable propositions of the textual comment relate to each other in the absence of explicit or implicit logical conjunction. In a narrative context such propositions are temporally connected, in a descriptive one additive relations typically serve as connectors, but in an expository textual comment the mutual relevance of these propositions can frequently be explained only by reference to the fact that they carry determinants which belong to the frame of description that is conventionally associated with a given discourse topic. This means that the top-hierarchy propositions of an expository textual comment are often related through a frame relation only. Thus the notion of frame justifies the recognition of such a global message-core function as elaboration, which incorporates a variety of seemingly mutually unrelated conceptual determinants in terms of which the topical idea is elaborated (for elaboration see section 6.3.2).

As pointed out above the content of the frame is primarily determined by the discourse topic. It is, however, also essentially affected by the representational and communicative illocutionary purpose of the passage. Accordingly, *temporal*, *spatial*, and *notional frames* are presently distinguished depending on whether the dominant mode of description is narrative, descriptive, or expository. The concept of frame explains the way in which the topical idea and the purpose of the message control the semantic content of the text.

Frame is a term quite heavily loaded with slightly differing meanings in linguistic and related literature. Bateson (1955) has used the term in anthropology as a psychological concept referring to the set of signals which allow people to interpret the intended level of abstraction in a message. Hymes (1974) includes the notion of frame in his work on the ethnography of speaking to denote a 'means of speaking', i.e. whether a linguistic activity can be characterized as joking, imitating, chatting, performing a play, etc. In the field of sociology, Goffman (1974) and Fraake (1977) use the notion to refer to a culturally determined, familiar activity. By Minsky (1975) the concept is associated with the computer model of artificial intelligence. It is used to denote "a data-structure for representing a stereotyped situation" (Minsky 1975:212). By stereotyped situations Minsky means such event sequences as e.g. a birthday party but also ordered expectations about objects and settings. For Fillmore (1975) the word frame means 'any system of linguistic choices --- that can get associated with prototypical instances of scenes', the term 'scene' being used to refer to 'any kind of coherent segment of human beliefs, actions, experiences or imaginings' (1975:124). People are assumed to associate certain scenes with certain linguistic frames.

Van Dijk (1977) explains the concept of frame as follows:

(Frame) denotes a conceptual structure in semantic memory and represents a part of our knowledge of the world. In this respect a frame is an organizational principle, relating a number of concepts which by convention and experience somehow form a unit which may be actualized in various cognitive tasks, such as language production and comprehension, perception, action and problem-solving. (1977:159)

A frame is a subsystem of knowledge about some phenomenon in the world — In more specific terms such a frame contains information about component states, actions or events, about necessary or probable conditions and consequences (of a phenomenon). (1977:135)

The set of propositions characterizing our conventional knowledge of some more or less autonomous situation (activity, course of events, state) is called a frame — such frames include propositions determining the possible orderings of facts, e.g. along the cause-consequence and general-particular or whole-part lines.(1977: 99)

Even though Goffman's, Frake's, Minsky's, Fillmore's and van Dijk's definitions of the term are fairly close to its present meaning, it pertains in their thinking to cognitive theory and refers to cognitive categorization of world knowledge. As a text, however, is an outcome of a cognitive process, a corresponding categorization of information can also be identified as a textual phenomenon. Thus in this study the term frame is used to refer to the linguistic manifestation of such cognitive categorization.

On the other hand, the notion of frame, as adopted here, is also related to that of 'scheme' as used by Barlett (1932), Rumelhart (1975), and Chafe (1977), but it is associated more strictly with the semantics of concepts, while a scheme relating to language is rather a model for processing such basic linguistic systems as grammatical structure and global rhetorical structure. Thus a frame can possibly be understood as a semantic equivalent of 'scheme'.

Moreover, an analogy with the present idea of frame can be seen in the way in which both Werlich (1976, 1982) and Jordan (1984) expect to find out about the content structure of certain types of texts by posing questions such as *why (purpose), when (time), where (location), who (agent), what (objects), how (relations)* (Werlich 1976: 62: the structure of a report) and *What is it?/Name?, Maker?/Composition?/Characteristics?/What can it do?/What are its advantages?/What problems does it overcome?* (Jordan 1984). These questions imply frame-based expectations concerning the propositional content of the text. Jordan (1984) also points out relevantly that no object/phenomenon can be described in terms of all of its attributes. Thus description involves always a choice of relevant distinctive items. Jordan claims that this choice is usually based on a consensus regarding what information is available and what is contextually essential.

In this chapter a review of previous research on text structure analysis has been provided, and the theoretical premises of the present model have been compared with those of others. In addition, some concepts have been defined which are necessary tools in the construction of the model. In the following chapters message-strategic and message-structural functions will be specified. For the structural description to create the framework of a message, as the premises of the present model require, the description of the various text-structural functions will start with a description of the types of discourse topic. This is then followed by a description of the types of introduction because introduction is the message-structural function which carries the discourse topic to the readers' awareness.

4 Description of the components of the MSU-MSA model

4.1 Types of discourse topic

The discourse topic of a text can be elicited as the writer's answer to the initial planning question 'What am I going to talk about?' (or as an answer to the reader's opening text-analytical question 'What is this text about?'). This way of eliciting the discourse-topical idea is consistent with Renkema's (1993) definition of 'topic' and 'discourse topic'. A further consideration is, however, that a text may provide several answers to such a question which represent different levels of generality (see van Dijk 1977:133-136 for the notion of topic set, also this study section 3.4.2). There is, however, according to van Dijk, a hierarchy among the alternative answers stating the 'aboutness' of a text so that the most specific concept or proposition that has the capacity to articulate it should be identified as its proper discourse topic. Thus, following van Dijk, the discourse topic is presently seen to be the most specific concept or proposition that all the propositions of the text are directly or indirectly about.

It was stressed in section 3.5.2 above that the major determinant of message structure is the overall (representational and communicative) illocutionary purpose because this purpose defines the dominant way in which the top-hierarchy message-core functions of the textual comment relate to the discourse topic. It can also be assumed that the quality and construction of the discourse topic may exert an effect on the form of the message structure of the text. Before the various types of discourse topic are discussed, attention will be paid to those discourse-topical characteristics that may create text-structural variation. First, it seems that the representational illocutionary purpose of the text may be influenced by the quality of the discourse topic. The most obvious hypothesis about the impact of the quality of discourse topic on message-structural features is that a concrete animate or inanimate concept as a discourse topic tends to entail a description which assigns spatially observable attributes, actions, events, or measures to the topical object. An abstract notion as discourse topic, on the contrary, is likely to be followed by an analysis of the topical idea at a notional level, calling forth an elaborative pattern. This may not always be the case because it is occasionally possible for a concrete object to be described both in terms of its spatially observable features and conceptual determinants, e.g. an equipment with a physical appearance and highly abstract operational principles.

Second, the discourse topic may incorporate temporal or spatial modifiers, i.e. a *setting* (e.g. the British communities in India), which, if described side by side with the nucleus of the discourse-topical entity, constitutes a subordinate topical continuity in the text, i.e. a subordinate topic-comment sequence which is developed alongside with the nucleus of the discourse-topical idea (see Virtanen 1992:85 for the related notion of 'text strategic continuities'; also Sallinen 1994:128). In text-structural terms this means that the description of the setting constitutes a text structure of its own within the text structure relating to the discourse-topical nucleus.

Third, the discourse topic may show a multi-foci structure with message-structural implications when the topical position is occupied by two or more independent entities which are each described separately, or when the topical role is adopted by *an agent and its product / possession*, both of which are separately commented on. In both of the above cases at least two parallel text structures relating to different discourse-topical nuclei run side by side.

In the following overview, definitions, accompanied by brief examples, are provided for different types of discourse topic. Authentic examples of the functioning of the various topic types in the textual whole can be found in sections 6.3.1.5, 6.3.2.5, 6.3.4.5, 6.3.5.1, 6.3.6.1, and 6.3.8.3) :

- *Topical participant* refers to a concrete animate or inanimate (e.g. 'Saddam Hussein', 'furred animals', 'nuclear weapons') object chosen to be the topic of a text. When the topical position is shared by several participants the multi-foci quality of the discourse topic does not affect the message structure of the text, if the same comment propositions apply to all of them. If they are, however, described/defined individually by means of reference to a shared set of determinants, a matching structure is entailed. If the participants are commented on individually within separate frames of determinants, the result is a pattern with several parallel message structures.
- *Topical participant in setting/settings 1-n*. If a participant is the topic of discussion within the constraints determined by a temporal or spatial situation, i.e. a setting, (e.g. 'the British in India') the discourse topic is defined as *topical participant in setting/settings 1-n*. The setting may or may not be described alongside with the description of the participant. If the description of the setting runs parallel with that of the participant, the setting as a component of the discourse topic exerts an effect on the message structure by constituting a subordinate discourse-topical continuity. It is also possible for a topical participant to be described within a set of settings (1-n). Again if the settings are provided with separate descriptions subordinate text structures are created alongside with the main structure.
- *Setting* is a temporally and/or spatially determined situation (e.g. 'the 1970s') which may assume a discourse-topical position by being the only common denominator for a number of participants or events described. As pointed out above, setting may also occur as a subordinate discourse-topical continuity.
- *Topical event* refers to a concept or proposition denoting an event (e.g. 'the wreck of the Titanic') which occupies the discourse-topical position. A text with an event as its discourse topic may allocate a separate description to the setting of the event. If so, the setting must be identified as a subordinate discourse-topical continuity, i.e. *topical event in setting*. Otherwise the setting need not be recognized as part of the topical idea because temporal and spatial determinants can be seen as being inherently involved in the concept of 'event'.
- *Topical concept* denotes an abstract idea (e.g. 'freedom', 'poverty', 'loneliness' etc.) or a concrete one which is being discussed in terms of its normally unobservable determinants (e.g. the brain discussed by reference to the brain cells). A description of a setting/ a set of settings may or may not be incorporated as a subordinate discourse-topical continuity. In the case of incorporation the discourse topic is defined as *topical concept in setting /settings 1-n*.
- *Topical phenomenon* refers to a discourse-topical proposition (e.g. 'The number of refugees increased by 20 % last year') or concept (e.g. 'socialization', 'cultural adaptation') denoting some abstract or practically unobservable process or state of affairs. As in the case of an event as discourse topic the determinants of a setting may be so inherently intertwined in the notion of the topical phenomenon itself that it need not be separated from it for the purposes of text structure analysis. If, however, the description of a setting/a series of settings runs as a subordinate discourse-topical continuity alongside with the description of the topical phenomenon, text-structural implications follow and the definition of the discourse topic is *topical phenomenon in setting/settings 1-n*.
- *Topical participant and product/possession*. The discourse-topical status is shared by a participant and his product or possession (e.g. 'Sibelius and his seven symphonies'). The product is any kind of achievement, e.g. a theory, plan, work of art, etc., by the participant. The focus of description may lay on either member of the discourse-topical entity, or on both of them evenly. In any case,

however, the double-nuclei discourse topic results in two parallel message structures. An incorporation of a setting/a set of settings as a mere restrictive modifier or a subordinate discourse-topical continuity is possible. The setting(s) may then relate both to the participant and the product or to either of them.

- The term *evaluation* as a discourse topic denotes an argumentative assertion in which the writer proposes his evaluation of a certain real world situation as a truth. The validity of the evaluation is established by providing it with a basis. An argumentative evaluation is understood to be the discourse topic of a single argumentative sequence, where the discourse-topical status has not been assigned to any single concept by means of an introductory procedure. This position can be supported by stating that the fulfilment of the reality-related and reader-related illocutionary purposes of an argumentative sequence, i.e. the purposes of claiming that something is true and of substantiating such a claim, presumes that such a sequence incorporates an implicit truth evaluation with a basis. Subsequently its macro structure reads *X is Y. This is true on the grounds Z*. This transcription of the argumentative macro structure (where the point of reference for the comment part is the argumentative evaluation *X is Y*) indicates that the argumentative evaluation itself is what is being talked about, i.e. the discourse topic of the sequence. This interpretation is supported also by the fact that the topical concept of an argumentative evaluation alone may be too specific to present a point of reference to all the propositions of the basis. An entire argumentative evaluation may need to be identified if a reference point is sought for all the propositions of the basis sequence. On the other hand, an argumentative text may also focus on a single-concept discourse topic. In such case the topical emphasis is indicated by inserting a separate introductory sequence. An argumentative passage may also be opened by a topical *reported evaluation*, which is presented to be either supported or challenged.

- The term *situation* is used to refer to a set of facts that are being evaluated in the text. It is expected to constitute a multi-propositional textual speech act with a discourse topic and textual comment of its own. Situation is included in the list of discourse topics because it acts as a topic member for the following comment function which is *evaluation (interpretation, implication), instruction, or commitment*. The whole situation - evaluation / instruction / commitment sequence is, however, expected to be semantically controlled by the discourse topic of the situation member. This view is based on the assumption that, if the text at the top-most level of text-structural hierarchy, is about the situation member, and this in turn is about its own discourse topic X, the whole text is about X. The recognition of situation as a type of discourse topic enables the description of the situation - evaluation type of text, in the same way as the other types of texts, as one global speech act with a particular illocutionary purpose that explains its structural features.

- The discourse-topical idea of a passage is coded as *problem* when it denotes an event, phenomenon or situation (as defined above) with implicit or explicit negative connotations for which a solution is provided, in the form of an instruction or otherwise, in the textual comment.

- *Instruction* is the discourse topic of a single instructive sequence, i.e. a *motivation - instruction - basis, motivation - instruction, or instruction - basis* sequence. It is the writer's evaluation of the desirability of a certain future action/behaviour by some other person/s in a certain situation. Therefore an instruction like *You should go home* can be transcribed into the form *Your going home is desirable*. When an instruction is followed by a reasoning sequence the implication is that the encoder wants to prove the desirability of the action suggested by the instruction. Analogically with argumentation then, the macro structure of an instructive sequence with a reasoning can be transcribed into the form *X is desirable. This is true on the grounds Y*. This indicates that the

discourse-topical function in such a sequence is performed by the instruction itself. It is, however, also possible that a specific concept, phenomenon, event etc. is singled out in a separate introductory member as the discourse topic of an instructive sequence. The instruction (with or without a basis) itself then constitutes the textual comment.

When an instruction arises from a problematic situation (the pattern to be described as *problem - instruction*), the recognition of the discourse topic becomes a more complicated matter. On the one hand, a mention of the problem (Y) provides a basis explaining why the instruction (X) should be followed and can therefore be seen as forming the reasoning part (Y) of the desirability evaluation according to the formula *X is desirable. This is true because Y*. On the other hand, the sentence level topic of the proposition stating the problem may be seen as the discourse topic of the sequence, in which case the instruction serves a comment function. When an instruction is preceded by a statement of a problem the recognition of the discourse topic must be based on a judgement of the contextual relevance of the above alternative interpretations.

If the source of the instruction is very authoritative, a basis sequence may not follow. The topical concept is in that case the one that denotes the object/idea that the instruction is about. The instruction is then often expanded into a text by means of a generic-specific strategy.

4.2 Types of introduction

Introduction is a message-structural function which carries the discourse topic. A textual speech act differs from a sentential one in that the basic topic-comment information structure is more heavily loaded with linguistic substance. One of the manifestations of this characteristic is that it frequently takes a whole textual sequence to bring the topical idea to the reader's awareness, i.e. to introduce it. For the purpose of message-structural analysis, which seeks to discover the topic-comment structure of the textual message, it is essential to be able to identify the part of the text which serves the introductory purpose. This is because, once the length of the introductory sequence has been recognized and the discourse-topical idea identified, the propositional structure of that part of the text may in most cases be ignored as it does not have any further implications to the analysis of the textual comment. The essential thing is, however, to find out how far this 'irrelevancy' of propositional structure goes. For this reason it is necessary to include here a survey of introductory conventions. If, however, a thorough propositional analysis of a text is needed, then a lengthy introductory sequence may require a function-internal propositional analysis of its own. It may be possible for such an introductory sequence to assume initially a function/unit - internal discourse topic (topical node) which does not coincide with the discourse topic of the whole text. This may be the case especially with introductions using example, analogy, metatext, or citation as a text-opening device. Although such propositions may not immediately enhance the development of the discourse-topical idea, they stay within the scope of the present definition of text structure, which presumes that all propositions of the text ultimately contribute to that development in that they work for the gradual introduction of the topical idea.

In spite of the fact that the proposition, or group of propositions, that introduce the discourse-topical idea often assign top-hierarchy attributions to it, these propositions are presently coded primarily with their introductory function in view. The attributive function may, if it seems to be text-structurally significant (if, e.g. a following proposition relates directly to it rather than to the discourse-topical idea itself), be coded as an embedded function. An alternative solution would have been that of identifying the discourse-topical concept and regarding the rest of the text as serving a comment function. Because, however, the introductory part frequently plays a key role in exerting various message-strategic effects on the reader, it would seem an oversimplification to draw a direct analogy from a sentence to a text and isolate the discourse topic from its propositional context accordingly. Thus the present solution is to highlight the introductory function, its content-related

conventions, and the message strategies frequently involved, at the expense of message-structural considerations. On the basis of Werlich's (1982) survey of the types of introduction, Longacre's (1983) study of existential and equational text relations, and the writer's own experience of texts, twelve types of introduction were distinguished. To facilitate practical text analysis these types have presently been categorized as text-structurally unmarked and marked. Text-structurally marked types of introduction are those which tend to expand into a multi-propositional unit and those which embed textual elements engaging in a global generic-specific pattern. Text-structurally unmarked ones, on the contrary, are those with none of the above text-structural implications. The unmarked/marked distinction is made because it seems that the type of the introduction needs to be specified for the analysis only when it exerts a marked influence on text structure.

The various types of introductions will be discussed and illustrated below to show how the introductory function works and how it is presently identified. The text samples provided are presented as numbered sequences proposition by proposition (for the notion of proposition as defined in the present study see section 3.4.5.1). The numbered propositions are referred to as *acts*. To illustrate the introductory function, a passage of several propositions is cited for the introductory role of one/some of them to be revealed. The explanations provided will point out the act which carries the introductory function.

4.2.1 Text-structurally unmarked introductions

• *Identifying or defining introduction.* The introductory sequence states what the discourse-topical object/idea is either by identifying it as something generally known (e.g. John Smith is an engineer) or by providing it with a definition. An identifying introduction may assign a superlative or near-superlative attribute to the discourse-topical idea/object or otherwise provide it with a unique status. This introductory convention brings about a hierarchy of salience among the attributions assigned to the discourse-topical idea which may aim at attracting the reader's attention at the very beginning of the text. The passage below shows (in act 1) the typical introductory pattern which establishes the near-uniqueness of the discourse topic ('the English policeman') by identifying it as one member of a group with a superlative attribution ('the most English institutions').

(1)

1. One of the most English institutions is the English policeman, with his odd helmet reminiscent in shape of the topees that shahibs used to wear in India

2. To an Englishman a policeman with a flat-topped cap looks somehow a little less reassuring, more likely to be an enemy, than one with a helmet.

3. Outside London the police are all local forces, employed and paid by counties and county boroughs. (Broamhead 1969:85-86)

Definition differs from identification and description in general in that while a description (which usually includes identification) may incorporate all features of a phenomenon, or only those which are contextually relevant, a definition involves a judgement about the hierarchy of the distinctive features. Only top-hierarchy attributes with adequate generic coverage do because a definition must allow for all the variation that a phenomenon possibly shows. The defining introduction below (acts 1-2) with 'relational concepts' as its topical idea shows an additional generic - specific strategy as the definition given in act 1 is explained by providing an example in act 2.

(2)

1. *Relational concepts are those characteristics of a phenomenon that can be understood only through the combination or interaction of two or more enumerative or associative concepts.*
2. *'Elderly' is a concept that cannot be understood without an understanding of the combination of age and longevity— (Marriner 1986:17)*

• *Direct introduction.* The discourse-topical idea is presupposed to be known to the readers without being defined or identified by means of an equational pattern. The introductory proposition assigns an informatively significant attribution to the discourse-topical idea:

(3)

The working class

1. *Manual workers gained no advantage from forming a majority of the population, for as ever in the past, theirs was a world apart, socially isolated and the victim of two basic laws, insecurity and dependence.*
2. *In it one submitted and toed the line.*
3. *Here were to be found all those to whom an industrialized society delegated the material tasks of manufacture and distribution.*
4. *Their world was bounded by— (Francois Bedarida 1991: A Social History of England 1851-1990:209, Routledge, London)*

The discourse-topical idea 'manual workers' is introduced in a direct fashion within an informatively significant opening sentence (act 1). As the source of the above extract implies, the larger context from which the extract has been taken provides the discourse topic with a setting which specifies its position in terms of place and time.

• *Setting introduction.* The topical entity is introduced by reference to its spatial and/or temporal setting. The setting may or may not constitute a subordinate discourse-topical continuity. A setting introduction (acts 1-2 below) frequently takes the form of an existential sentence that is followed by a relative clause (act 2 in the sample below) which defines the aspect of the topical phenomenon that is going to be dealt with:

(4)

1. *There exists in Chihuahua a type of Indian, the Tarahumara, 2. who, to catch the wild ducks that go every November to hibernate on the lakes of the high tablelands, sometimes remains motionless for a whole day, as if he were a tree or a stone, — (Erico Verissimo, Mexico, in Hakulinen-Sipilä and Norko-Turja 1961:113)*

4.2.2 Text-structurally marked introductions

Text-structurally marked introductions make use of informative and presentational devices that aim at arousing the reader's interest or improving his ability to anticipate and comprehend text-structural and content-related turns in the text. They frequently use message-strategic practices, which may appear in the middle of the text as well. Strategies which occur both in the middle of the text and in the text-opening position will presently be discussed as general message strategies in chapter 5. Introductions with such strategic practices are only briefly defined in this section. For a more detailed study the reader is asked to refer to the examples provided in sections 5.1.1, 5.1.2, 5.1.3, and 5.1.4. *The topic controlling generic - specific, text organizing generic - specific, interest*

arousing specific - generic, and *background creating generic - specific approaches* are strategies which typically occur in the text-opening position, so that the generic - specific or specific - generic relation cuts across the whole text. This means that the first member covers the introduction and the second the rest of the text. The introduction is in such cases coded as *introduction with topic-controlling generic preview*, *introduction with text-organizing generic preview*, *introduction with interest-arousing specific as a starting point*, and *introduction with (generic) background information* (this type of introduction may or may not be based on the generic - specific variation) respectively.

The above strategies frequently occur also within the introductory sequence. This means that both members of the generic - specific or specific - generic relation are to be found within the introductory unit. Because the strategy, on such occasions, is not imposed on the text globally it does not determine the type of the introduction in relation to the rest of the text. In such cases the type of the introduction is not indicated but the strategy coded within it explains the way in which the discourse-topical idea is communicated to the reader (see section 5.1.2, example 17).

In addition to the above strategic approaches, which all draw on the generic - specific variation, further general message strategies which also appear in the introductory position are metatext and question. These types of introduction will be coded as *metatextual introduction* and *introduction with question*. Moreover, analogy, whole-part/class-subclass analysis, and citation entail in the text-opening proposition/group of propositions marked text-structural variation. These introductions will be referred to as *introduction with analogy*, *introduction with embedded constituent attribution*, and *citatory introduction*. The above types of introductions are defined as follows:

- *Introduction with a topic-controlling generic preview*. The discourse topic is introduced within a generic evaluative preview of the (specific-level) message that is going to be conveyed about it in the comment part of the text. It informs the reader of the aspect of the discourse-topical idea that the writer is going to focus on. Consequently, the reader's ability to make content-related predictions is increased. (See section 5.1.2.)
- *Introduction with text-organizing generic preview*: The discourse topic is introduced within a proposition that carries a generic lexical clue as to the organizational plan of the text. This lexical clue indicates the message structural functions of the propositions of the comment part of the text. Enumeration is frequently involved. (See section 5.1.3, example 23a.)
- *Introduction with interest-arousing specific as a starting point*. The discourse-topical idea is introduced either in a specific form or within a specific-level context while the focus of the message as a whole is on the generic. The strategic effect of the text-opening specific-level approach lies in the interest-arousing power of specific information as compared to generic information. This is especially the case when the specific deals with people and the generic with a phenomenon. (See section 5.1.4, example 28.)
- *Introduction with (generic) background information*. The introductory sequence provides the reader with relevant background information by means of which further topical information can be accommodated into an appropriate frame of knowledge. In the text sample below the introductory member (acts 1-4) informs the reader of the background factors in the light of which it is relevant to discuss the topical idea, i.e. laws prohibiting monopolistic activities.

(5)

Antitrust Regulation

1. *The basis of the economic system in the United states is free competition.*
2. *Free competition permits the laws of supply and demand to determine the prices of goods and services and provides incentives for innovations, technological advancement, and increased efficiency. In an effort to increase profits business leaders have tried to decrease competition by creating monopolistic combinations.*
3. *Early state laws attempting to deal with this problem were largely ineffective due to the fact that monopolies were a problem of national scope.*
4. *Recognizing the detrimental impact of such combinations on the economy and the need for federal regulation, Congress has passed laws prohibiting monopolistic activities.*
5. *The Sherman Act of 1890, the Clayton Act of 1914, and the Federal Trade Commission Act of 1914 are the core of the antitrust laws.*
6. *The Sherman act — (Grillot 1979:431-432)*

Background information may also concern the class that the discourse-topical concept is a member of. A generic - specific relation then exists between the introductory part and the rest of the text. (See section 5.2, example 13.)

• *Metatextual introduction.* A metatextual introduction (acts 1-6 in example 6) states the discourse topic (ESP in the sample text below) and explicates the organizational plan of the text. Its strategic effect is to contribute to the readability and predictability of the text by addressing the reader directly:

(6)

1. *Our concern in this section is to arrive at a workable definition of ESP.*
2. *But rather than give a straight answer now to the question 'What is ESP?', we would prefer to let it gradually emerge as we work through the section.*
3. *Let us begin instead with a simpler question: 'Why ESP?'*
4. *After all, the English Language world got along well enough without it for many years, so why has ESP become such an important (some might say the most important) part of English language teaching?*
5. *In the following three chapters we shall briefly survey the factors to the emergence of ESP in the late 1960s and the forces, both theoretical and practical, which have shaped its subsequent development.*
6. *In Section 2 we shall look in greater detail at the elements we outline in this section. (Hutchinson and Waters 1987:5.)*

• *Introduction with question.* Text-opening question in act 1 and its reformulation in act 2 introduce the discourse-topical idea ('the British economy after 1870s' occupies the topical position in the sample below) and simultaneously fix the propositional plan of the text as the comment part of the text can be expected to contain answers to the questions made in the introductory part of the text.

(7)

1. *Was there a decline after 1870 in the British economy?*
2. *Did growth slow down, and prosperity come to a halt?*

3. *So many reputable historians have proclaimed that with the 'great depression' (1873-96) England entered an area of sloth and stagnation, even retreat, that the claim has almost been promoted to a dogma. ... (Bedarida Francois 1990, A social history of England 1851-1990, Routledge, London KATSO SIVU)*

• **Introduction with analogy.** The reader's attention is sought by pointing out an analogy between the discourse-topical idea and some other phenomenon that is assumed to be of interest to the reader or well-known by him. The discourse-topical idea is introduced in the proposition in which the analogy is either explicitly or implicitly established. An analogy is created when a parallel is shown to exist between a known but discourse-topically irrelevant phenomenon and the initially unknown topical one in view of increasing the reader's/listener's knowledge of the latter. The previously known phenomenon is then only used for the description of the topical phenomenon. As the example below shows an introduction with analogy (acts 1-3) may incorporate both a (more or less explicit) statement of the similarity between the two phenomena (act 1), and a description of the non-topical phenomenon (acts 2-3). Act 4 in the present sample confirms that the discourse-topical idea is 'mankind in the sixties':

(8)

1. *Like the driver of a racing car, mankind sits behind the wheel and speeds into the sixties.*
2. *Ahead lie testing curves.*
3. *According to his skill the driver will either crash in a shriek of twisting steel or accelerate to new horizons.*
4. *For mankind the alternatives are simply these: either to annihilate himself in the holocaust of atomic war, or to enjoy a decade of unparalleled technological progress ---. (The Sixties 1960, in Hakulinen-Sipilä and Sirkka-Liisa Norko-Turja 1961:57)*

• **Introduction with embedded constituent attribution.** The text-opening proposition introduces the discourse-topical idea (which in the sample below is 'communication' or 'information transfer') and points out its constituent elements ('non-linguistic' and 'linguistic performance'), i.e. it communicates a whole-part/class-subclass analysis. The discourse topic is then described in terms of its constituent ideas (acts 2-3) as they constitute topical nodes for the top-hierarchy propositions of the textual comment:

(9)

1. *Generally speaking, communicants can transfer information to each other by means of either non-linguistic or linguistic performance.*
2. *In non-linguistic performance people communicate with each other by such means as gestures, facial expressions, manners of walking, pictures, maps, diagrams, music or sculpture.*
3. *In linguistic performance, on the other hand, they use sounds or marks, such as letters, words, sentences, and texts. (Werlich 1982:17)*

• **Citatory introduction.** A direct or reported remark by someone usually well-known is placed in the text-opening position to attract the reader's interest. The citation carries the discourse-topical concept of the sequence to follow. Werlich (1982:157) discusses 'citatory introduction' as a subclass of 'antithetical introduction', which means that he sees it as an element of the argumentative text type. The use of citatory introduction is, however, by no means restricted to argumentative texts. In the extract below, which shows the motivation sequence of an advertisement with an instructive

message structure, the discourse-topical concept 'punctuality' (which is the benefit accruing from buying the advertised product) is introduced by citing Louis XVIII's famous remark:

10)

1. 'Punctuality', Louis XVIII was fond of saying, 'is the politeness of kings'.

2. We believe that in the matter of punctuality, we can rise to the occasion by making you a mechanical timepiece that will keep its rendezvous with the Gregorian calendar at the end of every century, omitting the leap-years in 2100,2200 and 2300 and recording them in 2000 and 2400. — (Time, May 25, 1992)

To sum up, introductions constitute, within the present system of text structure analysis, a message structural function whose task is to bring the discourse-topical idea to the reader's awareness. This may be done by means of one proposition or it may take a paragraph or a chapter depending on the length of the whole text. (In the overview of the model illustrated in figure 2, where message structural and message strategic functions are not yet specified, this part of the text is referred to as discourse-topical proposition/ group of propositions.) Moreover, especially when comprising a wider sequence of the text, introductions may also serve some reader-oriented communicative purpose. They may constitute initial incentives for the reader to undertake the task of reading, or they may function as cataphoric devices whose purpose is to preorganize the content of the text for the reader. The types of introduction categorized as text-structurally marked may expand into a multi-propositional unit and/or impose a global text-structural pattern on the text. The type of such introductions is specified and coded for the analysis of the text, because it explains the way in which the introductory function as a whole relates either to the discourse-topical idea or to the propositions of the textual comment. Text-structurally unmarked types of introduction need not be specified for text structure analysis. The coding used will merely be *introduction of topical participant/concept/phenomenon* etc. For an analyst to be able to determine the comment functions of a text properly it is essential to identify the introduction in its full length first. This is because, once the introductory part has been identified, the basic message-structural topic - comment division can be distinguished.

The order of presentation to be followed in chapters 5 and 6, where the components of the model are described, has been chosen with the reader's gradually growing knowledge of the model in view. Once the types of discourse topic and the types of introduction, which constitute the message-structural elements of the topic part of the textual topic-comment structure, have been specified it would be logical to inquire next into the message-structural functions of the textual comment. Because, however, the message-structural analysis of authentic text samples becomes obscured if message-strategic elements cannot be 'singled out' of the text, it is necessary to provide first a description of the various types of message strategies. Thus in chapter 5 a number of message strategies will be identified that typically appear in factual texts. So much accomplished, section 6.1 will provide a brief overview of logical functions which together with message-core functions constitute the message structure of the text. A theoretical basis for message-structural variety will then be provided, message-core functions specified, and specified message structural patterns constructed in sections 6.2-6.4. The above order of presentation will be followed as it seems to yield most conveniently to the construction of the model so that at every stage of that process the reader is sufficiently familiar with the functions needed for the description of the sample texts. However, before the structural description of the sample texts can be undertaken, the choice of these texts must be discussed. This will be done in the next section. Still another preparation to be made before structural descriptions can be started is to find out how propositions group into text-structural units. This will be surveyed in section 4.4. In addition, a coding system needs to be fixed for the model.

Thus the system of coding to be used will be explained in section 4.5 before any further specification of the model takes place.

4.3 The choice of the text samples to illustrate text-structural functions

The text samples have been chosen by the criterion that they seemed to provide examples of the text-structural functions studied in each case. They are either extracts taken from the beginning of a text or a paragraph or, in the case of letters to the editor, complete texts. The extracts are seen to satisfy the definition of a text in that they are coherent pieces of writing with an identifiable discourse topic. The overall structural description assigned to them does not coincide with the description that would have emerged had they been analysed in their original full-length context: the same text-structural functions can still be identified but the ways in which they are embedded in text-structural hierarchy are likely to be different. This is because the model is based on the assumption that a text of any length shows a topic-comment structure (see also 2.2, item 6). Thus the extracts must be understood as independent texts. Because they are taken from authentic texts, the text-structural functions to be identified can be shown to exist in the real language used by publishing authors.

4.4 When does a group of propositions constitute a unit of text structure?

A text structure analysis which is consistent with the definition of text structure formulated in section 2.1 identifies also groups of propositions which collectively relate to other propositions/groups of propositions in a text-structurally meaningful way. To understand such notion of text structure it is necessary to see how text-structurally relevant groups of propositions are constituted. For this reason propositional grouping is briefly studied before a detailed description of the message-strategies and message-structures is undertaken. Fabricated examples will be used to illustrate it. (Earlier in section 3.7 the global situation - evaluation structure was discussed when ways to identify the largest global units of text structure were compared in the various models. The present discussion is included because groups of propositions constitute text-structural units also at the lower levels of textual hierarchy.)

A group of propositions may constitute a text-structural unit when subordination is present in some of its manifestations, when an anaphoric reference is addressed to a number of preceding propositions, or when the realization of a message-structural function takes several propositions. Subordination, which results from either

- the presence of a hypertheme (for hypertheme see Daneš 1974) at paragraph level, or
- the presence of message strategies, which in most cases involve either genericity / specificity or sequence (i.e. order of presentation) -based subordination,

may organize the text into inclusive units that as units relate to other such units or single propositions in text-structurally relevant ways. The above two types of subordination are illustrated by the extract below whose overall discourse topic is 'the Kennedys':

(11)

(1)The Kennedys have given America three prominent politicians, John, Robert, and Edward. (2)They have, however, also experienced one tragedy after another. (3)John, the eldest son, who became President of the United States in 1961, was assassinated in 1963. (4)The suspect was shot before a trial took place. (5)So the case remained unsolved. (6) A political conspiracy was, however, suspected. (7)Robert, who was eight years younger, was murdered in 1968. (8) A political conviction turned out to be fatal to him, too.

Propositions 3-6 and 7-8 constitute text-structural units based on hyper-thematic inclusion. The sentence-level topics of propositions 4-6 are all subordinated to the paragraph-level topical event,

i.e. *John's assassination* in proposition 3. In the same way, the paragraph-level topical event in proposition 7 dominates as a hypertheme the causal explanation in proposition 8. Propositions 3-6 and 7-8 relate to proposition 2 as groups of propositions connected by means of a temporal succession relation.

Moreover, propositions 2-8 constitute a text-structural unit because propositions 3-8 are subordinated to proposition 2 as specifications of the generic phenomenon introduced in proposition 2. Proposition 2 and propositions 3-8 provide an example of the topic controlling generic - specific sequence with way-of-writing-related informatively redundant information (proposition 2) which typically involves subordination of the specific element, although the specific may be (as in this case) informatively more significant (for a more detailed account of the message strategy in question see chapter 5, section 5.1.2). Propositions 2-8 relate to proposition 1 as a group of propositions which attributes experiences to the discourse topic.

Anaphoric co-reference is the case when ideas introduced in separate propositions are addressed by a shared reference in one of the following proposition. This creates a situation where a proposition relates to a group of previous propositions:

(12)

(1) The Kennedys were a talented but unlucky family. (2) John their eldest son, was assassinated in 1963. (3) Robert who was eight years younger was murdered in 1968. (4) Both brothers were prominent politicians.

Proposition 4 relates to propositions 2-3 jointly as it assigns a shared attribute to the two participants, John and Robert, introduced in the two separate propositions. Co-reference is the case also when a description of a factual situation is followed by an evaluation of that situation (see section 6.3.4.5, example 63). The evaluation then relates to a group of propositions by assigning those propositions a shared attribute.

Sample 12 above provides an example also of a case in which several propositions are needed for a certain message-structural function to be fulfilled. Proposition 1 carries two evaluative assertions ('The Kennedys are talented', and 'The Kennedys are unlucky') that will be reasoned for. Evidence must be provided to support the validity of both of them. Hence, it naturally follows that several propositions are needed in the present case to realize the evidentiary message-structural function. This means that propositions 2-4 relate as a group to proposition 1.

Finally, if sample 12 is considered to be an extract of a wider textual whole it may be seen as constituting a text-structural unit because acts 2-4 convey the facts which justify the assertion made in act 1. Whether supporting facts are regarded as forming a text-structural unit with a preceding assertion or as performing a co-ordinate text-structural function depends on the relative contextual emphasis placed on each member of the argumentative relation.

In the following chapter, a way of coding for the above types of text-structural units will be fixed.

4.5 The coding system for text-structural representation

The technicalities of the coding system to be used for the present way of text-structure representation must be explained before the various message-strategic and message-structural functions are illustrated by means of sample text analyses. It may be difficult for the reader to understand this exposition of the coding system at this stage because the various message-strategic and message-structural functions have not yet been specified. Yet this is the last opportunity to discuss it before the analyses are introduced. The reader is advised not to take too much trouble to

get an idea of the system at this stage but to refer to this section when studying the analyses to be presented in the next three chapters.

In the coding the following principles have been observed:

1. The text samples provided are presented as numbered sequences proposition by proposition (for the notion of proposition as defined in the present study see section 3.4.5.1). The numbered propositions are referred to as *acts*.
2. Subordinate clauses and their main clauses are identified as separate units of text-structure analysis when the clause relation involved is also of text-structural significance. They are then provided with subordinate sequence numbers, e.g. (1.1), (1.2).
3. Text samples are followed by their respective analyses. While the text samples themselves are marked by a sequential number in brackets, e.g. (13), the analyses are indicated by the same number preceded by a capital A in brackets, e.g. (A13).
4. An introductory proposition/set of propositions is identified for the text.
5. Each top-hierarchy proposition of the textual comment (= each message-structural proposition which relates directly to the discourse topic) is coded for its direct relation to the discourse topic and to a preceding proposition/group of propositions within the textual comment, if preceding propositions exist. The first of the two codings shows how the proposition relates to the discourse topic. The second points out its relation to a preceding proposition/group of propositions. The two codings are separated by a colon (:). E.g.:
 1. INTRODUCTION OF TOPICAL PARTICIPANT (act 1)
 2. EVENT ATTRIBUTION TO TOPICAL PARTICIPANT (act 2)
 3. ATTRIBUTION TO TOPICAL PARTICIPANT: CAUSAL EXPLANATION TO EVENT IN ACT 2 (act 3)
6. Message-structural functions (= message-core functions including the items of the elaborative frame and logical functions) are coded in capitals.
7. Message-strategic functions are coded in lower case with capital initials. Hyphens are not used in the compound names of message strategies in the analyses because a hyphen is used to denote a text-structural relation between propositions (see 9 below).
8. When a message-strategic sequence of propositions is accommodated into the coding of a message-structural function, the two codings are separated by a colon (:). For an example see 15 (c) below.
9. A hyphen (-) or vertical arrows ($\uparrow \downarrow$) indicate that a text-structural relation exists between two propositions. The way of coding depends on what is technically more convenient in a given structural representation. See 15 (d) below.
10. Relations between propositions are pointed out also by references made in the coding texts. See 15 (d).

11. An asterisk (*) is used to indicate items of the elaborative frame. E.g.:

1. INTRODUCTION OF TOPICAL CONCEPT (act 1)

2. ELABORATION OF TOPICAL CONCEPT (act 2-4):

* DEFINITION (act 2)

* ORIGIN: STATEMENT (act 3)

* FUNCTION: STATEMENT (act 4)

12. A slanting stroke (/) denotes an overlap of two strategic patterns, e.g. when the specific member of a generic - specific strategy constitutes the generic member of a further similar pattern.

13. A double slanting stroke (//) signals a transition from the description of an evaluation - basis message structure to the description of the inferential strategy by means of which it is realized.

14. A triple slanting stroke (///) signals non-relatedness of two adjacent propositions.

15. Propositions are grouped into enumerated units of analysis by top-hierarchy propositions (i.e. propositions which relate directly to the discourse topic), which may

(a) function as topical nodes for subordinate propositions

(b) perform the same text-structural function in relation to the discourse topic and relate to each other through some logical relation

(c) be realized by means of a strategic pattern

(d) be reached through an inferential process.

On the last two occasions the coding of the top-hierarchy message-structural function acts as an umbrella coding which accommodates the description of the strategic or inferential process which produces the top-hierarchy proposition. Examples of the above four cases are given below:

(a) 1. INTRODUCTION OF TOPICAL PARTICIPANT (act 1)

2. EVENT ATTRIBUTION TO TOPICAL PARTICIPANT (act 2) - CAUSAL EXPLANATION (act 3)

(b) 1. INTRODUCTION OF TOPICAL PARTICIPANT (act 1)

2. EVENT ATTRIBUTION TO TOPICAL PARTICIPANT (acts 2-3: SUCCESSION)

(c) 1. INTRODUCTION OF TOPICAL PARTICIPANT (act 1)

2. EVENT ATTRIBUTION TO TOPICAL PARTICIPANT (acts 2-3): Generic (act 2) - Specific (act 3)

(d) 1. INTRODUCTION OF TOPICAL PARTICIPANT (act 1)

2. ATTRIBUTION TO TOPICAL PARTICIPANT (acts 2-6):
REPORTED EVALUATION OF TOPICAL PARTICIPANT (act 2) -
REJECTING EVALUATION OF ACT 2 (act 3) - CONTRAST TO
ACT3: CORRECTING EVALUATION OF TOPICAL PARTICIPANT (act 4) - BASIS (act 5)

16. Propositions serving simultaneously more than one text-structural function are identified by the dominant function. The secondary functions are coded as embeddings within the main function (e.g. INTRODUCTION OF TOPICAL PARTICIPANT WITH EMBEDDED ACTION ATTRIBUTION)

17. When a proposition relates directly to a participant within a preceding proposition this participant can be established as a topical node by coding it as an embedded text-structural element, e.g.

1. INTRODUCTION OF TOPICAL EVENT (act 1)
2. CAUSAL EXPLANATION WITH EMBEDDED INTRODUCTION OF PARTICIPANT X (act 2) - ACTION ATTRIBUTION TO PARTICIPANT X (act 3)

5 Message strategies

Message strategies result from the writer's decisions when answering the compositional question 'How should things be said so as to make the text as readable / comprehensible / convincing / attractive to the reader as possible?' (for the set of compositional questions eliciting the main components of text structure see sections 2.1 and 3.4.4). Message strategic propositions contribute to the fulfilment of the communicative illocutionary purpose of the text by aiming at an optimal way of presentation. As has been pointed out, a communicative purpose is involved in the formation of message structure as well. This communicative purpose pertains to the elicitation of a given cognitive process in the reader's mind by means of imparting particular kind of information. Message strategies contribute by providing an auxiliary system that works to ensure the success of the communicative event by presentational means. They may also serve certain genre-related stylistic purposes (e.g. *reformulation* can be used as a stylistic device in fiction). Being manifestations of the writer's awareness of and concern for his audience, message strategies produce the pragmatic elements of texts. The notion of message strategy as defined above is consistent with Leech's (1983) idea of pragmatic problem solving in the communicative situation. According to him, pragmatic features result when the speaker/writer finds an answer to the question 'Given that I want the mental state of the hearer to change or to remain unchanged in such and such ways, how do I produce an utterance which will make that result most likely?' (Leech 1983:36).

Message-strategic patterns do not affect the information content of the text because they carry redundant or otherwise dispensable information or they provide alternative ways of conveying a message without interfering with its propositional content.

A crucial question in the representation of message-strategic features is how to distinguish the strategic elements from the major message-structural propositions which carry the hard-core information of the text. To solve this problem the notions of 'markedness' and 'unmarkedness' must be introduced. If the text shows a straightforward proposition by proposition development of the topical idea with no redundancy, deviations from the topical lines or from a canonical order of presentation, the text is unmarked in terms of message strategies. If, however, the text contains propositions which are redundant or optional from the point of view of discourse-topical development, it is said to be marked in terms of message strategies. The topic development then does not proceed in an informatively economic way but seems to be a multi-layered zigzagging phenomenon. Although message strategies account for the presentational effectiveness of the text, the presence of message-strategic units brings about structural complexity.

On the basis of a study of the previous models of text structure and the present writer's experience of texts the following types of message strategies have been identified:

- Background creating generic - Specific
- Topic controlling generic - Specific
- Text organizing generic - Specific
- Generic - Interest arousing specific (- Topic resuming generic)
- Interest arousing specific - Generic
- (Labelling) generic - Explanatory specific (- Topic resuming generic)
- Explanatory specific - Labelling generic
- Evidence - Conclusion
- Assertion - Evidence - Conclusion
- Reformulation
- Metastatement

- Question - Answer
- Summary

Hyphens cannot be used to denote compound words in the names of the message-strategic functions when message-strategic patterns are described because the same signal must be used to separate the members of such patterns.

In the following sections a detailed survey of the above types of message strategies will be provided along with authentic examples of each of them.

5.1 Generic and specific as levels of information transfer

The two-phased description of the world which includes a reference both to its generic and specific aspects is a very extensive and a most complex text-organizational phenomenon. Its complexity may partly result from the fact that there is variation in the quality of the relation. Christensen (1963) introduces transitions from literal to metaphorical, from denotative to connotative, and from abstract to concrete as subtypes of the generic-specific relation (through Grimes 1975: 216). Further variations of the generic-specific theme, which may also assume a message-strategic function, include the indefinite-definite and class-member transitions. Moreover, the complexity of the phenomenon is enhanced by the fact that the transition from the generic to the specific or vice versa may concern a proposition as a whole or any of the concepts involved. A survey of the various occurrences of the approach seems, however, to justify the claim that the writer's choice of the generic-specific strategy is based on considerations of thematic clarity, comprehensibility, convincibility, and the interest-arousing power of the text.

The two-level approaches to communicating and processing information include the generic-specific, generic-specific-generic, and specific-generic(- specific) strategies. In the following some observations are made concerning the feasible causes for the use of the main variants of the approach, i.e. the generic-specific and specific-generic strategies, and their effects on information processing and management. The generic-specific strategy can be seen in such established conventions of written presentation as the use of titles, subtitles, tables of contents, and previewing introductions, the purpose of which is to give the reader an idea of the subject matter first at a very general level. These conventions may reflect a general human tendency to prefer proceeding from the generic to the specific in the processing of new complex ideas. Such a tendency may be explained by reference to the fact that detailed information becomes contextually relevant only when placed in the proper framework of more general ideas.

Associated with the above assumption is the question of the relative significance of generic and specific information. To have an overall understanding of phenomena and insight into them, generic information is needed, and it may even be all that is needed in a given context. Specific information without the framework of the general context to which the details pertain, on the contrary, remains fragmented and practically useless. From this point of view, generic information would seem to be higher in the order of salience than specific knowledge. However, to be an expert one must have both. Yet there would be no abstracted generic knowledge without a knowledge of the empirical world. Accordingly, the primary and indispensable function of many literary sources (e.g. news reports and history text books) is that of imparting information about actual empirical facts. In these texts the factual information must be rated higher in fundamental significance than the generalizations evaluating the meaning of the facts. Yet even such texts frequently make use of the generic-to-specific approach. Thus we are left with the earlier conclusion that this approach is the writer's strategy to organize the world of information so that it can be processed by the reader in an optimal way.

Moreover, a text can also be seen as an outcome of the cognitive process that has taken place in the writer's mind. If looked at from that point of view, it could be assumed that besides being a conscious strategy used by a skilful writer, the generic-specific approach may also reflect the writer's state of knowledge at the moment of writing, i.e. a state of being initiated enough in the subject matter to be able to consider it at both levels. However, whatever the explanation for the two-level approach may be, in all of the above cases generalizations are signals of the presence of the writer as an intermediary agent between the world of facts and the message.

Writers use, however, also the opposite strategy of approaching information from the specific-to-generic angle. This may be the case when the writer wants to attract his reader's attention. People may be expected to be more interested in detailed information about the observable world than in generic abstractions of phenomena. Thus, in popular magazines, for example, articles on generic phenomena are often started with a detailed account of a specific instance. A specific-to-generic approach may also be chosen by the writer to evoke in the reader's mind a process of reasoning which produces a generalization on the basis of given facts. Such process of information acquisition follows the real-world-order of the operation.

Although no general rule can be stated as to which member of the generic/specific - specific/generic sequence is informatively more significant a typical strategic approach is one in which one member of the relation carries discourse-topically indispensable information, while in the other the same information at a different level of genericity has become contextually redundant.

Alternatively, the discourse-topical idea may be developed in the two fronts of generic and specific. This is the case when a description of a discourse topical idea is provided partly by reference to the determinants of the class that the discourse-topical concept is a member of. On such occasions the strategic quality of the approach is not manifested as ideational redundancy but as an alternative way of saying how things are (see example 13 in section 5.2). This means that instead of communicating all the information about the topical idea at one level of genericity/specificity it is partly described by attributes being assigned to the class of which the topical idea is a member.

Even more definitely than in the former case, the question of dominant and subordinate information remains ambiguous in the latter case. Hence, to avoid stating any regularity concerning the dominant and the subordinate member of the generic-specific relation, the two-level approaches have here been described as a way of proceeding through the two levels without defining the mutual interactive functions of the generic and specific propositions in further detail (this was done by Aston (1977) and Tirkkonen-Condit (1985) when they defined one member of the generic - specific sequence in terms of its illocutionary purpose and the other in terms of its interactive value in relation to the preceding member, e.g. statement - enlargement). Instead, those propositions of the dual-approach sequence which show a strategic potential have been specified by reference to that strategic quality, e.g. text organizing generic - specific. As, however, either member of the generic/specific - specific/generic relation in each case conveys discourse-topically indispensable information the strategy is coded as being embedded in the message structural function that both of the members of the message-strategic relation perform in relation to a preceding proposition (e.g. **ATtribution to Topical Participant (acts 2-3): Text organizing generic (act 2) - Specific (act 3)**).

The discussion in section 5.1 will deal with the types of the generic/specific - specific/generic strategies listed below:

- Background creating generic - Specific
- Topic controlling generic - Specific
- Text organizing generic - Specific
- Generic - Interest arousing specific (- Topic resuming generic)
- Interest arousing specific - Generic

- (Labelling) generic - Explanatory specific (- Topic resuming generic)
- Explanatory specific - Labelling generic

These patterns cover the 'interactional roles' of 'elaboration', 'enlargement', and 'initiation', which Tirkkonen-Condit (1985) derived from Grimes's 'specificity' predicate, as well as the genericity-specificity-variation-based 'interactive values', which Aston (1977) identified as 'exemplification', 'particularization' and 'enlargement'. The difference between these two systems and the present one lies in that the present analysis sees in the phenomena a strategic development of the attributes (in the widest sense of the term) assigned to the discourse-topical idea. In comparison with Hoey's (1983) patterns of 'generalization-example' and 'preview-detail', which are traced back to the clause relation of 'generic-particular' as described by Winter (1977), and Longacre's (1983) 'genericity/specificity paraphrase', the present analysis represents greater specificity.

Text samples will be provided below to illustrate each of the above types of message strategy. However, except for the message-strategic pattern in question, and when necessary the respective inclusive message-structural function, most other text-structural phenomena contained in the samples are ignored in the accompanying analyses. This simplification must be accepted at this early stage of the step-by-step description of the model to avoid unnecessary complexity as far as possible.

5.1.1 Background creating generic - specific

The generic member of the generic-to-specific pattern may introduce the discourse-topical idea in the framework of its generic class. This provides scope for the reader to see the topic against the background of its conceptual affinities:

(13)

1. *Law consists of a body of rules which regulate the behaviour of the citizens of a country.*
2. *It differs from other rules that control their behaviour, such as those of good manners or of speech, in that any infringement of the legal rules may be dealt with by the machinery of the law in the shape of the courts.*
3. *The breach of certain legal rules is visited by punishment of the law-breaker.*
4. *We call these rules the rules of criminal law, and they are outside the scope of this book.*
5. *The breach of other rules does not lead to punishment, but entitles the person who has some interest in the observance of the rule to have his rights protected by a court of law, whether by having monetary damages awarded to him, or by receiving a court order which request the rule breaker to rectify his breach, or by other means.*
6. *These are the rules of civil law.*
7. *English law, whether civil or criminal, is basically derived from two sources, namely, statutes (Acts of Parliament) and the common law. ... (Frank, W.F. and Royall, D.V.E 1968. The Legal Aspects of Industry and Commerce, General Introduction, in Sallinen 1990:12)*

'English law', the discourse-topical concept of the opening chapter of Frank and Royall's book on English commercial law, is introduced through a brief outline of the concept of 'law'. This means that the discourse-topical idea is initially (in acts 1-6) described indirectly in terms of the characteristics of the inclusive class of which it is a member. It may be assumed that a more extensive topic-related scheme is activated in the reader's cognition when the position of the discourse-topical idea is indicated in the 'genealogical' tree of related concepts. That the generic-to-specific approach is in the above type of case a message-strategic choice, is indicated by the fact that the passage would have conveyed the same information about the discourse topic, i.e. 'English law',

had everything that in the first six acts is attributed to the generic concept 'law' been directly attributed to the specific one, 'English law'. This is so because what is said about 'law' in general inevitably applies to 'English law' as a result of the fact that 'law' is an inclusive concept and 'English law' an included one. Thus the generic-to-specific strategy is one presentational alternative to unmarked one-level description. In its background-creating function the generic-specific strategy naturally appears in a topic-opening position, i.e. within an introduction. Accordingly, the coding in the present case will take the form:

(A13)

1. INTRODUCTION OF TOPICAL CONCEPT WITH EMBEDDED ELABORATION AND CONSTITUENT ATTRIBUTION (acts 1-7): Background creating generic (acts 1-6):--- - Specific (act 7): ---

The hyphenated line indicates that the analysis ignores text-structural phenomena other than that presently in question.

5.1.2 Topic controlling generic - specific

This application of the double-phased strategy of information transfer is, to the analyst, the most complex and confusing of all the occurrences of the generic-specific approach. It involves occasions where the writer, before reporting on factual data, makes a unifying and generalizing statement of the contextual meaning of that data. The writer has ended up with such an evaluative statement as a result of a process of imposing a general meaning on the multiplicity of empirical detail. In other words, the writer has been able to identify, in the chaos of empirical observations, a phenomenon that serves as a common denominator for all of them. The writer then, logically enough, makes an attempt to control the abundance of facts by means of the insight he has gained. Thus this message-strategic approach is presently described as a *topic controlling generic - specific* pattern. The following passage shows a topic-controlling generic preview with an embedded evaluation in a purely strategic function in the underlined part of act 2:

(14)

1. *Each year on August 6 the haunting ceremony in Hiroshima is much the same. —*
2. *But this year when 55,000 people gathered to commemorate the 46th anniversary of the devastating bombing that killed an estimated 140,000 and brought World War II to a sudden halt, the city's newly elected mayor, Takashi Hiraoka, broke the tradition by adding a few uncustomary lines to the annual Peace Declaration.*
3. *It should also be recalled, he declared, that 'Japan inflicted great suffering and despair on the peoples of Asia and the Pacific during its reign of colonial domination and war. For this we are truly sorry.'*
4. *Noting that this year marks the 50th anniversary of the Japanese assault on the US., he added, 'Remembering all too well the horror of this war, starting with the attack on Pearl Harbor and ending with atom-bombings of Hiroshima and Nagasaki, we are determined anew to work for world peace.'*
5. *These plain, straightforward words were a surprising departure from the tautology about the war usually heard in Japan. — (Time, August 19, 1991, p.17)*

The discourse topic of the text is understood to be 'the mayor's speech at the Hiroshima commemoration ceremony in 1991'. This conclusion is made because a matching in the introductory sequence of the previous and the present recurrences of the Hiroshima anniversary produces 'the mayor's speech in the Hiroshima commemoration ceremony in 1991' as a remarkable distinctive phenomenon. In act 5 it then occupies the thematic position. The introduction can be specified as a

background-creating introduction (this is different from the background creating generic-specific strategy in that the generic-specific element is not involved) because it provides the historical background against which the topical phenomenon stands in relief. The topic controlling generic - specific strategy that is presently focused on is manifested in acts 2 and 3-4. The topical phenomenon is first introduced in act 2 by means of a generic reference incorporating an embedded evaluation: 'the city's newly elected mayor, Takashi Hiraoka, *broke the tradition by adding a few uncustomary lines* to the annual Peace Declaration' (the evaluative preview in italics). This generalizing preview of the specific quotation to follow in acts 3-4 must be seen as the writer's strategy to control the informative effect of the factual data to be delivered. The strategic pattern is to be coded within the message-structural function of introduction as follows:

(A14)

1. BACKGROUND CREATING INTRODUCTION OF TOPICAL PHENOMENON (acts 1-4):
INTRODUCTION OF EVENT X (the annual ceremony in commemoration of the Hiroshima bombing) WITH EMBEDDED ATTRIBUTION (act 1) — - CONTRAST: INTRODUCTION OF EVENT Y (this year's ceremony) WITH EMBEDDED INTRODUCTION OF TOPICAL PHENOMENON (the mayor's speech): Topic controlling generic (act 2) - Specific (acts 3-4)
2. EVALUATION OF TOPICAL PHENOMENON (act 5) —

In order to show that the topic controlling generic - specific approach is a strategic choice, the strategically unmarked options must be referred to. They are the single-phased specific and the single-phased generic approaches. The passage below communicates the message at the level of the specific:

(15)

1. *Each year on Aug. 6 the haunting ceremony has been much the same. The bell tolls But this year when 55, 000 people gathered to commemorate the 46th anniversary of the devastating bombing that killed an estimated 140, 000 and brought World War II to a sudden halt, Hiroshima's newly elected mayor TH declared that it should also be recalled that 'Japan inflicted great suffering and despair on the peoples of Asia and the Pacific ...' He said that they were truly sorry for this. Noting that this year marks the 50th anniversary of the Japanese assault on the U.S. he added, 'Remembering all too well.'*—
2. *These plain straightforward words were a surprising departure from the tautology* —

Two observations on the above option seem to relate relevantly to the present discussion. First, the strategic character of the topic-controlling generic preview ('--- the city's newly elected mayor, Takashi Hiraoka, *broke the tradition by adding a few uncustomary lines* to the annual Peace Declaration.') becomes evident when example 15 shows that it can be left out without effecting any changes in the propositional content of the passage. In example 14 the redundancy of the evaluative statement contained in the underlined part of act 2 is most obvious as its propositional content coincides with that of act 5. Second, an essential difference in example 15 as compared with the original one (example 14) is that the reader's ability to interpret the context-specific meaning of the information to be encountered is not facilitated by means of any preceding strategic measures. This extract happens to provide a retrospective statement of the generic value of the preceding factual information (act 5 in example 14, and act 2 in example 15) as part of the message to be conveyed by the textual comment, but until the reader gets that far, the contextually relevant meaning of the mayor's speech remains ambiguous. It can be postulated therefore that the strategic approach with an

initial topic-controlling evaluation results in a more straightforward process of comprehension than the above strategically unmarked version.

As a further alternative, the writer could have maintained the generic level of reference and omitted the direct quotation altogether. Such an approach would require again a generalizing interpretation by the writer of the meaning of the specific facts, i.e. the mayor's words may be interpreted for example as an apology:

(16)

1. 'But this year — the city's newly elected mayor, T.H., broke with tradition by apologizing Japan's conduct in Asia and the Pacific during its reign of colonial domination and war.'

The first observation to be made is again that leaving out one of the levels of information transfer, this time the specific, does not affect the macro-level propositional content of the message. Moreover, a comparison of examples 15 and 16 raises some arguments in favour of the writer's original choice. It can be claimed that being one in the series of *Time* magazine's weekly reviews of world affairs, the text is essentially a news report. On the one hand, the major purpose of a news report is to report observable phenomena. It seems that the level of specificity at which a phenomenon is dealt with reflects the immediacy of the writer's access to the original source of information, which indeed is needed for journalism to be able to convince the readers of its validity. Conversely, a treatment of the discourse-topical issue at a very generic level of reference may suggest that the writer is drawing on inadequate sources, which may result in the reader's disinterest or disbelief. Accordingly, it can be postulated that specificity is an essential requirement of news reporting. On the other hand, the writer's ability to discuss his subject at varying levels on the genericity-specificity continuum indicates an insight by the writer in the meaning of a phenomenon in a wider context. This insight provides also a means for facilitating the processes of reading and comprehending for the reader. The above reasoning seems to justify the assumption that the double-phased way of imparting information involves reader-orientated strategic considerations.

In a topic-opening position the topic controlling generic - specific strategy may be contained in the introductory part of the text as in the samples dealt with so far, or it may cut across the borders of text-structural functions so that the specific member of the relation comprehends the whole of the textual comment or some part of it. This overlap presents a problem of representation. The way of reasoning applied to overcome it was as follows: The actual strategic process that contributes to the reader's ability to predict has been that of abstracting a general meaning from the information provided and placing it in the topic-opening position. The strategic effect therefore lies in the introductory member, i.e. the discourse-topical proposition. Therefore, when the topic-controlling generic alone occurs in a text-opening position, it is seen as determining the character of the introductory function itself, which accordingly will be coded as *an introduction of topical idea within a topic-controlling generic preview* (see section 4.2.2). It is then not necessary to code the strategic function for the comment part separately. The following passage shows an introduction with a topic-controlling generic preview (act 1):

(17)

- 1. The Liberal Party is still managing, with struggle, to keep alive.*
- 2. It is a party of the Left, but pragmatic rather than doctrinaire.*
- 3. From the 1920's, when Labour replaced it as one of the two main parties, it declined steadily and by 1950 seemed to have finally lost all political significance.*
- 4. But it has always been supported by at least one tenth of the population.— (Bromhead 1967:24)*

The introductory statement (act 1) is a generalizing evaluation of the facts given in acts 3 and 4. The coding of the text structure can be done as below:

(A17)

1. INTRODUCTION OF TOPICAL CONCEPT WITHIN TOPIC CONTROLLING
GENERIC PREVIEW (act 1)
2. ELABORATION (acts 2-4): * DEFINITION (act 2)
* STATEMENT OF TOPIC-SPECIFIC DETERMINANT:
SUPPORT (acts 3-4): INEFFECTUAL CAUSE (act 3) -
CONCESSION (act 4)

5.1.2.1 A grey area of analysis in the generic - specific continuum

The recognition of *the topic controlling generic - specific strategy* is often complicated by the fact that a passage with a generalization that is followed by an account of the empirical facts that the generalization is based on can be seen also as an argumentative sequence with an assertion supported by relevant facts which could be coded as an *evaluation - basis* pattern (for evaluation - basis structures see section 6.3.4.4).

To understand the different cognitive processes that underlie the topic controlling generic-specific strategy, on the one hand, and the evaluation - basis structure, on the other, the following observations are relevant: A message that is conveyed by means of a topic-controlling generalization and a following account of specific facts consists actually of a description of a situation and the writer's non-argumentative evaluation of it. As, however, the evaluation amounts only to a generalization of the meaning of the factual situation described, it is redundant and does not actually contribute to the development of the discourse-topical idea. This suggests that the generic evaluation in question is more likely to serve a strategic function than an informative one. By reversing then the natural order of observation and evaluative response so that the generic evaluation precedes the account of the factual situation a reader-directed strategic effect is attained.

On the contrary, if the generic - specific structure is seen as argumentative, the initial evaluation concerns a text-external real-world situation. As it is, however, assumed that readers may be inclined to challenge the validity of the evaluation, the facts resulting in the evaluation are referred to as supporting evidence. This analysis shows a difference in the emphasis and function assigned to the specific factual data in the above two interpretations of a passage with generic and specific information.

A distinction between an argumentative generalization and a strategic topic-controlling one can occasionally be made by assessing the relative emphasis placed on the generalizing statement, on the one hand, and on the detailed account of facts, on the other. If it seems that the writer's real interest lies in informing the reader about the facts rather than in persuading the reader to think in his way, then the initial generic evaluation serves a mere strategic function. If, on the contrary, the generic evaluation itself becomes the topic of discourse, and the specifics do not reach the level of topical significance, then probably the passage has a persuading illocutionary purpose and is argumentative in character. This kind of analysis remains, by necessity, intuitive and must often be based on such larger contextual considerations as the illocutionary purpose of the whole text, or even on text-external criteria like the genre of the publication in which the text is issued.

Still another criterion in the analysis is the level of the generality of the generalization. If it is general enough, it becomes almost void of meaning and consequently cannot be taken as an argumentative evaluation. Moreover, besides noting the distinctive features discussed above, we

probably distinguish between the above type of argumentative message structure and the non-argumentative topic controlling generic - specific message strategy also on the basis of our own idea of the general acceptability or challengeability of the opening generalization. Although the above criteria often seem to enable a distinction of the two kinds of text-structural phenomena, a grey area of analysis is occasionally met where unambiguous solutions cannot be reached.

The passage below shows a text-structurally obscure structure where three paragraph-initial generalizations (acts 1, 4 and 8) present borderline cases as to whether they should be understood as argumentative evaluations or strategic topic-controlling generalizations:

(18)

Bloodying the Drug Hydra: Mexico

1. *If Colombia is the nerve center of the drug trade, Mexico is now its most important arm.*
2. *Anywhere from 50% to 70% of all cocaine bound for the U.S. - 400 to 500 tons a year - comes through Mexico.*
3. *So does 70% of the marijuana and more than 20% of the heroin.*
4. *Mexican society is feeling an impact (of this situation):*
5. *A UN study reports local drug consumption rose 20% last year.*
6. *Seizures of cocaine in Mexico shot up from 9,000 kilos in 1989 to 90,000 in 1991.*
7. *Some of the increased interceptions are due to unprecedented co-operation between U.S. and Mexican law-enforcement agencies, including a massive air-interdiction effort using Mexican planes and U.S. radar.*
8. *But the jump mostly indicates that Mexico has become a major export conduit for Colombian drugs.*
9. *With the escalation in trafficking has come a rise in violence .*
10. *Since Jan. 1, at least 30 suspected drug-related murders have occurred in the Tijuana area alone. (Lopez and Shannon 1992)*

None of the criteria discussed above indicate the writer's illocutionary purpose quite unambiguously in the present passage with an interplay of specific facts and generic abstractions from their meaning. The two alternatives for text structure analysis are as follows:

(A18)

I Expository text type

1. INTRODUCTION OF TOPICAL PHENOMENON (acts 1-3): Topic controlling generic (act 1) - Specific (acts 2-3: act 3 ADDITION to act 2)

2. CONSEQUENCE (acts 4-6, 9-10): Topic controlling generic (act 4) - Specific (act 5)

↑↑

ADDITION

↓↓

- Specific (act 6)

↑↑ ↓↓

↑ CAUSAL EXPLANATION

↑ (acts 7-8): INEFFECTUAL
 ↑ CAUSE (act 7) - CONCESSION
 ↑ (act 8)
 ↑
 ADDITION
 ↓
 - Specific (acts 9-10): Topic controlling
 generic (act 9) - Specific (act 10)

II Argumentative text type

1. EVALUATION (act 1) - BASIS (acts 2-3: act 3 ADDITION to act 2)

↓

2. CONSEQUENCE (acts 4-6, 9-10): EVALUATION (act 4) - BASIS (act 5)

↑

ADDITION

↓

BASIS (act 6)

↑ ↓

↑ CAUSAL EXPLANATION (acts 7-8):

↑ INEFFECTUAL CAUSE (act 7) -

↑ CONCESSION (act 8)

↑

ADDITION

↓

BASIS (acts 9-10): EVALUATION (act 9) -

BASIS (act 10)

There are a few features in the text that suggest that the passage should be interpreted as a non-argumentative piece of writing. First, the first two generalizations (acts 1 and 4) are so general that they involve an element of vagueness. The vagueness of act 1 derives from the metaphorical expressions used. Both of these propositions would naturally elicit the reader request 'Tell me about this in greater detail', which is used by Hoey (1983:138) to identify the 'preview-detail' structure, a pattern which by its definition partly overlaps with the topic controlling generic - specific strategy as defined here. The specific information provided stands in strong relief against the background of the vagueness of the generic propositions giving rise to the impression that the factual data forms the hard core of the text. This can be indicated by the fact that if the text is stripped of the generic propositions the remaining message (example 19 below) is still highly informative though lacking in clues as to a proper contextual aspect of interpretation. If, however, the specific data is left out, the reduced message (example 20 below) seems to become somewhat ineffectual because of a vagueness of expression:

(19)

Anywhere from 50 % to 70 % of all cocaine bound for the U.S. - 400 to 500 tons a year - comes through Mexico. So does 70 % of the marijuana and more than 20 % of the heroin. A United Nations study reports local drug consumption rose 20 % last year. Seizures of cocaine in Mexico shot up from 9,000 kilos in 1989 to 90,000 in 1991. Since Jan. 1, at least 30 suspected drug-related murders have occurred in the Tijuana area alone.

(20)

If Colombia is the nerve center of the drug trade, Mexico is now its most important arm. Mexican society is also feeling an impact (of this situation). With the escalation in trafficking has come a rise in violence (in Mexico).

Moreover, the wider context of the whole article 'Bloodying the Drug Hydra' is clearly reportive in character.

None of the points made above, however, seem to be strong enough to give a final clarity to the present analytical problem. The consideration that prevents the analyst from excluding an argumentative interpretation of the above passage is the fact that acts 2, 4, 5 and 9 could all incorporate the test phrase of a basis component, i.e. 'I claim this to be true on the grounds that ---', (see Tirkkonen-Condit 1985:69 for a test for identifying an argumentative assertion and the accompanying supporting sequence) without causing any distortion of meaning in the passage. The most reliable indication of argumentative text structure is, however, an incorporated reported evaluation that states the claim that is to be challenged by the argumentative evaluation. In the absence of an explicit opposite view, the text structure analysis of a sequence with an underlying generic-specific relation may remain ambiguous if there are no other contextual indicators of text type.

Analytical ambiguity of the kind discussed above is typical of texts with a matching pattern. These passages may incorporate a previewing generic proposition that states a similarity or a difference between two or several entities. These entities are then described in terms of the traits or aspects that are being matched. The opening proposition can be seen either as a topic-controlling generic preview that is being followed by a detailed account specifying the difference/similarity, or as an argument about a difference/similarity that is being justified by reference to specific facts.

To sum up, it can be said that a grey area of analysis is formed by assertions which propose a general meaning for a number of observations and are subsequently supported by an account of these observations and generalizing initial statements (see Aston 1977 for a definition of the assertion/statement difference), whose function is to interpret in general terms the meaning of following empirical facts so as to facilitate the cognitive process of comprehension for the reader. Some criteria can be applied to find out about the illocutionary purpose of such passages, but there are cases in which none of them gives an unambiguous answer.

5.1.3 Text organizing generic - specific

Another type of the generic - specific approach is a pattern with a generic preview stating the organizational function or plan of the following sequence. Accordingly, the approach is presently called a *text organizing generic - specific strategy*. The previewing statement refers to an informatively significant content but it does so at such a high level of generality that it becomes almost void of any topic-related meaning and assumes instead message-strategic significance. This means that the generic preview carries a lexical clue such as *reason, aspect, way, explanation, class, condition, problem, solution, part, consequence, example* referring to the text-organizational plan of the sequence to follow. Winter (1977) refers to the former kind of vocabulary items as 'Vocabulary 3'. He points out that these words serve as indicators of text-structural relations because of their semantics which can be interpreted to ultimately correspond to the meaning of subordinators or clause connectors. In addition, previewing generalizations very often contain enumeration or a cataphoric metatextual reference (e.g. *the following, below*) as another typical signal of their text organizing function. This strategy increases the reader's ability to make predictions concerning further text-structural development.

The text organizing generic - specific strategy is manifested in four kinds of patterns. First, both the text-organizing generic member with its generic lexical clue and the specific member of the relation may be equipped with enumeration as an additional organizing element.

(21)

1. *A major theme that recurs is that we should beware of over-simple contrasts between 'the middle class' and 'the working class'.*
2. *There are two reasons for this warning.*
3. *First, there appears to be increasing convergence by substantial sections of both classes on a variety of indicators - authority, working environment, status, family and political practices. —*
4. *Second, while the middle class has never comprised a coherent unity, not even in the classic bourgeois age of the nineteenth century, it is even more of a heterogeneous grouping today. — (King, R. and Raynor, J 1981, *The Middle Class*, in Attila et al. 1992:27)*

The text presents an instructive sequence with a reported instruction (act 1) followed by a reported basis (acts 2-4). The text organizing generic - specific strategy is applied to the presentation of the basis sequence with *reason* as its text-organizational clue. The text structure of the passage can be described by means of the following formula:

(A21)

1. REPORTED INSTRUCTION (act 1)
2. REPORTED BASIS (acts 2-4): Text organizing generic with enumeration (act 2) - Specific with enumeration (acts 3-4: act 4 ADDITION to act 3)

The word *reason* in act 2 defines the text-structural function of the following sequence by generalizing the meaning of the specific information contained in it.

Second, a generic text-organizational preview with enumeration is often embedded into a constituent-attributing proposition. *Constituent attribution* is a special type of the attributive message-structural function (for *attribution* as a message-structural function of the textual comment and *constituent attribution* as one of its subcategories see section 6.3.1). It introduces the parts of a topical whole. There are two different patterns to convey constituent attribution by means of the text organizing generic -specific strategy. They are illustrated by examples 22 and 23 below:

(22)

1. *State education is in two main stages:*
2. *primary up to the age of eleven, and secondary from eleven to eighteen.*
3. *The primary stage is subdivided ...*
4. *For all children in state schools, secondary education begins at the age of eleven. ... (Bromhead 1967:136-138)*

(23)

1. *State education is in two main stages.*
2. *Primary education is up to the age of eleven.*
3. *It is subdivided ...*
4. *Secondary education is up to the age of eighteen.*
5. *For all the children in state schools, secondary education begins at the age of eleven. .*

The text structure of passage 22, where the text-organizing generic - specific strategy is confined in the introductory member (which is coded as two separate acts, because act 2 constitutes a syntactically co-ordinate though elliptical sentence), can be represented as follows:

(A22)

1. INTRODUCTION OF TOPICAL PHENOMENON WITH EMBEDDED
ATTRIBUTION OF CONSTITUENT 1 AND CONSTITUENT 2 (acts 1-2):
Text organizing generic with enumeration (act 1) - Specific (act 2)
2. ELABORATION OF CONSTITUENT 1 (act 3) ---
3. ELABORATION OF CONSTITUENT 2 (act 4) ---

Example 23, which illustrates the third pattern of the text organizing generic - specific strategy, differs from example 22 in that a topic-opening text organizing generic - specific approach (A23a) cuts across the whole structure where constituents are being introduced and the respective whole described by reference to these constituents. In analogy with the occurrence of the topic-controlling generic preview in an introductory function the text-organizing generic preview when similarly positioned is coded also as a strategic introduction, i.e. *introduction of topical idea within a text-organizing generic preview*. The specificity of the level of treatment in the rest of the text is then not indicated by coding. The text structure representation of the passage accordingly takes the form:

(A23a)

1. INTRODUCTION OF TOPICAL PHENOMENON WITH EMBEDDED ATTRIBUTION OF
CONSTITUENTS 1 AND 2 WITHIN TEXT-ORGANIZING GENERIC PREVIEW (act 1)
2. ELABORATION OF CONSTITUENT 1 (acts 2-3)---
3. ELABORATION OF CONSTITUENT 2 (act 4-5)---

If in a non-introductory position (A23b), the example 23 type of text organizing generic - specific strategy is coded in the following way (asterisks are used in coding to denote the various items of the elaborative frame):

(A23b)

1. ---
2. ATTRIBUTION OF CONSTITUENTS 1 AND 2: Text organizing
generic with enumeration (act 1)
3. ELABORATION OF CONSTITUENT 1: Specific (acts 2-3) :
 - * --- (act 2)
 - * --- (act 3)
4. ELABORATION OF CONSTITUENT 2: Specific (acts 4-5):
 - * --- (act 4)
 - * --- (act 5)

A fourth type of text-organizing generic preview incorporates a cataphoric metatextual signal like *the following, below, in the next chapter* etc. In the passage below the strategy covers acts 2-6:

(24)

1. *Readers are asked to note that Winter Behaviour comes into force in Finland on October 1st.*
2. *From that day forward the following rules, regulations and conventions are to be observed.*
3. *Cheerful banter with shop-assistants and waiters shall cease herewith.*
4. *It is not permissible to smile at people in the street, even if they smile at you first. —*
5. *Recommended colors for clothing are grey, black and anemic shades of blue. —*
6. *Upon dialling a wrong number in error, the summer practice of apologizing for one's mistake ceases. — (Hardwick 1988:26)*

The text-organizational effect of act 2 arises from two sources. First, the generic statement includes the metatextual cataphoric reference *following*, which makes explicit the writer's intention to guide the reader's process of reading. Second, the listed items *rules, regulations, and conventions*, inform the reader of the directive illocutionary point of the acts constituting the specific sequence (acts 3-6). In other words, a common denominator, i.e. a common illocutionary purpose, which constitutes text-structural coherence between propositions 3-6, is made explicit in the previewing statement by calling these propositions by their generic names.

A strategically unmarked alternative for the present text organizing generic - specific structure could have read as follows:

(25)

1. *Readers are asked to note that Winter Behavior comes into force in Finland on October 1st.*
2. *From that day forward cheerful banter with shop assistants and waiters shall cease forthwith. ... It is not permissible to smile at people in the street, even if they smile at you first. ...Recommended colors for clothing are grey black and anemic shades of blue. ... And upon dialing a wrong number in error, the summer practice of apologizing for one's mistake ceases. ...*

The fact that it is possible to leave out the generic text-organizing preview with a cataphoric reference without affecting the message of the passage indicates that the generic proposition is of purely strategic character. The text structure of the original passage, when 'winter behaviour' is understood to constitute its discourse-topical phenomenon, can be outlined as below:

(A24)

1. METATEXTUAL INTRODUCTION OF TOPICAL PHENOMENON (act 1)
2. ELABORATION: * SPECIFICATION OF TOPICAL PHENOMENON (acts 2-6):
Text organizing generic (act 2) - Specific (acts 3-6: ADDITION)
* ---

For an explanation for the coding of the introductory member (act 1), see sections 4.2.2 and 5.4. *Specification* is a coding for an item of the elaborative frame which introduces an element included in the discourse-topical whole and entails an increase in the level of concreteness. It differs from strategic specific-level propositions in that the information it conveys is indispensable for the elaboration of the discourse-topical idea.

5.1.4 Strategies with Interest arousing specific

Single instances of a phenomenon may be introduced to evoke the reader's interest in it. It can be assumed that descriptions with specific cases often are more attractive to the reader than a statement of the generic state of affairs itself because they typically operate at a level of real-world experience. Thus one of the functions of specific-level description seems to be that of interest arousing. An interest-arousing specific proposition may assume either of the two positions:

- (1) *Generic - Interest arousing specific*
- (2) *Interest arousing specific - Generic*

The text below shows both interest arousing specific - generic and generic - interest arousing specific strategies:

(26)

1. *Are our schools doing a good job?*
2. *Are they trying to do the right job?*
3. *These are the questions being asked by parents, politicians and the press in many countries*
4. *and some like England, France and the USA have started reforming their schools.*
5. *In the USA and England, for instance, the governing political parties are calling for a return to traditional methods,*
6. *while in France the government wants to move away from the self-same traditions.* (Topical Tapes: *Education: Crisis? What Crisis?*, Programme Number 91R 32V 132)

An interest arousing specific - generic strategy is used in acts 1-3 to convey the discourse-topical phenomenon 'Parents, politicians and the press in many countries are asking questions about how their schools are doing'. A reader-oriented strategic effect is brought about by means of singling out direct questions in acts 1-2, which could be attributed to any reader as the point of reference for the possessive pronoun 'our' remains open for various interpretations. The generic labelling proposition in act 3 expands these questions to denote a more universal inquiry (it seems to be common for the generic member of the generic/specific - specific/generic relation to assume a *labelling function* when the specific component serves some more explicitly reader-oriented function). This means that the generic function provides the specific items with some common denominator, i.e. label. When the labelling purpose is present, it is also coded as in pattern 26 below. In the present case the specific - generic relation prevailing between acts 1 and 2 does not only arise from the distinction between specified direct questions and a common label attached to them ('These are the *questions* being asked by ---') but also from an implicit 'personal' - 'public' or 'we' - 'they' distinction. The strategic character of the pattern is evident from the fact that the message would still be conveyed even if the direct questions of acts 1-2 with the ambiguous possessive pronoun were left out and the topical phenomenon were presented in the above reported form, i.e. 'Parents, politicians and the press in many countries are asking questions about how their schools are doing'.

The reversed strategy of generic - interest arousing specific holds act 4 and acts 5-6 together. The interest-arousing character of the examples provided in acts 5-6 is evident from their provocative contrastiveness. The text structure of the above passage can be described as follows:

(A26)

1. INTRODUCTION OF TOPICAL PHENOMENON (acts 1-3): Interest arousing specific (acts 1-2: ADDITION) - Labelling generic (act 3)
2. CONSEQUENCE (acts 4-6): Generic (act 4) - Interest arousing specific (acts 5-6: CONTRAST)

It can be expected to be common for writers to return to the generic case in question after having illustrated it at the level of its specifics. This may happen by incorporating an additional strategic proposition which repeats the content of the previous generic one. The whole pattern is then described as a *generic - interest arousing specific - topic resuming generic strategy*.

Still another typical example of the interest arousing specific - generic strategy is provided below:

(27)

Spoils of World War II

1. *When forward units of general Patton's Third army entered the dark recesses of the Merkers salt mine near Weimar in April 1945, they found a wondrous treasure.*
2. *There, stashed away for safekeeping by the crumbling Third Reich, were 285 tons of gold, nearly 520 million dollars in various currencies, 1,214 crates of art, including works by Renoir, Raphael, van Dyck and Durer, 140 rolls of Oriental rugs, 2 million books, many of rare editions*
3. *-trophies of the Nazi blitzkrieg become spoils of war.*
4. *The Merker find was only a small part of a vast amount of precious metals and priceless art that disappeared in the chaotic aftermath of World War II*
5. *-and which is now the object of world wide treasure hunt.*
6. *Just as new technology has stimulated the search for sunken treasure, so the collapse of communism and the unification of Germany have stepped up the hunt for war time booty. — (Whales 1993)*

To evoke the interest of the reader the writer describes one member (the Merker discovery) of the discourse-topical class ('the vast amount of precious metals and priceless art that disappeared in the chaotic aftermath of World War II') before the generic reference to the topical idea is introduced. The following text structure representation is suggested:

(A27)

1. INTRODUCTION OF TOPICAL PARTICIPANT (acts 1-4):
Interest arousing specific (acts 1-3): Topic controlling generic (act 1) - Specific (act 2) - Topic resuming generic (act 3) - Generic (act 4)
2. MEASURE ATTRIBUTION TO TOPICAL PARTICIPANT (act 5) ⇒ CAUSAL EXPLANATION (act 6)

The interest-arousing specific member presently contains an embedded topic controlling generic - specific - topic resuming generic strategy. The generic act (act 4) establishes a level of topical reference inclusive enough to cover all the propositions of the text, i.e. the discourse topic. It is presently coded as topical participant because it denotes a set of concrete objects.

Distinct from the interest arousing specific - generic strategy is *an introduction with specific as a starting point*. Such an introduction consists of an account of a specific case which introduces an idea that assumes a discourse-topical position in the generic discussion that is to follow. Thus the specific - generic relation involved ranges over the whole text. As in the previous cases with a global generic/specific - specific/generic pattern the strategic effect is coded as a special type of introduction only. No strategic coding is extended to the comment part of the text. In example 28 below, the discourse topic, i.e. a psychiatric drug called 'Prozac', is introduced through an individual patient history (acts 1-5). The discussion of the drug then goes on a generic level.

(28)

The Personality Pill

1. *Susan Smith has everything going for her.*
2. *A self-described workaholic, she runs a Cambridge, Massachusetts, real estate consulting company with her husband Charles and still finds time to cuddle their two young kids, David, 7, and Stacey, 6.*
3. *What few people know is that Susan, 44, needs a little chemical help to be a supermom:*
4. *She has been taking Prozac for five years. —*
5. *Now says Susan, "the lows aren't as low as they were. I am more comfortable with myself."*
6. *Millions agree, making Prozac the hottest psychiatric drug in history.— (Toufexis 1993)*

As pointed out above, the coding would take the form

(28)

1. INTRODUCTION OF TOPICAL PARTICIPANT WITH SPECIFIC AS A STARTING POINT (acts 1-5)
2. REPORTED EVALUATION OF TOPICAL PARTICIPANT (act 6)

A thorough propositional analysis of a passage involving an introduction with specific as a starting point would require a unit-internal analysis of the propositions contained in the introduction function. The introductory unit in such a case frequently shows a topical node of its own ('Susan Smith' in the above passage). The internal analysis of the introduction does not, however, play any role in the structural analysis of the whole passage. It only shows how the discourse-topical idea is brought into the text.

5.1.5 Strategies with explanatory specific

In the explanatory function of the generic/specific-specific/generic relation the reader-oriented effect derives from the functional quality of the specific part, while topical development takes place at the generic level. This means that a generic idea is explained by means of a reference to more specific subordinate or included ideas. Thus an explanatory specific function is distinct from causal explanation; it merely enhances the comprehensibility of the text by explaining the meaning of a preceding or following term, proposition, or group of propositions. By definition then, the explanatory specific member of the generic/specific - specific/generic pattern often provides an example of the phenomenon referred to in the generic member. When an explanation is provided by means of exemplification, the message-strategic function is coded as *explanatory specific with*

exemplification. Like in the case of the interest-arousing specific proposition, also the explanatory specific function may appear in the reversed strategies of

- generic - explanatory specific
- and
- explanatory specific - generic.

A question of analytical significance is whether the explanatory sequence can justifiably be regarded as a purely strategic feature and not as discourse-topical information contributing to the shape of the message structure of the text. Previously, the redundant or optional character of either member of the generic/specific - specific/generic approach was used as a criterion for distinguishing between message-structural and message-strategic phenomena. A generic - specific sequence with explanatory specification could not dispense with the generic information without losing some of the inclusive power of its macro propositions. The explanatory comment, on the contrary, could be eliminated without deforming the macro-level message of the text. This is due to the fact that even if the explanatory specification may not be informatively redundant, it is subordinate to the generic act, and as such the information contained in it does not reach macro-propositional significance.

The generic member of the relation typically, although not regularly, introduces the topical idea by using some generalizing terminological label. In such a case it is coded as *labelling generic*. The *explanatory specific* then explains the meaning of the term.

A passage showing a generic-explanatory specific sequence typically resumes its initial level of generality after the necessary explanation has been provided. The return to the original level is often signalled by incorporating a statement which repeats the propositional content of the opening generic act. This indicates that the explanatory specifying act is seen as a deviation from the main route of passing discourse topical information, and the repetitive third act is there to remind the reader of the direction of the discourse-topical development. Like in the pattern with interest-arousing specific, the repetitive generic third act is also presently coded as topic-resuming generic. Accordingly, the complete strategy may assume the form *labelling generic - explanatory specific - topic resuming generic*.

The following passage provides three examples of explanatory specification: a generic-to-specific-to-generic pattern and two generic-to-specific structures with exemplification as the functional quality of the second act:

29)

1. *A third type of (social) change is also structural but of a reform character.*
2. *It does not seek a direct destruction of the basic relations of production, but a modification and sometimes amplification of existing arrangements.*
3. *It is incremental change or reform rather than revolution.*
4. *These changes can be consistent with the nature of the system and can make it more of what it theoretically is supposed to be.*
5. *We have moved to make our political democracy more of a consistent system by extending suffrage, first to non-property owners, then to women, and finally to blacks.*
6. *We have changed the representation system from indirect to direct elections and are moving in the same direction in primary elections.*
7. *We have also redistricted election areas to achieve a one-man/ one-vote principle.*
8. *Other modifications can occur incrementally which are less consistent with basic institutions.*

9. Thus a progressive income tax and a welfare and social security system are in opposition to principles of private enterprise. — (Katz, Daniel. Types and Sources of Change, in Attila et al. 1992:99)

The text structure of the above passage can be described as below:

(A29)

1. INTRODUCTION OF TOPICAL PHENOMENON (acts 1-3): Labelling generic (act 1) - Explanatory specific (act 2) - Topic resuming generic (act 3)
2. ELABORATION (acts 4-9):
 - * TOPIC SPECIFIC DETERMINANT (acts 4-5): Generic (act 4)
 - ↑ - Explanatory specific with exemplification (acts 5-7: ADDITON)
 - ↑
 - ↑
 - ↑
 - ALTERNATIVE
 - ↓
 - ↓
 - * TOPIC SPECIFIC DETERMINANT (acts 8-9): Generic (act 8)
 - Explanatory specific with exemplification (act 9)

The first three acts of the above text form a generic-to-specific-to-generic sequence. The second act explains the meaning of a change being 'of a reform character'. The explanation consists of a specification of the measures constituting a reform and those not included in that notion. The third act signifies a return to the initial level of generality to enable topical development. By means of these three acts the topical idea, i.e. 'a social change with reform character' is introduced to the reader.

The rest of the text provides a discussion of the phenomenon in the framework of topic-specific associated concepts or determinants, i.e. the consistence/inconsistence of a reform with the nature of the existing system and its cumulative effects (acts 4 and 8). Acts 5-7 present three phenomena as examples of the generic proposition conveyed by act 4. As exemplification can be used also as a means of providing evidence for the validity of a certain argumentative evaluation, a generic - specific with exemplification sequence could also be interpreted to be argumentative. In the present case, however, the wider context suggests a non-argumentative interpretation of the sequence because the text as a whole shows a textbook approach in its account of the various types of social change. In addition, it can be assumed that the level of abstraction at which the propositional content of act 4 is presented necessitates an explanation to ensure a consistence between the meaning intended by the writer and that perceived by the reader. What has been said about the relation between act 4 and acts 5-7 applies also to acts 8 and 9. The states of affairs depicted in act 4 and 8 are understood as alternatives; hence the coding *alternative* between these acts.

A further example is provided below of the functioning of the explanatory specific with the following topic-resuming act. Example 30 introduces a discourse-topical phenomenon (i.e. 'Unlike the other immigrant groups the blacks do not help themselves but ask the federal government for special privileges') in the strategic form of a cited question. As the strategic question suggests, in the textual comment the writer sets out to provide a causal explanation for the phenomenon.

(30)

1. *'Why don't 'they' act as 'we' did?'*
2. *This has long been the cry of well-meaning white Americans who simply can't understand why blacks don't repeat the classic immigrant experience.*
3. *Our parents, or grand parents came here desperately poor, with nothing more than strong arms and high hopes.*
4. *They worked their way out of poverty.*
5. *They didn't go whimpering to the federal government, asking for special privileges.*
6. *Why don't the blacks do as we did? ... (Harrington, Michael 1984, Superfluous People, in Attila et al. 1992)*

The passage illustrates how the meaning of a question can be clarified through explanatory specification. The question contains such normally anaphoric references as 'they', 'we' and 'acting as we did'. In this context these references are indefinite in the sense that they are void of contextual meaning because the reader does not yet know what they refer to. Act 2 clarifies these expressions by providing the respective points of reference, i.e. 'we' is specified as 'well-meaning white Americans', 'they' as 'blacks', and 'acting as we did' as 'the classic immigrant experience'. Acts 3-5 further on specify the meaning of the phrase 'classic immigrant experience' by giving an account of the content of the experience and matching it with an opposite alternative. Thus acts 2 and 3-5 provide a two-staged explanatory specification for the initial cited question. When a point of reference has been pointed out for the pronouns 'they' and 'we' the question when repeated in act 6 is generic in relation to the preceding explanatory acts (acts 2 and 3-5) in that it refers to the behaviour of the white immigrant groups in generic terms as 'doing as we did', while acts 3-5 give a specified account of that behaviour. In view of the above considerations, the following text structure representation is suggested:

(A30)

1. INTRODUCTION OF TOPICAL PHENOMENON WITHIN CITED QUESTION (acts 1-6):
 Generic (act 1) - Explanatory specific (acts 2-5): Labelling generic (2) - Explanatory specific (act 3-5: act 4 SUCCESSION to act 3, act 4 REPLACEMENT, act 5 REJECTION) - Topic resuming generic (act 6)

A reversed form of the pattern discussed above i.e. *an explanatory specific - labelling generic strategy* is illustrated below:

(31)

1. *As a child grows up, he learns how to behave in ways which are appropriate to the society into which he is born.*
2. *That is to say, he acquires the patterns of behaviour which are accepted as normal in his society.*
3. *This process of social learning is generally referred to as socialization.*
4. *By socialization, then, we mean the process whereby individuals learn the rules, values and practices of the society in which they live. (Allen and Widdowson 1978:30)*

Acts 1, 2 and 3 introduce 'socialization' as the topical phenomenon of an expository passage to follow. The introductory sequence makes use of an explanatory specific - labelling generic strategy. The reversed order of the members seems to be of special strategic significance in cases where a new concept or a concept with a new meaning in a given context is introduced to the reader. If the

specific reference did not come first, then a concept whose meaning might be unknown to the readers (such as 'socialization' in the present sample) would occupy the thematic position in the introductory act. This would be contrary to the conventions of the theme-rheme logic, which presume that the thematic position should be held by a concept known by the writer and the reader alike. Thus it can be concluded that explanatory specific - labelling generic strategy is a device that can be used to avoid initial confusion when a new concept or one with some context-specific meaning must be introduced as a tool for transferring further information. The text structure of the above passage can be represented as follows:

(A31)

1. INTRODUCTION OF TOPICAL PHENOMENON (acts 1-3):

Explanatory specific (act 1)-Reformulation (act 2)-
Labelling generic (act 3)

2. ELABORATION (acts 4-):

* DEFINITION (act 4)

* ...

The *definition* of the topical phenomenon in act 4 might be seen as paraphrasing the information provided in acts 1-3. Yet it is not coded as a mere reformulation because it is understood to provide the formally correct definition that conventionally occupies a slot within the elaborative frame. The opening acts are understood to provide a working definition to get the reading started.

5.2 Inferential strategies: Evidence-conclusion and assertion-evidence-conclusion

If we accept the basic premise that the strategically unmarked form of an argumentative message consists of an *evaluation-basis sequence*, the study of argumentative texts leads us to the conclusion that there are a few strategic alternatives for the communication of the basic message. These alternatives are seen as strategic variation because the text in all the alternative forms conveys the same propositional content and illocutionary purpose as it would if it were transformed or reduced to its basic message-structural elements. The alternative ways for communicating an evaluation and its basis are the *evidence-conclusion* and *assertion-evidence-conclusion* sequences. In the description of strategic procedures the term *assertion* is used to denote an evaluation, and *evidence* to refer to the information that justifies that evaluation. The term *conclusion* denotes in this study an inference that is drawn from evidence. ⁴These different terms that semantically overlap with the terms *evaluation* and *basis* are needed to point out the structural alternatives for conveying an argumentative message.

The evidence - conclusion strategy deviates from the bulk of the patterns defined as message strategies in that it does not produce any redundancy. Yet, because it provides an alternative way of conveying a message without its content being tampered and is assumed to exert a distinct reader-related effect, it seems to be justified to include it in message-strategies.

By presenting evidence first the evidence - conclusion strategy enables the reader's participation in the inferential process and allows him his own judgement. Thus, in addition to being a statement of a newly established fact, the conclusion may also articulate an agreement by the

⁴ In addition to the meaning given to the term conclusion in this study, it is used by Tirkkonen-Condit (1985:67-68) also for the second act of the inverse form of a sequence consisting of a statement of a phenomenon and its causal explanation. In this study the inverse of the statement-causal explanation sequence is dealt with as a logical cause-consequence structure (see section 6.4.4). Very often, however, causal semantics is involved in justification so that the cause of a phenomenon serves as a factor that justifies an assertion about the existence of that phenomenon.

reader and the writer as to the meaning of the evidential information. By letting the reader participate in the process of inference, the writer assumes a less authoritative and more co-operative attitude. In addition, as pointed out earlier, a further reader-attracting effect may be created by placing such specific-level illustrative information as evidence often is in the opening position. The conclusion is often explicitly signalled by phrases like *on these grounds, thus, as a result, consequently, therefore, so I claim that*, etc. The passage below shows how a basic evaluation - basis message is communicated by means of the evidence-conclusion strategy:

(32)

1. *The guests at the new al-Maseera Hotel in Tobruk were reduced to drinking soda to quench their thirst the other day.*
2. *Reason: a truck that was to bring bottled water never appeared.*
3. *Turn on a water faucet in Tobruk- or almost any other place along Libya's Mediterranean coast- and undrinkable, salty water trickles out.*
4. *In some sections of Tripoli, the capital, the salt level in tap water is 10 times as high as the safe limit for human consumption; in other parts of the city, the tap water does not flow at all.*
5. *(5.1) Despite Colonel Muammar Gaddafi's boasts about the technological achievement represented by the recently inaugurated Great Man-Made River irrigation scheme, which brings water to the coast from aquifers 2,00 km to the south, (5.2) his 'Green Revolution' is steadily decaying. (Time, September 23, 1991)*

Acts 1-4 introduce three empirical facts. There is an interest arousing specific - generic relation between acts 1-2 and acts 3-4. A conclusion is then drawn in act 5 from the facts presented in acts 1-4. Act 5 also incorporates a concessive relation. This means that a state of affairs is referred to (ineffectual cause, act 5.1) that, contrary to expectations, does not prevent the validity of the conclusion in act 5.2. The beginning of the description of an inferential strategy is marked with a double slanting stroke (/). The passage shows the following structural patterning:

(A32)

1. EVALUATION(act 5): INEFFECTUAL CAUSE(act 5.1) - CONCESSION (act 5.2)
2. BASIS (acts 1-4): Interest arousing specific (acts 1-2: act 2 CAUSAL EXPLANATION to act 1) - Generic (acts 3-4: act 4 ADDITION to act 3)
 - // Evidence (acts 1-4): Interest arousing specific (acts 1-2: act 2 CAUSAL EXPLANATION to act 1) - Generic (acts 3-4: act 4 ADDITION to act 3)
 - Conclusion (act 5): INEFFECTUAL CAUSE(act 5.1) - CONCESSION (act 5.2)

In an *assertion-evidence-conclusion sequence* the propositional contents of assertion and conclusion coincide. Two different terms are used only to indicate the functional difference of the respective speech acts in the inferential process. The corresponding elements in message-structural representation are evaluation for assertion/conclusion and basis for evidence. The strategy is expected to increase the persuasive power of the text because it involves two different processes of justification. The more passive process of judging the validity of the assertion on the basis of the evidence provided is followed by another, leading the reader to draw a conclusion from given facts. In addition, the assertion - evidence - conclusion strategy may also contribute to the comprehensibility of the message by repeating the argumentative evaluation in a paraphrased form. The strategy is illustrated by the sample below:

(33)

1. *The problem of representation is central to all discussions of the functions of the legislatures or the behaviour of legislators.*
2. *For it is through the process of representation, presumably, that legislatures are empowered to act for the whole body politic and legitimized.*
3. *And because, by virtue of representation, they participate in legislation, the represented accept legislative decisions as authoritative.*
4. *It would seem, therefore that legislation and representation are closely related.* (Wahlke et al. 1962:267)

The propositions stated in acts 2-3 justify the assertion made in act 1. In addition, act 4 is a conclusion made on the basis of acts 2-3, and its propositional content coincides with that of act 1. Thus the information conveyed by the passage does not increase as a result of the incorporation of act 4. The information content of the text consists of an evaluation (act 1 or act 4) and its basis (acts 2-3). The text structure of the passage can be represented as follows:

(A33)

1. EVALUATION (act 1 or act 4) - BASIS (acts 2-3: act 3 ADDITION to act 2)
// Assertion (act 1) - Evidence (acts 2-3: act 3 ADDITION to act 2)- Conclusion (act 4)

In the coding of examples 32 and 33 above an evaluation and a basis has been identified to point out their equivalence to the components of the strategic evidence - conclusion and assertion - evidence - conclusion patterns. In practical analysis it is, however, sufficient to code the strategic manifestation of the message only (this means in the above cases the description following the double slanting stroke). This is preferable because for inferential strategies the dual coding of the elements of the message and its strategic realization overcomplicates text-structural description. The lower case used for coding the functions indicate their strategic character. Otherwise, it is for the analyser to keep the message behind the strategy in mind.

5.3 Reformulation

The term *reformulation* is used here to denote a proposition that restates the content of the previous proposition by using synonymous expressions (see also Tirkkonen-Condit 1985:93 for the interactional role of 'reformulation' and Longacre 1983 for 'equivalence paraphrase'). The primary pragmatic purpose of reformulation is to ensure that the message will be fully understood by the reader. Its clarifying effect is, however, restricted to the linguistic expressions used. The second chance of understanding the message that is communicated to the reader in this way contains either a paraphrase for the whole of the previous proposition or synonymous expressions for some of its lexical items, but does not explain the writer's meaning by reference to the logic involved. The referents produced by a reformulation represent the same order of informative significance as those provided by the preceding proposition. Grimes (1975) points out that the relation prevailing between a proposition and its reformulation is equivalent or symmetric in that either member of the relation can function as a referent for further comments.

Reformulation may also help the reader to spot the main ideas of the text because repetition makes them stand in strong relief against others. Moreover, it seems obvious that reformulation is used in fiction as a stylistic device which contributes to the richness of fictive expression.

Reformulation is typically signalled by lexical clues like *in other words*, *that is to say*, or *this means that*:

(34)

1. *As a child grows up, he learns how to behave in ways which are appropriate to the society into which he is born.*

2. *That is to say, he acquires the patterns of behaviour which are accepted as normal in his society.*

(Allen and Widdowson 1987:30)

To indicate that the reformulation above (act 2) is subordinate to the message-structural introduction function the following coding is used:

(A34)

1.INTRODUCTION OF TOPICAL PHENOMENON (acts 1-2): act 2 Reformulation of act 1

5.4 Metastatement

Metastatement is here understood as an explicitly strategic speech act where the writer steps out of the field of topical development and addresses the reader directly in matters concerning the medium of communication itself, i.e. the text. The strategic purpose of the writer's direct address seems to be twofold; first, to improve the reader's ability to process the text by providing previews, explanations of the writer's compositional decisions, or other text-directed comments, and second, to contribute to the accessibility of the text at an interpersonal level by establishing explicit writer-reader interaction. As these purposes imply, the distinctive quality of metastatement lies in its tendency to explicate the writer's text-managing purposes. It can even go as far as revealing its own purpose as the conclusion of a metatextual extract does below:

(35)

Your guide, route and mode of travel presented, it remains only to wish you an interesting and enjoyable journey. (Hutchinson and Waters 1987:2)

The above notion of metastatement which suggests that it constitutes a text-structurally distinct speech act is narrower than the notion of 'metadiscourse' as defined by Vande Kopple (1985) and, following him by Markkanen, Steffensen, and Crismore (1990). Markkanen, Steffensen, and Crismore's define metadiscourse as below:

— we use the term metadiscourse to refer to linguistic items that explicitly serve the interpersonal and textual functions, i.e. to the linguistic material which 'does not add propositional information but which signals the presence of the author' (Vande Kopple 1985). Metadiscourse helps readers organize, interpret and evaluate the information in a text.

and point out that

no linguistic criteria can be used in the identification of metatextual items since it can be realized through all kinds of linguistic units, ranging from affixes to whole clauses.

More specifically, Vande Kopple (1985) distinguishes the following subclasses of metadiscourse as reported by Markkanen, Steffenson and Crismore (1990):

1. *TEXT CONNECTIVES*, which help readers recognize how texts are organized and how different parts of the text are connected to each other functionally and semantically (e.g. *first, next, however, but*).

2. *CODE GLOSSES*, which help readers grasp and interpret the meanings of words and phrases (e.g. *X means Y*).
3. *ILLOCUTION MARKERS*, which make explicit what speech act is being performed at certain points in the text (e.g. *to sum up, to give an example*).
4. *NARRATORS*, which let readers know who said or wrote something (e.g. *according to Einstein*).
5. *VALIDITY MARKERS*, which assess the truth-value of the propositional content and show the author's degree of commitment to that assessment, i.e. *HEDGES* (e.g. *perhaps, might*), *EMPHATICS* (e.g. *clearly, obviously*), *ATTRIBUTORS* (e.g. *according to Einstein*), which are used to guide readers to judge or respect the truth-value of propositional content as the author wishes.
6. *ATTITUDE MARKERS*, which are used to reveal the writer's attitude toward the propositional content (e.g. *surprisingly, it is fortunate that*).
7. *COMMENTARIES*, which draw readers into an implicit dialogue with the author (e.g. *you may not agree that, dear reader, you might wish to read the last section first*).

Metastatements as defined in this study coincide with 'commentaries' in Vande Kopple's categorization, but they are further specified, as it is assumed that the writer's direct address to the reader informs the reader of various text-related considerations. Mauranen and Ventola (1992) have also adopted this view as they refer to 'metatext' as text which is commenting on itself.

Metastatements present a problem for text-structural analysis as far as text structure is defined as consisting of the functions that the propositions/groups of propositions of a text show in relation to their immediately or intermediately preceding propositions/group of propositions and the discourse topic. The problem arises from the fact that as a metastatement does not relate to the message of the text its relation to the preceding propositions (and the relation of the following proposition to preceding metatextual propositions) cannot be expressed in terms of semantic or pragmatic topic-related functions. Because the purpose of metastatement is to manage the text, its function in relation to the preceding (and following) text can only be defined by reference to the kind of the text, i.e. meta/non-meta. This means that a part of the text can be identified as a metastatement only in relation to another part which contributes to discourse-topical development and is accordingly non-metatextual.

Due to its text-managing purpose a metastatement typically contains cataphoric references and is frequently realized through commissive and explanatory speech acts. These acts arise from the writer's evaluation of the state of text management, not from the semantics of the message itself. When metastatements involve a commissive or explanatory purpose they are coded as *metatextual commitments* or *metatextual explanations* (Lower case is used for coding to indicate that these functions are message-strategic.). The sample below consists of two metatextual speech acts joined through a cause-consequence relation. It provides a typical example of the writer's commitment to a certain plan in his writing:

(36)

1. In what follows, the order of presentation is determined by convenience for the reader, as far as this can be judged.

2. Thus the first description of the texts which is actually presented in this study will be the PS analysis in chapter 2. — (Tirkkonen-Condit, 1985:19)

The coding can take the form:

(A36)

Metatextual commitment (acts 1-2):CAUSE (act 1) - CONSEQUENCE (act 2)

In addition to the above type of purely metatextual propositions, whose relation to the preceding and following propositions can only be expressed by reference to the meta/non-meta quality of the text, also propositions with regular message-structural functions may occasionally establish explicit writer-reader interaction with references to the text itself. Such propositions are coded by reference to their message-structural function, but the adjective 'metatextual' is placed in front of the name of the message-structural function, e.g.

(37)

1. *A major theme that recurs is that we should beware of over-simple contrasts between 'the middle class' and 'the working class'.*
2. *There are two reasons for this warning.*
3. *First, — (King, R. and Raynor, J 1981, The Middle Class, in Attila et al. 1992:27)*

Upper case is used for coding to indicate that such propositions are message-structural in spite of the metatextual element involved in them:

(A37)

1. METATEXTUAL REPORTED INSTRUCTION (act 1)
2. REPORTED BASIS: Text organizing generic with enumeration (act 2) - Specific with enumeration (act 3)

Moreover, metatextual commitments typically occur in text-opening positions in which they introduce the discourse topic, while giving an outline of the organization and propositional content of the whole text. Because the introductory function has priority over message-strategic considerations in text-structural analysis, such a proposition/group of propositions is coded, accordingly, as a text-structurally marked introduction, i.e. *metatextual introduction* (see section 4.2.2). Upper case is used to point out that the function is message-structural.

5.5 Question and answer

There are two considerations which can be used to argue for the inclusion of the *question - answer* sequence in message strategies. First, a textual question that is answered by the writer himself serves reader-oriented communicative purposes. The question - answer approach enables the writer to inform the reader of his text-structural plan. Questions necessarily suggest that answers are to follow, and the reader may assume that the answers to be given to the questions presented by the writer are what the writer intends to say about his topic (or a topical node). Thus questions act as 'precursors' of the message to be conveyed by the text. Questions may also be used to highlight and emphasize main ideas. Moreover, the cognitive effect of the question - answer strategy on the reader might be one of evoking a problem-solving process. A question always presents a problem because it points out a gap in knowledge. Once a question has been stated, there is a challenge also for the reader to find an answer. As a result the reader may feel more actively involved in the process of getting informed.

Second, the question of a question - answer sequence is dispensable. Instead of using a question - answer sequence *Why did Caesar invade the Pretanic Isles? He did it because ---* the writer might make a statement *Caesar invaded the Pretanic Isles because —*. What is problematic, however, in categorizing the question - answer sequence as a message strategy on the basis of the dispensability criterion is that it does not contain an informatively empty member (as message

strategies in the bulk of the cases do), because questions contribute also to the transmission of the propositional content of the text (see Grimes 1975:66 for the informative capacity of questions). This means that while asking for information about a certain aspect of a phenomenon, they - as a result of the way they are formulated - simultaneously provide information about some other aspects of the same phenomenon (e.g. the question *Is the Bosnian war still going on?* implies that there has been a war in Bosnia). The strategic nature of the question in a question - answer sequence can be seen, however, in that theoretically the question could be separated from the propositional content it carries, e.g. the sequence *Why did Caesar invade the Pretanic isles? He did it because* — is transcribable as *Caesar invaded the Pretanic isles. Why did he do it? He did it because* —. As the message of the above sequence could also be communicated in the form *Caesar invaded the Pretanic isles. He did it because* — it is clear that the question is dispensable as a speech act and, accordingly, can be looked at as a message-strategic construction.

A set of questions at the beginning of a text can function as an introduction (see *introduction with question* in section 4.2.2). While the information contained in these questions amounts to an introduction of the discourse-topical idea, the questions themselves presuppose answers that constitute the major message-structural components of the text, as in (38)

(38)

The Education of Taste

1. *Wherein lies the value of educating aesthetic taste?*
2. *Why should we include in public school curricula courses designed to teach children to appreciate fine music, paintings and poetry?*
3. *The answers given by art educators in justifying their programmes often involve extravagant claims relating their curricula to broad educational goals.*
4. *Some of the simpler answers are problematic as well.*
5. *It is worth raising the question again for the light that attempts to answer it throw on the nature of art itself.--- (Goldman 1990: 105)*

After having read the above text-opening passage, the reader knows that aesthetic education has some value and that the discourse topic of the text is 'the source of the value of aesthetic education'. By repeating the opening question (in an indirect reformulated form in act 5) after having criticized answers given to it by other people, the writer implies that he is going to argue for a position of his own, i.e. an argumentative text structure is to follow.

The global structure of the whole article opened by the above passage represents the *introduction of topical concept - reported evaluation - rejecting evaluation - contrast: correcting evaluation - basis* variant of the argumentative text structure. As in the case of other text-structurally marked introductions whose strategic effect cuts across the whole text, so also in the passage below the question - answer strategy is indicated by coding it as an introduction with question while the comment part is left uncoded in terms of the strategy in question, except for a repetition of the strategy in the comment part of the sample below:

(A38)

1. INTRODUCTION OF TOPICAL CONCEPT WITH QUESTION (acts 1-2): Topic controlling generic (act 1) - Specific (act 2)
2. REJECTING EVALUATION OF EMBEDDED REPORTED EVALUATION OF TOPICAL CONCEPT (acts 3-4:act 4 ADDITION to act 3)
 ↑
 CONTRAST

↓

3. CORRECTING EVALUATION OF TOPICAL CONCEPT (acts 5 - n): Reformulation of Question WITH EMBEDDED CAUSAL EXPLANATION (act 5) - Answer (act n)

Had the above message been unmarked in terms of strategy, a paraphrase like the one below could have been used:

(39)

1. *Art educators claim that the value of educating aesthetic taste lies in that broad educational goals can be attained in that way. (INTRODUCTION OF TOPICAL CONCEPT WITH EMBEDDED REPORTED EVALUATION)*
2. *This is an extravagant claim. (REJECTING EVALUATION)*
3. *The value of educating aesthetic taste lies rather in. —. (CORRECTING EVALUATION)*
4. *(BASIS)*

The analysis of the above passage shows that the strategic effect of a text-opening question amounts to a preview of the message-structural plan of the text with a simultaneous introduction of the topical idea.

The introductory and previewing functions need not, however, be combined. In the following extract, questions are not used to bring out the topical concept, but they give the organizational outline of the text by focusing on the attributions and other determinants of the discourse-topical idea that are going to be dealt with within the descriptive/elaborative frame of the textual comment:

(40)

1. *Journals, conferences, galleries and coffeehouses are spilling with talk about post-modernism.*
2. *What is this thing, where does it come from, and what is at stake? (Gitlin, Tod 1988. Hip-Deep in Post-modernism, in Koskinen et al. 1990:130)*

The text structure can be described as below:

(A40)

1. INTRODUCTION OF TOPICAL PHENOMENON (act 1)
2. ELABORATION (acts 2-n+3):
 - * DEFINITION (acts 2 and n): Question (act2) - Answer (act n)
 - * ORIGIN (acts 2 and n+1): Question (act 2) - Answer (act n+1)
 - * TOPIC SPECIFIC DETERMINANT (acts 2 and n+3): Question (act 2) - Answer (act n+3)

Any kind of message-structural function can be focused on by means of an anticipatory question (see Enkvist 1975 for the capacity of questions to focus on various syntactic elements). In the following passage a causal explanation (act n+4) is emphasized by means of a preceding message-strategic question:

(41)

1. —
- n. To their highly civilized contemporaries of the Graeco-Roman world these islanders had no special significance.*

n+1. Even their name -Pretani- was not certain.

n+2. It is likely that Caesar, whose expedition started from a region near Bolougne inhabited by people known as Britanni, thought that the Pretanic name was a mistake and corrected it to Britannia.

n+3. Why then did Caesar find it necessary or at all events worth while to invade the Pretanic isles?

n+4. Probably, like most conquerors, he found himself drawn on from one frontier to another; an unsubdued territory within sight of the north coast of Gaul might become a center of revolt or at least a source of border raids. (Woodward 1962:2)

The example is an extract from the middle of the text. As far as it extends, however, its discourse-topical position seems to be occupied by *the Pretanic isles*. Besides indicating a gap in knowledge, the question of act n+3 also provides the information that *Caesar found it necessary and worth while to invade the Pretanic Isles*. Act n+4 then communicates a causal explanation for that reported evaluation. In the form of a statement the same causal relation could have been expressed as follows:

(42)

However, Caesar found it necessary and worth while to invade the Pretanic Isles. This was probably because, like most conquerors, he found himself drawn on from one frontier to another;—.

Slightly less emphasis is placed on the causal relation in the latter format. The structure of the whole passage can be described as below:

(A41)

1. INTRODUCTION OF TOPICAL PARTICIPANT (act 1) —
2. EVALUATION OF TOPICAL PARTICIPANT: INEFFECTUAL CAUSE to act n+3 (act n) - BASIS (acts n+1-n+2): Labelling Generic (act n+1) - Explanatory specific (act n+2)
3. MEASURE ATTRIBUTION TO TOPICAL PARTICIPANT WITH EMBEDDED REPORTED EVALUATION: CONCESSION to act n: Question (acts n+3) - CAUSAL EXPLANATION: Answer (n+4)

5.6 Summarizing strategy

Summary as a message-strategic function is the concluding sentence or paragraph of a larger sequence which does not incorporate an inferential statement but summarizes the main content of the text or the part of the text to which it is related.

Van Dijk and Kintsch (1983) use the concept of macro structure to refer to the global content of a text. A summary is a representation of the macro structure of a text at a certain level of generalization. The macro structure of a text is, according to van Dijk (1977, also van Dijk and Kintsch 1983:190), derived from the text base through the application of four macro rules: zero, generalization, construction, and deletion. This means that certain propositions in the text are informatively indispensable and are included in the summary as such. Others, again, are combined on the basis of some common denominator into a more general statement and/or accommodated to a relevant framework of knowledge. Propositions of less global significance are left out. In the present system the message-strategic summary function is understood to show the above qualities in relation to the preceding text or sequence.

When the concluding paragraph of a whole text or a part of a text presents a summary of what has been said before, it means that the above macro-level cognitive operations have already been

performed for the reader. Thus it can be assumed that the purpose of the summary is to help the reader to recognize the ideas that are at the top of the informational hierarchy of the text. Moreover, as summarizing involves paraphrasing, generalizing, and explication of text-structural relations it can also be expected to contribute to the comprehensibility of the text. In addition to the above considerations, also the fact that summary does not add anything significant to the information already provided, justifies its classification as a message strategy.

The passage below shows a concluding summary (act 8) with its propositional content reflecting the process of van Dijk's macro-rule application:

(43)

1. *The practice of law in relation to matters which are not strictly limited to national laws is very much a question of know how.*
2. *A fairly simple matter can drag on for months and perhaps never be solved in a satisfactory way if one of the lawyers involved in an international matter does not know from whom he should ask advice in another country, and which questions he should ask.*
3. *A lack of minimum language knowledge or of knowledge of the basic structures of the legal system in the other country can also complicate matters.*
4. *The lawyer who has a general prior knowledge of the other country's legal system and who knows which colleague to contact can be of great value to his national client.*
5. *Likewise a practising lawyer who is advising foreign clients or foreign colleagues on matters relating to the laws of his own country can be of great value not only in relation to a strict interpretation of the law but also in the role of a wise counsellor explaining how the country functions in the areas relevant to the foreign client.*
6. *Experience shows that many international corporations not only seek good lawyers but such corporations will also try to find law firms with lawyers who can advise them on 'policy matters' so that they can avoid behaving in a way which may not be contrary to the law, but which is perhaps contrary to the customs of the country.*
7. *Complicated matters often require not only a thorough knowledge of the law but also experience in what is the best way of negotiating with public bodies and sometimes members of a government*
8. *(8.1) The lawyer who out of personal interest or because he is more or less compelled to take an interest in a more international practice can be of great value to his clients whether they come from his own country or from other countries, (8.2) if he not only has a thorough knowledge of the laws of his own country but also has this special know how and ability to deal with what I would call the fringe problems of legal matter (Defensor Legis 1/1984)*

The overall text-structural pattern of the above passage is reducible to the form:

(A43)

1. EVALUATION X (act 1 or act 4) - BASIS (acts 2-3: ADDITION) // Assertion (act 1) - Evidence (acts 2-3: ADDITION) - Conclusion (act 4)
 ↑
 MATCHING X AND Y
 ↓
2. EVALUATION Y (act 5) - BASIS (acts 6-7: CAUSAL EXPLANATION)
3. Summary of acts 1-7 (act 8): CONDITION (act 8.2) - CONSEQUENCE (act 8.1)

The summary can be shown to be an outcome of a reduction process based on the macro rules. The two major evaluations of the text as expressed in acts 4 and 5 (act 4 is a conclusion whose propositional content coincides with that of act 1, if formulated at a higher level of generality) are

combined into one in act 8. This procedure can be seen as a manifestation of the application of the 'construction' rule. The first two of the professional requirements of an international lawyer (act 8.2: *a thorough knowledge of the laws of his own country* and *this special know how*) are produced verbatim in the summary. This indicates a use of the 'zero' principle to the key ideas. The formulation of the last of the international lawyer's qualifications (act 8.2: *ability to deal with what I would call the fringe problems of legal matters*) is an outcome of the generalization process which is essential for summarizing. The phrasing *ability to deal with what I would call the fringe problems of legal matters* is derived from the previous more specific formulations *knowledge of the basic structures of the legal system in the other country* (act 2) and *knowledge of how the country functions in the areas relevant to the foreign client* (act 5) through generalization. The requirement of *minimum language knowledge*, however, has not obviously been essential enough in the writer's hierarchy to be mentioned in the summary, and so it has been deleted. The comparison made above between acts 1-7 and act 8 indicates that what is presently coded as a summary function is consistent with van Dijk and Kintsch's definition of 'macro structure'.

As pointed out above the summary function relates directly either to all of the preceding propositions or to a preceding group of propositions. This is indicated in coding by pointing out the acts that are covered by the summary (see the coding of act 3 above).

5.7 Concluding remark on message strategies as an element of text structure

The purpose of the above discussion on message-strategic phenomena has been to show that text-pragmatics-based structural phenomena can be separated from those accountable for the formation of the message itself. The information conveyed by message-strategic propositions is either redundant, metatextual, or communicated within an alternative text-structural pattern. Accordingly, it seems to be an inevitable conclusion that as such propositions do not serve any informative purpose they must serve a strategic one. As indicated by the text extracts studied in this chapter, message-strategic propositions may increase the predictability of the text, place special emphasis on certain pieces of information, provide explanations for the concepts used, arouse the reader's interest in the text, or involve the reader more personally in a process of reasoning. Thus, although message-strategic phenomena entail a great deal of analytical complexity, it seems to be justified to assume that they contribute to the comprehensibility, convincibility, and attractiveness of the text, too. Providing the text with such qualities is expected to be an objective that all writers have in common.

Moreover, the implication is that text-structure analysis should benefit from the message strategy/message structure distinction. Seeing text structure from the two perspectives of message structure and message strategies should help the reader to recognize the message from beneath the auxiliary textual elements.

6 Message structure

Message structure is a text-semantics based perspective of text structure analysis. It consists of the relations by means of which the semantically indispensable propositions of the textual comment are directly or indirectly connected to the discourse topic and to each other. These comment propositions relate to the discourse topic and to each other either as *message-core functions* or as *logical functions*. Message-core functions are operational and express what the writer is doing to inform the reader about his topic. Logical functions involve propositions whose semantics in relation to the discourse topic or their adjacent propositions corresponds to the meaning of clause-connecting conjunctions, e.g. condition, reason, consequence, addition.

A brief overview of the logical functions identified for the present model will be provided in the following two sections. A thorough survey of clause-connecting semantics-based text-structural relations will not be included, because the area has been widely studied in text-linguistic literature (e.g. Enkvist 1975, van Dijk 1977, Longacre 1983, Winter 1985, Leddo and Abelson 1986, Schank 1986, Reed 1987, Abelson and Lalljee 1988) and there is general agreement on the various types of such relations. Thus it is unlikely that such survey would bring any new aspects to text-structural study

6.1 Logical functions

One of the major premises of the present model is that the message structure of a text, i.e. its textual topic-comment structure, can be elicited as the writer's answer to the two basic compositional questions *What is this text going to be about?* and *What is going to be said about the topic?* The first of these questions elicits the discourse topic. The writer's answer to the second question brings about the various *message-core functions* of the textual comment and *the logical functions*. Logical functions are tied to the propositional semantics of the text because they carry semantic messages which correspond to those of clause-connecting conjunctions. They become necessarily revealed when, as an answer to the second question, the content of the text is reduced to a terminal complex macro proposition.

The notion of logical function/relation covers both clause-relations and the corresponding relations combining sentences or sequences of sentences. Clause relations must be included because sentence-internal logical relations are occasionally also text-structurally significant (see e.g. examples 66 and 67). In spite of the fact that the message-core functions and the logical functions both contribute to the construction of the message, they are essentially different in that while the former point out the cognitive operations by the writer that produce the message, the latter provide for the semantic logic of that message. Logical functions are seen as exerting a structuring effect on the flow of textual information, because their semantics provides means for assigning further functional labels to various parts of the text.

Logical relations frequently account for the adjacency of the top-hierarchy message-core propositions of the textual comment. This means that such propositions constitute logical functions in relation to each other. To elicit the logical relations which serve the above purpose, the specific question *How do the propositions of the textual comment relate to each other?* can be singled out of the basic question *What is said about the topic?*. Example 44 illustrates a logical relation connecting two top-hierarchy message-core functions:

(44).

1. *Mr X is a middle-aged man.*
2. *He is unemployed and homeless.*

3. *This is because he is a drug addict.*

The discourse topic of the sequence is a participant, i.e. 'Mr X'. While act 3 provides a causal explanation for the attribution assigned to the topical participant in act 2, it also simultaneously adds the attribution 'He is a drug addict'. Thus the following pattern of text structural representation is proposed:

(A44)

1. INTRODUCTION OF TOPICAL PARTICIPANT (act 1)
2. ATTRIBUTION TO TOPICAL PARTICIPANT (acts 2-3): act 3 CAUSAL EXPLANATION to act 2

It is also possible for logical functions whose semantics involve subordination to relate subordinatively to a higher-level message-core function as in example (45):

(45)

1. *Mr X is a lorry-driver.*
2. *He became unemployed two months ago.*
3. *This was because the firm he was working for went bankrupt.*
4. *He has since been trying to earn some money by redecorating houses.*

(A45)

1. INTRODUCTION OF TOPICAL PARTICIPANT (act 1)
2. EVENT ATTRIBUTION TO TOPICAL PARTICIPANT (act 2)- CAUSAL EXPLANATION (act 3)
3. ACTION ATTRIBUTION TO TOPICAL PARTICIPANT: SUCCESSION TO ACT 2 (act 4)

Moreover, logical functions may link directly to the discourse topic as in the following extract:

(46)

1. *Unemployment and homelessness are rapidly increasing.*
2. *This is because the economy is in recession.*

(A46)

1. INTRODUCTION OF TOPICAL PHENOMENON (act 1)
2. CAUSAL EXPLANATION (act 2)

There are a few occasions where a logical relation coincides with an operational message-core relation and is coded according to the latter. In an expository context, logical functions which relate directly to the discourse-topical idea are included in the model as items of the elaborative frame (see section 6.3.2). This is because they are seen as inherently pertaining to the set of conceptual tools by means of which abstract topical ideas can be dealt with. Moreover, a causal logical relation may exist between an argumentative evaluation and its basis (see 6.3.3.1), between an instruction and its basis (see 6.3.3.1), and also between motivation and instruction (see 6.3.5). The coding, however, is done

by reference to the respective message-core function. This is because the explanatory power of a message-core relation seems to override that of a logical one. Yet, occasionally, identifying a particular logical relation may help identify a particular co-existing message-core relation, or at least it may confirm one's analysis of such message-core functions.

Although the semantics of logical relations corresponds to that of clause-connecting conjunctions, they are not usually signalled by those conjunctions when connecting sentences or sequences of sentences. Instead, they may be explicated by means of relevant adverbials such as *consequently, due to, as a result, in spite of, however* etc. or content words such as *reason, alternative, condition, contrast* etc. (see Winter 1977 for details of text-structurally significant content words, i.e. 'Vocabulary 3').

Textual logical relations have been identified here by reference to the categories of clause-connecting conjunctions. An alternative approach would have been to study discourse connectives (i.e. adverbials of the above kind, which signal various text-structural relations). The category includes semantic derivatives of clause-connecting conjunctions but also adverbials pointing out text-structural relations, which in the present system are categorized as either strategic or message-core relations. Clause-connecting conjunctions were preferred to discourse connectives as a source for identifying logical text-structural relations for two reasons. First, the purpose was to identify the basic types of logical conjunction, which seem to appear both between clauses within sentences and between sentences and sequences of sentences. Clause-connecting subordinating and co-ordinating conjunctions can be regarded as natural-language derivatives of the pure logical relations of conjunction, alternation, and implication, by means of which formal logic operates (Longacre 1983). Discourse connectives, on the contrary, are less precise in character and a contextual interpretation is often needed before a correspondence to a clause-connecting conjunction can be recognized. Second, as the focus of interest in the present study is on identifying the basic semantics involved in logical textual co-ordination and subordination and not on the various ways in which these relations are signalled, clause-connecting conjunctions, which are finite in number, seem to offer an advantage over discourse connectives in that they present a clear-cut area for study. Discourse connectives do not constitute such precisely definable categories of relevant lexical items.

Following Enkvist's (1975) categorization of clause-connecting conjunctions (except for the category of 'consecutives', which has been excluded because it seemed that at the textual level of analysis it was not necessary to specify it within the category of causation) and in view of a few other studies of conjunctive semantics (Grimes 1975, van Dijk 1977, Longacre 1983, and Warner 1985) and the present definition of text structure, logical functions are identified as in table 2. For every category of conjunction clause-connecting conjunctions and discourse connectors are given. Moreover an example of each logical function is provided.

Table 2: Derivation of logical functions

Categories of conjunction	Logical functions
<p>Additive conjunction</p> <p>Conjunctions: <i>and</i></p> <p>Discourse connectors: <i>in addition to, also, besides, furthermore, moreover</i></p>	<p>ADDITION (<i>He is a pensioner. He lives with his wife and daughter</i>)</p> <p>HYPOTHESIS-AFFIRMATION (<i>I expected him to come by six. He appeared at the front door a quarter of an hour earlier</i>)</p>

<p>Temporal conjunction</p> <p>Conjunctions: <i>after, before, while, when</i></p> <p>Discourse connectors: <i>then, thereafter, up to now, hitherto, meanwhile, at the same time, references to the calendar system, season, hour of day or place</i></p>	<p>SUCCESSION (<i>A leading politician was gunned down in broad daylight. Weeks later, the brother of a former President was arrested as the mastermind of the murder.</i>)</p> <p>OVERLAP (<i>Arab and Israeli political leaders are committed to the Middle East peace process. Yet, in the meantime, mutual violations between the Palestinians and the Israeli go on.</i>)</p> <p>SETTING (1-n) (<i>He lived in Japan 15 years. During that time he became familiar with the intricacies of Japanese business life.</i>)</p>
<p>Causal conjunction</p> <p>Conjunction: <i>because, therefore, for, so, since, while</i></p> <p>Discourse connectors: <i>thus, hence, consequently, this is because</i></p>	<p>CAUSE-CONSEQUENCE (<i>The economy is in recession. Consequently, unemployment and homelessness are rapidly increasing</i>)</p> <p>CAUSAL EXPLANATION (<i>Unemployment and homelessness are rapidly increasing. This is because the economy is in recession.</i>)</p>
<p>Final conjunction</p> <p>Conjunctions: <i>so that, in order that, so as to</i></p> <p>Discourse connectors: <i>so, as a result, therefore, accordingly, thus</i></p>	<p>PURPOSE-RESULT (<i>His intention was to have a good night's sleep that night. So he left the pub early</i>)</p> <p>PURPOSE (<i>Every year the anniversary of the relief of the siege is celebrated in the town. This is done in order to remind the younger generation of the plight of their ancestors</i>)</p> <p>RESULT (<i>They want to remind the younger generation of the plight of their ancestors. Therefore the anniversary of the relief of the siege is celebrated in the town every year.</i>)</p>
<p>Conditional conjunction</p> <p>Conjunctions: <i>if, in case, unless, providing, provided</i></p> <p>Discourse connectors: <i>in that case, in the event of, otherwise</i></p>	<p>CONDITION-CONSEQUENCE (<i>The recession may not show any signs of being relieved by next winter. In that case the unemployment figures will go record high.</i>)</p> <p>CONDITION (<i>Unemployment figures may be record high next winter. This will be the case if the recession does not show any signs of being relieved</i>)</p> <p>CONDITIONAL EVALUATION (<i>If I drop this bomb, it will explode</i>)</p>
<p>Concessive conjunction</p> <p>Conjunctions: <i>although, but</i></p> <p>Discourse connectors: <i>yet, however, nevertheless, in spite of, notwithstanding, anyway, on the one hand - on the other hand</i></p>	<p>INEFFECTIVE CAUSE- CONCESSION (<i>A bomb exploded last night in Oxford street. Yet nobody was hurt.</i>)</p> <p>CONCESSIVE ASPECTS (<i>On the one hand, this situation calls for immediate action. On the other hand, time would be needed for inquiries</i>)</p>

<p>Adversative conjunction</p> <p>Conjunctions: <i>but</i></p> <p>Discourse connectors: <i>in contrast, on the contrary, conversely, however, yet, only, instead</i></p>	<p>CONTRAST (<i>Finland is considering of joining the EMU as soon as possible. Sweden, on the contrary, has decided to postpone the EMU for a few years.</i>)</p> <p>WISH-FRUSTRATION (<i>They thought they would have a comfortable room in a sea-side hotel. Yet, they were taken from the airport to an old dilapidated boarding house in a suburb.</i>)</p> <p>INTENT-FRUSTRATION (<i>He intended to come by train. Unfortunately, however, the railway workers went on strike that night.</i>)</p> <p>HYPOTHESIS-FRUSTRATION (<i>I expected him to come by six. He did not, however, turn up at all.</i>)</p> <p>RESTRICTION (<i>The metro station was empty. Only a couple of people were standing on the platform waiting for the next train.</i>)</p> <p>REJECTION-REPLACEMENT (<i>Sweden has not totally rejected the EMU. Instead it has postponed the date of its joining.</i>)</p>
<p>Disjunctive conjunction</p> <p>Conjunctions: <i>or</i></p> <p>Discourse connectors: <i>alternatively</i></p>	<p>HYPOTHESIS-ALTERNATIVE (<i>It is still possible that the earth Summit will be one of those landmark events that change the course of history. Or it could end up to be a diplomatic disaster of global proportions.</i>)</p> <p>ALTERNATIVE (<i>After the comprehensive school, you can continue your education at a senior high school. Alternatively, you can choose vocational training.</i>)</p>

Only the latter member of the logical relation has been identified as a logical function in cases where the first constitutes a text-structurally feasible dominant function for the subordinate logical one. When, on the contrary, the former member requires an additional text-structural description to fit in with the following logical function, it is provided with a double coding, which, on the one hand, points out its relation to the preceding proposition and/or the discourse topic and, on the other hand, explains its character as a dominant node for the following logical function, e.g.

(47)

1. *The Smiths bought a two-week holiday packet to Spain.*
2. *They thought they would have a comfortable room in a sea-side hotel.*
3. *Yet, they were taken from the airport to an old dilapidated boarding house in a suburb.*

(A47)

1. INTRODUCTION OF TOPICAL PARTICIPANT WITH EMBEDDED ACTION ATTRIBUTION (act 1)
2. STATE ATTRIBUTION TO TOPICAL PARTICIPANT: WISH (act 2)
3. MEASURE ATTRIBUTION TO TOPICAL PARTICIPANT: FRUSTRATION OF WISH IN ACT 2 (act 3)

Both members of the relation need to be coded also if the members of the relation are non-adjacent propositions.

6.1.1 Message-strategic choices involved in the manifestation of logical functions

A further observation to be considered is that strategic variation is involved in the manifestation of logical relations. This means for instance that the writer may report successive events in whichever order he prefers as long as the temporal logic is indicated by means of appropriate signals. Such choices may be based on reader-oriented considerations, such as stylistic and interest-arousing effects, which means that they are message-strategic in character. Similarly, the writer has discretion as to the mutual ordering of the antecedent and the consequent in causal, final, conditional, and concessive relations. The strategic effects of such variation are ignored in the present system. Variation in the order of presentation is observed in coding only when semantic and functional implications are involved. There are two reasons for this omission. First, a study of strategic temporal ordering would necessarily lead us to the realm of fiction and the stylistic strategies characteristic of that genre. The major concern here is, however, factual texts. Second, strategic variation of the above kind does not add further propositions to the text. Thus, since such variation does not increase the quantitative explanatory burden of the analysis, it seems to be sufficient to identify logical functions by their semantics only, because it is their semantics that contributes to the logic of the global text structure. Accordingly, this model will indicate by appropriate coding when the order of presentation entails message-structurally significant features, but it will not try to explain the writer's choices by reference to any reader-oriented message-strategic considerations.

Another consideration complicating the analysis of logical relations is that the writer occasionally has discretion in semantic terms to convey a logical relation either within the boundaries of one sentence or within a sequence of sentences. Even though a sentential proposition is the basic unit of text-structural analysis, this discretion by the writer suggests that the context should in these cases eventually determine the unit of analysis. Thus if a sentence-internal logical relation could in a given context just as well relate two separate sentences, it is identified as a text-structural logical relation provided that this analysis contributes to the overall understanding of the text structure in question.

6.2 Steps for specifying message-core functions

Discourse topics and introductions have been discussed in section 4.1-4.2. Introduction is the message-structural function which carries the discourse-topic. Accordingly, a survey of the introductory function should have taken place in connection with a study of other message-structural functions. The types of introduction and discourse topic had, however, to be presented at an earlier stage to enable the text structure analysis of the sample passages illustrating the various message strategies that were discussed in the preceding chapter. In sections 6.2.1-6.2.5 the assumption that message-structural variation results from variation in textual illocutionary purposes will be argued for and a chain of reasoning will be presented in order to justify the specification of a number of message-core functions.

6.2.1 Establishing illocutionary purpose as a determinant of the dominant message-core function of the textual comment

It seems to be correct to assume that a text can be regarded as one propositional act by the writer because the main components of textual information, i.e. its discourse topic and the textual

comment, can be evoked by means of the same compositional questions, i.e. *What is this text/sentence about?* and *What does it say about its topic?*, as the sentential topic-comment structure. This assumption is also supported by the observation that a text is regarded as being reducible to one terminal (complex) macro proposition by means of applying to it a number of rules of text reduction (van Dijk 1977, van Dijk and Kintsch 1983:190, see also section 3.3). If the text is seen as one propositional act by the writer, it can also be seen as corresponding to one speech act. This is because the performance of a propositional act always also involves the performance of a speech act (Searle and Vanderveken 1985). The claim that the text is comparable to one speech act by the writer could be challenged by the observation (discussed in section 3.6) that a text can also be composed of two global speech acts, one of which is contained in the other, so that the text consists of a description of a factual situation and the writer's evaluation of that situation. Because these speech acts, however, still form a topic-comment unit so that the first act (description) constitutes the topic part of the second (evaluation), such texts can also be seen as one speech act at the topmost level of analysis.

Thus, if a parallel is established on the above premises between a text and a sentential speech act, it follows that a text like a sentence-level speech act has an illocutionary purpose. Searle and Vanderveken (1985) point out that a speech act consists of a propositional content and an illocutionary force, whose major constituent is an illocutionary point or purpose. The illocutionary purpose of a sentential speech act is manifested as lexical and syntactic features. Correspondingly, it can be assumed that in texts various illocutionary purposes materialize not only in the choice of propositional contents but also in the quality of interpropositional relations. In other words, it can be assumed that different textual illocutionary purposes produce different text structures. This idea may partially be supported by reference to an implication that can be drawn from two postulations introduced by other writers. Werlich defines text type as 'an idealized norm of distinctive text structuring' (Werlich 1976:39). Several other authors have noted that the illocutionary purpose of the text is the major determinant of text type (Grosse 1976, Aston 1977, Hatim 1983, Tirkkonen-Condit 1985). If both of the above two postulations are accepted, a corollary is also accepted that the illocutionary point of the text plays a major role in the formation of its text structure. The idea that the illocutionary purpose of the text materializes as a particular kind of text structure is still further elaborated in this study by stating that the illocutionary purpose as it will be defined presently (in section 6.2.5) is the fundamental determinant of the operational relations existing between the discourse topic and the informatively indispensable propositions of the textual comment. In other words, it is a major determinant of the *message-core functions* that appear in the text. The above chain of reasoning for the discovery of the determinants of text structure is illustrated below in the form of two diagrams. The diagram in figure 3 shows the way in which the determinants of *text-structure* as a whole are presently derived.

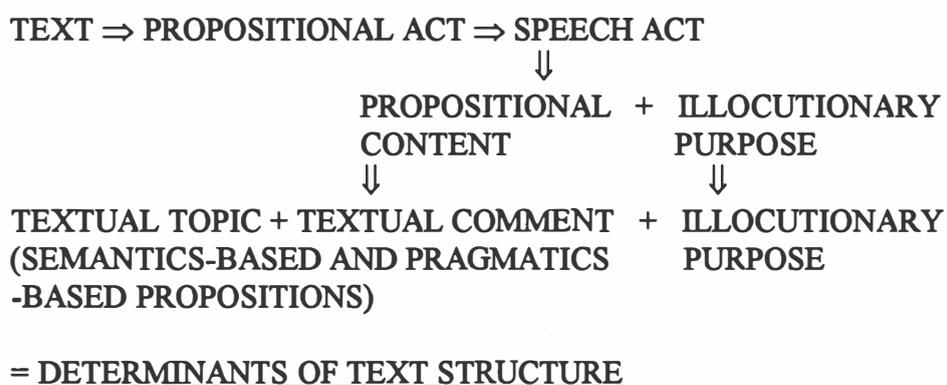


Figure 3: Determinants of text structure

As the pragmatics-based propositions can be peeled off the surface of the text to constitute a text-structural perspective of their own the remaining textual elements, i.e. the topic, the semantically indispensable propositions of the textual comment, and the illocutionary purpose of the text, are understood to constitute the *message structure* of the text as the diagram in figure 4 shows.

TEXTUAL TOPIC + TEXTUAL COMMENT (SEMANTICS-BASED
PROPOSITIONS = MESSAGE-CORE PROPOSITIONS AND LOGICAL
PROPOSITIONS) + ILLOCUTIONARY PURPOSE

= DETERMINANTS OF MESSAGE STRUCTURE

Figure 4: Determinants of message structure

Although the illocutionary purpose of the text can be expected to promote a certain type of logical function as dominant in a particular text (e.g. temporality can be expected to go with narration, causation with argumentation, and addition with description), the notion of logical function itself cannot be explained by reference to textual illocutionary purposes. Instead, the semantics of logical relations draw on universal experience of relations between phenomena (addition, causation, conditionality, temporality etc.). Consequently, as both text pragmatics-based propositions and logical propositions can be excluded as not being influenced by the illocutionary purpose of the text, the conclusion can be drawn that the effect of the illocutionary purpose must be manifested in the quality of *message-core functions*. Moreover, as was suggested in section 4.1, the quality of the dominant message-core function of the textual comment is also affected by the type of the discourse topic

6.2.2 Questions specified for the elicitation of message-core functions and logical functions

The above definition of the determinants of message structure necessitates a review of the question that is expected to elicit the informatively indispensable propositions of the textual comment. The diagram in figure 4 suggests that the writer's compositional question *What am I going to say about my topic?* necessarily dissolves into the following two subordinate questions *What is the propositional content?* and *What is the purpose of my message?* While an answer to the latter determines the illocutionary-purpose-related functions by means of which the informatively indispensable propositions may relate to the discourse topic (and to each other, at a lower level of analysis), i.e. *the message-core functions*, the structural aspect of the former involves the semantic logic which alternatively may hold between those propositions, i.e. the question calls forth *logical functions*. Logical functions are elicited by the former question because logical connections between ideas become necessarily explicated when the propositional content of the text is expressed in the form of a terminal complex macro proposition. A final specifying question to spot the logical relations holding between the top-hierarchy propositions of the textual comment would be *How do the propositions of the textual comment relate to each other?* As, moreover, a study of textual illocutionary purposes (see section 6.2.5) shows that a text has an illocutionary purpose both with respect to the reality it refers to and to the reader, the questions by means of which an analyst can elicit the message structure of a text must be specified by dividing the second compositional question into further subquestions as below

1. What is this text about?

2. What does the writer say about his topic?
 - a) What is the propositional content?
 - b) How do the propositions of the textual comment relate to each other?
 - c) What is the purpose of the message with respect to the reality that is referred to?
 - d) What is the purpose of the message with respect to the reader?

6.2.3 Specification of textual speech acts from sentential speech acts

As the reasoning in section 6.2.1 indicates, it is necessary to identify the various textual illocutionary purposes so that the types of message-core functions can be defined.

For the description of textual illocutionary purposes the Searlean theory of speech acts (1985) with 'assertives', 'commissives', 'directives', 'declaratives', and 'expressives' as an exhaustive set is referred to (see section 3.4.2). It seems that the most relevant speech act types for texts are 'assertives' with the illocutionary point of *saying how things are*, 'directives' whose illocutionary point is *to get other people to do things*, and 'commissives', which *commit the speaker to do something* (Searle and Vanderveken 1985). Assertives were earlier referred to by Searle (1976) as 'representatives'. This term will be used in the present study from now on to avoid a confusion of terms, as the term 'assertion' is used for the description of one of the inferential message strategies.

There are indeed texts which correspond to 'declarative' and 'expressive' speech acts with the respective illocutionary purposes of *changing the world by saying something*, and *expressing feelings and attitudes* (Searle and Vanderveken 1985). As texts corresponding to the declarative speech act seem to be mostly limited to very specific genres such as official announcements and legally binding declarations, they are excluded from this study. Texts representing the expressive speech act are here seen as a subcategory of the representative type, because they also say how things are, though they are restricted to saying so only as far as someone's attitudes and feelings are concerned.

A further modification of the Searlean system that is relevant to the present study is introduced by Aston (1977). She distinguishes 'statements' and 'assertions' as subtypes of the category of representatives. Statements report facts, while assertions propose that a certain assessment by the writer/speaker is true. To gain a status of truth also by the judgement of the reader assertions must be followed by supportive information. It is, however, possible for assertions to remain unsupported, if the speaker accepts their unestablished status. They are then regarded as opinions or inferences. This modality-based ('modality' here means the relation of a proposition to reality, see also Enkvist 1975:116-117) division of representative speech acts will be recognized also in this study. What Aston calls 'assertions' will, however, presently be referred to as *evaluations*. This is because the term 'assertion', as pointed out above, is here used to name an inferential message strategy. Thus, textual speech acts are at this stage identified as corresponding to *statements, evaluations, directives, and commissives* with the respective illocutionary purposes of *reporting facts, proposing the truth of a state of affairs, getting people to do things, and committing the speaker to do things*.

6.2.4 Further specification of textual speech acts on the basis of text type descriptions

Our experience of texts as representatives of different text types suggests, however, that a reference to texts as equivalents to statements, evaluations, directives, and commitments does not adequately explain text-structural variation in them. Therefore a further specification of textual speech acts still seems to be necessary. Descriptions of text types are then a relevant source to turn to since text

types have often been regarded as manifestations of textual illocutionary purposes (Grosse 1976, Aston 1977, Hatim 1983, Tirkkonen-Condit 1985). As this study is concerned with the propositional structure of text as far as it constitutes one discourse-topical unit, the typology of texts that is relevant for further specification of textual speech acts must be one which is based on text-internal, i.e. linguistic criteria. It seems to be justified to claim that further structural variation can be identified within statements and evaluations as textual speech acts, since they necessarily represent one of the four 'modes' of discourse which include 'narration', 'description', 'exposition', and 'argumentation' (Jakobson 1960, Hausenblas 1966, Barthes 1970, Dolezel 1973). This means that statement as a textual speech act with the illocutionary purpose of reporting facts may report them in a narrative, descriptive, or expository mode, while evaluation as a textual speech act may be argumentative or non-argumentative. Accordingly, textual speech acts include *narrative, descriptive and expository statements, argumentative and non-argumentative evaluations, directives and commissives*.

6.2.5 Derivation of textual illocutionary purposes from textual speech acts

It has been postulated above that a text has a purpose which influences its message structure, both with respect to the reality it refers to and the reader. The reality-related purposes are manifested in the four 'modes' of narration, description, exposition, and argumentation, which in turn have message-structural implications. As pointed out in section 2.1, these reality-related purposes (which are also simultaneously discourse-topic-related) will be referred to as *representational purposes* in this study. Moreover, each representational purpose seems to involve also a *communicative purpose*, i.e. an intended effect on the reader's cognition and attitude/behaviour. Both of these purposes exert an influence on message-core functions. In other words, the operational quality of the textual topic-comment relation varies depending on the representational and communicative illocutionary purpose of the text.

Werlich's (1982) description of the text types of 'narration', 'description', 'exposition', 'argumentation', and 'instruction' seems to provide a convenient account of textual illocutionary purposes, because the distinction of these text types is based on a recognition of the respective modes of discourse, which as such represent reality-related illocutionary purposes. Instruction, which has not been identified as a mode of discourse in earlier literature, can be seen as a modification of the argumentative mode with a specific communicative illocutionary purpose. Moreover, Werlich does not only point out the representational purposes of texts (modes) but also identifies the cognitive processes of 'perception in time' (for narration), 'perception in space' (for description), 'comprehension' (for exposition), 'judging' (for argumentation), and 'planning' (for instruction) as being associated with each of them, respectively. Werlich includes in the instructive text type also texts corresponding to the commissive speech act. This is because he sees commissions as first person instructions (Werlich 1982:124). Accordingly, planning as a cognitive process relating to the instructive text type explains the writer's purpose to plan future action either for himself or others. 'Planning' as such does not, however, exhaustively explain the communicative purpose of instructions and intentions. Thus more detailed definitions will be suggested below. Otherwise, the communicative purpose of the text (and of the writer) is presently understood to be that of evoking one of the above Werlichian cognitive processes in the reader's mind.

Above the point was made that it is necessary to find out about the various illocutionary purposes that texts may have so that the types of message-core functions can be specified. Accordingly, in the present study, textual illocutionary acts and corresponding illocutionary purposes have been inferred from the Searlean and Astonian sentential speech acts and their illocutionary purposes and Werlich's description of text types. As pointed out in section 3.4.2, text type

descriptions are seen as specifications of speech act descriptions. Accordingly, the representational and communicative textual illocutionary purposes are defined as in table 2:

Table 3: Derivation of textual illocutionary purposes

SPEECH ACT TYPE	REPRESENTATIONAL PURPOSE	COMMUNICATIVE PURPOSE
<u>1.Representative</u>	<u>- to say how things are</u>	
1.1. Statement	- to report facts	
1.1.1. Narrative statement	- to tell what happens/ happened	- to inform the reader by evoking a cognitive process of perception in time
1.1.2. Descriptive statement	- to tell what something/someone is/ is like	- to inform the reader by evoking a cognitive process of perception in space
1.1.3. Expository statement	- to describe conceptual connections within phenomena	- to inform the reader by evoking a cognitive process of conceptual comprehension
1.2 Evaluation:	- to report subjective assessments	
1.2.1 Argumentative evaluation	- to propose/claim that one's assessment of what happened/what something or someone is or is like / of conceptual connections within phenomena is true	- to inform the reader by evoking a cognitive process of perception in time or space, or of conceptual comprehension and to convince him of the validity of one's assessment by evoking a cognitive process of judging
1.2.2 Non-argumentative evaluation	- to report subjective assessments of what happened/what something or someone is or is like / of conceptual connections within phenomena	- to inform the reader of the writer's subjective assessments by evoking a cognitive process of perception in time or space or of conceptual comprehension
<u>2. Directive:</u>	- to propose/claim the desirability of a certain of action	- to inform the reader of the writer's will and to persuade him to act accordingly
<u>3.Commissive</u>	- to describe the writer's intention/plans	- to inform the reader of the writer's intentions/plans and of his commitment to carry them out

Earlier in this chapter the message structure of the text was defined as consisting of the discourse-topical proposition and the semantically indispensable propositions of the textual comment, which include logical propositions and message-core propositions whose operational function in relation to the discourse topic is defined by the illocutionary purpose of the text. For message structures to be properly represented, various types of logical functions and message-core functions must be recognized. The above definitions of textual illocutionary purposes make it possible to identify the message core functions of *attribution/reported attribution (1.1.1 and 1.1.2)*, *elaboration (1.1.3)*, *basis (1.2.1)*, *evaluation/reported evaluation (1.2.2)*, *evaluation(s) /reported evaluation(s) with basis/bases (1.2.1)*, *motivation (2)*, *instruction(s) (with basis/bases) (2)*, *commitment (3) and matching (1.1.1, 1.1.2, and 1.1.3)*. They correspond to various purposes as indicated by the codings in the brackets. These nine message-core functions are coded in operational terms, i.e. the coding indicates what the writer is doing to compose a message. In the next chapter the above message-core functions will be defined and text samples will be studied to illustrate the patterns in which these functions typically occur.

6.3 Message-core functions

6.3.1 Attribution

Attribution is a message-core function which indicates that the topical participant is given attributes that are, have been, or can be observable in space. It is a statement of facts and a manifestation of the representational illocutionary purposes of *telling what happened/what happens/what something or someone is/is like/looks like*, and of the communicative purposes of informing the reader by evoking in his mind a cognitive process of *perception in space or time*. Accordingly, attribution is the message-core function that typically pertains to the narrative and descriptive text types.

The qualities/phenomena assigned to the topical object through the attribution function are directly attributable to it through direct or indirect observation or experience. As mentioned in the above discussion of textual illocutionary purposes, the idea of spatiality as the basic essence of description is here borrowed from Werlich (1982). It is brought in relief as a distinctive feature of the attributive function because it highlights the difference between message-core propositions which assign immediate, concretely observable attributes to the discourse-topical idea and those which relate to it through some conceptual idea, such as *source, method, function, application, response*, etc. Spatiality is here understood to concern also narration, which by Werlich is characterized solely by temporality. A connection between spatiality and narration is presumed because, while inherently involving time, doing and happening also always take place in space and are thus mostly observable in space. Moreover, the notion of spatiality is presently extended to comprehend also features whose existence can be concluded from some spatially observable phenomena. This means that assigning feelings and attitudes to a discourse-topical participant is also referred to in text-analytical terms as *attribution*. The attributions assigned to the topical object amount to a reconstruction of its image in the reader's mind.

6.3.1.1 Types of attribution

For an analyst to be able to identify message-core propositions with the attributive function it is necessary to consider the semantic contents that can be conveyed through attribution. For this purpose Gray's (1977) study of the informative capacity of an independent unmodified proposition has been referred to. According to Gray, the informational content of a basic proposition can be defined as follows:

1. Subject described by function
 - a) Agent described by function, e.g. *He is walking*.
 - b) Object described by function, e.g. *He was shot*.

2. Subject described by nature
 - a) Subject described by characteristics, e.g. *He will be tired*.
 - b) Subject described by identity, e.g. *He is my father*.

3. Subject described by class
 - a) Individual described by class, e.g. *He is a lawyer*.
 - b) Subclass described by class, e.g. *Judges are lawyers*.

'Subject described by characteristics' (2a) is a very wide category in Gray's analysis (1977:51-52). It involves size, shape, weight, colour, texture, age, location, condition (e.g. has a problem, exists, etc.), relationship (e.g. has a baby, has an insurance agent, etc.), possession (e.g. owns a bicycle, etc.), content (e.g. includes an index, etc.), feelings, composition (e.g. consists of flour and water, etc.), value, imperative (e.g. must remain, has to be waterproof, etc.).

When Gray's analysis is further specified the attributive function can be said to assign actions (e.g. *He broke the window*), events (e.g. *His car ran off gasoline in the middle of nowhere*), measures (e.g. *He was taken immediately to hospital*), experiences (e.g. *He suffered from cancer for the last three years of his life*), states (e.g. *He was unaware of the success of his colleague*), opinions (e.g. *He regards environmentalists as a group of villains*), characteristics (e.g. *He is bald, blue-eyed, and limps as he walks*), identity (e.g. *He is my cousin*), class (e.g. *Jenny is a dog*), constituents (e.g. *It consists of a rim, screen and handle*), possessions (e.g. *He has two sons*), comparisons (e.g. *He is younger than his cousin*), and analogies (e.g. *He is like a squirrel which stores food for the winter*) to the topical participant.

To distinguish the narrative message structure from the descriptive one *action attribution*, *experience attribution*, *event attribution*, *state attribution* and *measure attribution*, which have been specified from Gray's categories 1a and 1b, are recognized as specific types of the attributive function by coding them accordingly. Similarly, also *constituent attribution*, *matching attribution*, and *analogy attribution* are distinguished to point out such fundamental message-structural features as the description of a topical whole by reference to its parts (constituent attribution), the description of a topical entity/several topical entities in relation to another / each other (matching attribution), or the description of a topical entity in relation to a non-topical entity (analogy attribution). *Evaluation attribution* is also identified to point out opinions/assertions by the topical participant. This is necessary because such propositions may be followed by others which provide supporting evidence, i.e. a basis, and it would not be logical for an unspecified attribution function to be followed by a basis function. Moreover, an assignment of class is coded as *definition* both in the attributive and in the elaborative frame (for elaboration see section 6.3.2) when the purpose of the proposition that involves such an attribution is to describe the topical idea, not as an individual member of a class, but as a representative of a class that can be depicted by reference to a more generic class (e.g. *Alpha particles are helium atoms which have lost two electrons*). Other types of attributive contents are referred to simply as *attributions*, because further specification would only expand the array of text-structural functions without increasing the informative capacity of the structural description. A more detailed set of codings specifying the various attributive contents (as described above) were used for the structural description of the texts included in the experimental corpus of this study. As such a way of coding was found to be unnecessarily specific, a lighter system is suggested here.

6.3.1.2 Two basic types of message structure with attribution as their dominant message-core function

A number of attributions can be assigned to the same discourse-topical entity. This frequently results in a sequence of sentences where the discourse-topical idea repeatedly occurs in the thematic position. If this is not the case with regard to all propositions of a descriptive or narrative sequence, the pattern is probably found at least among the informatively indispensable propositions of the text. This amounts to saying that a message structure with attribution as its dominant message-core function is more likely than other types of message structures to show 'continuous thematic progression' (for the linear, continuous, and hyperthematic types of thematic progression see Daneš 1974). Alternatively, the thematic progression of a descriptive sequence may be a combination of 'hyperthematic', 'linear', and 'continuous' development, if the top-hierarchy propositions of the textual comment relate to the discourse-topical object by means of *constituent attribution*. This means that the discourse-topical idea is discussed in terms of its constituents. There is a linear progression from the previous sentence-level rheme to the next sentence-level theme when the constituent elements of the topical idea are first introduced and then further described. As far as the descriptive mode is applied to the constituents, continuous thematic development can be expected for the discussion of each of the constituents, while a hyperthematic position is held by the discourse-topical entity. When, however, the text incorporates a subordinate discourse-topical continuity in the form of a setting that is being described alongside with the proper discourse topic, or when the discourse topic itself shows two or more nuclei, or is itself a setting, it becomes more difficult to distinguish any thematic regularity. The diagrams in figures 5 and 6 illustrate the two basic message-structural patterns with a single focus discourse topic and attribution as their message-core function.

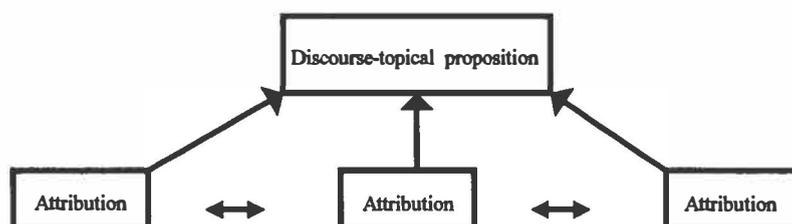


Figure 5: Basic attributive message structure

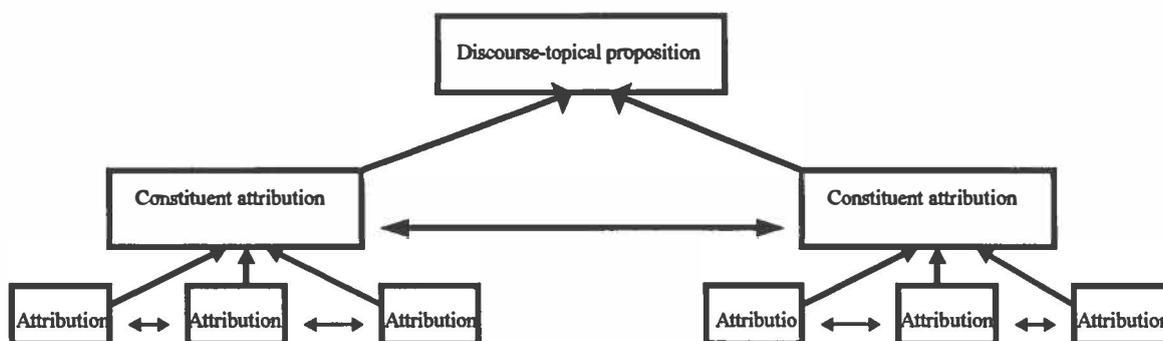


Figure 6: Basic attributive message structure with constituent attribution

6.3.1.3 How attributions relate to each other

When constituent attribution is not the case, the attributions assigned to a discourse-topical object typically stay in an *additive logical relation* to one another or, in the case of action / event / measure / experience attribution, in a *temporal logical relation*. It is, of course, also possible that they are combined by other logical relations or by a *frame relation*.

The choice of the attributions to be assigned to a particular discourse-topical object is restricted by the notion of frame. As was mentioned in 3.8, frame is here defined as the set of concepts in terms of which a given topical idea is conventionally represented. It restricts the choice of the propositions to be applied to the description of a particular topical idea because it suggests that every object of description has a fairly fixed set of determinants in terms of which it can be defined. The idea of frame contributes to the perception of the macro-level coherence of the text by accounting for the relevance of the various message-core functions when no logical structure relations can be recognized between them. Logical relations between top-hierarchy message-core functions are indicated by coding. This means that top-hierarchy message-core functions are double-coded when staying in a logical relation to one another: they are coded by their relation to the discourse topic and to each other. A frame relation, on the contrary, is left uncoded.

As implied above, the content of the frame, i.e. the set of determinants applied to the discussion of a particular topical idea, is topic-specific. The content of the frame is, however, also determined by the purpose of the respective textual speech act. Accordingly, the attributive frame of representation can be described as *spatial and constructive* or *temporal and constructive* depending on whether it is a manifestation of the representational and communicative illocutionary purposes of the descriptive text type or of the narrative text type. To sum up, the dominant type of message-core function in a narrative text can be described as *event / action / measure / experience attribution in a temporal and constructive frame*, while that of a descriptive text is defined as *attribution / constituent attribution / evaluation attribution / state attribution / matching attribution / analogy attribution / definition in a spatial and constructive frame*.

When an attribution is assigned to the topical idea not by the writer, but by some third party, the respective message-core function is called *reported attribution*.

6.3.1.4 Discourse topic of an attributive sequence

As pointed above (4.1), there seems to be an interdependence between the type of discourse topic and the type of the dominant message-core function. A concrete animate or inanimate object, or a physical setting as discourse topic, can be expected to be described in terms of its spatially observable characteristics. Thus single-focus discourse topics that typically take attribution as their dominant message-core function are *topical participant* and *topical setting*, and *topical event*. The message-structural pattern of the text is further modified if the discourse topic consists of several nuclei or if it is accompanied by a subordinate discourse-topical continuity. The latter types of discourse topic include topical participant and product/possession (provided that the product or possession is spatially manifested) and topical participant in setting. Below, examples will be provided of texts with *attribution* as their dominant message-core function and *topical participant/topical participant in setting*, *topical setting*, *topical event*, and *topical participant and product/possession* as their discourse topic.

6.3.1.5 Message-structural patterns with attribution as a dominant message-core function

(48) Topical participant with attribution as a dominant message-core function

- 1 *Prince Edward Island (PEI) is the tiniest province in this land of vast horizons.*
- 2 *It rests in the Gulf of St. Lawrence, cut off from the mainland by the Northumberland Strait.*
- 3 *Less rugged than its fellow Atlantic Provinces,*
- 4 *PEI's quaintness seems untouched by the modern world -*
- 5 *its past is still the present.*
- 6 *Agriculturally, the land is well-groomed and cultivated.*
- 7 *Some have gone so far as to describe the Island as two beaches divided by potato fields (Canada p.215. Directed and designed by Hans Hoefler. Photography by Joe Viesti. Edited by Hillary Cunningham. Updated by Jane L. Thompson. 1989 APA Publications (HK) LTD, Singapore)*

The extract shows the basic case of the attributive message structure with fairly regular continuous thematic progression. The first act introduces the discourse topic (Prince Edward Island). Acts 2-7 assign attributions to it. The last of these attributions (act 7) is in a reported form, and its function in relation to the preceding attribution (act 6) is reformulation; accordingly, it is coded as reported reformulation. The passage illustrates the problem that occasionally turns up in distinguishing between the attributive and evaluative function. The fact/opinion distinction (for the definition of evaluation see section 6.3.4) must be based on text-external knowledge and experience when the context does not provide any unambiguous clues. Thus it is postulated that in the above passage the statement that PEI 'seems to be untouched by the modern world' (act 4) is a statement of fact, i.e. an observation that would be made by most people. The embedded reference to the 'quaintness' of the island (act 4), on the contrary, seems to involve subjective judgement and is therefore coded as an embedded evaluation. It is necessary to point out this embedded function also because there is a causal relation between act 3 and the embedded evaluation of act 4 but not between the attribution of act 5 and the preceding act (act 3). The text structure of the passage can be described as follows:

(A48)

1. INTRODUCTION OF TOPICAL PARTICIPANT (act 1)
2. ATTRIBUTION TO TOPICAL PARTICIPANT (act 2)
3. MATCHING ATTRIBUTION TO TOPICAL PARTICIPANT: CAUSAL EXPLANATION TO EVALUATION IN ACT 4: ADDITION to act 2 (act 3)
4. ATTRIBUTION TO TOPICAL PARTICIPANT ('untouched by modern world') WITH EMBEDDED EVALUATION ('quaintness') (acts 4-5): act 5 Reformulation of ATTRIBUTION in act 4
5. ATTRIBUTION TO TOPICAL PARTICIPANT: ADDITION to acts 2-5 (acts 6-7): act 7 Reported reformulation of act 6

(49) **Topical participant with constituent attribution as a dominant message-core function**

1. *The harpoon consists of a 'socket', 'shank', and 'mouth'.*
2. *The shank, which is made of the most pliable iron, is about two feet long.*
3. *The socket is about six inches long, and swells from the shank to nearly two inches in diameter.*
4. *The mouth is of a barbed shape.*

5. *Each barb or wither is eight inches long and six broad, with a smaller barb reversed in the inside. (Peter the Whaler 181, through Hoey1983:139)*

Example 49 shows constituent attribution embedded in the introductory function. The discourse topic of the passage is 'harpoon'. The text structure of the passage can be represented by the coding:

(A49)

1. INTRODUCTION OF TOPICAL PARTICIPANT WITH EMBEDDED ATTRIBUTION OF CONSTITUENTS 1-3 (act 1)
2. ATTRIBUTION TO CONSTITUENT 1 (act 2)
3. ATTRIBUTION TO CONSTITUENT 2 (act 3)
4. ATTRIBUTION OF CONSTITUENT 3.1 TO CONSTITUENT 3 (act 4)
5. ATTRIBUTION TO CONSTITUENT 3.1 (act 5)

As the above coding indicates, each of the constituents introduced as embedded in the opening act appears later in a thematic position for further description. Acts 4 and 5 show a repetition of the same pattern at still a lower level of message-structural hierarchy. The present system of representation does not indicate by coding the way in which the proposition/group of propositions which describe each of the constituents relate to each other. It is postulated that this relation must be clear from the nature of the constituent attribution function. Such propositions (acts 2,3 and 4 above) relate to each other because they assign attributes to the constituents of the same whole.

(50) **Topical setting with attribution as a dominant message-core function**

The political development of Finland, 1863-1917

1. *The convening of the Finnish Diet in 1863, after a break of over fifty years, marked the beginning of a new era in Finnish political life.*
2. *The Language Decrees of 1863 and 1865, described during a meeting of the Diet in 1877 as 'a sort of Magna Carta for the Finnish-speaking part of the nation', took over twenty years to be implemented, but progress was made, however slow.*
3. *It would have been much slower if the authorities had not been constantly prodded by the Diet.*
4. *The Diet Act of 1869 laid down that the Diet should be summoned at least every five years, and in fact it was summoned more frequently.*
5. *In 1879 the electoral laws were relaxed and the franchise in the towns was widened.*
6. *Legislation on economic and commercial questions and on education was enacted during the 1870s and 1880s.*
7. (7.1) *Although the Czar still had the power to reject legislation passed by the Finnish Diet, (7.2) in practice the degree of self-government increased at both national and local level within the Grand Duchy. (Singleton 1989: 93)*

Histories and reports may not necessarily be participant-oriented. The selection of the events/actions to be reported may be totally determined by the characteristics of a temporal-spatial setting. This means that the discourse topic of such a text is *the setting* that accommodates the events in question.

In the above passage the discourse topic, which is given in its specific form in the title 'The political development of Finland, 1863-1917', and referred to in more generic terms as 'a new era in Finnish political life' in the introductory act, can be transcribed in the form 'the years 1863-1917 in Finnish political life/development', which indicates that the elements of the discourse-topical idea

basically denote time and place (in this case partly spatially observable and partly abstracted). (In the extract the above discourse topic is, however, only partially covered because the original text has been cut before the treatment of the topic reaches the year 1917.) This transformation of the elements of the discourse-topical idea into a temporally and spatially determined setting is justifiable on the assumption that the focus of interest in the text lies on the series of events that took place within a certain period of time and not on the 'political development of Finland' and 'Finnish political life' in a more total sense. In the latter case the discourse topic should be coded as *topical phenomenon in setting*. For the analysis of the present sample the former assumption is made. The text structure of the above extract can be described as below:

(A50)

1. INTRODUCTION OF TOPICAL SETTING (act 1)
2. EVENT ATTRIBUTION TO TOPICAL SETTING WITH EMBEDDED EVALUATION OF EVENT (act 2) - CONDITIONAL EVALUATION OF EVENT IN ACT 2 (act 3)
3. EVENT ATTRIBUTION TO TOPICAL SETTING: SUCCESSION TO ACT 2 (acts 4-6: SUCCESSION/OVERLAP)
4. EVALUATION OF TOPICAL SETTING: IMPLICATION OF ACTS 2-6 (act 7): INEFFECTUAL CAUSE (act 7.1)- CONCESSION (7.2)

(51) Topical participant and product/possession with attribution as dominant message-core function

1. *Hennessy hooks into the Malerish tradition of European painting;*
2. *his new works suggest Baroque effulgences of matter and light.*
3. *He conceives pictorial space as a complex and contradictory entity, alternately concave and complex, folding inward and outward, endlessly overlapping itself.*
4. *The image of a colossal cornucopia often comes to mind when looking at the new paintings, which are more moderately scaled than his production of the early 80's*
5. *- a period Hennessy was best known for either very large or very small works.*
6. *His elaborate use of oil paint, often relying on sophisticated glazing techniques, can strike some viewers as almost too epicurean and his literary titles as too erudite or too clever,*
7. *but for me, they hold up over time.*
8. *Around 1985, the arabesques in his paintings became increasingly intense.*
9. *Looping in and out, over and under each other in Leaping Laocoon (1985), they almost seem to be chasing their own tale.*
10. *I frankly began to worry at this development;*
11. *it seemed like the onset of a full-fledged maniera (Hennessy had recently spent a month in Rome), and I wondered if that whiplash was going to ossify into a contortion.*
12. *Now, five years later, the painter's figura serpentinata has, if anything, become speedier and more various.*
13. *Forms whiz by one another, carried on the heady stream of his brush strokes, as bright as glow worms, as they buzz around through Hennessy's almost comically elastic pictorial field. (Adams1990:184)*

The discourse topic of the above passage is assumed to be 'Hennessy's new paintings'. Thus the passage introduces for further discussion *a participant and his product* in an implied *temporal setting*. The comment part of the text mainly consists of attributions assigned to the product either

directly or through attributions which are addressed to the participant in the surface structure. The above kind of partial fusion of participant and product seems to be typical of this type of message structure. It is indicated by the coding *attribution to product through attribution to participant*. When the attributions assigned to the participant actually inform us about the product the double-nuclei discourse topic does not entail two parallel message structures. In the above sample attributions to the product are made in different temporal settings. As, however, these attributions are in most cases contrasted to those assigned to 'the new paintings', the discourse-topical setting is assumed to be implied by the adjective 'new', which signals a contemporary point in time. The text structure of the above extract can be outlined as in (A51):

(A51)

1. INTRODUCTION OF TOPICAL PARTICIPANT AND PRODUCT IN SETTING 1
(acts 1-2): EVALUATION (act 1) - BASIS (2)
2. ATTRIBUTION TO PRODUCT THROUGH ATTRIBUTION TO PARTICIPANT IN SETTING 1 (act 3)
3. ATTRIBUTION TO PRODUCT IN SETTING 1 WITH EMBEDDED MATCHING
ATTRIBUTION TO PRODUCT IN SETTINGS 1 AND 2: CONSEQUENCE OF ACT 3 (act 4) -
ATTRIBUTION TO SETTING 2 WITH EMBEDDED ATTRIBUTION TO PRODUCT
THROUGH ATTRIBUTION TO PARTICIPANT (act 5)
4. EVALUATION OF PRODUCT THROUGH EVALUATION OF PARTICIPANT IN SETTING 1:
INEFFECTUAL CAUSE TO ACT 7 (act 6)
5. EVALUATION OF PRODUCT IN SETTINGS 1 AND 2: CONCESSION (act 7)
6. EVENT ATTRIBUTION TO PRODUCT IN SETTING 3: SUCCESSION TO SETTING 2 IN
ACT 4 (acts 8-9): EVALUATION (act 8) - BASIS (act 9) - EVALUATION OF EVENT IN ACT 8
(act10) - CAUSAL EXPLANATION WITH EMBEDDED HYPOTHESIS (act 11)
7. ATTRIBUTION TO PRODUCT IN SETTING 1: FRUSTRATION OF HYPOTHESIS IN ACT 11
(acts12-13) Topic controlling generic (act 12) - Specific (13)

The coding of acts 8 and 9 indicates that an attribution, which by definition is a statement of facts, may consist of an evaluation, i.e. a subjective assessment, which is supported by a basis. An evaluation which is provided with a basis assumes the standard of a fact in text-structural terms irrespective of the real-world validity of the basis.

(52) Topical participant in setting with attribution as its dominant message-core function

1. *During the Crimean War Nightingale volunteered to go to Scutari, Turkey.*
2. *There she organized a nursing department and devoted her efforts to eliminating sanitation problems in the wards.*
3. *At the time women working in hospitals were not respectable, reliable, or educated.*
4. *There were no trained nurses and no British Red Cross.*
5. *Consequently, Nightingale solicited and received help from the Sisters of Mercy.*
6. *Conditions in the army wards were poor.*
7. *In addition to their wounds, the soldiers suffered from exposure, frostbite, lice infestation and disease.*
8. *There were few chamber pots ; latrines were blocked; chess pools overflowed; and the water was contaminated.*

9. *Patients who could not feed themselves starved.*
10. *There were no surgery tables nor anaesthesia.*
11. *Nightingale's work made her popular with the men.*
12. *They called her "the Lady of the Lamp" in recognition of her Turkish candle lantern she carried through the corridors packed with wounded soldiers.*
13. *While at Scutari Nightingale became critically ill with Crimean fever, which might have been typhus. (Marriner 1986:65)*

Example 52, which is an extract of a longer biography, serves as an illustration of a participant-oriented chronological narrative with a setting described alongside with the actions or experiences of the topical participant. The message structure of the text can be represented in terms of the following pattern:

(A52)

1. INTRODUCTION OF TOPICAL PARTICIPANT IN SETTING (act 1)
2. ACTION ATTRIBUTION TO TOPICAL PARTICIPANT (act 2)
3. ATTRIBUTION TO SETTING: CAUSE TO ACTION IN ACT 5 (acts 3-4: ADDITION)
4. ACTION ATTRIBUTION TO TOPICAL PARTICIPANT: CONSEQUENCE OF ATTRIBUTION IN ACTS 3-4 (act 5)
5. ATTRIBUTION TO SETTING (acts 6-10: ADDITION)
6. EVALUATION OF TOPICAL PARTICIPANT WITH EMBEDDED CAUSAL EXPLANATION (act 11) - BASIS: MEASURE ATTRIBUTION TO PARTICIPANT (act 12)
7. EVENT ATTRIBUTION TO TOPICAL PARTICIPANT: OVERLAP WITH ACTS 1-12 (act 13)

The *cause-consequence* relation between acts 3-4 and 5 shows that the setting may trigger a certain set of activity by the participant. This means that a cause-consequence relation may hold between the subordinate and dominant discourse-topical developments, i.e. between the setting frame and the participant frame.

6.3.2 Elaboration

Elaboration is a message-core function which arises from the representational illocutionary purpose of *describing conceptual connections between phenomena* and from the communicative purpose of *informing the reader by evoking in his mind a cognitive process of conceptual comprehension*. This means that in their elaborative function the propositions of the textual comment approach the discourse topic in an analytical way: they comment on the topical idea within the framework of a set of analytical concepts which throw light on its relevant aspects and lead into an in-depth understanding of its essence. Accordingly, elaboration is a message-core function which typically pertains to the expository text type. In most cases the concepts used for the analysis of the topical idea do not (except for *definition*) provide direct attributes to it in the way the attributive message-core function does. Instead, they relate to it through various kinds of conceptual connections. The elaborative determinants of the topical idea include

- definitions
- causes/causal explanations
- source/origin
- effects/consequences/implications
- principles of operation/methods
- agents
- objects/goals
- instruments/means
- advantages/disadvantages
- purposes/functions/applications
- problems
- solutions/responses
- focuses/interests/concerns
- premises/conditions
- interpretations/reported interpretations
- constituents/subclasses/aspects/specifications
- opposite/parallel/analogical phenomena
- alternatives
- other topic-specific determinants

6.3.2.1 Reasons for defining a message-structural umbrella category

Subsuming the above variety of textual relations into the umbrella category of elaboration raises the question of the justifiability of such a decision. It can be defended on the grounds that all of the above concepts share a conceptual and analogical approach to representation as determinants of the topical idea. This distinguishes them from the attributive message-core function, which tends to construct an image of the topical object in terms of spatially observable phenomena. Incorporating the analytical notional determinants of the topical idea (they are analytical and notional in opposition to the spatial character of attribution) in a single message-core function contributes to the globality of message structure analysis. This means that a text-structural unit with a specific mode of discourse is signalled when an elaborative function is coded as an inclusive framework which houses a set of the above determinants. Yet, items of the elaborative frame can occasionally be found in the middle of an otherwise attributive sequence, or single attributions may turn up within an elaborative frame. This is because the text types, whose distinctive features are reflected in the various message-core functions, are theoretical constructs in the sense that, while text-typologically pedigreed examples of texts can be constructed, authentic texts seldom stay within strict text-typological definitions. Text-structural coding must allow for this fact by letting occasional attributions to be incorporated within the elaborative frame, if the textual comment otherwise is predominantly elaborative. Vice versa, if an occasional elaborative proposition appears in a manifestly attributive context or as a sole determinant of a lower-hierarchy topical node, the elaborative frame as an inclusive message-core function will not be coded. Moreover, it must be remembered that instruction, commitment, and evaluation in its various manifestations (i.e. as implication or interpretation) may relate to any proposition (including the discourse topic) in an elaborative context as well as in an attributive one, because they signal the critical presence of the writer in the text or, if reported, that of some other participant thus satisfying the double function of a message as a conveyor of both facts and opinions. Thus, an elaboration function is coded to point out a structural unit with a shared dominant illocutionary purpose and a resulting mode of discourse when several of

the determinants listed above appear as top-hierarchy propositions of the textual comment but the elaborative frame may then accommodate also top-hierarchy evaluations and occasional attributions.

Another reason for applying the 'umbrella' label of *elaboration* to several determinants of the discourse topic lies in that the coding indicates the frame relation which justifies the side by side existence of these determinants. Unlike attributions, which frequently show either explicit or implicit logical interrelatedness (mostly through additive or temporal conjunction), the items of the elaborative frame may not be mutually connected through any logical conjunction. In the absence of both explicit and implicit logical connections between the top-hierarchy propositions of the textual comment it seems essential to provide such an inclusive text-structural entity as elaboration to explain not only the mode of discourse (resulting from a shared illocutionary purpose) which the propositions of the textual comment share but also their mutual relevance. In terms of its generic illocutionary-point-related quality the elaborative frame can be described as *notional and analytical*. If, however, the discourse topic is provided with only one of the determinants listed above, the coding of the elaborative frame becomes pointless and can be omitted.

6.3.2.2 Elaborative determinants

A further question that arises from the study of the above list of elaborative determinants is why logical relations are in this system regarded as a category of their own in spite of the fact that a number of logical functions appear as items of the elaborative frame. Several points can be made to defend this solution. First, logical relations form a group of message-structural relations, which are similar in kind among themselves and, correspondingly, different in comparison with other such relations. Their mutual similarity is based on a common source of semantic content, i.e. the statement calculus (see Longacre 1983). Second, logical relations seem to serve two different functions: they may relate propositions of the textual comment directly to the discourse topic or to lower-hierarchy topical nodes (e.g. as causes, consequences, conditions, and alternatives) or they may relate top-hierarchy / lower-hierarchy message-core functions to each other (e.g. additive, temporal, adversative, causal, and disjunctive relations). In the former use, when accompanied by a set of other elaborative determinants, logical functions are seen as items of either a top-hierarchy or lower-hierarchy elaborative frame. Thus, as logical functions differ from the rest of the items of the elaborative frame in that their semantics corresponds to that of sentential conjunctions and as they, besides their elaborative function, still serve a separate conjunctive function, it is not possible to associate them in all respects with the rest of the items of the elaborative frame. The solution then is to discuss them as a category of their own with two different purposes in the construction of message structure.

The list of the items of the elaborative frame provides near-synonymic concepts like 'instrument' and 'means', 'effect' and 'consequence', and 'purpose' and 'function'. This variety seems to be necessary to account for the various shades of meaning to be encountered in texts. Elaborative determinants which as such do not indicate linguistic action with an inherent modality aspect are provided with an additional coding which translates them into speech acts. This means that such determinants are distinguished as either *statements* or *evaluations* depending on whether facts or subjective views are involved. (Attributions are distinguished from evaluations on the same basis. The difference between statement and attribution lies in the fact that, while attributions assign direct attributes to the discourse-topical idea, statements comment on some notional aspect in terms of which the topical idea can be described.) The practical coding of the items of the elaborative frame, accordingly, takes the form of either *focus/origin/opposite/etc.: statement*, or *focus/origin/opposite/etc.: evaluation*. This way of coding allows for the message core propositions to be represented in operational terms, i.e. the message structure analysis indicates what the writer

does to construct his message. The coding of the items of the elaborative frame only by reference to their semantic content would be disruptive within an otherwise operational analytical system.

The various determinants of the elaborative frame include *definitions*, *constituents* and matching-based *opposite/parallel and analogical phenomena*, which can also appear within an attributive frame. It seems that like the evaluation function with its various derivatives these message-core functions consist of linguistic operations whose existence is not restricted by the various modes of discourse. This means that the basic abstract-concrete distinction on which the differentiation of the attributive and elaborative functions is based does not affect these speech acts. They can operate in an abstract as well as in a concrete context.

6.3.2.3 Two basic elaborative patterns

Thematic progression in a message structure with elaboration as its dominant message-core function can often be explained by reference to the notion of 'hypertheme' (see Daneš 1974 for types of thematic progression). This is not necessarily the case, but the likelihood of a hypertheme seems to be greater in a passage with elaboration than in one with attribution. The reason for this may be the fact that, as the items of the elaborative frame do not indicate properties that could be directly attributed to the discourse-topical idea, there may be a greater number of options for propositional themes in the elaborative frame than there is in the attributive one. Similarly to attribution as the dominant message-core function of a text, initial linear thematic progression can be expected when the topical idea is described by reference to its constituents, which in turn are discussed within an elaborative frame. Figure 7 shows the idea of the elaborative frame. Figure 8 illustrates an elaborative pattern when constituent attribution is involved.

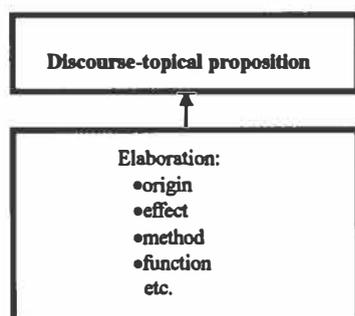


Figure 7: Basic elaborative structure

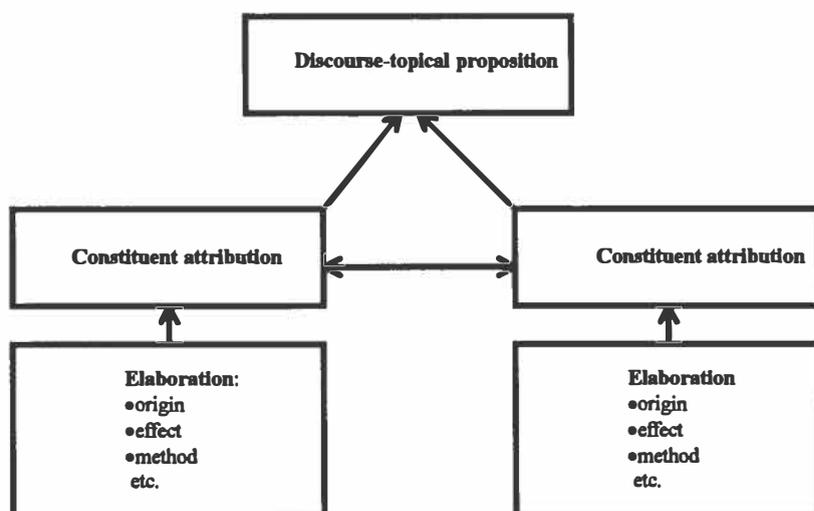


Figure 8: Basic elaborative structure with constituent attribution

6.3.2.4 The discourse topic of an elaborative sequence

Discourse topics which inherently invoke a textual comment with an elaborative approach are mostly of abstract character. Such a discourse topic is likely to be either a *topical concept* or a *topical phenomenon* with or without a *setting*. It is also common for the discourse-topical position of an expository text to be occupied by *a participant* and his intellectual or artistic *product/possession* whose description takes an elaborative approach. Moreover, *a topical event* or a series of events can be surveyed in an analytical way. This means that elaboration may occur as a message-core function also in the narrative text type. Such is frequently the case in the news report type of narrative text with an event as its discourse topic. In theoretical terms, an amalgamation of the narrative and expository illocutionary purposes then takes place. The dominant message core function of such a narrative text can be defined as *elaboration in a temporal and analytical frame*.

6.3.2.5 Message-structural patterns with elaboration as a dominant message-core function

In the following section examples will be provided of elaborative message structures with *topical concept*, *topical phenomenon*, *topical participant and product*, and *topical event* in the discourse-topical position.

(53) **Topical concept with constituent attribution and elaboration as dominant message-core functions:**

RADIOACTIVITY

1. *Certain heavy elements (e.g. radium, uranium) disintegrate spontaneously, emitting high energy radiation.*
2. *This radiation consists of three types of rays:*
3. *alpha-rays, beta-rays and gamma-rays.*
4. *These three types of radiation can be shown to exist by their behaviour in a magnetic field.*
5. *Alpha rays consist of alpha particles.*
6. *These particles are helium atoms which have lost two electrons.*
7. *This means that they are just the nuclei*
8. *and are therefore positively charged.*
9. *Beta-rays consist of beta-particles,*
10. *which are fast-moving electrons.*
11. *They are therefore negatively charged.*
12. *Gamma-rays have a very short wavelength and high penetrating power.*
13. *They are therefore not deflected by a magnetic field.*
14. *All three types of radiation cause blackening of a photographic plate.*
15. *They can therefore be detected by photographic methods. (Donovan 1978:63)*

The topical concept in the present text is 'high energy radiation'. High energy radiation is discussed in terms of its constituent elements, i.e. the kinds of rays involved. The structure of the text is complicated by the fact that it shows *constituent attribution* at two levels of message-structural hierarchy. This means that two of the various types of rays which constitute 'high energy radiation' are also described by reference to their composition. In text-structural terms this results in an

embedded constituent attribution structure within the elaborative sequence dealing with top-hierarchy constituents. The individual items of the elaborative (i.e. the various conceptual determinants of the discourse topic or of a lower-level topical node) frame are indicated by an asterisk. The level of textual hierarchy at which the elaborative function is found is indicated by indenting the vertical column of asterisks for each of the lower levels of analysis. The text structure of the present sample can be outlined as in A53

(A53)

1. INTRODUCTION OF TOPICAL CONCEPT (act 1)
2. ATTRIBUTION OF CONSTITUENTS 1,2, AND 3 (acts 2-3): Text organizing generic with enumeration (act 2) - Specific (act 3)
3. ELABORATION OF CONSTITUENT 1 (acts 4-8, 14-15):
 - *PREMISE (act 4)
 - *ATTRIBUTION OF CONSTITUENT 1.1 TO CONSTITUENT 1(act 5) - ELABORATION OF CONSTITUENT 1.1 (acts 6-8):
 - * DEFINITION (act 6)
 - * CONSTITUENT ATTRIBUTION: CONSEQUENCE OF ACT 6 (act 7)
 - * TOPIC SPECIFIC DETERMINANT CHARGE:STATEMENT: CONSEQUENCE OF ACT 7 (act 8)
 - * EFFECT: STATEMENT (act 14)
 - * TOPIC SPECIFIC DETERMINANT: METHOD OF DETECTION: STATEMENT: CONSEQUENCE OF ACT 14 (act 15)
4. ELABORATION OF CONSTITUENT 2 (acts 4-11, 14-15):
 - * PREMISE (act 4)
 - * ATTRIBUTION OF CONSTITUENT 2.1 TO CONSTITUENT 2 (act 9) - ELABORATION OF CONSTITUENT 2.1 (acts 10-11):
 - * DEFINITION(act 10)
 - * TOPIC SPECIFIC DETERMINANT: CHARGE: STATEMENT: CONSEQUENCE OF ACT 10 (act 11)
 - * EFFECT:STATEMENT (act 14)
 - * TOPIC SPECIFIC DETERMINANT: METHOD OF DETECTION: STATEMENT: CONSEQUENCE OF ACT 7 (act 15)
5. ELABORATION OF CONSTITUENT 3 (acts 4, 12-13, 14-15):
 - * PREMISE (act 4)
 - * DEFINITION (act 12)
 - * REACTION: STATEMENT: CONSEQUENCE OF ACT 12 (act 13)
 - * EFFECT:STATEMENT (act 14)
 - * TOPIC-SPECIFIC DETERMINANT: METHOD OF DETECTION: STATEMENT:CONSEQUENCE OF ACT 14 (act 15)

Acts 6 and 10, and 12 are identified as definitions and not as (characteristics) attributions because these propositions are applicable to all possible representatives of the conceptual classes concerned. Thus the difference between description and definition lies in that, while descriptions state the contextually relevant features of individual members of a certain class, definitions, on the contrary, are concerned with whole conceptual classes and must therefore introduce those features only which apply in any context to all members of a class. However, when all members of a class are identical, any overall description becomes a definition. This

seems to be the case in the above text. Moreover, acts 8 and 11 are coded as topic-specific determinants and not as (characteristics) attributions because 'electronic charge' is spatially observable only in terms of its effects and because the contexts, in which they appear, are manifestly elaborative (acts 4, 13, 14, and 15).

(54) Topical phenomenon with elaboration as its dominant message-core function

1. *Nothing throws more light on the deep roots of a society than its attitude to sex and death.*
2. *The Victorians, faced with these two great and mysterious forces, Eros and Thanatos, chose unequivocally to hush up sex and glorify death.*
3. *Repression on one side, celebration on the other: a choice dictated as ever by the contrasting fears of the dark forces of creation and destruction.*
4. *An attitude, one might point out, exactly the opposite of what prevails in England today where, in common with the rest of the western world, death is hushed up and sex glorified*
5. *-this, too, a panic choice. (Francois Bedarida: A social history of England 1851-1990, 1990, Routledge, London p.158)*

The discourse topical position is occupied in the above passage by the phenomenon conveyed by proposition 2, i.e. 'The Victorians --- chose unequivocally to hush up sex and glorify death.' The text structure representation takes the form:

(A54)

1. INTRODUCTION OF TOPICAL PHENOMENON(acts 1-2): Topic controlling generic (act 1) - Specific (act 2)

2. ELABORATION (acts 3-5):

*CAUSE: STATEMENT WITH EMBEDDED Reformulation OF TOPICAL PHENOMENON (act 3)

↑

MATCHING

↓

*OPPOSITE PHENOMENON: STATEMENT (act 4) - MATCHING EVALUATION OF OPPOSITE PHENOMENON (act 5)

(55) Topical participant and product with elaboration as a dominant message-core function

1. *Robert Malthus was an English clergyman and a political economist*
2. *who believed that the population of the world tends to increase faster than the food supply.*
3. *Consequently, if mankind fails to control the birth rate, poverty and war will result and these processes will bring about a natural restriction of the increase.*
4. *Malthus claimed that if there were four children in the first generation there might be sixteen in the second generation and sixty-four in the third generation, and so on.*
5. *Thus, assuming that the fertility rate remains constant, the population increases by geometric progression.*
6. *This means that the total numbers increase very rapidly after the series reaches a certain point; even though the rate factor remains the same.*
7. *Food, on the other hand, increases in an arithmetical series such as 2,4,6,8,10,12.*

8. *When Malthus talked about food he really meant land where people could grow food.*
9. *If there was always plenty of land then we might hope that the food supply would increase indefinitely like the population.*
10. *However, Malthus lived at the end of the eighteenth century and at that time people could increase the food supply only if they added more land to the cultivated areas - and the amount of land was limited.*
11. *The situation as Malthus saw it, therefore, was a race between an increasing birth rate and the supply of food. (Allen and Widdowson 1978:135)*

A text with an elaborative textual comment may typically be about a participant and his intellectual product, i.e. a theory/argument/experiment/survey/paper/novel/poem, etc. The discourse topic of such a text can usually be stated within a genitive structure. In the above passage it is defined as *Malthus's theory on population growth and food supply*. For the structural description of the discussion of the product, i.e. the theory, its two elements 'population growth' and 'food supply' are coded as phenomena Y and Z, respectively. As the structure of the discourse topic implies, the topical focus is on the product, although a knowledge of the participant, i.e. Malthus, is also topically indispensable. This results in an intermingling of the information concerning the participant and his product so that information about the participant's actions typically works out as elaboration of the product. The text structure of the passage can be coded in the form:

(A55)

1. INTRODUCTION OF TOPICAL PARTICIPANT X AND PRODUCT (acts 1-3):
INTRODUCTION OF X (act 1) - INTRODUCTION OF PRODUCT(acts 2-3): EVALUATION
ATTRIBUTION TO X WITH EMBEDDED PHENOMENA Y AND Z (act 2) - IMPLICATION OF
ACT 2 (act 3)
2. ELABORATION OF PRODUCT STATED IN ACTS 2-3 (acts 4-11):
 - * SPECIFICATION OF PHENOMENON Y THROUGH EVALUATION
ATTRIBUTION TO X (acts 4-6): Interest arousing specific (act 4) - Labelling
generic (act 5) - Reformulation (act 6)
 - * SPECIFICATION OF PHENOMENON Z THROUGH EVALUATION
ATTRIBUTION TO X: CONTRAST TO PHENOMENON Y IN ACTS 4-6 (act 7)
 - * INTERPRETATION OF PRODUCT AND PHENOMENON Z IN ACT 7
(act 8) - BASIS (acts 9-10): HYPOTHESIS (act 9) - FRUSTRATION (act 10) -
CONSEQUENCE (act 11)

(56) **A topical event with elaboration as a dominant message-core function**

FRONTIER JUSTICE: An Angry Mother Takes a Child-Molesting Case into Her Own Hands

1. *Daniel Mark Driver, 35, had just taken his seat in a rural California courtroom for a hearing on charges that he had sexually molested four boys when Ellie Nesler, the 40- year-old mother of one of the victims, quietly walked behind him.*
2. *According to the police, she pulled out a small-caliber pistol and fired five shots into his head.*
3. *The fatal shooting quickly plunged the tiny gold-mining town of Jamestown into turmoil.*
4. *Reporters poured in; tabloid-TV shows pressed for details; and local supporters took up a collection for Nesler's defence.*

5. *Donna Brewer, who runs a cafe next to the courthouse, said Driver 'deserved what he got. That's the worst crime there is.'*
6. *And Nesler's sister claimed that Driver, who had a previous conviction for child molestation, had 'smirked' when he entered the courtroom.*
7. *Almost lost in the hubbub was the district attorney, who called the shooting 'reprehensible'.*
8. *Nesler, who was freed on a 500,000 dollar bond, will enter a plea this week. (Time, April 19, 1993)*

The news report type of narrative text typically shows an event as its discourse topic. This results in a structure where the introductory member reports the directly observable facts of the event while the rest of the text provides a more analytical survey of its contextually relevant aspects. These aspects frequently include causes, consequences, parallel phenomena, etc., and also evaluations of the topical event. Accordingly, due to the analytical character of the frame content, the dominant message-core function of the textual comment is defined as elaboration.

The event reported in the above example is itself participant-oriented (with 'Ellie Nesler' as its text-structurally significant participant) but the focus of the whole text is not on the participant but on the event itself. The uniqueness of the action is what the writer is interested in, not the agent of it. Thus a reference to the whole event, i.e. 'the fatal shooting' is in the thematic position in the opening act of the textual comment, and it remains the most specific common denominator for the rest of the propositions of the textual comment. The text structure of the passage is represented by means of the formula:

(A56)

1. INTRODUCTION OF TOPICAL EVENT WITH EMBEDDED INTRODUCTION OF PARTICIPANT X (Ellie Nesler) (acts 1-2: SUCCESSION)
2. ELABORATION:
 - * CONSEQUENCE (acts 3-4): Topic controlling generic (act 3) - Specific (act 4)
 - * REPORTED EVALUATION OF TOPICAL EVENT (acts 5-7: ADDITION)
 - * RESPONSE BY PARTICIPANT X TO TOPICAL EVENT: STATEMENT (act 8)

6.3.3 Basis

Basis is a message-core function of the textual comment which realizes *a convincing and persuading communicative illocutionary purpose*. As indicated above, this illocutionary purpose pertains to the argumentative and instructive text types. An argumentative text is here defined as a text in which the writer argues for the validity of his *evaluation* of a state of affairs by presenting relevant justifying facts. The presupposition is that the reader may be inclined to challenge the writer's point unless persuaded to believe in it. Alternatively, the writer himself points out an earlier position with which his view is going to conflict. Thus, the writer presents his evaluation of a state of affairs in either implicit or explicit opposition to other existing evaluations. He therefore makes an attempt to prove the validity of his evaluation by offering evidence for the reader to judge. Thus it is the communicative illocutionary purpose of the argumentative text that is manifested as the presence of evidentiary information, i.e. a basis. In this case the communicative illocutionary purpose seems to override the representational one (which may be that of saying *what happened/what something is, is like, or looks like/ describing something by way of an analysis*) as a primary text-structural determinant of the function. The basic argumentative message structure in which an opposing view is implied but not explicitly stated has an evaluation as its discourse topic while its textual comment consists of a basis. The structure is represented by the formula *evaluation - basis*.

An instruction, when it makes a text, is also frequently followed by a basis. This is understood to result from the fact that an instruction is always transcribable into an evaluation stating the desirability of certain behaviour in a certain situation, e.g. the instruction *Go home* corresponds semantically to the evaluation *It is desirable that you go home*. As evaluations are expressions of subjective judgement unless others are persuaded by means of reasoning to believe in them, desirability evaluations, i.e. instructions, may remain ineffective if not provided with a basis. Thus instructions frequently add reasoning to their imperative force. The basic instructive message structure therefore consists of an *instruction - basis* sequence.

To sum up, in an argumentative text the basis is assumed to convince the reader of the validity of the writer's point. In an instructive text its function is to persuade the reader to believe in the desirability of the behaviour suggested by the instruction and to act accordingly. Part of the persuasive force of an instruction derives, of course, from the form of the instruction itself.

The conclusion that the textual comment of an argumentative and an instructive sequence may be the basis and that the evaluation - basis and instruction - basis sequences can be represented by means of the textual topic-comment distinction in the same way as any other message structures is based on the following line of thought: Every argumentative sequence involves an implicit truth evaluation and can therefore be written into the form: *X is Y. This is true on the grounds Z*. This format shows that the discourse topic, i.e. what is being talked about, in the basic argumentative sequence is the argumentative evaluation itself and that the textual comment consists of the justifying information that supports the implicit truth evaluation and accordingly also the topical evaluation. Thus in the case of argumentation, saying something about the discourse topic (which is what the textual comment is supposed to do) means stating the premises of its validity. An instructive sequence with a basis can be shown to yield to the same line of analysis by transcribing the instruction into a desirability evaluation and by explicating the truth evaluation which is assumed to link a reasoning sequence to the preceding evaluation. It takes the form *Behaviour X is desirable. This is true on the grounds Z*. Thus basis can justifiably be regarded as a message-core function which may dominate the textual comment in the same way as attribution and elaboration.

6.3.3.1 Basis through deduction

The evidentiary force of the information providing a basis for an argumentative evaluation may derive from a single physical experience (e.g. Mr. X is the burglar. I saw him break into the house), or inductive or deductive reasoning.

In the case of deduction, in which inferences are made from premises, the chain of deduction is often incomplete, because some of the steps are assumed to be shared knowledge between the encoder and the decoder of the message. Moreover, deduction occasionally involves an overlap of causal and evidentiary relations. This means that the proposition which provides evidence for the argumentative discourse-topical evaluation coincides with the causal explanation of the discourse-topical idea. The regular case is that there is a causal relation between the implicit act of claiming the truth of the discourse-topical proposition and the propositions providing the basis. This is evident from the basic argumentative pattern which can be read *X is Y. This is true (or I claim this to be true) on the grounds Z*. (See Tirkkonen-Condit 1985:69 for ways to identify an evidentiary relation.) The coincidence of a causal and an evidentiary relation can be detected by testing whether the introductory clause of the basis *This is true (or I claim this to be true) on the grounds* — can be replaced by a signal of a causal relation such as *This is because* — . The passage below shows an example of a deductive reasoning sequence which stands in a coincidental evidentiary and causal relation to the preceding evaluation:

(57)

1. *Your description of the social and economic adversities facing young people in Cuba only scratched the surface (Aug. 12).*
2. *(I claim this to be true on the grounds that/This is because) You did not discuss human rights abuses.*
3. *While your article spoke of fun and frolic in the streets of Havana and the 'hardship' of doing without designer jeans, it mentioned nothing of the persecutions of Cuban political dissidents, many of whom are under 18 (Lilian S. Dorka, Time, September 2, 1991)*

In this editorial letter the propositions of the basis function state the reasons why the article published in *Time* on August 12 had, in the opinion of the letter writer, resulted in 'only scratching the surface'. These reasons coincide with the considerations on which the writer can also claim that the proposition of act 1 is true. Overlaps of causal and justifying relations seem to appear in deductive contexts only. The above argumentative sequence involves deduction although the complete set of inferential steps which is presented below is not explicated. The starting point is an implicit premise expressed by proposition 1 below.

(58)

1. *If a description of the social and economic adversities facing young people in Cuba does not discuss human rights abuses, it only scratches the surface*
2. *Your article in Time on August 11, 1991 did not discuss human rights abuses*
3. *So it only scratched the surface*
4. *Your article in Time on August 11, 1991 only scratched the surface. I claim this to be true on the grounds that it did not discuss human rights.*

Because, however, coincidental causal semantics in the basis sequence does not have any practical bearing on text structure analysis the causal element will not be recognized by coding. Accordingly, the following text structure representation is proposed for the above text.

(A58)

1. EVALUATION (act 1)
2. BASIS (acts 2-3): Topic controlling generic (act 2) - Specific (act 3)

The basis sequence follows the generic-to-specific pattern, 'persecutions of Cuban political dissidents' being a specification of 'human rights abuses'.

When *an instruction* is followed by *a basis*, it seems to be a rule that there is an overlap of causal explanation and the basis function. This implies that instructions are normally supported by means of deductive reasoning.

(59)

1. *It is naturally important that the law should, as far as possible, be certain.*
2. *(I claim this to be desirable on the grounds that/ This is because ...) (2.1) If law depended entirely on the whims of the judge dealing with a case, (2.2) there would be little use in studying law. (Frank, W.F. and Royall, D.V.E 1968, The Legal Aspects of Industry and Commerce, General Introduction, in Sallinen 1990:19)*

As pointed out above, an instruction can always be interpreted as a desirability evaluation by the encoder. This means that an instruction expresses the encoder's preference concerning some future action by the decoder. The preference is based on the expectation that the suggested action should have a desirable outcome or that the omission of that action would lead to an undesirable situation. The above example illustrates an instruction - basis sequence with deductive reasoning from a desirable outcome, i.e. the premise that *people should be able to study the law*. The reasoning indicates that if the topical instruction is not heeded, the desirable state will not be reached. The fact that the basis sequences could logically be started with either of the two leadings suggested in the brackets in act 2 indicates an overlap of causal and evidentiary logic. Priority is, however, given also in the instructive context to the basis function (and double coding is avoided). To point out the logic of the above basis the reasoning proposition (act 2) is coded as a proposition-internal *condition-consequence sequence* (acts 2.1 and 2.2) instead of being referred to as a single *conditional evaluation*. The proposition carrying the instruction serves a double purpose in that there is embedded in it an evaluation of the significance of the state of affairs suggested by the instruction. In view of the above considerations the coding takes the form:

(A59)

1. INSTRUCTION WITH EMBEDDED EVALUATION (act 1)
2. BASIS (act 2): CONDITION: CONTRAST TO INSTRUCTION IN ACT 1 (act 2.1) - CONSEQUENCE (act 2.2)

6.3.3.2 Basis through induction

Inductive inferences can be made from one or several instances. Example (60) below illustrates inductive reasoning from a number of instances. Where the evidence is based on observations of instances of the phenomenon in question, no coincidence of evidentiary and causal logic can be identified (in practical terms this means that it is not possible to start the basis sequence by inserting the causal signal *This is because —*).

(60)

1. *In addition, mental health professionals, including social workers, have not fully accepted responsibility for service to this client population.*
2. *(I claim this to be true on the grounds that ...) Nancy Atwood documented a professional prejudice toward psychotic clients in social workers as well as other professionals.*
3. *Others have discussed the resistance of practitioners toward this client group and have provided detailed reasons for this resistance. (Libassi 1988:89)*

Though experimental research conventionally establishes the validity of its hypothesis by means of inductive reasoning, i.e. it makes generalizations from particular instances, the process in many cases involves also an element of deduction. This element becomes inevitable when the phenomena to be studied must be reduced to a measurable form, i.e. conceptualized. Then a certain premise must be accepted concerning the equivalence of the phenomenon to be studied and the properties to be measured. In the above case, as there are two pieces of supporting evidence, there are also two premises. They are *If mental health professionals are prejudiced towards a client group they do not accept responsibility for them* and *If mental health professionals are resistant to a client group they do not accept responsibility for them*. The text structure of example 60 can be described as below:

(A60)

1. EVALUATION (act 1)
2. BASIS (acts 2-3); act 2 ADDITION to act 3

The basis sequence naturally involves additive logical relations when it consists of several pieces of evidence. In the case of deductive reasoning, causal, conditional, and concessive relations are typical.

The evidentiary force of the basis function may also be founded on the observation of one instance of the class of phenomena that the generalization deals with. Kinneavy (1971: 112) mentions this as a special case of induction, and Aston (1977: 500) refers to it as 'substantiating exemplification'. The text sample below shows an argumentative sequence where inductive reasoning from one incident constitutes the basis:

(61)

1. Some endangered animals experience intense suffering when they are smuggled into the U.S. hidden in the secret compartments of crates.

2. (I claim this to be true on the grounds that) In one incident, six baby orangutans were smuggled in unventilated crates labelled BIRDS, causing the deaths of four of them.

3 This horrible crime was organized by an international network managed by a Miami animal dealer

4 who recently pleaded guilty and received a 13-month jail sentence. (Shirley McGreal, Time, August 9, 1993)

Instead of simply stating the evidentiary incidence, the basis contains as an embedded structure also an elaboration sequence. This is probably to make known the documented status (a charge was brought against the person responsible for the event and he was convicted) of the case reported, which is likely to increase the evidentiary force of the basis. Accordingly, the following text structure representation is suggested:

(A61)

1. EVALUATION (act 1)

2. BASIS (acts 2-4); INTRODUCTION OF EVENT X (act 2) -
ELABORATION (acts 3-4):

* AGENT OF TOPICAL EVENT: STATEMENT (act 3)

* CONSEQUENCE OF TOPICAL EVENT: ACTION AND
MEASURE ATTRIBUTION TO AGENT(act 4)

The evaluation - basis and instruction - basis sequences discussed above with basis as their dominant top-hierarchy message-core function represent the basic idea of argumentation and instruction. There are modifications of these argumentative and instructive patterns where along with varying discourse-topical choices the textual comment itself consists of one or several evaluation / instruction - basis sequences. The basis function then still plays a text-typologically inherent role though at a lower level of message-structural hierarchy. A more detailed discussion on these patterns will be provided in section 6.3.4.4, where evaluation (with basis) will be studied as a message-core function of the textual comment.

6.3.3.3 Text-structural logic versus propositional logic

Although natural language complies with the established conventions and forms of verification, it does not necessarily follow that all logic-sounding language is strictly logical in terms of its propositional content. Thus a distinction must be made between propositional logic and the logic of the linguistic system. The linguistic system is capable of producing a sound of logic irrespective of propositional content by providing clues for the presence of a basis-providing message-core function.

It is the message-structural function of the propositions involved that the present analysis is concerned with, not the logic of their semantics.

The evaluation - basis and instruction - basis sequences discussed above with basis as their dominant top-hierarchy message-core function represent the basic idea of argumentation and instruction. There are modifications of these argumentative and instructive patterns where along with varying discourse-topical choices the textual comment itself consists of one or several evaluation / instruction - basis sequences. The basis function then still plays a text-typologically inherent role though at a lower level of message-structural hierarchy. A more detailed discussion on these patterns will be provided in section 6.3.4.4, where evaluation (with basis) will be studied as a message-core function of the textual comment.

6.3.4 Evaluation

Evaluation is a message-core function that may occur both in the discourse-topical position and in the textual comment. It realizes the same representational purposes as attribution and elaboration but its communicative purpose is to inform the reader of the writer's view instead of delivering established facts. This means that although it can constitute as a comment function message structures which are similar in terms of their modes of discourse to those created by either attribution or elaboration, there is a difference between those two and evaluation which lies in the modality aspect involved, i.e. they have different relations to observable reality (see Enkvist 1975: 116-117 for modality). While attributions as message-core functions of the textual comment are assumed to deliver facts, evaluations convey subjective judgements, impressions, and inferences. Similarly, the items of the elaborative frame may be stated either as facts or as subjective positions (for the system of coding used see also section 6.3.2.2).

The above definition of evaluation suggests that the demarcation line between a characteristics attribution or the statement of an elaborative determinant and a non-argumentative evaluation (i.e. which is not followed by a basis) remains necessarily vague. However, if text structure analysis is seen as one constituent of the process of text comprehension, it can be concluded that it is inevitable to make that distinction because it enables a critical understanding of the content of the text. It may even be that the purposive manipulatory capacity of some textual genres (e.g. political speeches) draws from the obscurity of the fact/evaluation distinction. Thus although that distinction remains up to a point a matter of interpretation, it is presently suggested that propositions involving moral or aesthetic judgements, or other inferences from factual phenomena with implicit or explicit signals of subjectivity, be coded as evaluations. Besides the above criteria the analyst /reader must rely also on his own experience as to the relative subjectivity/objectivity of an observation. If it can be expected that a majority of observers would agree on an observation, it is more likely to involve a fact than a subjective evaluation. For example, observations of quantity can be regarded as statements of fact rather than as evaluations in contexts in which people have conventionalized ideas of what is considered to be high quantity and low quantity within a given topical class (e.g. He is a tall/small man). Also when an observation can be expected to be based on factual information though this information is not referred to as evidence, it must be understood to constitute a statement of fact (e.g. *The Rockefellers were one of the richest families in the world at the beginning of the 20th century*). In other words, the criteria to be applied for the identification of the non-argumentative evaluation function arises, on the one hand, from the value-relatedness of the semantic content of the proposition and the explicit or implicit lexical or contextual clues to be found in the text, and, on the other hand, from the reader's experience of the relative subjectivity/objectivity of an observation. The present system of text structure representation codes as evaluations also first-person expressions of states of mind evoked by some text-internal participant / phenomenon / event, etc. if such expressive statements can be turned into evaluations in their respective contexts, i.e. if, for example, *I was*

deeply disappointed by X can be transcribed into *I found X deeply disappointing*, or *How I wish I could go home* can be transcribed into the form *I find going home desirable*.

Evaluations are argumentative if they are followed by a basis. If the basis is convincing enough, the evaluation attains the status of a fact by the reader's judgement. Such evaluations do not present any problems of identification. When no basis is provided both the writer and the reader accept the evaluation as a mere subjective point of view.

6.3.4.1 The evaluation function specified in terms of agent and object

Evaluations may be made either by the writer, by a participant of the message, or by someone inessential to the message. Moreover, the object of the evaluation may vary, as the discussion below will show, from the topical idea to any proposition in the text. Consequently, the coding of the evaluative function must appropriately specify it in terms of its agent and object. When an evaluation of the topical idea is made by the writer, the coding used is simply *evaluation*. If the evaluator of the topical idea is one of the message-structurally significant participants of the text, this participant is coded as the agent of the evaluation, e.g. *evaluation by participant X*. When the object of the evaluation is text-structurally significant but other than the discourse-topical idea and the evaluator is the topical participant or one of the textual participants with a significant role as an agent of the evaluation, the coding *evaluation of Z by topical participant/participant X* (e.g. evaluation of response by participant x) is used. If, however, the object of evaluation is text-structurally insignificant and its agent is either the topical participant or some other text-structurally significant participant, the evaluation is coded only as being attributable to its agent, i.e. *evaluation attribution to topical participant/participant*. When, on the contrary, an evaluation is made by an outsider to the core of the message or by a textual participant who is message-structurally insignificant as the agent of the evaluation, it is coded as a *reported evaluation*. When the object of the reported evaluation is other than the discourse topic, it is indicated by the coding *reported evaluation of Z*. When conditionality is involved in an evaluation, the function is coded as *conditional evaluation* (e.g. If they tried harder, they might succeed). When the evaluation involves a hypothesis, i.e. when it communicates the message that a state of affairs depicted by the respective proposition may or may not be the case (e.g. Things may be getting worse), it is coded as *hypothetical evaluation*.

6.3.4.2 Derivatives of the evaluation function

Instruction, *commitment*, *implication*, *interpretation* and *problem* are seen as special kinds of evaluations. Aspects of *the instruction function* are studied in sections 6.2.3 and 6.3.6. Similarly, a detailed discussion on *commitment* will be provided in 6.3.7. The coding *implication* is used instead of evaluation when the inferential nature of the evaluation seems to be of special relevance for text-structural interpretation. Implication differs from the strategic structure with evidentiary facts followed by a conclusion in that it is not supported by its preceding propositions, although it can be inferred from some of the lines of information provided by them. Thus a sequence of propositions with a final implication lacks the persuasive purpose of an argumentative evidence-conclusion sequence. Because the generation of implications involves analytical treatment of information they frequently appear in elaborative contexts. The coding *interpretation* is used for an evaluative proposition when the object of evaluation is the meaning of a preceding proposition/group of propositions. Implications and interpretations differ from the basic type of evaluations in that they cannot appear in the discourse-topical position. *Problem* denotes a proposition introducing a state of affairs which is negatively evaluated, either explicitly or implicitly. The coding is used when the text responds to such an evaluation by suggesting a solution, in the form of an instruction, or otherwise. Like implications, also interpretations and problems are typical constituents of an elaborative frame. (see example 55 for implication and interpretation and example 76 for problem)

6.3.4.3 The place of the evaluation function within message structure

As suggested at the beginning of the present section, evaluation may serve as the dominant message-core function of the textual comment. Alternatively, evaluations may appear within attributive and elaborative frames in which they signal a critical response by the writer, a textual participant or some text-external observer. Within the elaborative frame, the coding of a top-hierarchy evaluation may serve two functions: it denotes either a direct evaluation of the discourse-topical idea, or it indicates the modality aspect of any item of the elaborative frame whose semantics allows for the statement/evaluation variation. In the latter case the coding *evaluation* (or *statement*; see section 6.3.2.2 for the reasons why the statement / evaluation distinction in the coding of elaborative determinants is regarded as necessary) follows the coding of the respective elaborative determinant as a further specification (e.g. *solution: evaluation*).

It is also theoretically possible that every message-core function as well as every logical function would be followed by an evaluation. Such evaluations are subordinate to the respective message-core functions and so operate at a lower level of text-structural hierarchy. This role of evaluation indicates that it may act in the textual comment as a text-type-independent free mover within which the writer communicates his opinions/inferences about the facts that he is reporting.

Moreover, a whole narrative/ descriptive/ expository passage may constitute a factual situation that the writer wants to comment on by making value judgements or by drawing inferences from the information provided. The message structure of such a text then corresponds to the coding *situation - evaluation*. Theoretically, in such a case the text consists of two speech acts because the text-opening narrative/ descriptive/ expository/argumentative/ instructive or commissive passage is a complete textual speech act with a discourse topic and a textual comment of its own. The discourse topic of the whole evaluative sequence is expected to coincide with that of the situation component, because if the evaluation constituting the textual comment of the inclusive speech act is about the situation which in its turn shows a particular discourse topic, the evaluation is also bound to be about that discourse topic at the most specific level of topic definition.

If a message structure consisting of a discourse topic which is *a phenomenon* or *an event* and a textual comment which provides *a specification* of that phenomenon/event is followed by an evaluation, this evaluation relates both to the discourse topic (like evaluation as a top-hierarchy item of the elaborative frame) and to the whole situation described by the preceding message structure. This coincidence raises the theoretical question of whether the evaluation should then be coded as an item of the elaborative frame together with the specification item (because it relates directly to the discourse-topical idea), or whether the discourse-topical phenomenon/event when specified should be seen as constituting a situation which is being evaluated, i.e. whether the message structure of the whole passage should be represented by means of the situation - evaluation pattern. The latter way of representation is adopted here because the discourse topic of such a passage (a phenomenon or an event) already denotes a situation or state of affairs which is introduced so that it could be evaluated (see text sample 64).

6.3.4.4 Argumentative evaluations

Evaluations as message-core functions of the textual comment may also be followed by supporting evidence. A text is assumed to be argumentative, i.e. realizing a convincing illocutionary purpose, when a basis or an evaluation with basis /evaluations with bases serves/serve as its dominant message-core function. An argumentative text structure may thus consist of a single evaluation - basis pattern or several evaluations with bases relating to a discourse-topical object or situation. Both the truth-signalling lexical items of the evaluation itself and the basis contribute to the realization of the convincing illocutionary purpose of such a text. The difference between

argumentative passages representing the patterns *evaluation - basis* and *introduction of topical participant / concept / event / phenomenon / setting - evaluation - basis* lies in that while in the former structure the focus of interest is on the inferential or judgmental evaluation, in the latter the topical idea of the evaluation overrides the evaluation itself in discourse-topical significance and is therefore singled out of it by means of a separate introductory sequence.

The representational illocutionary purpose of an argumentative text may be that of *telling what happens/happened*, *telling what something is or looks like in terms of observable features*, or *describing something by means of an analysis*. Thus the frame of an argumentative text does not impose restrictions as to the mode of description of the text, i.e. whether it is temporally/spatially constructive or notional and analytical. Instead, it can be assumed that the frame of description in an argumentative text is determined by what is logically supportive to the discourse-topical argumentative evaluation or the dominant argumentative evaluation of the textual comment. Accordingly, the frame of an argumentative sequence is presently described as *argumentative*. This means that logically relevant information in an argumentative text is what provides arguments to validate the writer's claim.

The message structure of a report on an experimental piece of research or of any inquiry into the validity of a hypothesis can be seen as a modification of the above basic argumentative pattern with a discourse topic and an evaluation - basis sequence as its textual comment. The evaluation - basis sequence is replaced in the structural description of a research report by a hypothesis - test - conclusion sequence. The difference between the above two message structures lies in the modality aspect involved, i.e. while the writer is convinced of the validity of his own evaluation in the basic argumentative pattern, a hypothesis in a research setting is subject to an inquiry. Thus the process of verification that follows incorporates in the latter case a test which may also overturn the hypothesis. For this reason the basis function must be represented in a modified form which allows for the alternative outcomes of the testing procedure. Accordingly, the formula *introduction of topical phenomenon - hypothetical evaluation (X) - test: report on test and results - conclusion (X) / conclusion (Y): frustration of X* is suggested for the message-structural analysis of research reports. When the hypothesis is confirmed, the test and conclusion components combine to constitute a basis for it. When the hypothesis is not confirmed the conclusion made on the grounds of test results amounts to a frustration of the initial hypothesis. The introductory member may embrace a comprehensive embedded message structure. It is, however, coded as an introduction of the topical phenomenon and not as a situation like in the situation - evaluation pattern, when the following hypothetical evaluation is targeted to a specified phenomenon and not to a whole textual speech act.

An argumentative message structure with a textual comment consisting of an evaluation - basis sequence (or some of its modifications) may typically take a reported or quoted evaluation as its discourse topic. The reported/quoted evaluation may be followed by a reported basis, which if present combines with the evaluation to constitute the discourse topic. This means that also the supporting reasoning is exposed to further evaluation. The topical reported/quoted evaluation can be either affirmed or rejected. The pattern is signalled by the coding *reported evaluation (- reported basis) - affirming evaluation - basis* or *reported evaluation (- reported basis) - rejecting evaluation - basis* depending on whether affirmation or rejection takes place. In the case of rejection the message structure may incorporate also a correcting evaluation which relates to the rejecting evaluation as its basis or by means of an adversative relation, i.e. *a contrast*. This interpretation is derived from the observation that the relation existing between a rejecting evaluation and a correcting one can be transcribed into the form *X is not the case. On the contrary, Y is the case*, which shows that a contrast relation prevails between the two implicit truth evaluations. The relation between the topical reported evaluation and the correcting evaluation can also be defined in logical terms. The correcting evaluation stands in *a replacement relation* with the preceding reported evaluation. The replacement relation corresponds to the semantics of the sentence connector *instead*.

Thus the underlying argumentative truth evaluations could be conveyed also by the formula *Y is the case instead of X*. The above analysis shows that also the latter of the above two argumentative patterns conforms to the definition of text structure which assumes that every proposition is linked either directly to the discourse topic, or directly/indirectly to the discourse topic and directly to one of the preceding propositions / groups of propositions. However, similarly to other cases with an overlap of operational and logical relations (e.g. evaluation - basis and motivation - instruction), the operational relation, i.e. in this case that of *correcting evaluation*, is preferred for message-structural description because of its greater explanatory power. Accordingly, the coding of the pattern takes either the form *reported evaluation (- reported basis) - rejecting evaluation - basis = correcting evaluation (- basis)* or *reported evaluation (- reported basis) - rejecting evaluation - basis - contrast: correcting evaluation - basis*.

Alternatively, the object of the reported evaluation may occupy the discourse-topical position in the above structures. The patterns then read *introduction of topical participant / concept / phenomenon / event etc. - reported evaluation (- reported basis) - rejecting evaluation - basis = correcting evaluation (- basis)* or *introduction of topical participant etc. - reported evaluation (- reported basis) - rejecting evaluation - basis - contrast: correcting evaluation - basis*. The difference between the latter patterns and the former ones is analogical to that between *evaluation - basis* and *introduction of topical participant etc. - evaluation - basis*.

An introductory strategy may or may not be involved in the presentation of the topical reported/quoted evaluation. If present it is coded respectively. It is, however, possible for an argumentative passage to be opened directly by the topical evaluation. No introduction is coded in such a case.

6.3.4.5 Message-structural patterns with evaluation as a discourse topic or as a message-core function of the textual comment

The text samples studied below will provide examples of the evaluation (with basis) function in the various structural positions discussed above.

(62) Evaluation (with basis) as a top-hierarchy proposition within an elaborative frame and as a free-moving lower- level message core function

Double Dose of Death

1. *The poisoning of a prominent businessman has seized the financial community with fear and frustration.*
2. *Ivan Kivelidi, 46, became the 6th banker to be murdered in Russia in 3 1/2 years after salts of heavy metals were slipped into his tea and smeared onto his telephone receiver.*
3. *His secretary, Zara Izmailova, 35, also died.*
4. *(4.1)Underscoring the public's lack of faith in the police, (4.2) Kivelidi's colleagues in the Russian Business Roundtable, a group he founded to lobby for commercial interests, put up one million dollars for information leading to the killer's capture and vowed to monitor the official investigation.*
5. *Said Alexei, who declined to give his full name: 'A thorough overhaul of the police is needed.*
6. *Now they are simply corrupt.'*
7. *Furthermore, bankers themselves are in dangerously low regard.*
8. *'Why do we need so many bankers anyway?' sniffed magazine vendor Vera Polna.*
9. *All they do is cheat us and each other while they try to take our money.(Time, August21 1995)*

The present text shows an elaboration of a topical event, i.e. the shooting of Ivan Kivelidi, a Russian banker. It incorporates a set of evaluations (in acts 5,7, and 8) which are seen as implicit evaluations of the topical event itself (acts 7 and 8) or the response item of the elaborative frame (act 5), while they explicitly relate to two textual participants, i.e. to 'financial community' (in act 1), which is understood to be synonymous with 'bankers' (in act 7), and to 'the police' (first mentioned in act 4.1). The structural looseness of the evaluations may be due to the fact that they are comments from a Gallup poll in which people have responded to questions which relate to and arise from the topical event but which could not be woven in a text-structurally ideal way into the written report. As the evaluations in acts 4.1, 5, and 8 are made by text-structurally insignificant participants they are coded as reported evaluations. In analogy with the coding of acts 5 and 8 acts 6 and 9 are coded as reported bases. In the argumentative sequence of acts 5-6 an evaluation (act 6) is used to support another (act 5). This is acceptable when the speaker believes that his evaluation is a commonly held assumption (see Tirkkonen-Condit 1985 for 'shared knowledge assumptions'). Act 7 voices the writer's inference of a topic-related state of affairs which is supported by reference to a reported evaluation and its basis. In the text structure representation of the above passage only text-structurally significant textual participants are singled out by coding. Thus, 'financial community' is singled out as a textual participant because it constitutes a reference point and accordingly a text-structural node to act 8. Similarly, 'the police' is identified as a participant because in addition to being introduced and evaluated in act 4.1 it is evaluated also in act 5. The entire text structure of the passage can be presented in the form:

(A62)

1. INTRODUCTION OF TOPICAL EVENT WITH EMBEDDED INTRODUCTION OF PARTICIPANT X (=financial community) (acts 1-2): Topic controlling generic (act 1) - Specific (act 2)

2. ELABORATION (acts 3-9):

* CONSEQUENCE (act 3)

* RESPONSE: STATEMENT (act 4.2) WITH EMBEDDED CAUSAL EXPLANATION = REPORTED EVALUATION OF PARTICIPANT Y (the police) (act 4.1)

⇓

REPORTED EVALUATION OF RESPONSE THROUGH REPORTED EVALUATION OF PARTICIPANT Y (act 5) - REPORTED BASIS (act 6)

⇑

ADDITION

⇓

* EVALUATION OF TOPICAL EVENT THROUGH EVALUATION OF PARTICIPANT X (act 7) - BASIS (acts 8-9): REPORTED EVALUATION (act 8) - REPORTED BASIS (act 9)

(63) Evaluation (with basis) as textual comment in a situation - evaluation type of message structure

The Sleaze Factor

1. In Cape Town last week, motorcycle outriders escorted President Nelson Mandela to parliament, where a red carpet ribboned down the granite steps.

2. *Leaving his limousine, Mandela was greeted by a navy honor guard in spotless whites.*
3. *Air force jets flew overhead, and a 21-gun salute rang out from nearby Signal Hill.*
4. *Beginning his second year in office, Mandela had arrived to open a new session of Parliament,*
5. *and the spectacle suited the occasion -*
6. *to all who remember apartheid, the very existence of a Mandela administration in South Africa is still amazing. (Peter Hawthorne, Time, February 27, 1995)*

'Nelson Mandela' is the most specific formulation of the discourse topic of the above passage. There is a reference to Mandela in acts 1-2, and 4. Act 3 could be transcribed into the form *Mandela was also greeted by air force jets flowing overhead* —, which shows that 'Mandela' is the topical participant of this act as well. Accordingly, Mandela is indisputably the discourse topic of the situation component. The notion 'spectacle' in the evaluation function (act 5) refers collectively to the situation described in acts 1-4, but it involves also an implicit reference to Mandela because it denotes 'the spectacle of Mandela arriving to open a new session of Parliament'. Thus the above text sample supports the earlier assumption that the most specific formulation of the discourse topic of the situation - evaluation sequence coincides with the discourse topic of the situation component. The text structure of the passage can be represented as below:

(A63)

I SITUATION (acts 1-5)

1. INTRODUCTION OF TOPICAL PARTICIPANT IN SETTING WITH EMBEDDED MEASURE ATTRIBUTION (act 1)
2. MEASURE ATTRIBUTION TO TOPICAL PARTICIPANT: SUCCESSION TO MEASURE IN ACT 1 (acts 2-3: OVERLAP)
4. REPORTED COMMITMENT BY TOPICAL PARTICIPANT: CAUSAL EXPLANATION TO MEASURES IN ACTS 1-3 (act 4)

II EVALUATION OF SITUATION (act 5) - BASIS (act 6)

(64) Evaluation (with basis) as a message-core function of the textual comment when the topical phenomenon/event is elaborated through specification

Jerusalem: Rabbis' Row

1. *As the government raced to finalize an agreement on expanding Palestinian self-rule, a group of influential right wing Israeli rabbis raised a new roadblock on the path to peace.*
2. *Israeli soldiers must disobey any order to vacate West Bank army bases, the rabbis decreed, because the Torah commands Jews to populate the land of Israel.*
3. *'It is a disgrace', said Erel Mizrachi,*
4. *'You can't have an undemocratic group like these rabbis challenging the democratic authority of the government.'*
5. *Attorney General Michael Ben-Yair issued his own ruling: soldiers who refuse to obey orders will be tried and punished. (Time, July 24, 1995).*

The propositional content of act 3 can be seen as an evaluation of both acts 1 and 2. This means that the evaluation in act 3 relates both to the discourse topic (i.e. 'As the government raced to finalize an

agreement on expanding Palestinian self-rule, a group of influential right wing Israeli rabbis raised a new roadblock on the path to peace') and the message about it. The coincidence is brought about by the fact that the discourse-topical phenomenon is elaborated by means of specification. As pointed out above the pattern might be interpreted either as corresponding to the situation - evaluation representation or as one with evaluation as one top-hierarchy item of the elaborative frame, in which case the evaluation is understood as relating directly to the discourse topic. The former interpretation is preferred because it seems to be the more obvious one; the discourse topic as such already provides a situation to be evaluated either directly by the writer or indirectly by someone else. The commitment conveyed by act 5 is coded as part of the evaluation sequence on the grounds that commitments can always be transcribed as evaluations; they are evaluations of appropriate action in a given situation (see section 6.3.7 for commitments). The following text structure representation is suggested:

(A64)

- I. SITUATION (acts 1-2)
 - 1. INTRODUCTION OF TOPICAL PHENOMENON IN SETTING WITH GENERIC TOPIC CONTROLLING PREVIEW (act 1)
 - 2. SPECIFICATION OF TOPICAL PHENOMENON WITH EMBEDDED CAUSAL EXPLANATION (act 2)
- II EVALUATION (acts 3-5):
 - 1. REPORTED EVALUATION (act 3) - REPORTED BASIS (act 4)
 - ↑
 - ADDITION
 - ↓
 - 2. REPORTED COMMITMENT (act 5)

(65) An argumentative sequence with evaluation - basis as its dominant message-core function: Introduction of topical phenomenon - evaluation - basis

1. *In your story about UN Secretary-General Boutros Boutros-Ghali (Jan. 18), you mentioned incidents in which demonstrators jeered and spat at him.*
2. *The hostility shown by the people of the Third World is not directed at Boutros-Ghali personally but shows contempt for the UN.*
3. *This so-called world leader is perceived as a tool of an organization created and operated by the Western powers to protect their economic and political interests. (Sana A. Ghoudhary, Time, February 8, 1993).*

The discourse-topical phenomenon of the passage is understood to be 'incidents in which demonstrators jeered and spat at him (Secretary-General Boutros Boutros Ghali)'. The discourse-topical idea is interpreted as a phenomenon rather than as events, because the focus of interest in the passage lies on explaining the meaning of the recurrence of an event, i.e. that of a phenomenon. The evidentiary force of the basis provided in act 3 is that of an assumption commonly shared by people as it does not introduce established facts. The passage complies with the basic pattern as follows:

(A65)

- 1. INTRODUCTION OF TOPICAL PHENOMENON (act 1)
- 2. EVALUATION (act 2)

3. BASIS (act 3)

(66) Introduction of topical phenomenon - hypothetical evaluation (X) - test: report on test and results - conclusion (X) / conclusion (Y): frustration of X

1. *Such indirect memory modifications that result from misleading post event inputs indicate that direct memory modifications force a "ripple effect" throughout the memory representation.*
 2. *Could these effects be due to the demand characteristics of the experimental situation?*
 3. *Weinberg, Wadsworth, and Baron (1983) considered this possibility.*
 4. *They suggested it might be the case that when subjects are asked questions such as "How fast were the cars going when they smashed?" they infer that the person asking the question already feels the cars were moving at relatively high speeds.*
 5. *A subject could easily deduce that giving a high speed answer to this question is the best means of being viewed as a perceptive observer and of obtaining social rewards from the questioner.*
 6. *By analogy, subjects who must choose between a stop sign and a yield sign might believe that they actually saw a yield sign, but choose the stop sign because they think the experimenter wants them to.*
 7. *Weinberg et al. devised a clever way to explore this possibility;*
 8. *their experiment used a test that did not easily allow subjects to accede to demand pressure.*
 9. *Their experiment used a three-stage procedure:*
 10. *(a) subjects saw an event depicted in slides, with one slide showing a yellow yield sign; (b) some subjects received misinformation suggesting that it was a stop sign; (c) subjects were then tested with either the stop/yield option used in prior work, or a yield/yield option. In the latter case, the subjects had to choose between the original yellow yield sign and the one that was red.*
 11. *Those tested with the stop/yield option showed the usual effects of misinformation, but this observation could have been due to demand characteristics.*
 12. *However in the yield/yield case, subjects could not comply with any hypothetical demand to choose stop.*
 13. *If those given misinformation are still less able than control subjects to discriminate between the two signs, this would argue against a demand explanation.*
 14. *In fact, subjects did show an impairment in ability to discriminate even with this modified test;*
 15. *this indicates that simple compliance to demand pressure cannot explain the altered recollections.*
- (Loftus and Davies 1984. The Malleability of Adult Memory, in Sallinen 1990:40)

Research reports are often referred to in scientific articles as premises for further conclusions. Their content is then discussed in a reported form. As original research reports tend to be very long, a message structure analysis of a reported research report is presently provided as an illustration of the above pattern. At the main level of analysis the discourse topic of the above passage is a phenomenon, i.e. 'the ripple effect of direct memory modifications'. The textual comment on the topical phenomenon consists of a statement of its cause (embedded in the introductory act) and of an inquiry into the validity of another feasible cause by means of reference to previous research. Thus the text shows two overlapping occurrences of *the introduction of topical phenomenon - hypothetical evaluation - test - conclusion pattern*. The top-hierarchy functions of the message structure of a research report can be expected to consist of several embedded message structures. Especially, *the test function* usually constitutes an extensive part of the text. Thus, the following text structure representation is proposed:

(A66)

1. INTRODUCTION OF TOPICAL PHENOMENON WITH EMBEDDED CAUSAL EXPLANATION (act 1)
2. CAUSAL EXPLANATION: HYPOTHETICAL EVALUATION: ALTERNATIVE TO CAUSAL EXPLANATION IN ACT 1: Question (act 2)
3. TEST: Answer (acts 3-14):
 1. REPORTED HYPOTHETICAL EVALUATION (acts 3-6): Text organizing generic (act 3) - Specific (acts 4-6: act 5) CONSEQUENCE to act 4: act 6 IMPLICATION to act 5)
 2. REPORTED TEST (acts 7-10):
 1. INTRODUCTION OF TEST (act 7-10): Topic controlling generic (act 7) - Specific (act 8)
 2. ELABORATION: * STEPS: STATEMENT (acts 9-10): Text organizing generic with enumeration (act 9) - Specific (act 10)
 - * RESULT WITH EMBEDDED HYPOTHETICAL CAUSAL EXPLANATION (act 11)
 - * PRINCIPLE OF OPERATION (act 12) - IMPLICATION (act 13)
 - * RESULT (act 14)
 3. REPORTED CONCLUSION: FRUSTRATION OF REPORTED HYPOTHETICAL EVALUATION IN ACTS 3-6 AND HYPOTHETICAL CAUSAL EXPLANATION IN ACT 2 (act 15)

(67) Reported evaluation - Affirmative evaluation - Basis

1. *President Bush is right in contending that the U.S. is a major influence on Chinese domestic development, particularly on democracy (June 10). (This can be transcribed as 'President Bush contends that the U.S. is a major influence on Chinese domestic development, particularly on democracy. This is true.')*
2. *(I claim this to be true on the grounds that) In my high school in China in the 1950's, I probably learned more about democracy and American history than many of today's U.S. high school graduates.*
3. *(I claim this to be true on the grounds that) (3.1) Without the U.S. influence, (3.2) the 1989 student protests would not have taken place. (Soong T. Chiang. Time, July 8, 1991)*

In this editorial letter a reported evaluation and the writer's evaluation of the same real-world situation are in agreement (act 1). However, the writer's affirming evaluation is embedded in the reported evaluation (by President Bush). The transcription of act 1 into two separate evaluations (as shown above) institutes the reported evaluation as the discourse topic of the text. The textual comment then consists of the affirming evaluation and its basis.

The affirming evaluation is argued for by pointing out manifestations of American influence on Chinese domestic development. While act 3 refers directly to an instance of American influence (or what the writer definitely sees as such), the proposition carried by act 2 is based on an implicit premise that justifies the propositional content of act 2 as a valid basis. The premise seems to be the

proposition *If Chinese schools teach more about American history and democracy than American schools, America is a major influence on Chinese domestic development*. In act 3 the evidentiary proposition suggests that a state of affairs contrary to that denoted by the topical evaluation would have resulted in a situation that is inconsistent with historical reality (i.e. in reality the students' protests did take place). Because the propositional content of act 3 can be transcribed into the form 'If there had not been U.S influence, the 1989 student protests would not have taken place', act 3 can be coded as *a condition - consequence sequence* with the state of affairs implied by the condition constituting a contrast to that suggested by the discourse-topical evaluation. It is preferable to code act 3 as two speech acts, i.e. as a condition followed by a consequence, instead of referring to it as a conditional evaluation, because the former way enables the condition (act 3.1) to be further described as constituting a contrast to the topical reported evaluation.

As to the verifying power of the evidence provided, the above text gives an example of how in natural language the form of logic is heeded even though the argument itself may not always be logically watertight. The writer of the above letter accepts as a statement of facts in act 3 a proposition whose information content is not necessarily entitled to that status. The formula below is suggested for the description of the text structure of the passage:

(A67)

1. REPORTED EVALUATION WITH EMBEDDED AFFIRMING EVALUATION(act 1)
2. BASIS (acts 2)
- ↑
- ADDITION
- ↓
3. BASIS (act 3): CONDITION: CONTRAST TO EVALUATION IN ACT 1(3.1) - CONSEQUENCE (3.2)

(68) Reported evaluation (and basis) - Rejecting evaluation - Basis = Correcting evaluation

1. *I enjoyed Charles Krauthammer's analysis of the possible effects of the war on the U.S. (Jan. 28.).*
2. *However, I challenge his reference to 'the last good war'. (This can be transcribed as 'However, he contended that the last war was good. That is not true')*
- (I claim this on the grounds that/This is because)
3. *War can be for a good cause, as was World War II.*
4. *But wars, even if just and inevitable like the Gulf war, are always horrible and bad. (Enre Y. Mozes. Time, February 25, 1991)*

Act 1 provides a context for the topical reported evaluation (i.e. Krauthammer's contention that the last war was good). Accordingly, it is coded as a background-creating introduction. As the transcription of act 2 above indicates, it combines a reported and rejecting evaluation. The reported evaluation is inferable from the quoted reference 'the last good war'. The justifying force of the basis (acts 3-4) is not grounded on a fact but on the assumption that the writer's opinion is morally infallible. The text structure of the above letter can be represented by means of the following pattern:

(A68)

1. BACKGROUND CREATING INTRODUCTION OF REPORTED EVALUATION WITH EMBEDDED REJECTING EVALUATION (acts 1-2): INEFFECTIVE CAUSE (act 1)- CONCESSION (act 2)
2. BASIS = CORRECTING EVALUATION (acts 3-4): INEFFECTIVE CAUSE (act 3)

- CONCESSION (act 4)

(69) Reported evaluation (and basis) - Rejecting evaluation - Basis - Contrast to rejecting evaluation (and basis): Correcting evaluation - Basis

1. *It is sometimes implied, if not stated expressly, that the possibility of easy dissolution is characteristic of African customary marriage.*
2. *But as a generalization this appears to be too sweeping.*
3. *It is true that in very many tribes (probably in the great majority) a marriage can be dissolved by inter-family arrangement, without the necessity for any judicial pronouncement.*
4. *But it does not follow that a divorce can be easily obtained at a mere wish of a husband or wife (or even both of them) in the absence of substantial grounds.*
5. *Native law frequently requires that the wife's relatives should refund the bride-price (in part at least) as an essential condition of the validity of the divorce; and this requirement tends to have an obstructive effect.*
6. *Another possible deterrent is the prospect of losing the right to the children.*
7. *Attention may be drawn, on the other hand, to the fact that in some tribes a union does not acquire the strictly binding quality of marriage until it has been in existence for a number of years; and doubtless other examples could be cited in support of the view that African marriage is easily dissoluble.*
8. *On the whole, however, it would seem that no very definite conclusions can be drawn from a comparison between African and European marriage in the matter of dissolubility.*
9. *It must be remembered that divorce by mutual consent is not unknown to European secular law; and that while in some African tribes (e.g. the Yakö as described by Professor Daryll Forde) divorce is exceedingly common, there are others in which (to quote Professor Gluckman's account of the position in Zululand) it is 'almost unknown' - in practice, at any rate, and occasionally, it seems, even in law. (Phillips, Arthur and Morris, Henry 1971. Distinctive Features of African Customary Marriage, in Attila et al. 1992:124)*

This text assumes a step by step exploratory approach to arguing for the final correcting evaluation (act 8), which is a compromise between the topical reported (in act 1) view and its opposite position. During this exploratory process the writer studies arguments for both the original reported view (in acts 3 and 7) and its rejection (in acts 5 and 6) and arrives at a conclusion that compromises these two views (act 8). This kind of bi-focused argumentation with the purpose of weighing the validity of alternative arguments typically shows changes in the aspect of observation. These changes in the aspect of observation are identified in message-structural analysis as *concessive aspects* (act 7), which derive from the *concessive logical relation* (see section 6.1). The correcting evaluation relates in this type of argumentative pattern to the rejecting evaluation by means of a logical *contrast* relation. As the explicit reference to European marriage in act 7 indicates, there runs through the whole passage an implicit assumption of matching the African marriage against our knowledge of its European equivalent. Thus the rejecting evaluation could be transcribed as *It is not true that the African marriage can be dissolved more easily than the European one*, and the correcting evaluation, respectively, as *On the contrary it is true that no very definite conclusions can be drawn from a comparison between African and European marriage in the matter of insolubility*. It is in this sense that act 8 constitutes a contrast to act 2. The following message structure representation is proposed:

(A69)

1. REPORTED EVALUATION (act 1)
2. REJECTING EVALUATION: Topic controlling generic (act 2)
3. BASIS FOR REPORTED EVALUATION: INEFFECTIVE CAUSE (act 3)
4. REJECTING EVALUATION: CONCESSION TO ACT 3: Specific to act 2 (act 4) - BASIS (acts 5-6: act 6 ADDITION to act 5)
5. BASIS FOR REPORTED EVALUATION: CONCESSIVE ASPECT TO ACTS 5-6: INEFFECTIVE CAUSE TO ACT 8 (act 7)
6. CORRECTING EVALUATION: CONTRAST TO ACT 2: CONCESSION TO ACT 7 (act 8) - BASIS (act 9)

(70) Introduction of topical participant / concept / event / phenomenon etc. - reported evaluation - rejecting evaluation - basis - contrast: correcting evaluation - basis

1. *Jonathan Edwards is a modest man who describes himself, accurately, as 'a skinny-looking, ordinary guy.'*
 2. *But Edward was anything but ordinary last week when he electrified the World Athletics Championships in Gothenburg, Sweden, by becoming the first man ever to clear 18m in the triple jump.*
 3. *And ('he was' can be inserted) no less than extraordinary when he got up, dusted himself off and did it again.*
 4. *The distance of his two record-shattering jumps: 18,6m and 18,29m, respectively.*
- (Sally B. Donnelly, The Joint is Jumpin', *Time*, August 21, 1995)

The thematic structure of the above passage indicates that 'Jonathan Edwards' is its discourse-topical participant. Embedded in the introduction of the discourse-topical participant is an evaluation by the topical participant of himself, i.e. 'a skinny-looking, ordinary guy'. This can be coded as a reported evaluation because the topical participant is not presently message-structurally significant as an agent of the evaluation; a similar message-structural pattern could follow an evaluation of the topical participant by an outsider to the text. The rejecting evaluation of act 2 and the correcting evaluation of act 3 can be interpreted as embedding a basis, because the *when* clauses which introduce a setting also simultaneously provide information which justifies the evaluations stated in the respective main clauses. The embedded bases in acts 2 and 3 are further specified in act 4. For this reason a topic controlling generic - specific strategy is coded for acts 2-4. The text-structure representation takes the form

(A70)

1. INTRODUCTION OF TOPICAL PARTICIPANT WITH EMBEDDED EVALUATION AND REPORTED EVALUATION (act 1)
2. REJECTING EVALUATION FOR REPORTED EVALUATION WITH EMBEDDED BASIS: Topic controlling generic preview of Basis (act 2)

3. CONTRAST: CORRECTING EVALUATION WITH EMBEDDED BASIS: Topic controlling generic preview of BASIS (act 3) - Specific of BASES in acts 2 and 3 (act 4)

6.3.5 Motivation

Motivation is a function of the textual comment which pertains to the instructive text type. It provides information which renders the behaviour suggested by the instruction more attractive and therefore more eligible. It differs from the basis component in that it precedes the instruction. A cause - consequence relation can be identified between the motivation sequence and the instruction itself. There are two considerations which make the analysis of the motivation unit problematic in the framework of the present system of message structure representation. First, the question arises whether it should not, instead of being coded as a message-structural function, be coded as a strategic variant of the basis function, because it serves more or less the same persuading and convincing function. The latter approach would be consistent with the treatment of argumentative sequences with justifying information preceding the argumentative evaluation. In such sequences the alternative order of presentation is seen as a manifestation of an inferential strategy. The second problematic question concerns the way in which motivation can be shown, in spite of its sequence-opening surface-structural position, to fulfil a comment function in an instructive sequence.

The first question can be answered by reference to the observation that the illocutionary purpose of an instructive text differs from that of an argumentative one in that its persuasive power is also supposed to motivate the encoder for relevant action. Therefore it may be essential that a sequence which reasons for the eligibility of the action to be suggested precedes the actual instruction. Thus it seems to be justified to introduce motivation for action as an inherent and distinct message-core function of the instructive text type.

As to the second question, it can be reasoned that because there is a cause - consequence relation between the motivating sequence and the instruction, it would be possible for the motivating sequence also to follow the instruction. In such a case it would relate to the instruction as its causal explanation and form a basis for it. A basis can be identified as a comment function of the instruction - basis sequence on the grounds that the instruction can be shown to occupy the discourse-topical position. As indicated in 4.1, the transcription of the instruction - basis sequence into a desirability evaluation followed by a truth evaluation with a causal explanation (*Behaviour X is desirable. This is true on the grounds Y*) establishes the instruction as what is being talked about, which means that it is the discourse topic of the sequence. It follows that the basis must then constitute the textual comment, i.e. what is said about the discourse topic. Because the information conveyed by a motivation sequence could serve as a basis if it followed the instruction sequence, it can be claimed that motivation, like basis, is a message-core function of the textual comment.

The motivation sequence may describe a desirable situation that can be attained by obeying the instruction that is to follow. The sequence is then coded as *motivation - instruction (- basis)*. The desirable situation may typically be outlined as a conditional state that can only be reached by fulfilling a condition, i.e. by adopting the behaviour indicated by the instruction. The motivation - instruction sequence then follows the pattern *If you want X, do Y* and is identified by the coding *motivation: desirability condition - instruction (- basis)*. A further form that the motivation function can take is a reference to an analogous desirable state that may or may not be contrasted with an undesirable existing situation. The motivation - instruction sequence corresponds in this case to the text base *You do X (, but you do not do Y). You should do Y, too. or Z does X, you should do X, too.* The coding used respectively is *motivation: analogous desirable situation (- contrast: existing situation) - instruction (- basis)*. Text samples will be given below to illustrate the above types of the motivation - instruction sequence.

6.3.5.1 Message-structural patterns with motivation as a top-hierarchy message-core function of the textual comment

In the text below the persuasive effect is intensified by means of a hierarchical structure in which lower-level motivation - instruction (-basis) sequences constitute higher-level motivation functions. The opening act of the passage provides an example of the *motivation: desirability condition - instruction - basis sequence* in act 1.

(71) Motivation - instruction (- basis) and motivation: desirability condition - instruction (- basis)

1. (1.1) *If you want to build a sand castle on the beach, (1.2) why not model it on the one on the hill behind you?*
2. *Spanish beaches like this one on the Costa Brava often hold magical surprises.*
3. *Just imagine yourself on holiday here on the coast of the wonderful province of Gerona.*
4. *There is so much to delight you.*
5. *Never far from enchanting bays and beaches with crystal clear waters are fascinating medieval monuments like the Monestir de Sant Pere de Rodes and the Creek ruins at Empuries, the Roman remains at Tossa de Mar and the castle at Begur.*
6. *Then there are picturesque villages such as Cadaques, Port de la Selva or Calella.*
7. *Not to mention lively centres of attraction like the Platja D'Aro, S'Agaro and Lloret de Mar.*
8. *Come and enjoy the sun and every kind of sport under the sun.*
9. *Swim to your heart's content.*
10. *Experiment with new gastronomical delights.*
11. *Visit places of great historical interest.*
12. *Sail in idyllic conditions.*
13. *And build sand castles.*
14. *While you build up your sun tan.*
15. *Consult with your travel agency. (Time, April 15, 1991)*

In the coding below each hierarchical level of text structure is indicated by means of inclusive numbering of the functions/sequences of functions so I - II, 1-4, 1.1- 1.3, and 1.1.1 represent four different levels of text-structural hierarchy: In act 1 the *if* clause (act1.1) and the main clause (1.2) are distinguished by coding for its *motivation: desirability condition - instruction* structure to be revealed.

(A71)

- I MOTIVATION (acts 1-13):
 - 1. MOTIVATION (acts 1-7):
 - 1. 1. MOTIVATION (acts 1-2):
 - 1.1.1 MOTIVATION:DESIRABILITY CONDITION (act 1.1) - INSTRUCTION (act 1.2) - BASIS (act 2)
 - 1.2 INSTRUCTION (act 3)
 - 1.3 BASIS (acts 4-7): EVALUATION (act 4) - BASIS (acts 5-7: ADDITION)

2. INSTRUCTION (acts 8-9): Generic (act 8) - Interest arousing specific (act 9)
 3. INSTRUCTION (acts 10-12: ADDITION): ADDITION TO INSTRUCTION IN ACTS 8-9
 4. INSTRUCTION IN SETTING (acts 13-14: OVERLAP): ADDITION TO INSTRUCTION IN ACTS 8-12
- II INSTRUCTION (act 15)

(72) Motivation: analogous desirable situation (- contrast: existing situation) - instruction

As was mentioned above, the motivation sequence may also create an analogy implying that because an analogical state of affairs can be agreed upon as being desirable, the state of affairs to be brought about by the behaviour suggested by the instruction must also be justified and desirable. Similarly to the previous example, the *if* clause and the main clause of the initial conditional sentence are distinguished by coding to point out the text-structurally significant motivation - instruction sequence.

1. *(1.1) If the lives of half a million Kuwaitis deserved the sacrifice of American and allied blood, (1.2) should not the millions of Kurds who face the genocidal war of Saddam deserve some kind of international protection?*
2. *Kuwait endured only six months of Iraqi control, and the world gathered, rightfully so, the biggest armada to liberate it.*
3. *But few attempts have been made to safeguard the rights of the 3.8 million who are living in a de facto Kurdistan between Turkey and Iraq.*
4. *The allies have a moral responsibility to protect the Kurds.* (Bakhtiar Dargali, *Time*, March 23, 1992)

The motivation - instruction pattern with an analogous situation as the motivating factor occurs twice in the above text. Act 1 constitutes the first of these patterns, and the second consists of acts 2- 4. Even though the linguistic form of neither act 1.2 nor act 4 involves a direct invitation for the 'allies' to take action, in pragmatic terms both of them function as such. Once these acts are identified as instructions, the message-structural functions of their neighbouring propositions can also be explained. The two instructive sequences are interrelated through a generic - explanatory specific relation. While it is suggested in act 1.2 that the Kurds should deserve 'some kind of international protection', the implicit instruction of act 4 (act 4 is seen as an implicit instruction because 'have a moral responsibility to protect' can be interpreted as an equivalent of 'must protect') specifies the agent who is assumed to provide this protection as 'the allies', thus explaining the meaning of the generic reference. Moreover, the latter instructive sequence (acts 2-4) explicates *the existing situation* (act 3), which stands in contradistinction to *the desirable analogous situation* and is only implied in act 1. Act 3 also specifies the number of the Kurds as 3.8 million, while the earlier reference in act 1 was the more generic 'millions of Kurds'. In view of the above considerations the following text structure representation is suggested:

(A72)

1. MOTIVATION: ANALOGOUS DESIRABLE SITUATION X (the situation of the Kuwaitis) (act 1.1) - INSTRUCTION WITH EMBEDDED BASIS AND INTRODUCTION OF SITUATION Y (the situation of the Kurds) (1.2): Generic (act 1)

2. MOTIVATION: ANALOGOUS DESIRABLE SITUATION X WITH EMBEDDED EVALUATION (act 2) - CONTRAST: SITUATION Y (act 3) - INSTRUCTION (act 4): Explanatory specific (acts 2-4)

6.3.6 Instruction

Instructions, which are transcribable into desirability evaluations, can basically occupy the same message-structural positions in the textual comment as evaluations. This means that they may relate directly to the discourse topic in both attributive, elaborative, and argumentative contexts. The pattern assumes the coding *introduction of topical participant / concept / phenomenon / etc. - instruction (-basis)*. The ideational logic between a discourse topic and a textual comment which consists of an instruction frequently corresponds to problem - solution semantics. On such occasions the coding *introduction of topical problem - instruction (-basis)* is used. Like evaluations, instructions may also relate, at a lower level of text structure, to any function of the textual comment. In addition, an instruction may be an evaluation called forth by a situation constituting a text-structurally complete speech act. Such a sequence is represented by the coding *situation - instruction*. An instruction can also constitute a discourse topic and be followed by a basis which dominates the textual comment. In this position it may typically incorporate also a motivation sequence with further persuasive effect.

When the text consists of an instruction without a basis, the instruction may be expanded into a text by means of a generic-specific strategy. This means that the instruction itself constitutes a discourse topic while a specification of that instruction serves as a textual comment. The coding of the message structure then takes the form *instruction* only.

As a dominant message-core function of the textual comment the instruction realizes a persuasive illocutionary force by means of its imperative form (and basis if provided). Thus instructions differ from evaluations in that they try to persuade the addressee to act in a suggested way. That instructions are frequently followed by a basis can be explained by reference to the fact that a parallel can be drawn between instructions and evaluations, i.e. instructions are desirability evaluations whose validity can be argued for. The basis function, when present, contributes to the realization of the persuasive illocutionary point by convincing the addressee of the desirability of the action suggested by the instruction.

The frame of an instructive text consists of all those instructions that may relevantly pertain to the discourse-topical idea of that text.

Text samples will be provided below to illustrate instruction in those message-structural contexts in which it has not yet come up in the earlier examples.

6.3.6.1 Message-structural patterns with instruction as the dominant message-core function of the textual comment

If the sender of an instruction assumes adequate authority over the receiver, it is possible that the instruction is not preceded by a motivation sequence nor followed by a basis. The persuading force of the instruction originates then in the power and/or authority status of the sender of the directive speech act and in the strength of the directive verb (see Searle and Vanderveken 1985:40-41 for the 'mode of achievement' and the 'degree of strength' of the directive speech act). The power/authority status of the sender, if not explicitly stated, may be implied by the lexical and stylistic features of the directive speech act. The lexical and stylistic choices in the formulation of an instruction may relate it to a register with acknowledged authority to issue directions (e.g. legal and administrative language).

If such an authoritative instruction without a basis creates a text, the textual comment frequently consists of a *specification* of the topical instruction. Specification has been introduced in the present system as an item of the elaborative frame (see sections 6.2.2 and 6.2.4.3). It differs from

the specific member of a message-strategic (labelling) generic - specific sequence in that it relates to the discourse topic (or lower-level topical node), which itself is an inherent part of the message and communicates about it information that is essential to the message, while in a strategic generic-specific sequence either member conveys redundant information. Thus it is, for example, relevant for a lawyer to be informed both of a legal principle and the specific provisions that are drawn from it. Specification as an elaborative message-core function bears a resemblance also to constituent attribution but it signals conceptual inclusiveness of a more abstract character. A topical instruction followed by a specification is the case in the passage below which represents the genre of causerie but provides nevertheless an example of the functioning of an authoritative instruction since it seeks to imitate some formal features of the legal and administrative registers:

(73) Instruction: the text consists of an instruction without a basis

1. *The readers are asked to note that Winter Behavior comes into force in Finland on October 1st.*
2. *From that day forward the following rules, regulations and conventions are to be observed.*
3. *Cheerful banter with shop-assistants and waiters shall cease forthwith.*
4. *If silence cannot be maintained, surely bad temper is recommended for both parties.*
5. *It is especially to be borne in mind that, in all establishments where intoxicating liquors are served, the customer is sometimes right during the period May-September, but always wrong during the period October-April. (Hardwick 1988:26)*

The text structure of the passage is represented as below:

(A73)

1. INSTRUCTION (act 1)
2. SPECIFICATION (acts 2-5): Text organizing generic (act 2) - Specific (acts 3-5: ADDITION)

(74) Introduction of topical problem - instruction (- basis) / Introduction of topical problem - rejecting instruction - contrast: correcting instruction (-basis)

A suggestion/recommendation/command is very often issued as a response to a situation or thing which is experienced as problematic and which therefore calls for a change of circumstances or of attitudes. The instruction following the envisaged problematic situation or thing then introduces a way of solution. In such a structure the problem occupies the discourse-topical position while the instruction constitutes the textual comment. This way of thinking can be argued for by stating that the passage is analogous to *an introduction of topical phenomenon - elaboration* sequence where the determinants of the elaborative frame relate to the discourse-topical idea through different varieties of conceptual logic. In this case the discourse topic is related to its textual comment by means of a problem - solution semantics. Also intuitively, it seems to be correct to assume that the topical focus in such a passage lies on the problem rather than on the instruction through which a solution is suggested.

Any explicitly or implicitly negatively evaluated situation or thing can be identified as a problem. Problems can thus frequently be recognized on the grounds of lexical clues. When an instruction arises from an undesirable situation, i.e. from a problem, it often, but not always, consists of two instructions: a prohibition of a current adverse practice and a suggestion for a new beneficial one. The logical relation between the two instructions is one of contrast. The coding then takes the

form *introduction of topical problem - rejecting instruction - contrast: correcting instruction (-basis)*. This is the case in the passage below:

1. *If Americans want to get to the root of our current plight,*
2. *(2.1) we shouldn't blame the Japanese across the Pacific (2.2) but should look inward and see our own folly.*
3. *The U.S. has to clean up its government, stop corporate greed and start caring for others.*
4. *(4.1) If we do this, (4.2) we will never need to fear good competition from the Japanese - (4.3) we will again thrive on it. (James W. Francisco, Time, December 23, 1991)*

Presently, the motivating desirability condition is about overcoming a problem. Thus the topical problem of the passage is introduced in an embedded structure. That it is referred to in such inexact terms as 'our current plight', which would need a further explanation for the reader to be able to fully understand the passage, is due to the intertextuality existing between an editorial letter and the article in the previous issue of the magazine that the letter refers to. The text structure of the passage is described as follows:

(A74)

1. MOTIVATION:DESIRABILITY CONDITION WITH EMBEDDED INTRODUCTION OF TOPICAL PROBLEM (act 1)
2. REJECTING INSTRUCTION (act 2.1) - CONTRAST: CORRECTING INSTRUCTION (acts 2.2-3): Topic controlling generic (act 2.2) - Specific (act 3)
3. BASIS (4):CONDITION (act 4.1) - CONSEQUENCE (acts 4.2-4.3: CONTRAST)

(75) **Instruction relating to a complete textual speech act: Situation - Instruction**

Leave One Frontier Unexplored

1. *Not content with despoiling the earth's ecosystems on land, scientists are now bent on messing up the last frontier, the ocean floor (Aug. 14).*
2. *Alas, history proves that man's meddling with nature under the banner of scientific knowledge for the good of humanity has benefited mostly profit-greedy companies, leaving humanity at large to suffer the irreversible consequences of widespread pollution, global warming, the ozone hole and the extinction of animal species, just to name a few.*
3. *Let's agree to keep our hands off the ocean depths. (Time, September 11, 1995)*

Acts 1 and 2 constitute a complete text structure with a discourse-topical phenomenon ('scientist are now bent on messing up the last frontier, the ocean floor') and a textual comment stating the consequences of the topical phenomenon. This textual speech act depicts a situation from which an inference is drawn concerning desirable behaviour in the circumstances. In addition, the problem - solution logic exists also in this kind of context so that the situation depicted may, as in the present case, constitute a problem for which the following instruction provides a suggested solution. The problem - solution semantics arises in the above extract initially from an implicit negative evaluation of the topical phenomenon in the introductory act (signalled by the verb 'messing up'), while the consequence sequence lists a number of explicitly negative effects. The text structure can, accordingly, be represented in the form:

(A75)

I SITUATION:PROBLEM (acts 1-2)

1. INTRODUCTION OF TOPICAL PHENOMENON WITH EMBEDDED EVALUATION:PROBLEM (act 1)

2. CONSEQUENCE WITH EMBEDDED EVALUATION:PROBLEM (act 2)

II INSTRUCTION (act 3)

6.3.7 Commitment

Commitment is a message-core function of the textual comment with a representational illocutionary purpose of describing an action that the writer or some textual participant intends or promises to take, and a communicative one of informing the reader of the writer's/participant's intention and his commitment to carry it out. By definition a commissive speech act (see section 3.4.2) expresses the speaker's commitment to a certain goal. Commitments can, however, also be reported. When a commitment by some text-structurally significant participant is observed, the coding takes the form *commitment by participant*. Commitment by a text-structurally insignificant agent is coded as *reported commitment*.

Like instructions, commitments can also be seen as specific types of evaluations. They are the writer's/participant's evaluations of proper action by himself in a particular situation. For example, a commitment like *I shall help you next time* can be transcribed as *It is appropriate that I should help you next time*. Consequently, they may, like evaluations in general, relate either directly to the discourse topic, to any message-core function of the textual comment, or to a complete narrative/descriptive/expository, etc. textual speech act, which is coded as *situation*. Moreover, commitment, like instruction, may also relate to a *problem* or problematic situation, i.e. a complete textual speech act with negative connotations, as an intended future solution.

Metatextual commitments by the writer abound in factual texts. Such commitments are, however, identified as message-strategic phenomena and not as message-structural functions because they do not contribute to the construction of the message itself.

Because evaluations, instructions, and commitments can occupy largely similar positions within the textual comment and in the previous chapters examples of evaluations and instructions in these positions have been provided, the commitment function will not be studied in all those positions. One example is given, however, to illustrate the character of the function itself. The sample text below shows a commitment by textual participants which relates to a preceding problematic situation. The commitment must be understood as an evaluation by the respective textual participants of what action might constitute an appropriate response to the problem envisaged in the text.

(76)

War and (Hope for) Peace

1. *More than 100.000 Bosnian Serbs sought refuge in the Bosnian stronghold of Banja Luka in northern Bosnia, pushing ahead of Croat and Bosnian forces, who pledged not to move against the city.*

2. (2.1)*The Croatian army suffered heavy casualties and began pulling back (2.2) after being bombed and strafed by Bosnian Serb aircraft.*

3. *The air strikes were a violation of Nato's 'no-fly' zone, but Nato was unable to scramble fighters in time to stop them.*

4. *The Croat-Muslim offensive has reduced the Serb holdings in Bosnia from 65% of the country to roughly 50%.*

5. *Diplomats feared that further Croat-Bosnian gains might disrupt peace talks.*

6. *The foreign ministers of the three warring parties in Bosnia - Croats, Bosnians and Serbs - agreed to meet this week in New York. (Time, October 2, 1995)*

The text structure of the passage is represented as below:

(A76)

I SITUATION: PROBLEM

1. INTRODUCTION OF TOPICAL PARTICIPANTS X (Bosnian Serbs), Y (Croats) AND Z (Bosnians) WITH EMBEDDED ACTION 1 ATTRIBUTION TO PARTICIPANTS Y AND Z (act 1)

2. EVENT ATTRIBUTION TO PARTICIPANT Y WITH EMBEDDED ACTION 2 ATTRIBUTION: CONSEQUENCE (2.1) - CAUSE WITH EMBEDDED ACTION 3 ATTRIBUTION TO PARTICIPANT X (act 2.2)

↓

EVALUATION OF CAUSE: PROBLEM (act 3)

3. CONSEQUENCE OF ACTION 1 BY PARTICIPANTS Y AND Z (act 4)

↓

REPORTED EVALUATION OF CONSEQUENCE IN ACT 4: PROBLEM (act 5)

II COMMITMENT BY PARTICIPANTS X, Y AND Z (act 5)

Action 1 by participants Y and Z (i.e. an offensive by the Croat and Bosnian armies) is coded in act 1 although it is only implicitly stated in 'More than 100 000 Bosnian Serbs --- pushing ahead of Croat and Bosnian forces'. This is because the action constitutes a text-structurally significant node in that it is referred to in a later act (act 4). Action by participant X (Bosnian Serbs) is, on the contrary, left uncoded in act 1, because it does not have any further text-structural consequences. The coding of embedded functions is in general based on the text-analytical necessity to identify topical nodes for further acts.

6.3.8 Matching

Matching is a sentential and textual message which states a similarity or difference between two or more entities. Similarity or difference may be unspecified or it may be further specified as the existence, non-existence or degree of existence of the properties in terms of which the entities are matched, or as the existence of properties which represent various subclasses of the property to be matched (see f) below). Thus, by definition, a sentential matching proposition as well as a textual matching sequence may convey the message that the entities to be matched

(a) are alike or different (e.g. *The situation of the gypsies is similar to that of the other minority groups in the country / The Japanese are different from the Chinese*);

(b) both/all show or do not show the property in terms of which they are matched (e.g. *My brothers are both lawyers / Neither of them was rich*);

(c) show an occurrence and non-occurrence of a property (i.e. one of the entities to be matched shows a property while the other does not, e.g. *The boy behaved in a very aggressive manner*

but the father did not);

(d) both show the same degree of a property (e.g. *The boss works as hard as his staff*)

(e) show a different degree of the same property (e.g. *The boss works much harder than his staff*); or

(f) show different properties which pertain to the same generic class (e.g. *Scandinavian countries are Protestant while Russia is largely orthodox*)

Matching is a fundamental informative device for several reasons. First, knowledge of the characteristics of things may become contextually relevant only when accompanied with a knowledge of the relative degree of that characteristic, i.e. we have to know what the degree of a characteristic is relative to the degree of the same characteristic as it appears in some other entity (e.g. *The son was taller than his father*). Secondly, a mention of the presence or absence of a characteristic in a participant / concept / phenomenon may become contextually significant only in relation to a mention of the existence or non-existence of the same characteristic in some other participant / concept / phenomenon (e.g. *He is rich while all the other people in the village are poor*). Thirdly, an unknown phenomenon can only be described in terms of known concepts (e.g. *A dung fork is like an ordinary fork but much bigger*). Thus similarity with or difference from something previously known are effective descriptive parameters. In addition, matching provides a relational way of describing several participants/concepts/phenomena when they can be described in terms of a shared set of parameters (e.g. The information contained in the unrelated propositions *Tom earns 20 pounds a day, Jim earns 12 pounds a day, and Bill earns 24 pounds a day* can be conveyed in the propositions *Tom earns more than Jim but less than Bill* or *Jim earns less than Bill and Tom* or *Bill earns more than Tom and Jim* depending on which participant the writer/speaker wants to focus on).

As a text-structural phenomenon matching seems to arise either from a situation with a multi-nuclei discourse topic, i.e. the discourse-topical position is occupied by several topical objects/ideas, which all are commented on separately in terms of a shared set of determinants, or from a situation where the discourse topic is a single idea whose topical aspect involves comparison. The latter definition means that the discourse-topical idea is systematically contrasted and/or matched with another idea that does not, however, itself assume an independent discourse-topical status. This is the case for instance in example 76, where the formulation *Scottish towns in comparison with English ones* describes the 'aboutness' of the passage more specifically than the more generic *Scottish towns*. The systematic matching counterpart of the topical idea functions as a kind of subordinate discourse-topical continuity, which relates to the discourse-topical idea through a matching relation. The shared determinants in terms of which two or more discourse-topical objects/ideas or the discourse topic and its accompanying subordinate discourse-topical continuity are described and, consequently, matched, are presently called *matching parameters*.

6.3.8.1 Two ways for the matching function to manifest itself

The matching function is manifested in two different ways in text structure. First, it may appear as the conceptual logic which explains the relationship between the sets of message-core functions of the textual comment which pertain to each discourse-topical nucleus, or to the discourse topic and the entity that constitutes its subordinate discourse-topical continuity. In such a context the matching function is not manifested in a propositional form. It can be identified only as a message-structural relation, which may or may not be signalled by lexical clues (e.g. Tom became a lawyer, Jim became

an engineer and Bob became a businessman). Matching can account for the coincidence of any kind of message core functions. This means that the propositions of the textual comment which relate to the various discourse-topical nuclei show, depending on the representational and communicative illocutionary purposes of the text, an attributive, elaborative, evaluative, or justifying function. Figure 9 illustrates this kind of matching pattern.

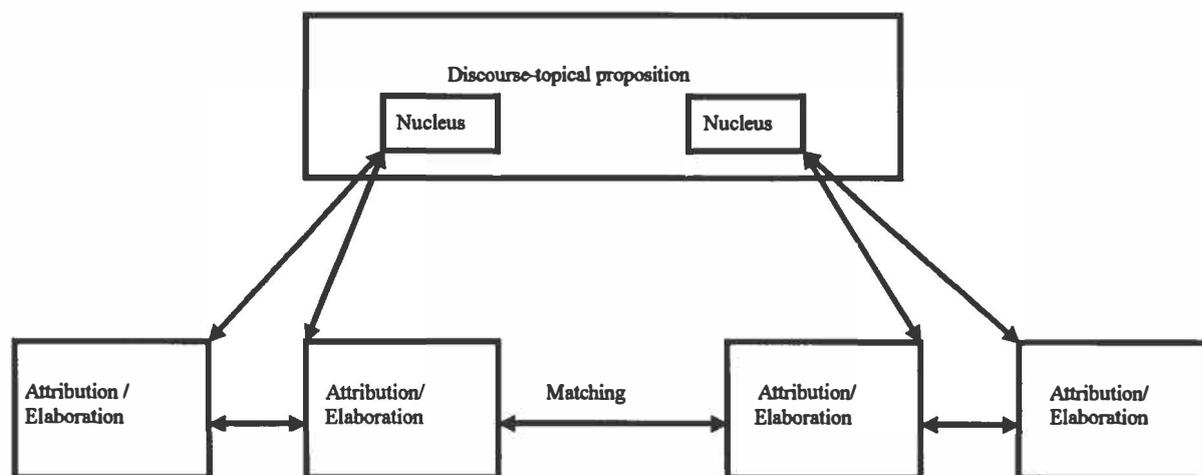


Figure 9: A matching relation joining two sets of top-hierarchy message-core propositions which relate to different discourse-topical nuclei

A modification of the above case with a multi-nuclei discourse topic is a structure where a matching relation exists between attributions, evaluations, or elaborative descriptions assigned to the same topical idea in different settings (e.g. unemployment rates in different parts of a country or in different years). The discourse-topical idea is then dissolved into constituents, i.e. the discourse-topical idea in each of the modifying settings, which constitute a set of parallel lower-hierarchy discourse-topical nodes. Matching is then recognized between the setting-specific attributions/evaluations/elaborative descriptions.

In the present system the relation is coded when compatibility is involved as *matching* with arrows pointing at the propositional members. When, on the contrary, a contrast is being pointed out between two propositions, the function of the latter member in relation to the preceding one is that of *contrast*, and the existence of the matching relation is conveniently indicated by coding the proposition itself as carrying the logical *contrast* function. If, however, the contrast relation extends over two sequences of propositions, it is convenient to code the relation itself, i.e. *matching: contrast*, with the arrows pointing at the respective members.

Second, it is also possible that the textual comment of a multi-nuclei discourse topic or of one with a matching counterpart as a subordinate discourse-topical continuity consists of propositions which incorporate a matching relation within their propositional structure. Such propositions assign attributions, evaluations, or elaboration to all items (whether subordinate or not) of the topical set (e.g. the proposition *Sweden is richer than Finland* implies the proposition *Finland is not as rich as Sweden*, i.e. an attribution is assigned to both of the discourse-topical nuclei). Such propositions are presently coded as *matching attributions/evaluations* when they appear as message-core functions of the textual comment. Within matching attributions/evaluations entities may be matched in terms of temporal, spatial or conceptual parameters, i.e. with respect to what they do, what happens to them, what they are like, and what they are by identity or class etc. The attribution/evaluation distinction in the coding of such a proposition refers to its modality aspect, i.e. whether it is presented as a statement of fact or as a subjective evaluation of a situation. Figure 10 illustrates a matching structure with a multi-nuclei discourse topic and matching attributions / evaluations as message-core

functions of the textual comment. When the matching attribution/evaluation denotes a contrast, it is recognized in the coding *matching attribution/evaluation: contrast*

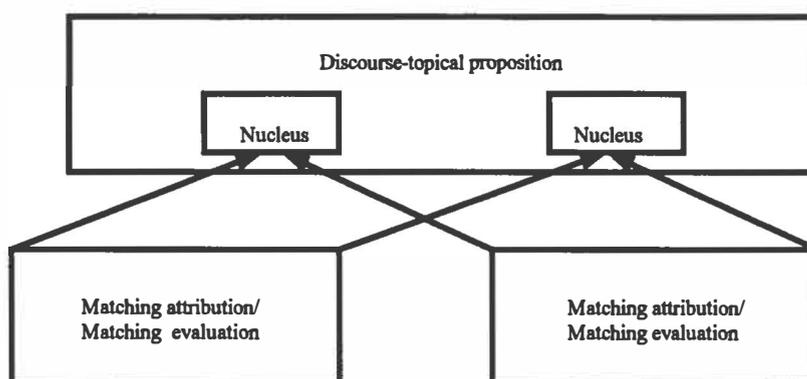


Figure 10: Matching attributions/evaluations relate to both/all discourse-topical nuclei

The above discussion of the matching function indicates that matching co-occurs with any textual illocutionary purpose. It also implies that while the other message-core functions of the textual comment can be explained by reference to the representational and communicative illocutionary purpose of the text, matching is rather brought about by the qualities of the discourse topic. This is because a multi-nuclei discourse topic is likely to evoke matching.

As an analysis of the discourse topic of the matching sequence suggests, the informative focus of the matching pattern may be on reporting either on all members of the matching relation on equal terms, which means that there is a multi-nuclei discourse topic (e.g. *Jane is ten years of age and Helen is two years older*), or on one member only. In the latter case the topical idea may be described by reference to another idea, which is either contextually relevant and constitutes a subordinate discourse-topical continuity, or of only provisional contextual significance (e.g. *A dung fork is like an ordinary fork but bigger*). If comparison of the topical idea with a contextually provisional idea points out a similarity, the function is coded as *analogy attribution*.

A proposition stating a matching relation may appear also in a text-initial position in which it functions either as a discourse-topical proposition introducing a multi-nuclei discourse topic or as an argumentative evaluation involving matching and constituting itself a discourse topic for a textual comment which serves as a basis. In the former case the text normally shows a generic - specific approach due to the generic topic-controlling effect of the initial matching proposition. The codings *generic topic-controlling introduction of topical participants x and y with matching* or *generic topic-controlling introduction of topical participant x and participant y with matching* are used depending on the quality of the discourse topic. In the latter case the proposition is coded as *matching evaluation*.

Ambiguity seems to be frequently involved in the interpretation of the sequence-initial matching proposition as either a topic-controlling generic preview of a fact-stating sequence or as a matching evaluation. This is because the kind of specific data that typically follows a topic-controlling generic preview may also constitute the basis for an argumentative matching evaluation (see section 5.1.2.1 for a discussion on the grey area of text-structural analysis). Four observations can be applied as criteria for the distinction of the above two functions. First, when the topic-opening generic matching proposition is understood to serve a strategic function, the implication is that the essential information of the message is conveyed by the following specifying sequence. When, on the contrary, the initial matching proposition is argumentative in character, i.e. when the writer is understood to propose the matching proposition as a truth, it can be expected to carry a stronger informative emphasis than the basis sequence. Second, it follows from what was said above

that while in the reportive pattern the discourse topic is one or all of the participants / concepts / phenomena to be matched, in the argumentative variety the discourse topic is the matching evaluation itself. Third, indicators of the reportive or assertive character of the matching proposition must also be looked for in the larger context of the passage.

6.3.8.2 Models for matching structure representation

On the basis of the observations made above about the structure of a matching sequence, the following patterns are proposed for its message-structural representation. Formula A77 with alternatives for the introductory sequence allows for the multi-nuclei discourse topic / discourse topic with a subordinate discourse-topical continuity variation as well as for the existence and non-existence of a text-initial matching proposition. The comment part of the same formula involves the possibilities of separate and combined commenting on the topical entities, i.e. matching counterparts. The formula also allows for the description of a matching sequence whether narrative, descriptive, expository, evaluative (with or without a basis), directive, or commissive.

- (A77)
1. INTRODUCTION OF TOPICAL PARTICIPANTS/CONCEPTS/PHENOMENA/etc.
X AND Y
 - (or
 1. INTRODUCTION OF TOPICAL PARTICIPANT/CONCEPT/PHENOMENON/etc. X AND
PARTICIPANT/CONCEPT/PHENOMENON/etc. Y
 - or
 1. GENERIC TOPIC CONTROLLING INTRODUCTION OF TOPICAL
PARTICIPANTS/CONCEPTS/PHENOMENA/etc. X AND Y WITH MATCHING
 - or
 1. GENERIC TOPIC CONTROLLING INTRODUCTION OF TOPICAL
PARTICIPANT/CONCEPT/PHENOMENON/etc. X AND PARTICIPANT/
CONCEPT/PHENOMENON/etc. Y WITH MATCHING)
 2. EVENT ATTRIBUTION (TEMPORAL FRAME)/ATTRIBUTION (SPATIAL
FRAME)/ ELABORATION (ANALYTICAL FRAME)/etc. TO X
 - ↑
 - MATCHING
 - ↓
 3. EVENT ATTRIBUTION (TEMPORAL FRAME)/ ATTRIBUTION (SPATIAL
FRAME)/ ELABORATION (ANALYTICAL FRAME)/etc. TO Y
 - (or
 2. MATCHING ATTRIBUTION/EVALUATION TO X AND Y)

The structure of a matching sequence with a sequence opening matching proposition may also be incomplete in that only one of the matching counterparts is discussed in the comment part of the text. This is the case when the relevant features of the other counterpart are assumed to be known by the readers.

Formula A78 explains a structure where both or all of the matching counterparts are not introduced at the same time at the beginning of the sequence. The reader then becomes aware of the matching relation only when its second member is introduced.

- (A78)
1. INTRODUCTION OF TOPICAL PARTICIPANT/CONCEPT/PHENOMENON X
 2. EVENT ATTRIBUTION (TEMPORAL FRAME)/ATTRIBUTION (SPATIAL FRAME)/
ELABORATION (ANALYTICAL FRAME) etc. TO X
 - ↑

MATCHING



3. INTRODUCTION OF (TOPICAL) PARTICIPANT/CONCEPT/PHENOMENON Y
4. EVENT ATTRIBUTION (TEMPORAL FRAME)/ATTRIBUTION (SPATIAL FRAME)/ELABORATION (ANALYTICAL FRAME) etc. TO Y

Pattern A79 represents a matching sequence with a topical argumentative matching evaluation followed by a basis which assigns attributions or elaborative descriptions to both of the matching counterparts either separately or by means of matching attributions/evaluations.

(A79).

1. MATCHING EVALUATION WITH EMBEDDED INTRODUCTION OF PARTICIPANTS/CONCEPTS/PHENOMENA X AND Y
2. BASIS:
 - 2.1 EVENT ATTRIBUTION (TEMPORAL FRAME)/ATTRIBUTION (SPATIAL FRAME)/ELABORATION (ANALYTICAL FRAME) etc. TO X

⇕

MATCHING

⇓

 - 2.2 EVENT ATTRIBUTION (TEMPORAL FRAME)/ATTRIBUTION (SPATIAL FRAME)/ELABORATION (ANALYTICAL FRAME) etc. TO Y

(or

 - 2.1 MATCHING ATTRIBUTION TO X AND Y)

Similarly to argumentative texts in general, it is of course also possible for the entities to be matched, i.e. the matching counterparts, to be introduced before the matching evaluation is presented. This means that the discourse-topical focus in the sequence is on one or all of the matching counterparts rather than on the argumentative evaluation itself.

6.3.8.3 Message-structural patterns with matching

Text samples will be provided below to illustrate the various manifestations of the matching phenomenon discussed in the preceding chapter.

(80) Matching structure for contrast: a single-nucleus discourse topic, a matching counterpart as a subordinate discourse-topical continuity, and a generic topic controlling matching introduction

1. *Scottish towns look very different from English towns.*
2. *Architectural traditions have been quite distinct, with certain styles appearing all over Scotland but not at all in England.*
3. *In the central areas of towns, where in England nineteenth-century building consisted mostly of long rows of two-storey red brick houses, the Scots built grey four-storey apartment-houses.*
4. *The streets of most country villages have little of the grace of the English eighteenth and early nineteenth centuries.*
5. (5.1) *Stone has been the usual building material until very recently, (5.2) though now brick is often to be seen;*
6. *in fact Scottish architecture seems to be losing its distinctive character to some extent. (Bromhead 1967: 192)*

The extract above shows a text-opening generic matching statement which introduces a topical participant that is involved in a matching relation with a subordinate discourse-topical continuity, i.e. the discourse topic of the text can be specified as *Scottish towns in comparison with English ones*. The wider context of the passage, which sets out to describe Scotland and the Scots, provides evidence for the assumption that *Scottish towns* constitute the discourse-topical nucleus, while *English towns* serve as a discourse-topically subordinate matching counterpart, which, because they are assumed to be better known by the readers, provide a basis for the description of the less known topical idea. The text-opening matching proposition does not in this case present ambiguity concerning whether it is reportive or argumentative in character because the causal explanation which follows (in act 2) the initial statement of a contrastive situation implies that the writer's intention is to report rather than to argue. Act 6 is coded as a matching evaluation because matching is implied; the proposition can be transcribed into the form *In fact it seems that Scottish towns are becoming more like English towns* in which a matching relation is explicit. For the description of the text structure the following formula is proposed:

(A80)

1. GENERIC TOPIC CONTROLLING INTRODUCTION OF TOPICAL PARTICIPANT X (Scottish towns) AND PARTICIPANT Y (English towns) WITH MATCHING: CONTRAST (act 1) - CAUSAL EXPLANATION TO CONTRAST WITH EMBEDDED ATTRIBUTION TO PARTICIPANTS X AND Y (act2)
2. MATCHING ATTRIBUTION TO X AND Y (acts 3-4: act 4 ADDITION to act 3)
3. ATTRIBUTION TO PARTICIPANT X (acts 5.1- 5.2): INEFFECTIVE CAUSE (act5.1)- CONCESSION (act 5.2)
4. MATCHING EVALUATION OF PARTICIPANTS X AND Y: CONSEQUENCE OF ACT 5.2 (act 6)

(81) Matching structure with contrast: a multi-nuclei discourse topic and no matching introduction

1. *All but the most autocratic of fathers encouraged their sons to broaden their acquaintance with the world.*
2. *It was not complimentary to say of a son that he devoted himself to his family,*
3. *but it was derogatory to say anything else of a daughter.*
4. *Sanzio saw that his son Raffaello had greater talent than he, so he sent him away to a better master than himself.*
5. *For a daughter, such action was impractical and unthinkable.*
6. *However much her talent for painting might be valued, her other contributions to the nurturing activities of the family were deemed more important.*
7. *A father might with impunity forbid his daughter to sign paintings in her own style, for publicity was considered immodest,*
8. *but often such prohibition was unnecessary.*
9. *Daughters were ruled by love and loyalty; they were more highly praised for virtue and sweetness than for their talent, and they devalued their talent accordingly.*
10. *Anne Louise (1690-1747), the eldest daughter of Lodowyck de Deyster, is a typical case.*

11. *She copied her father's work so expertly and faithfully that the copies could not be distinguished from the originals: her original compositions were conceived and carried out in her father's manner and when he died she was his biographer.* (Greer, Germaine 1979, *The Obstacle Race*, in Koskinen et al. 1989:26)

Example (81) shows a matching pattern without a generic text-opening matching proposition and without a text-initial introduction of both of the matching counterparts. It also shows a multi-nuclei discourse topic. This conclusion can be made since the matching counterparts ('sons' and 'daughters') seem to carry an evenly balanced focus of interest due to the fact that structurally similar descriptive processes are applied to them (e.g. parallel causal explanations and illustrations).

A crucial question for the text-structural analysis of the above passage is whether acts 1 and 5 should be understood as argumentative evaluations or as statements of historical facts. The latter interpretation is presently preferred on the grounds that both of these acts are immediately followed by a proposition that is a causal explanation rather than a basis. Both are also later accompanied by an example which in some circumstances could serve as substantiating evidence, but which in the present case is more likely to perform a strategic interest-arousing role, as generalizing from one instance does not in this context seem to provide a credible basis for an argumentative assertion. Accordingly, the following text structure representation is suggested:

(A81)

1. INTRODUCTION OF TOPICAL PARTICIPANT X (sons) WITH EMBEDDED MEASURE
ATTRIBUTION: Generic (act 1)
2. ATTRIBUTION TO TOPICAL PARTICIPANT: CAUSAL EXPLANATION TO MEASURE
ATTRIBUTION IN ACT 1 (act 2)
- ↑
MATCHING X AND Y
↓
3. INTRODUCTION OF TOPICAL PARTICIPANT Y WITH EMBEDDED ATTRIBUTION
TO Y (daughters): CONTRAST TO ACT 2 (act 3)
4. Interest arousing specific of act 1 (act 4)
- ↑
MATCHING Y AND Y
↓
5. ATTRIBUTION TO Y: CONTRAST TO ACT 4 (act 5)
6. ATTRIBUTION TO Y: CAUSAL EXPLANATION TO ATTRIBUTION IN ACT 5 (acts 6-11):
Generic (act 6) - Interest arousing specific (acts 7-8): INEFFECTIVE CAUSE (act 7) -
CONCESSION (act 8) - Topic resuming generic (act 9)- Interest arousing specific (acts 10-11):
Text organizing generic (act 10) - Specific (act 11)

As the above analysis indicates, the matching function is manifested as a proposition and not just as an abstract relation signified by some relevant lexical clue when the matching procedure points out a contrast. When a similarity is stated without a matching statement, matching logic only exists as a notional relation between two propositions (e.g. *My father is a lawyer. My brother is a lawyer too.*)

(82) Matching structure with similarity and degree matching: a single-nucleus discourse topic and a matching counterpart as a subordinate discourse-topical continuity

1. *In England since the nineteenth century, there has been a rule of precedent which, in the circumstances, already examined, obliges judges to follow the legal rules already enunciated in individual cases by other judges.*

2. *In the United States there is a similar rule,*

3. *but the American 'stare decisis' ('let the decision stand') does not operate in quite the same way, nor is it so rigorous, as the present English rule.* (David, Rene and John E. Brierly. *The Rule of Stare Decisis*, in Sallinen 1990:26))

This extract shows both compatibility and degree matching with the discourse-topical focus on one of the matching counterparts ('the American rule of precedent'). The matching counterpart constituting the subordinate discourse-topical continuity ('the English rule of precedent') functions as a basis of description for the topical one. That 'the English rule of precedent' does not function as a parallel discourse-topical nucleus is evident from the larger context from which the extract has been taken: the passage is a part of a chapter dealing with the American stare decisis rule. The text structure of the passage can, accordingly, be outlined as follows:

(A82)

1. BACKGROUND CREATING INTRODUCTION OF TOPICAL CONCEPT X (the American rule of precedent) AND CONCEPT Y (the English rule of precedent) WITH MATCHING (acts 1-2): INTRODUCTION OF Y (act 1) \Leftarrow MATCHING X AND Y \Rightarrow INTRODUCTION OF X (act 2)
2. MATCHING ATTRIBUTION TO X AND Y (act 3)

(83) **Matching structure with an argumentative matching evaluation**

(Why don't 'they' act as 'we' did?. This has long been the cry of well-meaning white Americans who simply can't understand why blacks don't repeat the classic immigrant experience.)

1. *But there are enormous differences too, not just between the Irish and the blacks, but between the blacks and all of the European groups of our ethnic legend.*

2. *Blacks were subjected to the institution slavery,*

3. *something that happened to no other group.*

4. *They were brought here in chains from Africa, and,*

5. *as far as it was possible, slavery tried to deprive them of their tribal memories.*

6. *For every other ethnic group, a language, a religion, and a cuisine were rallying points and opportunities for small businesses to develop (restaurants, groceries selling special foods, wineries, breweries).*

7. *But the ethnic identity of black America was the target of cultural genocide.* (Harrington, Michael 1984, *Superfluous People*, in Attila et al. 1992:46)

The above sample text illustrates an argumentative matching sequence. Act 1 claims a difference between participants X and Y, i.e. 'the blacks' and 'all of the European groups of our ethnic legend'. The passage presents the typical grey area of text-structural analysis, which arises from a generic - specific order of presentation in some semantic contexts. The present interpretation of the passage as a piece of argumentation is based on a knowledge of the whole article from which it has been taken. The article is argumentative with the point of claiming that the blacks have not been as successful in American society as the other immigrant groups because they had a different background and a different starting point. The writer then sets out to justify his position by specifying these differences. As the text-opening sequence, which is provided (in brackets) to point out the discourse-topical focus of the whole text, indicates 'the blacks' are the discourse topic of the complete article, while 'the other immigrant groups' function as a subordinate discourse-topical continuity. The matching

evaluation of act 1 above constitutes a discourse topic for the following six acts only (acts 2-7). The text structure of the separate extract can be represented as follows:

(A83)

I MATCHING EVALUATION WITH EMBEDDED INTRODUCTION OF PARTICIPANTS X AND Y (act 1)

II BASIS (acts 2-6):

1. MEASURE ATTRIBUTION TO X: Labelling generic (act 2)
2. MEASURE ATTRIBUTION TO Y: CONTRAST TO MEASURE ATTRIBUTION TO X IN ACT 2
Labelling generic (act 3)
3. MEASURE ATTRIBUTION TO X: Explanatory specific to act 2 (acts 4-5: ADDITION)
4. ATTRIBUTION TO Y: CONTRAST TO MEASURE ATTRIBUTION TO X IN ACT 5:
Explanatory specific to act 3 (act 6)
6. MEASURE ATTRIBUTION TO X: CONTRAST TO ATTRIBUTION TO Y IN ACT 6:
Reformulation of act 5 (act 7)

(84) Matching structure with analogy

1. *Like a driver in a racing car, mankind sits behind the wheel and speeds into the sixties.*
2. *Ahead lie testing curves.*
3. *According to his skill the driver will either crash in a shriek of twisting steel*
4. *or accelerate to new horizons.*
5. *For mankind the alternatives are simply these:*
6. *either to annihilate himself in the holocaust of atomic war,*
7. *or to enjoy a decade of unparalleled technological progress.* (The Sixties, in Hakulinen-Sipilä and Norko-Turja 1961:57)

As was mentioned above, a matching pattern is called *analogy* when it states a compatibility and only one of the matching counterparts is contextually relevant. Analogy is a descriptive device where a new idea is described by finding a parallel between such phenomenon and another, which is well-known to the reader/listener. Analogy may also be used for stylistic purposes to increase the power of the text to impose images and associations on the reader. In the latter case, the contextually irrelevant member of the matching relation frequently constitutes a metaphor rather than a concrete matching counterpart. The text structure of the above passage can be outlined in the following way:

(A84)

1. GENERIC TOPIC CONTROLLING INTRODUCTION OF TOPICAL PARTICIPANT X IN SETTING X (mankind in the sixties) and PARTICIPANT Y IN SETTING Y (a driver in a racing car) WITH ANALOGY (act1)
2. ATTRIBUTION TO SETTING Y (act 2)

3. EVENT/ACTION ATTRIBUTION TO PARTICIPANT Y IN SETTING Y (acts 3-4: ALTERNATIVE)

↑
ANALOGY BETWEEN X AND Y
↓

4. ACTION/STATE ATTRIBUTION TO PARTICIPANT X IN SETTING X (acts 5-7): Text organizing generic (act 5) - Specific (acts 6-7: ALTERNATIVE)

The above extract incorporates an introductory matching proposition which states an analogy. This is one way of spelling out an analogical relation between ideas. In addition, analogy can be expressed in any of the patterns that compatibility matching in general can take. The topically irrelevant situation could, for example, have been described in the opening sequence without any lexical clue as to its function in the textual whole. The insertion of such a clue may be postponed until the proper discourse topic is introduced (e.g. 'In the same way mankind enters the sixties. For them the alternatives are simply these: ---'). In such case analogy is coded only as a message-structural relation (not as proposition carrying such function) explaining the co-occurrence of two propositions or sets of propositions in the text.

6.4 A text-typological categorization of the patterns of message structure

In this chapter *the message-core functions of attribution, elaboration, basis, evaluation (with basis), motivation, instruction (with basis), commitment, and matching* have been defined. In addition, the types of discourse topic have been identified that these message-core functions tend to pertain to when they appear as dominant message-core functions of the textual comment. The occurrence of the above functions at the lower levels of message-structural hierarchy has also been discussed.

These functions of the textual comment (except for matching, which is a co-occurring message-core function effected by a multi-foci discourse topic) are brought about as the writer's answer to the preliminary planning question with its included subordinate questions, i.e. *What am I going to say about my topic? What is the purpose of my message with respect to the reality to be depicted?*, and *What is the purpose of my message with respect to the reader?* Because Werlich's (1982) text types were referred to as descriptions of the various textual speech acts with different representational and communicative illocutionary purposes, when an effort was made to identify the different functions through which the propositions of the textual comment relate to the discourse topic, the resulting message structural patterns must by definition apply also to the stereotypical representation of these text types. This equivalence is shown below, where the message-structural patterns constructed in this chapter are categorized in text-typological terms.

However, due to the fact that textual illocutionary purposes were looked for also by studying sentential speech acts and that subsequently a modality aspect distinguishing between objective and subjective statements was included as a text-structurally relevant criterion (i.e. evaluations were distinguished from statements of facts), a broadening of the basic Werlichian text types became necessary. This means the observation that an evaluative element whether in the form of an evaluation, instruction or commitment can be incorporated in any type of textual sequence. The coding *situation - evaluation / instruction / commitment* has been applied to such a structure. The overall illocutionary purpose of the sequence can then be expected to coincide with that of the predominant situation member. Moreover, any Werlichian type of textual sequence may show a co-occurring matching structure which is entailed by a multi-nuclei discourse topic or a discourse topic with a subordinate discourse-topical continuity. The message-structural patterns identified in this chapter are, however, only stereotypical representations of the structural qualities of the various text types in the same fashion as text types themselves are theoretical constructions based on the recognition of the dominant textual features only. As the analyses of the previous sample materials

have shown, real texts combine text-typological features freely, especially at a lower level of analysis, even though text types can still be identified on the grounds of dominant top-hierarchy structural properties.

Narrative texts:

- (1) 1. INTRODUCTION OF TOPICAL PARTICIPANT (IN SETTING 1)
 2. EVENT/ACTION/MEASURE ATTRIBUTION TO TOPICAL PARTICIPANT (IN SETTING 1/1+n)
 - (3. ATTRIBUTION/ELABORATION TO SETTING 1/1+n)
(Temporal and constructive frame)

- (2) 1. INTRODUCTION OF TOPICAL SETTING
 2. EVENT/ACTION/MEASURE ATTRIBUTION
(Temporal and constructive frame)

- (3) 1. INTRODUCTION OF TOPICAL EVENT (IN SETTING)
 2. ELABORATION TO TOPICAL EVENT
 - (3. ATTRIBUTION/ELABORATION TO SETTING)
(Temporal and analytical frame)

- (4) 1. INTRODUCTION OF TOPICAL EVENT
 2. ATTRIBUTING CONSTITUENT EVENT 1 AND CONSTITUENT EVENT n
 3. ELABORATION TO CONSTITUENT EVENT 1
 4. ELABORATION TO CONSTITUENT EVENT n
(Temporal and analytical frame)

- (5) 1. INTRODUCTION OF TOPICAL PARTICIPANT AND PRODUCT (IN SETTING 1)
 2. ACTION/EVENT/MEASURE ATTRIBUTION TO TOPICAL PARTICIPANT (IN SETTING 1/1+n)
 3. EVENT/MEASURE ATTRIBUTION TO TOPICAL PRODUCT (IN SETTING 1/1+n)
 - (4. ATTRIBUTION/ELABORATION TO SETTING 1/1+n)
(Temporal and constructive frame)

- (6) 1. SITUATION (Temporal and constructive/analytical frame)
 2. EVALUATION/INSTRUCTION/COMMITMENT

- (7) 1. INTRODUCTION OF TOPICAL PARTICIPANTS/ EVENTS/etc. X AND Y
 (or
 1. INTRODUCTION OF TOPICAL PARTICIPANT/EVENT/etc. X AND PARTICIPANT/EVENT/etc. Y
 or
 1. GENERIC TOPIC CONTROLLING INTRODUCTION OF TOPICAL PARTICIPANTS/EVENTS/etc. X AND Y WITH MATCHING
 or
 1. GENERIC TOPIC CONTROLLING INTRODUCTION OF TOPICAL PARTICIPANT/EVENT/etc. X AND PARTICIPANT/EVENT/etc. Y WITH MATCHING)
2. EVENT/ACTION/MEASURE ATTRIBUTION OR ELABORATION TO X
 ↑↑
 MATCHING
 ↓↓
3. EVENT/ACTION/MEASURE ATTRIBUTION OR ELABORATION TO Y
 (or
 2. MATCHING ATTRIBUTION/EVALUATION TO X AND Y)
 (Temporal and constructive/analytical frame)
- (8) 1. INTRODUCTION OF TOPICAL PARTICIPANT/EVENT/SETTING/etc. X
 2. ACTION/EVENT/MEASURE ATTRIBUTION OR ELABORATION TO X
 ↑↑
 MATCHING
 ↓↓
3. INTRODUCTION OF (TOPICAL) PARTICIPANT/EVENT/SETTING/etc. Y
 4. ACTION/EVENT/MEASURE ATTRIBUTION OR ELABORATION TO Y
 (Temporal and constructive/analytical frame)

Descriptive texts:

- (1) 1. INTRODUCTION OF TOPICAL PARTICIPANT (IN SETTING 1)
 2. ATTRIBUTION TO TOPICAL PARTICIPANT (IN SETTING 1/1-n)
 (3. ATTRIBUTION/ELABORATION TO SETTING 1/1+n)
 (Spatial and constructive frame)
- (2) 1. INTRODUCTION OF TOPICAL SETTING
 2. ATTRIBUTION
 (Spatial and constructive frame)

(3) 1. INTRODUCTION OF TOPICAL PARTICIPANT AND PRODUCT (IN SETTING 1)

2. ATTRIBUTION TO TOPICAL PARTICIPANT (IN SETTING 1/1+n)

3. ATTRIBUTION TO TOPICAL PRODUCT (IN SETTING 1/1+n)

(4. ATTRIBUTION/ELABORATION TO SETTING 1/1+n)

(Spatial and constructive frame)

(4) 1. INTRODUCTION OF TOPICAL PARTICIPANT

2. ATTRIBUTING CONSTITUENT 1 AND CONSTITUENT n

3. ATTRIBUTION TO CONSTITUENT 1

4. ATTRIBUTION TO CONSTITUENT 2

(Spatial and constructive frame)

(5) 1. SITUATION (Spatial and constructive frame)

2. EVALUATION/INSTRUCTION/COMMITMENT

(6) 1. INTRODUCTION OF TOPICAL PARTICIPANTS/SETTINGS X AND Y

(or

1. INTRODUCTION OF TOPICAL PARTICIPANT/SETTING X AND PARTICIPANT/SETTING Y

or

1. GENERIC TOPIC CONTROLLING INTRODUCTION OF TOPICAL PARTICIPANTS/SETTINGS X AND Y WITH MATCHING

or

1. GENERIC TOPIC CONTROLLING INTRODUCTION OF TOPICAL PARTICIPANT/SETTING X AND PARTICIPANT/SETTING Y WITH MATCHING)

2. ATTRIBUTION TO X

↑

MATCHING

↓

3. ATTRIBUTION TO Y

(or

2. MATCHING ATTRIBUTION/EVALUATION TO X AND Y)

(Spatial and constructive frame)

(7) 1. INTRODUCTION OF TOPICAL PARTICIPANT/SETTING/etc. X

2. ATTRIBUTION TO X

↑

MATCHING

↓

3. INTRODUCTION OF (TOPICAL) PARTICIPANT/SETTING/etc. Y

4. ATTRIBUTION TO Y
(Spatial and constructive frame)

Expository texts:

- (1) 1. INTRODUCTION OF TOPICAL CONCEPT / PHENOMENON (IN SETTING 1)
2. ELABORATION TO TOPICAL CONCEPT/PHENOMENON (IN SETTING 1/1+n)
(3. ATTRIBUTION/ELABORATION TO SETTING 1/1+n)
(Notional and analytical frame)
- (2) 1. INTRODUCTION OF TOPICAL PARTICIPANT AND PRODUCT (IN SETTING 1)
2. ATTRIBUTION TO TOPICAL PARTICIPANT (IN SETTING 1/1+n)
3. ELABORATION TO TOPICAL PRODUCT (IN SETTING 1/1+n)
(4. ATTRIBUTION/ELABORATION TO SETTING 1/1+n)
(Notional and analytical frame)
- (3) 1. INTRODUCTION OF TOPICAL CONCEPT/PHENOMENON
2. ATTRIBUTING CONSTITUENT 1 AND CONSTITUENT n
3. ELABORATION TO CONSTITUENT 1
4. ELABORATION TO CONSTITUENT 2
(Notional and analytical frame)
- (4) 1. SITUATION (Notional and analytical frame)
2. EVALUATION/INSTRUCTION/COMMITMENT
- (5) 1. INTRODUCTION OF TOPICAL CONCEPTS/PHENOMENA/etc. X AND Y
(or
1. INTRODUCTION OF TOPICAL CONCEPT/PHENOMENON/etc. X AND
CONCEPT/PHENOMENON/etc. Y
or
1. GENERIC TOPIC CONTROLLING INTRODUCTION OF TOPICAL
CONCEPTS/PHENOMENA/etc. X AND Y WITH MATCHING
or
1. GENERIC TOPIC CONTROLLING INTRODUCTION OF TOPICAL
CONCEPT/PHENOMENON/etc. X AND CONCEPT/PHENOMENON/etc. Y WITH
MATCHING)

2. ELABORATION TO X

↑

MATCHING

↓

3. ELABORATION TO Y

(or

2. MATCHING ATTRIBUTION/EVALUATION TO X AND Y)

(Notional and analytical frame)

(6) 1. INTRODUCTION OF TOPICAL CONCEPT/PHENOMENON/etc. X

2. ELABORATION TO X

↑

MATCHING

↓

3. INTRODUCTION OF (TOPICAL) CONCEPT/PHENOMENON/etc. Y

4. ELABORATION TO Y

Argumentative texts:

(1) EVALUATION - BASIS
(Argumentative frame)

(2) INTRODUCTION OF TOPICAL PARTICIPANT/EVENT/CONCEPT/PHENOMENON/etc. -
EVALUATION - BASIS
(Argumentative frame)

(3) REPORTED EVALUATION (- REPORTED BASIS) - AFFIRMING EVALUATION - BASIS
(Argumentative frame)

(4) REPORTED EVALUATION (-REPORTED BASIS)- REJECTING EVALUATION - BASIS/
BASIS = CORRECTING EVALUATION (- BASIS)
(Argumentative frame)

(5) REPORTED EVALUATION - REJECTING EVALUATION - BASIS - CONTRAST TO
REJECTING EVALUATION: CORRECTING EVALUATION - BASIS
(Argumentative frame)

(6) 1. INTRODUCTION OF TOPICAL PARTICIPANT/EVENT/CONCEPT/PHENOMENON/etc.

2. REPORTED EVALUATION (-REPORTED BASIS) - REJECTING EVALUATION OF REPORTED EVALUATION - BASIS/BASIS = CORRECTING EVALUATION
(Argumentative frame)

(7) 1. INTRODUCTION OF TOPICAL PARTICIPANT/EVENT/CONCEPT/
PHENOMENON/etc.

2. REPORTED EVALUATION (-REPORTED BASIS) - REJECTING EVALUATION OF REPORTED EVALUATION - BASIS - CONTRAST TO REJECTING EVALUATION: CORRECTING EVALUATION - BASIS
(Argumentative frame)

(8) 1. INTRODUCTION OF TOPICAL PARTICIPANT/EVENT/CONCEPT/PHENOMENON/etc.

2. HYPOTHETICAL EVALUATION (X) - TEST: REPORT ON TESTING AND RESULTS - CONCLUSION: AFFIRMATION OF X / CONCLUSION: FRUSTRATION OF X
(Argumentative frame)

(9) 1. SITUATION (Argumentative frame)

2. EVALUATION/INSTRUCTION/COMMITMENT

(10) 1. MATCHING EVALUATION WITH EMBEDDED INTRODUCTION OF PARTICIPANTS/EVENTS/CONCEPTS/PHENOMENA/etc. X AND Y

2. BASIS:

2.1 ACTION/EVENT etc. ATTRIBUTION /ATTRIBUTION/ELABORATION TO X

↑

MATCHING

↓

2.2 ACTION/EVENT etc. ATTRIBUTION /ATTRIBUTION/ELABORATION TO Y

Instructive texts:

(1) INSTRUCTION

When an instruction is authoritative enough to be issued without reasoning, its expansion into a text may be accomplished by means of a generic - specific strategy. The discourse-topical position may then be occupied by the sentence topic of the instruction.

(2) INSTRUCTION - BASIS

(3) MOTIVATION - INSTRUCTION (-BASIS)

(4) INTRODUCTION OF TOPICAL PARTICIPANT /CONCEPT/PHENOMENON/ etc. -

INSTRUCTION (-BASIS)

- (5) INTRODUCTION OF TOPICAL PROBLEM - INSTRUCTION - (BASIS)
- (6) INTRODUCTION OF TOPICAL PROBLEM - REJECTING INSTRUCTION - CONTRAST:
CORRECTING INSTRUCTION - (BASIS)
- (7) SITUATION (*Instructive frame*)- EVALUATION/ INSTRUCTION/ COMMITMENT

7 Testing of the model

7.1 Hypothesis about the applicability of the model

Because the present two-level system of text-structure representation has been constructed on a theoretical basis and by reference to other theoretical constructions, i.e. Werlich's typology of texts (Werlich 1982) and Searle and Vanderveken's (1985) theory of illocutionary acts, its practical relevance needs to be tested on authentic texts. Because both Werlich's text types and Searle and Vanderveken's types of illocutionary acts are claimed to be exhaustive descriptions of the linguistic variety they represent, a system of text structure representation which draws on them (except for the illocutionary act of declarations) could be expected to exhaust text-structural variation (except for texts with a declarative illocutionary purpose which are not expected to abound among factual texts).

The applicability of the present system is, however, restricted by the principle of message structure representation assuming the existence of a superordinate discourse topic, to which all the top-hierarchy propositions of the text are directly linked. This restriction means that the system primarily applies to texts with a 'complete' message, i.e. to texts which say something about something. Thus it does not necessarily apply to the global analysis of texts such as interviews, dialogues, minutes, agendas, speeches, personal letters, causeries, notes, and listing summaries, which may consist of several independent discourse-topical sequences. A further restriction is that the message strategies presently identified assumably do not exhaust the message-strategic variety found in fiction, although they are expected to account for the strategic differences in factual writing. Considering, on the one hand, the above restrictions and, on the other, the fact that the system has been constructed to account for text-typological variation, it would seem that the system applies to factual, i.e. non-fictional, written texts (and their extracts) in English which are governed by a superordinate discourse topic, either single or multi-nuclei. The rest of this section will deal with the question of defining a representative corpus of texts to test the validity of this claim.

7.2 Biber's text typology as a framework for collecting a corpus to test the hypothesis

The above hypothesis about the applicability of the system implies that the system should be tested on a sample of factual texts in which all the text types are represented. The text types themselves, however, can only be identified by reference to text-internal criteria such as the mode of discourse and the absence or presence of a persuasive text-internal communicative purpose, the recognition of which as such would require a structural analysis. Therefore, a way of categorizing texts into a matrix which would indicate the text-typological categories of the texts representing different genres had to be found. Knowledge of the cross-sections of genres and text types was needed, to point out the concrete sources of sampling which would ensure that all the text types are properly represented in the corpus. It was assumed that because genres are textual categories based on the recognition of a text-external speech community-imposed communicative purpose (see 3.8.2), they can be identified on the basis of the source of the text (e.g. texts representing the genre of press reportage was expected to be found from news papers and magazines). Thus the crucial question that remained to be answered was how the text types were represented among various genres. To find out about these connections between the text-internally defined text types and the text-externally determined genres, Biber's (1988) text typology with 23 genres cutting across eight text types was used (for a more detailed account of this typology, see 3.8.4). Also Werlich (1976 and 1982) has categorized natural

texts to represent his five theoretical text types (see Werlich 1982:46 for 'text forms' and 'text form variants'). As pointed out in section 3.8.4, genres as identified by Biber were preferred to Werlich's text forms or text form variants as textual categories from which the sample texts were taken, because if Werlich's text form variants had been used the system's explanatory power would have been tested only on the kind of texts whose existence was held as a premise for the construction of the model. The possibility that Werlich's typology does not exhaust text-typological variety would then have been excluded. In other words, it was assumed that the validity of the test was enhanced when another set of text-typological categories was used for the selection of the test sample.

Commitment to Biber's matrix of externally and internally defined textual categories in the collection of the corpus meant that the applicability of the present system was to be stated by reference to the Biberian text types. The sample was expected to be representative of factual texts if it included texts from all those Biberian text types which according to his analysis could occur in factual (i.e. non-fictional) genres. References to Biber's typology were expected to be an asset also, because the applicability of this system, which had been constructed by reference to a mode-of-discourse and illocutionary purpose based typology of texts, could in this way be tested on text-typological categories derived from experimental findings about co-occurring linguistic features.

As reported in 3.8.4, Biber applied a five-dimensional model of co-occurrence-based text-internal criteria to a corpus of 481 texts representing 23 genres and distinguished eight text types, both written and spoken. For the present study the relevant text types are *scientific exposition*, *learned exposition*, *general narrative exposition*, and *involved persuasion* (for a detailed account of the criteria on which each of the above categories are based, see 3.8.4). Biber's results show that the genres cut across the text types so that a variety of text types are represented within one genre. This state of affairs may be partly due to the inclusiveness of the genres used by Biber. It may also largely result from the empirical method of Biber's study, which may have exposed more text-typological variation within a genre than would have been expected on a theoretical basis (see for example Biber 1988:21-22 for the distribution of the genre of academic prose across the written factual text types). The inclusiveness of the genres presented a difficulty for the collection of sample texts: For the sample to be representative of a given text type it should contain texts from the particular genre subcategory which cuts across the text type. Yet Biber does not label the genre subcategories which fall into the various text-typological categories by reference to their external purpose or source; he merely gives their percentages from the total number of the texts representing in his corpus that particular genre (e.g. he states that 44% of the genre of academic prose represent the text type of scientific exposition). Thus at this point a methodological weakness in the selection of the corpus arose because the identification of the subcategories of the genres could not but be partly based on the present writer's view of what externally defined categories correspond to the text-internal features of the Biberian text type descriptions. This difficulty could have been avoided had a matrix with text types and more specifically defined genre categories been available. It now remains for the readers to judge whether they can agree on the genre specifications to be made.

7.3 Criteria for the choice of the genres and genre subcategories to be incorporated in the corpus

There are two criteria for the choice of the genres to be incorporated in the sample. First, because the above hypothesis about the applicability of the model suggests that the model can provide the structural description of all those written factual texts which are governed by a superordinate discourse topic, the genres to be included in the corpus must be chosen so that all text types which are manifested in factual writing are represented. Second, the corpus should be relevant from the point of view of the initial practical purpose of the present system. In the beginning the point was made that the impetus for the construction of the model rose from a need of finding effective tools

for the teaching of English reading comprehension at university level. Although the model will not be tested in this study as an aid of reading comprehension, it would be relevant to test its applicability to those genres or sub-categories of genres which are most commonly encountered on an academic reading course.

The genre of *academic prose* satisfies both of the above requirements. The bulk of the texts dealt with on an academic reading course represent this category. Moreover, it is distributed across the written factual text types as identified by Biber (1988). According to his data, 44% of academic prose represent the text type of 'scientific exposition'. Some 30% of these texts pertain to the category of 'learned exposition', 17% to that of 'general narrative exposition', and the bottom 9% are categorized as 'involved persuasion'. Thus academic prose was an appropriate choice for the corpus because, if properly represented, it was supposed to allow a very wide hypothesis of the applicability of the descriptive system. Before sampling was possible, however, the various types of academic prose had to be identified as specific sub-genres. As pointed out above, such categories were discovered by observing the inclusive genre and the dimensional structure of the respective text type.

Textbooks, when the term is used to denote any academic text with a text-externally defined purpose of imparting factual information from an expert source to a novice in the field, were expected to constitute a sub-genre of academic prose that cuts across the text types of scientific exposition, learned exposition, and general narrative exposition. Scientific exposition and learned exposition are nonnarrative (dimension 2: for the Biberian dimensions see 3.8.4), nonpersuasive (dimension 4), highly informative in production (dimension 1), elaborated in reference (dimension 3), and abstract in style (dimension 5). The differentiating factor is that learned exposition is less abstract in style. Because the text types of scientific and learned exposition share a dimensional composition, they are likely to share text-structural features too. For the sake of proper coverage of the text types, however, both of them were incorporated in the corpus. According to Biber, scientific exposition is manifested in the academic prose of natural sciences, engineering, and medicine, while that of humanities, social sciences, and education constitute the core of learned exposition. It was concluded that among the writings of the above fields textbook texts as defined above correspond to the above dimensional descriptions in that they lack the argumentative element that inherently pertains, e.g., to scientific articles. The textbook samples chosen to represent the above text types were taken from the fields of medicine, electrical engineering, economics, and education. The text type of *general narrative exposition*, which is informational and noninvolved (dimension 1) with narrative concerns (dimension 2) and unmarked on elaborated versus situation-dependent reference (dimension 3), overt expression of persuasion (dimension 4), and abstract versus nonabstract style (dimension 5), was expected to be realized in history textbooks because they are bound to follow a chronological scheme. Books on the reading lists of the respective university study programs were identified as textbooks. Textbooks contained in university syllabuses seemed to be appropriate also in that they represent the kind of texts dealt with on academic English reading comprehension courses.

Academic prose with persuasion was expected to be found in scientific articles, because scientific writing is known to be inherently argumentative (Kinneavy 1971:89). Articles published in scientific journals were identified as such. In spite of the fact that the proportion of persuasive academic prose is estimated by Biber to be as low as 9%, scientific articles constituted a relatively higher portion of the present sample of academic prose. This is because of their very central role in an academic reading program. Although the name of the text type *involved persuasion* implies that the texts concerned show both persuasion and personal attitudinal involvement by the writer, Biber points out that this is not actually the case. While the text type cuts across many spoken genres with strong attitudinal elements, its written representatives are said to be mostly informational (Biber 1988:37).

If the assumption could be made that the texts chosen for sampling within the genre of academic prose exhaust the text-typological variation within that genre, a corpus so collected would, at least in theory, be adequate for the testing of the present descriptive system. In this case, however, the descriptive system was tested also on the genre of 'press reportage' because it is a textual category also relevant to advanced reading skills and further sampling may compensate for the lack of complete objectivity in the identification of the genre subcategories representing the different text types.

Of press reportage 73% belong to the category of *general narrative exposition*, 25 % to that of *learned exposition*, and 2% to *scientific exposition*. This distribution probably results from the fact that both newspaper news reports, newspaper cultural articles, and magazine articles are included in the genre. The expectation is that news reports represent general narrative exposition, while articles in the cultural pages/supplement of newspapers and in magazines are more likely to show the text type of learned exposition. The 2% margin of press reportage that was found to represent scientific exposition was considered to be peripheral and was therefore ignored.

7.4 Sampling

Above the selection of a corpus was discussed on which the hypothesis of the applicability of the model could be tested. Another consideration that essentially related to the collection of the corpus was how to implement random sampling. Eighteen texts were estimated to be a reasonable size for a corpus to test a system of text structure description. It was assumed that a corpus of that size would show all the text-structural functions of factual texts as the number of text-structural functions in each text roughly equals the number of the propositions contained in it. Because those eighteen texts were, however, collected from nine different sources according to the genre subcategories representing the different text types, the number of the texts taken from one source was too small for any conventional methods of random sampling to be used. Thus the randomness of the sampling had to be ensured in other ways. The textbook materials were collected from the beginning of the first section/unit/chapter of the first textbooks in English on the reading lists of the respective study programs at the University of Oulu (to get the same number of samples to represent the text types of scientific exposition, learned exposition, and general narrative exposition within the genre of academic prose, the corresponding sampling of history books was made from the first (other than the introduction) and second sections/units/chapters because they were the only source chosen to provide samples of 'general narrative exposition' within the respective genre). It was assumed that the requirement that the textbooks used for sampling should be taken from a fixed reading list and that the position of the textbook on the list and that of the sample texts in the books should be predetermined and regular would entail the necessary randomness of sampling. The randomness of the sample of scientific articles was ensured by including all articles from one issue, which arrangement corresponds to that of fixed reading lists in that it introduces a fixed set of texts. Newspaper and magazine articles were collected from a predetermined issue; the first 1996 issues of *the Guardian* and *Time*. News reports were represented by the first two articles on the foreign news pages of that issue of *the Guardian*, cultural articles by the first two articles on the cultural pages of the same issue, and magazine articles by the first two articles on the list of contents of the respective issue of *Time*.

To sum up the above discussion, the composition of the corpus can be specified as below:

Academic prose:

(1) Textbooks (representing the Biberian text types of scientific exposition, learned exposition and general narrative exposition):

- From the 1996-1997 syllabuses of the University of Oulu the first section/unit/chapter (other than the introduction) of the first book in English on the list of readings for medicine, electrical engineering, economics, and education.
- From the 1996-1997 syllabuses of the University of Oulu the first and second sections/units/chapters of the first book in English on the list of readings for history

(A total of 6 texts)

(2) Scientific articles (representing the Biberian text type of 'involved persuasion'):

- From *American Sociological Review*, 1993, Vol. 58 (April:145-162) the first section of the first chapter of each article.

(A total of 6 texts)

Press reportage:

(3) Newspapers (representing the Biberian text types of general narrative exposition and learned exposition):

- From the first 1996 issue of *the Guardian* the first two articles on the first foreign news page. The first two articles of the cultural supplement of the same issue.

(4) Magazines (representing the Biberian text types of general narrative exposition and learned exposition):

- From the first 1996 issue of *Time* the first two articles on the list of contents.

(A total of 6 texts)

A problem was posed by the length of the texts. For practical reasons the sample texts were cut as their paragraph structure conveniently allowed, if the section/chapter was longer than one and a half pages. This procedure raised the question whether samples should be taken not only from the beginning but also from the middle and the end of the sections/chapters to ensure the testing of such text-structural functions, too, which typically occur at a more advanced stage of topic development. This is a very relevant consideration but it seemed that the present system does not necessarily allow for the distinction of such functions if the text has been cut. The fact that the system is capable of providing a text-structural description only in relation to the discourse topic or a lower-level topical node means that the description of any extract from the middle or end of a chapter/section would be distorted from what it would have been as part of the structural description of the whole text, because the descriptive system would deal with it as a complete message which introduces a discourse topic of its own and does not serve any text-structural function in relation to the preceding part of the text. For instance, a conclusion pertaining to a text-structural whole might be analysed within an extract from the text in terms of its message-structural and message-strategic features without any reference to its concluding function in the whole text. Thus since a separate analysis of the further parts of a section/chapter does not necessarily reveal structural functions typical of the later stages of topic development, a fairly advanced cut-off point of one and a half pages was preferred. It was estimated that this length of the text would in most cases comprise the end of a section/chapter. If, however, the section/chapter has to be cut, the main effect of the cutting on the analysis is that the passage as a whole may perform a certain function in relation to what follows

(e.g. it may constitute a situation to be evaluated in the remaining part of the section / chapter), which is not indicated by the analyzed length of the text.

7.5 The conditions of validity for the hypothesis

Above the conclusion was made that the hypothesis that

the MSU-MSA model provides means for the structural description of written factual texts in English provided that these texts are governed by a definable superordinate discourse topic, single or multi-nuclei

can be tested by means of a corpus containing texts from the various sub-genres of academic prose and press reportage, because all the text types which according to Biber's analysis (1988) occur in factual writing, i.e. scientific exposition, learned exposition, general narrative exposition, and involved persuasion, are represented in that corpus. Even one genre which cuts across all the text types would suffice for the testing because if the model is appropriate for the structural description of one genre subcategory representing a particular text type, it must be appropriate also for the structural description of all the subcategories of other genres which represent the same text type, since the subcategories of the various genres then share the set of text-internal features that determines their text structure. Thus if an affirmative answer is to be given to the specific research question

Does the MSU-MSA model provide the structural description of textbook texts, scientific articles, and newspaper and magazine articles ?

which is inferred from the above generic hypothesis, the above generic hypothesis is confirmed.

A question that still remains to be answered concerns the conditions under which the model is considered to be appropriate for the description of the various text structures and the hypothesis is confirmed. An affirmative answer can be given to the above specific research question, if the model is found

- (1) to provide means for the definition of the discourse topic in each text;
- (2) to provide unrivalled definitions for the functions by means of which the informatively indispensable propositions of each sample text link directly to the discourse topic or indirectly to the discourse topic and directly to a preceding proposition or group of propositions; and
- (3) to provide unrivalled definitions for the functions by means of which the rest of the propositions in each text link directly to their previous proposition and indirectly to the discourse topic.

Conditions 2 and 3 presume that for the model to be valid there should not be overlap among the function definitions contained in it. This means that the model should not allow for more than one function label to be assigned to describe the way in which a proposition or a group of propositions relates to another. It is also expected that all the text-structural functions defined for the model will be evoked by the corpus. If this is not the case, it must be assumed that there is overlap among the function definitions or that such a function does not exist.

8 Comments on the analysis of one text in the corpus

One text from the corpus was chosen for an analysis with accompanying comments so that the choices made in the structural description can be explained and reasoned for in a randomly collected and more complete textual unit. This was felt to be necessary because an analysis can be reasoned for only by reference to the textual clues on which it is based, and a mere coded representation does not explicate them. Moreover, since it is always possible that different readers interpret the text in different ways and a text-structure analysis necessarily is part of the analyser's interpretation of the text, it is informative for the reader to know about the interpretations behind the coded analysis.

The text chosen for this purpose is the introductory chapter from the sociological research report 'Citizenship and the Place of Public Sphere: Law, Community, and Political Culture in the Transition to Democracy' by Margaret R. Somers published in *American Sociological Review*, 1993, Vol. 58 (October: 587-620). This text was chosen because it shows a great variety of text-structural functions, contains a complete introductory chapter, and represents a genre which is central to an academic reading course. The text is enclosed in appendix 1.

The comments to follow the analysis below will first briefly explain the structural logic as it is understood in each unit of analysis and then reason for the solutions made when rival alternatives seem to exist. As the comments largely consist of diffuse notes, references to the acts by numbers constitute a thread for the reader to follow.

8.1 Analysis of the text 'Citizenship and the Place of Public sphere: Law, Community, and Political Culture in the Transition to Democracy' by Margaret R. Somers

1. INTRODUCTION OF TOPICAL PHENOMENON (citizenship) IN SETTING X (recent sociological research) WITH EMBEDDED STATE ATTRIBUTION (act 1) - CAUSAL EXPLANATION FOR STATE IN ACT 1 (acts 2-5): Text organizing generic (act 2) - Specific (acts 3-5: ADDITION)

2. STATE ATTRIBUTION TO TOPICAL PHENOMENON IN SETTING X WITH EMBEDDED REPORTED ELABORATION (acts 6-12): Topic controlling generic (act 6) - Specific with enumeration: REPORTED ELABORATION (acts 7-12):

* DEFINITION: REPORTED EVALUATION (acts 7-8): Topic controlling generic (act 7) - Specific (act 8)

* ORIGIN: REPORTED EVALUATION (acts 9-11): Topic controlling generic (act 9) - Specific (acts 10-11): INEFFECTIVE CAUSE (act 10) - CONCESSION (act 11)

* TOPIC SPECIFIC DETERMINANT (basis of theorizing): REPORTED EVALUATION (act 12)

3. STATE ATTRIBUTION TO TOPICAL PHENOMENON IN SETTING X WITH EMBEDDED PROBLEM: CONTRAST TO STATE IN ACTS 6-12 (acts 13-17): Topic controlling generic (act 13) - Specific (acts 14-17): PROBLEM: question (act 14) - REPORTED SOLUTIONS: answers (acts 15-17: SUCCESSION)

4. EVALUATION OF TOPICAL PHENOMENON IN SETTING Z (the present study): REJECTING EVALUATION OF REPORTED ELABORATION IN ACTS 7-12: PARTIAL SOLUTION TO PROBLEM IN ACT 14 (act 18)

5. COMMITMENT TO TOPICAL PHENOMENON IN SETTING Q (Marshall's exemplary case): RESULT FROM EVALUATION IN ACT 18 (acts 19 and 21): Labelling generic (act 19) - CAUSAL EXPLANATION (act 20) - Explanatory specific to act 19 (act 21)

6. ELABORATION OF TOPICAL PHENOMENON IN SETTING Q: Evidence to Conclusion in acts 28-48 (acts 22-27):

* ORIGIN: EVALUATION: CORRECTING EVALUATION OF REPORTED ORIGIN IN ACTS 9-11: RESULT FROM COMMITMENT IN ACTS 19 AND 21 (act 22) - ATTRIBUTING CONSTITUENT (public sphere) TO ORIGIN (acts 23 and 25): Generic (act 23) - DEFINITION OF CONSTITUENT (act 24) - Explanatory specific to act 23 (act 25) - RESTRICTION TO CONSTITUENT ATTRIBUTION IN ACT 25 (acts 26-27) Generic (act 26) - Explanatory specific (act 27)

7. ELABORATION OF TOPICAL PHENOMENON IN SETTING Z: Conclusion from acts 22-27 (acts 28-48):

* EVALUATION OF TOPICAL PHENOMENON: REJECTING EVALUATION OF REPORTED DEFINITION IN ACTS 7-8 (act 28)

*DEFINITION WITH EMBEDDED INSTRUCTION (acts 29-30): CORRECTING EVALUATION OF REPORTED DEFINITION IN ACTS 7-8: CONTRAST TO ACT 28: Labelling generic to act 38 (acts 29-30): Labelling generic (act 29) - Explanatory specific (act 30)

*ORIGIN: STATEMENT: CORRECTING EVALUATION OF REPORTED ORIGIN IN ACTS 9-11 (acts 31-32: RESTRICTION) - ELABORATION OF ORIGIN (acts 33-34):

* TOPIC SPECIFIC DETERMINANT OF ORIGIN: STATEMENT (means of normatization and transmission) (act 33)

* CONDITION OF ORIGIN (act 34)

* SPECIFICATION OF ORIGIN (acts 35-37): REJECTION (acts 35-36): INEFFECTIVE CAUSE (act 35) - CONCESSION (act 36) - REPLACEMENT (act 37)

* DEFINITION WITH EMBEDDED ORIGIN: IMPLICATION FROM ACTS 35-37: Explanatory specific to acts 29-30 (act 38)

* FUNCTION: STATEMENT: IMPLICATION FROM ACT 38 (act 39) - RESTRICTION (act 40)

* TOPIC SPECIFIC DETERMINANT (basis of citizenship theories): STATEMENT (acts 41-48): Text organizing generic (act 41) - Specific (acts 42-48): REJECTING EVALUATION OF REPORTED TOPIC SPECIFIC DETERMINANT IN ACT 12 (acts 42-45): Reformulation of acts 22-27: Evidence to act 45 (acts 42-44: act 43 CONDITION to act 42, act 44 ADDITION to 43) - Conclusion from acts 42-44 (act 45) - CAUSAL EXPLANATION TO ACT 45 (act 46) - /// CORRECTING EVALUATION OF REPORTED TOPIC SPECIFIC DETERMINANT IN ACT 12: CONTRAST TO ACT 45 (acts 47-48): Reformulation of acts 22-27 and 42-44: Evidence to act 48 (act 47) - Conclusion from act 47 (act 48)

1. Acts 1-5: The identification of the discourse topic is the first problem to be solved for the structural description of the extract. The opening sentence of the article suggests that it is 'citizenship and democratization'. As it seems, however, that 'democratization', which occurs in the text only in the abstract and in the opening sentence, is not referred to as an idea separate from 'citizenship' but rather as its synonym or near-synonym (i.e. denoting, presumably, the final stage of the development of citizenship rights), the proper discourse topic of the introductory chapter (and of the whole article) is understood to be 'citizenship'. Being dealt with as a state of affairs with e.g. conditions and functions rather than as an abstract concept the topical idea is coded as *topical phenomenon*.

Setting X is identified by coding so that a further distinction can be made between three contexts of the study of citizenship, i.e. recent sociological study (setting X), present study (setting Z), and present study of citizenship in a historical setting (setting Q). The first two settings can conventionally be expected to be found in research reports.

The *state attribution* (i.e. the state of 'being back on the sociological agenda') involved in the text-opening proposition has to be recognized by coding because a *causal explanation* (acts 2-5) relates to it.

Act 2 is interpreted as a *text-organizing generic preview*, because it states the text-structural function (as causes of the foregrounding of citizenship and democratization on the sociological agenda) of the world events *specified* in the following acts of the introductory sequence.

Acts 2-5 are seen as pertaining to the introductory sequence of the text because they provide a causal explanation for the attribution that is embedded in the discourse-topical proposition and are, subsequently, subordinated to it.

2. Acts 6-12: The present model presumes that the analysis should state for each proposition of the text how it relates directly or indirectly to the discourse topic and directly to a preceding proposition or a group of preceding propositions. For top-hierarchy propositions which relate directly to the discourse topic the system of coding used indicates first their relation to the discourse topic and then the way in which they relate to a preceding proposition/ a group of preceding propositions.

Acts 6-12 inform the reader about points of agreement in recent sociological study of citizenship. This is coded as *state attribution to topical phenomenon in setting X*. Embedded in this statement is an *elaboration* of the notion of citizenship as it has been understood in sociology. The elaboration in acts 6-12 proceeds through descending steps from genericity to specificity. The generic-level propositions are coded as *topic-controlling generic previews* because they focus the reader's attention on the aspect of the *specific* phenomena, which is relevant to the message (i.e. agreement among researchers).

The modality aspect of the items of the elaborative frame is interpreted to be that of *evaluation*. Among the propositions conveying information about the definition of the notion of citizenship and the basis of citizenship theories, acts 7-8 and 12 do not, however, carry any lexical signals suggesting subjectivity of judgement. One reason for this may be that these positions are reported. In act 11, on the contrary, the verb 'assume' signals that the position is possibly challengeable. Irrespective of whether signals of suggested subjectivity are present or not, it seems to be justified to code the items of the elaborative frame in the present context as evaluations by other researchers and not as statements of established facts, because a research report conventionally questions, and very often tends to challenge, the validity of earlier views. As the text goes on the reader will notice that such is the case also in this article.

The *ineffective cause - concession sequence* in acts 10-11 is recognized in coding in spite of its sentence-internal status, because also the ineffective cause (act 10) carries discourse-topically, and subsequently also message-structurally, significant information, which could alternatively have been communicated in a separate sentence.

3. Acts 13-17: These acts state a disagreement in the sociology of citizenship. Pointing out disagreement or other problem in a field of study is a conventional message-structural function in research reports, because it shows that there is need for further research and enables the writer to find a niche for his own study. The present statement of disagreement in acts 13-17 is coded as *state attribution to topical phenomenon in setting X* in the same way as the preceding statement of agreement in acts 6-12. The two sets of propositions relate to each other through a *contrast* relation.

Embedded in the attribution of disagreement is a mention of its cause, which is 'the problematic relationship between citizenship and social class'. Yet because the causal relation itself does not play

any further role in the development of text-structural logic, it is not indicated by coding. Instead, the embedding is text-structurally significant in that by evaluating the relationship between 'citizenship and social class' as 'problematic' it formulates a wide sociological research problem to which the present study suggests a preliminary solution and which therefore has to be recognized also in text-structural terms. A proposition with negative adjuncts needs to be coded as a *problem* when it is directly or indirectly followed by another proposition which introduces a *solution*. Thus the problem function, on the one hand, expresses a relationship between the discourse topic (or a lower-level topical node) and a proposition of the textual comment and, on the other, invites a structural member, i.e. solution, from beneath. This is the case also here as solutions will be suggested to the problem in different settings in acts 15-17 and 18.

Acts 13 and 14-17 are bound by means of a *topic controlling generic* (act 13) - *specific* (acts 14-17) relation, where act 13 introduces the generic ideas 'issue' and 'debate', both of which are specified in the following acts. The generic - specific relation is defined as topic-controlling, because it links the evaluation 'problematic' to the issue in question and accordingly predetermines the nature of the discussion which is to follow. (Act 13 itself also shows a sentence-internal generic - specific strategy, but because it does not affect the message-structural function of the act, it is not recognized by coding.) Act 14 is the specific step which articulates the problem, i.e. the 'issue'/ 'the problematic relationship between citizenship and social class' in more definite terms. The message-structural function of this proposition needs to be recognized by repeating the coding *problem*, because a topical node must be established for the following propositions (acts 15-17) which introduce *reported solutions* to the problem while specifying the state attribution of act 13 (= 'debate'). In the present case the problem and the reported solutions are strategically manifested as a question - answer sequence. Thus acts 14-17 are simultaneously members of both a generic - specific and a question - answer strategy.

The *reported solutions* in acts 15-17 are coded as being related by means of a temporal *succession* relation. They function as successions in relation to each other, because they are ideas introduced in the sociology of citizenship during successive periods of time. Acts 15 and 16 are coded separately although they are contained within one sentence because they constitute two text-structurally distinct units.

4. Act 18: The act contains the writer's preliminary or *partial solution* to the problem introduced in acts 13-14. As the solution involves a reference to the discourse topic the proposition relates also as an evaluation to the discourse topic itself. Accordingly, the first coding for the proposition is *evaluation of topical phenomenon*. The setting is now different from that of the preceding acts, because the topical phenomenon is evaluated by the writer in the temporal context of the study presently reported. The coding used is *setting Z*. The proposition of act 18 relates to preceding propositions of the textual comment also by functioning as a *rejecting evaluation* of the reported elaboration of the notion of citizenship in acts 7-12. This becomes explicit as it states that the 'first three premises of citizenship' must be 'questioned'.

5. Acts 19-21: The acts 19 and 21 convey a *commitment* by the writer to re-analyze a historical case of citizenship. A new setting (*Q*) is coded to identify a further context for the study of the topical phenomenon. Citizenship is now studied in Marshall's historical case. A connection between the discourse topic and acts 19 and 21 is maintained because the commitment involves measures directed at the topical phenomenon, i.e. the commitment is understood as *commitment to topical phenomenon*. Commitment is a text-structural function that can be expected to be found in a research report, because it marks the point in the text at which the writer starts reporting on the steps to be taken to solve a research problem. The commitment of acts 19 and 21 can be seen to *result from* the preceding *evaluation of the topical phenomenon* (act 18), which is a typical textual

environment for a commitment to arise from. In the present case the commitment to carry out measures directed at the discourse-topical phenomenon is communicated by means of *a labelling generic - explanatory specific strategy*, where the labelling generic is represented by 'Marshall's exemplary case of late seventeenth and eighteenth century English patterns of citizenship' (act 19), which is then explained in more specific terms as a pattern where 'popular citizenship practices and identities were present only among working class communities in the rural industrial regions of the countryside' (act 21). Also the generic 're-analyzing' of act 19 is replaced by a definite research question in act 21. The labelling generic - explanatory specific pattern is split by *a causal explanation* (act 20), which states why the Marshall case is worth studying.

6. Acts 22-27: The sequence reports on the writer's findings about the origin of citizenship rights when re-analyzing the Marshall case. Act 22 also mentions the methods used in the study. In section 6.3.2.2 the rule was established that the *elaboration function* need not be coded if the discourse-topical idea is discussed in terms of only one elaborative item. This is because the point of coding an elaborative frame lies in that it explains the adjacency of the various elaborative items, which normally are not linked to each other by means of any other text-structural relation. Moreover, the elaborative frame also signifies a shared representative and communicative illocutionary purpose between such items. If there is, however, only one elaborative determinant assigned to the discourse topic, the coding of the elaborative frame no more serves a purpose and it is more recommendable to leave the elaborative frame uncoded. In the present case, however, an exception from the rule seems to be justified. This is because the text shows a structure with three elaborative approaches to the discourse-topical phenomenon in three different settings (i.e. the notion of citizenship is elaborated on in acts 7-12 as it is understood in previous sociological study , in acts 22-27 as it is found by the writer in the 17th-18th century English context, and in acts 28-48 as it should according to the writer be understood in the present day setting) and if the elaborative frame is coded also for the analysis of the notion in the historical context (acts 22-27), which focuses on its origin only, then this three-fold elaborative structure can be elicited in structural description. With a unified system of coding for these three elaborative sequences the structural logic of the whole passage can be represented in a more consistent way as the first of these elaborations can be shown to be challenged by the writer (rejecting evaluation in act 18 and in act 28) and the second used for inferring the third (see act 28).

The modality aspect used in the reporting of the results of the Marshall case re-analysis is clearly indicated by the verb 'suggest' in act 22, which implies that the writer considers her position to be true but leaves it for the expert audience to judge. Accordingly, the coding *origin: evaluation* is provided. The mention of the methods used in the study is recognized by coding it as an embedded structural item in the same act. Act 22 relates to two sets of preceding propositions: It relates as a *correcting evaluation* to acts 9-11, which formulate the view held in recent sociological research of the origin (= 'historical development') of citizenship rights. Moreover, it *results from* the preceding commitment of acts 19 and 21 and is coded accordingly.

The notion of 'public sphere' is understood to represent one constituent among the factors bringing about citizenship rights. For this reason act 23 is coded as attributing a constituent to the state of affairs described in act 22.

Act 24 provides the constituent, i.e. 'public sphere', with a *definition*. The act raises the question whether it should be regarded as the second member of the message-strategic *labelling generic - explanatory specific - topic resuming generic sequence* or as a message-structural *definition function*, which elaborates on the notion of 'public sphere'. The latter interpretation was adopted because the introduction of the notion of 'public sphere' is a major element in the writer's contribution to the theory of citizenship. For this reason the term cannot be regarded as a mere strategic coinage useful because it would enable a single labelling reference to the complex idea explained in act 24. Thus the discussion of the role of public sphere in the development of citizenship

rights (acts 23 and 25) constitutes a *generic - explanatory specific sequence* interrupted by the definition function, which forms a loop in that no other proposition from beneath relates to it. Subordinated to act 25 with a specific-level explanation of the meaning of act 23 is a *restriction function* (acts 26-27), which itself is also manifested through a *generic - explanatory specific strategy*. The acts are coded as *restriction* because they exert a restricting effect on the preceding proposition, i.e. they point out that only some types of public spheres contribute to the emergence of citizenship rights.

Because the findings of the Marshall case re-analysis function as a basis for the subsequent elaboration of the notion of citizenship by the writer (acts 28-48), acts 22-27 are referred to as *evidence* for the *conclusions* to be made in acts 28-48. As pointed out in section 5.2, the evidence - conclusion sequence is dealt with as a strategic manifestation of the evaluation - basis message.

7. Acts 28-48: Within acts 28-48 the writer re-elaborates the notion of 'citizenship'. A new *setting* (Z) is provided to distinguish the present elaborative sequence in which the topical idea is elaborated by the writer herself in a contemporary context from the preceding two. This re-elaboration is based on the writer's analysis of the Marshall case. Accordingly, the acts are coded as constituting a *conclusion from acts 22-27*.

The writer starts by rejecting in act 28 the definition provided by earlier theoreticians and reported in acts 7-8. Because the topical phenomenon is involved in the rejecting evaluation contained in act 28, the act is incorporated in the elaborative frame of the topical phenomenon as an *evaluation of the topical phenomenon*, which relates to the preceding acts 7-8 as a *rejecting evaluation* and incorporated in the elaborative frame pertaining to the topical phenomenon in setting Z. This way of coding is preferred because it allows a continuity to be seen in the discourse-topical development of the text. An alternative approach would have been to point out only that act 28 relates as a *rejecting evaluation* to the reported definition in acts 7-8. In more generic terms the act raises the question of whether it is necessary or useful to code acts which involve a more complex or 'secondary' reference to the discourse topic and an obvious or more 'primary' one to one of the preceding propositions of the textual comment also in terms of their relation to the discourse topic or would the text structure representation be more readable with only the obvious and more immediate relations explicated by coding. This seems to be a context-specific consideration, where the analyser's discretion must be relied on. On the one hand, a coding which in addition to stating a 'primary' relation between a proposition and one of its preceding propositions also points out how the respective proposition relates to the discourse topic when a reference to the discourse topic is involved, shows on a more continuous basis a connection between the textual comment and the discourse topic. This asset is expected to be gained from the two-way coding also in the present case (see also the coding of act 18, where an effort was made to explicate the discourse-topical connectedness of a proposition which is more immediately related to a preceding one in order that the topic - comment relatedness of the text could be shown to continue). This approach seems to be advisable especially when the reference to the discourse topic carries new and/or contextually relevant information about it. On the other hand, if the 'secondary' discourse-topical reference does not convey any such information, the coding of the connection may unnecessarily complicate text-structural description. The coding of such connection in the present case is justified also on the basis of the information that act 28 carries because while formulating a rejection of the previous definition of the topical phenomenon, i.e. 'citizenship', it also contains an evaluation by the writer of what 'citizenship' is not.

The rejected definition is then replaced by a new one in acts 29-30, which, accordingly, relate as a correcting evaluation to the reported definition of acts 7-8. 'Instead' at the beginning of act 29 signals the replacement function by means of which the act relates to the rejected reported definition in acts 7-8. In section 6.3.4.4 it was held, however, that it is not necessary to indicate this inherent

replacement function between a rejected reported evaluation and a following correcting one by coding because the operational correcting function explains the relation comprehensibly enough. It was also mentioned above (6.3.4.4) that a correcting evaluation relates to a preceding rejecting evaluation by means of a contrast relation because the latter states the writer's view of what is not true and the former states the opposite, i.e. what is true. Accordingly the function is used also in the present case to explain the relationship between these two acts, whose operational label explains the way in which they relate to the preceding reported evaluation but does not actually state their mutual connection.

The new definition (acts 29-30) involves also a persuasive element ('I propose that citizenship be defined ---') and is therefore coded as embedding an instruction. The act is not coded as an instruction embedding a definition because the definition is the function which in this context promotes topical development. The proposition is communicated by means of a labelling generic - explanatory specific strategy, where 'instituted processes' in act 29 is the generic label which is explained in specific terms in act 30.

Acts 31-32 convey a statement of the origin of the topical phenomenon. The definition of 'citizenship' in the preceding act, which equates 'citizenship' with the notions of 'instituted process' and 'institutionally embedded practices', justifies the interpretation of acts 31-32 as a statement of the origin of 'citizenship', even though the reference in act 31 is changed from 'citizenship' to 'institutionally embedded practices'. There is no signal in this part of the text that would suggest that the description of the origin is not presented as a fact, although the writer only 'proposes' the preceding definition of 'citizenship' to the reader. The reason for this sudden change in the modality aspect in the middle of the elaborative treatment lies probably in the fact that the definition suggests a content, i.e. 'instituted process' or 'a set of institutionally embedded practices', for the term 'citizenship', which content itself is regarded as factually established. Consequently also the elaborative determinants which relate to that content are stated as facts. Thus the description of the origin of 'institutionally embedded practices', which by definition is also a description of the origin of 'citizenship', constitutes a statement of fact. The two acts 31 and 32 collaborate in stating the origin; act 31 carries a wider meaning from which the target meaning is separated by act 32. The coding *restriction* is accordingly used to explain the mutual logic of these acts. Even though no lexical reference is made in acts 31-32 to the reported origin in acts 9-11, it is possible to see a chain of reference to it through acts 18, 19, 22-27, and 28-32, which communicate a decision to challenge the reported view in order that a problem could be solved (act 18), a commitment to analysis for a new view to be stated (acts 19-21), an account of the results of the analysis (acts 22-27), and conclusions, of which acts 31-32 convey one, for the formulation of the new conception of citizenship (from act 28 onwards). For this reason acts 31-32 constitute also a correcting evaluation for the reported origin stated in acts 9-11. This coding involves, however, a problem that may not be restricted to the structural description of the present text only. Occasions are likely to occur, on which, like in the present case, a function which relates as a statement of fact (e.g. in connection with any item of the elaborative frame) to the discourse topic may simultaneously be coded as relating to one of the preceding propositions as a correcting evaluation. A discrepancy is then created by the simultaneous statement and evaluation codings which point to opposing aspects of modality. This possibility was not foreseen when the model was constructed. However, in spite of its seeming discrepancy, the coding also describes the actual text-structural function of such a proposition. When a proposition states a fact which contradicts with a view previously expressed its relation to the respective preceding propositions necessarily involves an implicit evaluation of the relative truthfulness of the two propositions. The implicit evaluation is likely to carry a message such as *Y (= correcting evaluation) instead of X (= reported evaluation) is true*. For this reason the way of coding used for the present case is maintained in the system in spite of the contradiction it seems to pose.

The origin of citizenship rights is initially formulated as 'networks of relationships and political idioms that stress membership and universal rights and duties in a national community' and then referred to as 'national membership rules'. In its latter formulation the origin then constitutes a topical node for a further *elaboration*, which first states the way in which these rules are normatized and transmitted and then defines the condition under which these rules turn into citizenship rights. The first of these elaborative items (act 33) is not definable in terms of any of the 'standard' elaborative determinants. For this reason it is identified as a *topic specific determinant* with its exact content (means of normatization and transmission) stated in the brackets. For the latter (act 34) the coding *condition* is used

Acts 35-37 provide a further *specification of the origin* of citizenship. Within these acts the demarcation line between definition and statement of origin becomes very thin. The conclusion is drawn, however, on the basis of such lexical signals as 'modern citizenship *is normatized by national and universal law*' (act 36) 'citizenship practices *emerge from*' (act 37) that these acts contribute more immediately to the description of the origin of citizenship than to its definition. The specification takes place by means of pointing out what is not exclusively the origin and then stating what is the origin. This message is coded as a logical *rejection - replacement* sequence. The rejection member contains an *ineffective cause - concession* sequence, which is recognized by coding although it is sentence-internal. This is because the ineffective cause carries discourse-topically relevant information.

Act 38 seems to convey a definition of the topical phenomenon in terms of its origin. The lexical items used include signals which point to both of these textual functions: citizenship is 'reconceptualized' as 'the outcome of various practices. While 'reconceptualization refers to a definition, 'outcome' suggests a source. Accordingly, the act is coded as *a definition with an embedded origin*. This source-related definition is also seen to be an *implication* from the specification of the source in acts 35-37. Because the topical phenomenon was already given a labelling definition on a much more generic level in acts 29-30, a *labelling generic - explanatory specific* relation is coded to explain the re-occurrence of the definitive function I act 38.

Act 39 is coded as *function* because providing people with a political identity can be regarded as one of the functions that citizenship rights have. Act 40 is coded separately because it constitutes an independent proposition and carries a distinct text-structural function even though it is contained in the same sentence structure with act 39. It is interpreted as conveying a restriction (which is a logical function that narrows the meaning of the preceding proposition and is usually signalled by the adverb *only*) on the grounds that the proposition can be transcribed into the form 'However, only certain contexts of activation translate political identities derived from citizenship into rights-based positive (political) citizenship identities.' Thus act 40 communicates a restriction on citizenship as a source of a particular kind of political identity, i.e. rights-based positive (political) citizenship identity.

Acts 41-48 review in setting Z (the present study) the third of the elaborative determinants of the topical phenomenon (i.e. the basis of citizenship theories) that was initially discussed in setting X (recent sociological research). Like in setting X (acts 7-12) this determinant is coded as *topic-specific determinant* because it cannot be described by means of any of the 'standard' labels of the elaborative frame. The redefinition of the basis of citizenship theories (like the writer's definition of the topical phenomenon and its origin) is inferred from the analysis of the *origin* of citizenship rights in setting Q (the Marshall case) in acts 22-27. The inferential sequence shows a pattern with a *reformulation* of the description of the origin of citizenship in acts 22-27 (acts 42-44). The description of the origin consists of a statement followed by two *conditions* (acts 43-44). The statement introduces the notion 'public sphere', which contributes to the formation of citizenship rights if it fulfils two conditions. This part of the text does not include any lexical clues as to the *condition function* of acts 43-44. Acts 26-27, however, suggest that all public spheres do not

contribute to the formation of quasi-democratic citizenship rights. Thus it seems to be the case that acts 43-44 communicate those conditions that the public sphere must fulfil for quasi-democratic citizenship rights to emerge.

The information carried by the reformulation (acts 42-44) provides *evidence* for a *conclusion* to be drawn in act 45. This conclusion contains a *rejecting evaluation of topic specific determinant* as it was reported in *setting X* in act 12. The rejecting evaluation is then followed by a *causal explanation (act 46)*, which explains why the earlier theoretical basis for the study of citizenship may not cover all the aspects of the phenomenon. This proposition with a causal element must be interpreted as serving an explanatory rather than a supporting function because it takes for granted the existence of the local and organizational element in the formation of citizenship rights that constitutes the basis for the rejection of the earlier notion.

The *correcting evaluation* for the earlier view which simultaneously represents the present writer's idea of a proper basis of theorizing is also reached through an inferential process. This process, like the preceding one for the formulation of the rejecting evaluation, first reformulates the description of the historical origin of citizenship. This means theoretically a *reformulation* of both acts 22-27 and 42-44 because these sets of acts relate to each other also through a reformulation relation. The description of the origin then provides *evidence* for the *conclusion* to be made in act 48. This conclusion communicates *the correcting evaluation* which is also the writer's formulation of a proper theoretical basis for the study of citizenship.

To make the coding system more readable, an inclusive approach is used in the coding of acts 41-48. This means that instead of coding propositions in their successive order, higher message-structural units are identified and coded as inclusive 'umbrella' functions with the coding of the included functions showing how the higher ones are constructed. This principle has, indeed, been applied also to the coding of message-strategic patterns and message-structural functions which serve as topical nodes for a number of subordinate functions. In the present case it is used to identify top-hierarchy message-structural functions which are brought about by means of an inferential process. Thus the whole sequence of acts 41-48 is coded as *topic specific determinant (basis of citizenship theories)* because all the acts included contribute through various inferential steps to the formulation of the statement made finally in act 48 about a proper theoretical basis for the study of citizenship. In the same way within this sequence the codings of *the rejecting and correcting evaluations of the reported topic specific determinant in act 12* are foregrounded, so that they are shown to include the coding of the inferential process by means of which the evaluations are reached. This way of coding is preferred because it enables the top-hierarchy units of text structure to stand out from the text-structural description and explains the ultimate way in which each proposition links to the discourse topic. Moreover, the functions of rejecting and correcting evaluation provide frameworks into which the details of the inferential process can comprehensibly be incorporated.

For each of the included proposition the coding indicates, as for any non-included proposition, a direct or indirect relation to the discourse topic and a relation to one or several of the preceding propositions. In cases where the coding indicates a relation to a preceding proposition only, the relation to the discourse topic is an indirect one through the chain of preceding propositions or such a direct one whose coding would not contribute to the explication of structural logic of the text. Codings like *rejecting evaluation of reported topic specific determinant in act 12 (acts 42-45)* and *reformulation of acts 22-27 (acts 43-44)* also satisfy the above requirements because they signal a relation to the discourse topic through the preceding elaborative determinant that they evaluate/reformulate.

Act 46 which provides act 45 with a causal explanation constitutes a text-structural loop because none of the following propositions relate to it. The linear way of coding elaborative determinants cannot point out such a loop and the subsequent break in the chaining of the

propositions. A triple slanting stroke is used to signal the break. Naturally, the ways of chaining are explicated also by the codings, which refer to the related acts by numbers.

The strategic operations by means of which the message of acts 41-48 is conveyed involve a global text-organizing generic - specific pattern as act 41 states the text-organizational function of the sequence, i.e. that it seeks to formulate the theoretical basis of the study of 'citizenship'. In relation to this generic level observation the rest of the propositions of the sequence (acts 42-48) function at the level of the specific. The other strategies used in the sequence are reformulation and the evidence - conclusion pattern. It can be claimed that the reformulations as used in the present context are a strategic choice on the grounds that instead of reformulating the information conveyed by acts 22-27 the writer could have recalled those propositions by means of a lexical reference only.

8.2 Concluding remarks

The system of text-structure representation used for the analysis of the passage allowed the basic framework of a *reported evaluation - rejecting evaluation - basis - contrast: correcting evaluation - basis* structure to emerge from the text. The emergence of this pattern coincides with the expectations held for the text structure of a research report. Moreover, as the discourse topic of the passage is an abstract phenomenon, the references made to it in three different settings expectedly created *elaborative patterns*. Thus the conclusion can be made that the analysis produced the patterns that were predictable alternatives on the basis of the genre of the text. The crucial question is indeed whether the various text-structural functions identified in the text, which in the end produce its global framework, correspond to the definitions given to them when the model was first outlined. If this is the case, the text can be said to have yielded this structural representation instead of a pre-existing pattern having been forced on it. This remains for the reader of the analysis to judge. The latter alternative can, however, hardly be the case, because the global framework has emerged from a systematic proposition by proposition analysis of the text.

The present analysis in which the model was applied to a more complete and lengthy text called up two observations that widen our perception of text structure. First, it seems to be possible for a proposition to link in different ways to more than one of the preceding propositions/groups of propositions of the textual comment, and it also seems that it is text-structurally informative to recognize all of these relations by coding. The model of text structure (see) on which the present descriptive system was based assumed only one kind of connection to preceding comment propositions. This observation does not, however, require a reconstruction of the model because it still states a minimum condition for a text structure to be created.

Second, a proposition may carry a direct cohesive link to the discourse topic, and yet stand in a text-structurally more significant relation to one of the preceding propositions of the textual comment. This raises the question of whether in such a case the coding should indicate also the direct relation to the discourse topic. As pointed out above, the solution of the problem must be based on a judgement of the discourse-topical relevance of the information carried by such proposition.

9 Findings from the testing of the model

9.1 The generic applicability of the model

Although the model has been applied to the structural description of 84 text examples, the analysis of a corpus of longer passages gave still more insight into the functioning of the model by showing its capacity for and focus in text-structural description and pointing out its limitations in an empirical context. Moreover, the analyses carried out for the testing of the model inevitably also highlighted the enormous complexity and compactness of the textual phenomenon. In this final review of the model its capacity for text-structural description is judged on the basis of the observations made when analyzing the corpus. Findings from a quantitative survey of the text-structural functions of the corpus will be discussed and conclusions drawn concerning the extent to which they support the basic assumptions of the model. Finally, some inferences will be made from the observation of the corpus with regard to the nature of text, meaning, and interpretation in general.

The expectations concerning the distribution of the various Biberian text types within the corpus were not in all respects realized, but nevertheless the corpus provided samples of all of them. History textbook texts were included because they were assumed to represent the text type of general narrative exposition, but the samples collected did not show chronologies and stood, accordingly, rather for learned exposition. Similarly, texts were taken from the cultural supplement of the Guardian to get an example of learned exposition in press reportage, but the extracts yielded by the sampling system represented general narrative exposition. Thus these misrepresentations did not affect the corpus in a very harmful way, because both of the text types looked for came to appear in it anyway. Another unexpected thing was that one of the texts taken from the supplement of the Guardian was closer to fiction than to a factual text. It was a fictive prospect of the year 1997 written from the point of view of a fictive Tony Blair, who looks back to it on the New Year Eve of 1998. Because the hypothesis about the field of applicability of the present model was restricted to factual texts, this text posed a problem. As it seemed, however, that the structural description of the text could be carried out by means of the model, the text was not discarded. The testing of the hypothesis was not expected to be adversely affected by the fact that the model seemed to apply also to the structural description of an occasional fictive text.

The testing of the model with a corpus of texts in which all the factual (Biberian) text types were represented was, in the first place, expected to give answers to the two questions: *Does the model provide an adequate selection of text-structural functions for the structural description of the texts of the corpus?*, and *Are any of the functions included in the model redundant, either non-existent in the corpus or overlapping with another function?*. To answer the first question, the texts analysed for the test did not introduce any interpropositional relations which could not be explained in terms of the functions incorporated in the model. Thus the model was found to provide means for a propositional text analysis which describes how each proposition relates directly or indirectly to the discourse topic and to one or several of the preceding propositions/groups of propositions. In addition, the method also enabled a separation of the structural core of the message from the redundant or informatively secondary strategic layer. (In the graphic form of the structural representation this is seen in that the components of the message are coded in capitals, while their strategic realizations are coded in lower case.)

As to the possible redundancy of the functions, the corpus showed examples of all the other comment functions contained in the model but *the alternative-hypothesis, background creating generic - specific, and interest arousing specific - generic sequences*. The absence of the background creating generic - specific sequence can be explained by reference to the fact that this

strategic sequence is more likely to appear in the introductory part of the text. As the corpus contained only 18 texts, the likelihood of the incidence of this strategy in the corpus was lower than that of those functions which typically occur in the textual comment. The same explanation applies also to the absence of the interest arousing specific - generic sequence. Besides, it must be noted that the latter strategy is typically found in popular magazines and the present corpus contained only two samples of such texts. For the non-incidence of the hypothesis - alternative sequence in the corpus no particular explanation could be found. As the example in table 2 (section 6.1) shows it is an authentic case of logical conjunction, which is clearly distinct from the alternative function that implies choice. Thus it is justified to assume that a more comprehensive corpus would have illustrated this sequence as well. From the discourse topics identified for the model *evaluation* and *instruction* were not found in the corpus. It could, however, be expected that all the discourse topics would not be represented, because only 18 texts were surveyed.

The fact that the bulk of the functions identified for the model were found in the corpus and that the non-incidence of the two missing discourse topics and the two of the missing strategic sequences could be explained by reference to the composition of the corpus argues for the view that such an arsenal is needed, if a thorough propositional text analysis is carried out. To get a less detailed structural description of a text, however, it is possible to use the model in a more reduced form. The analyser gets an idea of the general principle by which the text is organized, if the main message-core functions (i.e. attribution, evaluation, instruction, commitment, basis, matching, and elaboration, which would now be an umbrella function combining several unspecified propositions) are distinguished, all conjunction-based functions referred to generically as logical ones, and the strategic ones coded without specifying the various types of the generic - specific/specific - generic sequences. Thus even though the construction of the model has aimed at mapping the existing interpropositional relations, the framework in which the model places these relations provides simultaneously also a system for a more generic-level text-structural description.

9.2 A quantitative survey of the text-structural functions found in the corpus

A quantitative survey was carried out, which first showed the distribution of the three groups of functions, i.e. message-core functions, logical functions and message-strategic functions, within the samples of scientific articles, textbook texts, and press reportage. Then the incidence of each text-structural function was studied as a percentage within its own group (i.e. message-core functions / logical functions / message strategic functions) in each of the above genres. The purpose was to find out about the relative relevance of the three groups of text-structural functions and of each individual function to the text-structural description of the three genre samples. Before the results of the survey are discussed a few points are made concerning the way in which the survey was carried out and problems encountered in the process.

First, except for elaborations the treatment of which will be explained below, the functions have been counted mechanically by the codings that appear in the structural descriptions. This means that all the different text-structural functions (also embedded ones) assigned to one proposition are taken into account. As the analysis of the first longer text, 'Citizenship and the Place of the Public Sphere' suggested that a proposition may relate in different ways to several of the preceding propositions no predetermined ratio is expected to exist between the number of the propositions (acts) of the corpus, and the number of the text-structural functions found in it.

Second, the role of elaboration as an umbrella function posed a problem for the counting of the functions because the quantitative survey would have underestimated the incidence of elaborative propositions, had elaboration been recognized only as an umbrella function. A comparison of the incidence of the more global elaborative function with the incidences of the other message-core functions which were coded proposition by proposition would not have given an idea of the real

proportion of elaborative propositions. For this reason a decision was made to code the logical functions contained in the elaborative frame as logical ones and all the remaining elaborative statements or elaborative evaluations as elaborations. The modality aspect of elaborations, i.e. the statement/evaluation distinction of the items of the elaborative frame, was ignored in counting, because it was concluded that for the quantitative survey to reveal the text-type specific message - core functions, priority should be placed on the notional-analytical quality of the elaborative approach which distinguishes it from the other modes of description. The statement/evaluation coding was originally incorporated in the coding of the elaborative determinants where they could not otherwise be described as linguistic action. This was because the purpose of the model was to explain what the writer has done to construct and convey the message of his text.

Third, the article 'Man of the Year' from *Time* magazine, which was assumed to provide an example of general narrative exposition but which, contrary to expectations, was found to represent the text type of learned exposition, was placed into the same group with textbook texts. This was made because it was the only sample of press reportage which did not represent Biberian general narrative exposition. Because, moreover, the sample of textbooks, also accidentally, lacked a specimen of general narrative exposition (see 9.1) and consisted only of representatives of the text types of scientific and learned exposition, this replacement made it possible for the texts of the corpus to be grouped by their text-types. Such grouping enabled a study of how the various functions were distributed in those text types. In other words, the survey gave an opportunity to find out in quantitative terms about the text-type related structural features of texts representing the Biberian text types of involved persuasion, scientific/learned exposition and general narrative exposition.

Fourth, for the above analysis to be relevant to the present study a return to the Werlichian text types was necessary. Thus, on the whole, the results of the analysis are based on a statement of correspondence between a text, a genre, a Biberian text type, and a Werlichian text type. It can be expected that such a chain of correspondence must involve some inaccuracies. Yet it seems that in spite of this intervening inaccuracy factor the survey resulted in conclusions which largely support the premises on which the MSU-MSA model lies. As, however, Biber's typology does not recognize a purely descriptive text type, the survey could not define text-structural features for descriptive texts. This complication was not foreseen because it was not initially clear what information the quantitative analysis might yield.

Fifth, the assumptions of correspondence on which the interpretation of the quantitative survey is based include the following:

- (1) The Biberian text type of involved persuasion, which is represented in the corpus by scientific articles, corresponds to the Werlichian text type of argumentation.
- (2) The Biberian text types of scientific/learned exposition, which are represented in the corpus by textbook texts and the article 'Turning the Tide', correspond to the expository text type of Werlich's typology.
- (3) The Biberian text type of general narrative exposition, which is represented by press reportage in the corpus, corresponds to Werlich's narrative text type.

9.2.1 The distribution of message-core, logical and message-strategic functions in scientific articles, textbook texts and press reportage

Tables 4-7 in appendix 2 display the results of the quantitative survey. Table 4 shows a very predictable distribution of message-core, logical and message-strategic functions in scientific articles (47%, 36%, 17%), textbook texts (48%, 33%, 19%) and press reportage (58%, 34%, 9%). It was to be expected that message-core functions constitute the largest group of text-structural functions irrespective of text type because they carry the substance of the message. Similarly, it was predictable that the proportion of message-strategic functions must be lowest, because they represent textual redundancy. It is also worth pointing out that there is no noticeable difference between the percentages of logical functions in the three groups (36%, 33%, 34%). This result may imply that logical functions are an inherent and stable element of text structure which are, however, regularly outnumbered by message-core functions, the propositional pillars of the message. Still another noticeable finding is that press reportage, which is assumed to represent the narrative text type, is lowest in message strategies (only 9%, the corresponding figure being 17% for scientific articles and 19% for textbook texts). Also this result was anticipated because it was postulated that the more conceptually complex a text is the more strategic devices are likely to be used to convey its content. Narrative texts involve in most cases spatial phenomena with little conceptual intricacy. Accordingly, the incidence of message strategies can be expected to be low in such texts in comparison with the conceptually more complex argumentative and expository ones. Argumentative and expository texts seem to be very similar to each other in terms of the proportion of message-strategies.

9.2.2 The distribution of message-core functions in the three genre samples

A survey of the distribution of the various message-core functions (see table 5) indicated expectedly that *attributions* were the top message-core category in press reportage with 52% of all the message-core functions of the genre sample falling into that category. Attribution was expected to be a big category because it involves the basic message-core functions of both descriptive and narrative modes of discourse. But a comparison with the corresponding figure in the two other genre samples (15% for scientific articles and 16% for textbook texts) suggests that the frequency of attributions is a distinctive feature of the narrative text type represented by press reportage. This assumption was made earlier when text-type specific structural patterns were constructed on a theoretical basis in chapter 6.4.

Elaborations were most numerous in textbook texts constituting 51% of all the message-core functions of the genre sample. The position of elaboration as the dominant message-core function of an expository text was postulated previously when text-type specific text structures were described in chapter 6.4. In scientific articles the top position was shared between elaborations (34%) and evaluations (30%). The relatively high incidence of elaboration in scientific articles can be explained by reference to the fact that scientific articles typically incorporate large sections of non-argumentative expository writing when the setting of the study is introduced.

The above explains also why *evaluation*, which is the expected dominant message-core function of argumentative writing, is not in this sample as dominant as the dominant functions of the other two text types. That evaluations have a remarkably higher incidence in press reportage than in textbook texts (19% in comparison with 8% in textbook texts) is probably partly due to the Anglo-American journalistic tradition which abounds in quotations by experts or people otherwise involved evaluating the phenomenon/event dealt with by an article.

To find out about the number of *argumentative evaluations* in the three genre samples the incidence of the basis function was studied. The number of basis functions did not, however, directly

point out the number of argumentative evaluations, because *assertion - evidence - conclusion* and *evidence - conclusion sequences* had been coded only by their strategic manifestation and not by the corresponding message-core functions. Thus to get the number of argumentative evaluations in each group of texts the incidence of the above two strategic sequences (see table 7) had to be added to that of the basis function. Accordingly, the incidence of argumentative evaluations was found to be 11% for scientific articles and 4% for both textbook texts and press reportage. The analysis of the present sample seems to suggest that texts with a persuasive purpose show a remarkably higher incidence of both evaluations and basis functions, but within such texts only every second or third (the evaluation/basis ration being 2,5 for scientific articles) evaluation is supported by a basis. Such finding may imply an argumentative procedure in which evaluations are supported by evidence only when they reach the level of the main lines of thought.

From the rest of the message-core functions *implication* and *matching* seemed to pertain more typically to the genre of textbook texts, i.e. to expository writing, (constituting 9% and 7% of all the message-core functions of the sample of textbook texts, respectively) than to the other two genres, i.e. to argumentative and narrative writing (see table 5). Moreover, commitment showed a slightly higher frequency among the message-core functions found in scientific articles than the two other groups. This is because the introductory part of a scientific article regularly contains a commitment to carry out the study outlined in it.

To sum up, the above survey of message-core functions within the groups of scientific articles, textbook texts (including the article 'Turning the Tide'), and press reportage confirmed that the different text types with different representational and communicative purposes produce different text structures. More specifically, the survey supports the hypotheses made concerning text-type-specific structural patterns: expository texts tend to assume an elaborative approach, narrative texts an attributive one, and argumentation uses evaluations followed by supporting evidence. As was pointed out in 9.2, assumptions concerning the structural manifestation of Werlich's descriptive text type could not be tested with exclusive samples of such texts, because Biber did not distinguish texts with a descriptive mode of discourse as a separate text type. The reason why Biber's empirical study did not come up with such a text type is probably that the descriptive mode of discourse seems to be frequently embedded within other more dominant text types. The system of analysis suggested by the model enabled, however, the structural representation of the descriptive sequences contained in the corpus by allowing adequate variation within the notion of attribution (see 6.3.1.1).

9.2.3 The distribution of logical functions in the three genre samples

Addition, succession, cause - consequence, causal explanation, and ineffective cause - consequence were the top five set of logical functions in the total corpus (see table 6). This means that they are either evenly high in all the three genre samples or remarkably high in some and low in others. In both cases they are worth commenting on. A postulation concerning the incidence of *addition* was that it would be one of the most frequent logical functions in all text types and abound in descriptive contexts. The analysis of the corpus confirmed the former assumption with the incidence of addition being in the three text groups among the top three, i.e. 25% for scientific articles, 15% for textbook texts, and 18% for press reportage. The latter assumption could not be confirmed because Biber did not identify description as a separate text type. The notably higher percentage of addition in scientific articles came as a surprise for which it is difficult to find an explanation. The temporal *succession function* was expectedly high in press reportage (15%) because of the narrative nature of the genre, and low in the other two texts groups (5% in scientific articles and 9% in textbook texts).

The cause - consequence sequence showed a fairly even distribution in scientific articles (10%) and textbook texts (12%) but was lower in press reportage (6%). This can be seen to reflect the analytical quality of expository writing (represented in both scientific articles and in textbook texts)

as opposed to the temporality and spatiality of the narrative text type. *Causal explanation* was in the present corpus the most frequent logical function and showed a steady distribution across the three genre samples. The slightly higher incidence of causal explanation in press reportage (24% as compared to 17% in scientific articles and 20% in textbook texts) may result from the fact that the texts included in the sample of press reportage were more often complete ones with all the explanations given, while especially the samples of scientific articles represented the introductory parts with at least top level causal explanations still pending. The frequency of causal conjunction in general (30% of all the logical functions in the total corpus) may be explained by the fact that stating the cause or consequence of a phenomenon may constitute the core of the writer's message in the same way as evaluations often constitute the writer's contribution to the world of information conveyed by a text. Like addition and causal explanation, the concessive *ineffective cause - consequence sequence* also showed a fairly even - though somewhat lower- distribution in the three genre samples (i.e. 10% in scientific articles, 11% in textbook texts, and 7% in press reportage).

9.2.4 The distribution of message-strategic functions in the three genre samples

The two major observations about message strategies made in section 8.3.2.1 were that they constituted the smallest group of text-structural functions in each genre sample, and that they showed the lowest incidence in the sample of press reportage, i.e. the narrative text type. Moreover, the proportion of message strategies seemed to be very similar in argumentative texts (scientific articles) and expository texts (textbook texts).

A study of the distribution of the various types of message-strategic functions within each genre sample (table 7) indicated that *the topic controlling generic - specific pattern* was the most frequent type in all the three genre samples (29% in scientific articles, 40% in textbook texts, and 59% in press reportage). For press reportage with 59% of its message-strategic patterns representing this type this means that the genre, which in general is low in strategic patterns, is more likely to show this than any other strategic approach. The relatively high percentage of the topic controlling generic - specific sequences in the present sample of press reportage may not, however, describe narrative texts in general. The strategy may abound in this sample because generic previews are a genre-specific feature of news reports, which constituted a third of the sample of press reportage.

The strategy with the second highest percentage in both scientific articles (27%) and textbook texts (22%) was the *(labelling) generic - explanatory specific approach*. A high percentage of this strategy was predictable in view of the fact that argumentative and expository texts typically operate with subtle conceptual distinctions and yet aim at an optimal unambiguity of expression. An opposite assumption was that texts representing the narrative text type do not as frequently raise points that need to be explained. The fairly low percentage of the (labelling) generic - explanatory specific strategy in press reportage (9%) supports this postulation.

The text organizing generic - specific strategy ranked fourth highest among the message strategies in the total corpus. The expectation was that the text organizing generic - specific pattern would show a fairly similar distribution in scientific articles and in textbook texts because both of the genres should aim at as organized a text structure as possible. Yet there is a difference in the two genres with scientific articles showing a 16% incidence of the pattern as opposed to only 5% in textbook texts. Thus the need for text-structural systemacy seems to be more urgent in scientific articles than in textbooks. On the basis of the present survey it is difficult to say whether this feature is inherent to the argumentative text type in general, or whether it gets emphasized in the genre of scientific articles.

Metastatement showed a low incidence in scientific articles (7%) and press reportage (3%) but was noticeably high in the sample of textbook texts (27%). This finding suggests that textbook texts

tend to be more instructive to the reader than scientific articles. It may also be a finding that relates to the genre of textbook texts more inherently than to expository writing in general.

The observations made above about the appearance of topic controlling generic - specific sequences in press reportage, text organizing generic - specific sequences in scientific articles, and metastatements in textbook texts may suggest that genre-specific features are better predictors of detailed message-strategic patterning than mere text types.

On the whole, based on a study of the distribution of message core, logical, and message-strategic functions across the three genre samples and a study of the distribution of the various types of the above functions in each genre sample the following major conclusion were made:

- (1) The type of the dominant message-core function of the textual comment is determined by the text-internal representational and communicative purpose of the text, i.e. its text type. Thus a fundamental theoretical premise of the MSU-MSA model was confirmed by the findings of the quantitative survey of the text-structural analysis of the corpus.
- (2) Message strategies are more abundant in the argumentative and expository text types than in the narrative one. The corpus did not allow a separate study of this feature in the descriptive text type.
- (3) Genre-specific features may determine more immediately than the text type the message-strategic patterning of a text.

9.3 Other observations resulting from the analysis of the corpus

Outside the quantitative survey, the analyses of the texts contained in the corpus resulted also in some less predictable observations that threw further light into the functioning of the model. These will be briefly discussed below.

- (1) The analyses of the lengthy authentic texts, of which the corpus consisted, revealed the complexity of reference in such texts and made it clear that a system of text structure representation which aims at outlining the discourse-topic-related message inevitably has to ignore those subordinate lines of reference which do not contribute to the construction of the main idea. This is the case even though every proposition of the text is defined by its relations to one or several of the preceding propositions, because a single proposition frequently incorporates an array of references and, if the message itself is to be identified, the descriptive system can recognize only those references which advance the articulation of the message. In practical terms this means that from the ideas introduced in individual propositions only the discourse-topically relevant ones can be established as topical nodes for further lower-hierarchy propositions. Thus the model does not read the text quite as it is. It trades off side stories in order to be able to identify the main one. It is likely that readers who read to find out about the main idea of the text proceed intuitively in the same way.
- (2) The analyses also indicated that, besides relating directly or indirectly to the discourse topic, propositions frequently relate in discourse-topically relevant ways to several of the preceding propositions. This means that one proposition may serve more than two text-structural functions. These functions may arise from the embeddedness of the sentence structure or a proposition as a whole may relate in different discourse-topically relevant ways to several of the previous propositions. This assumption was not made initially when the model was theoretically constructed. An example of this phenomenon is provided in act 18 of the text 'Citizenship and the Place of Public

Sphere' (see appendix 1 for the text and its analysis and sections 8.1 and 8.2 for comments on the analysis).

(3) The model presumes that each proposition be coded by its direct relation to the discourse topic, if such a relation exists, and by its relation to one/several of the preceding propositions. This produces a pattern which, in the first place, lists all the references to the discourse topic and then explains how these different propositions with references to the discourse topic relate to one another. In other words, the method first records everything that is said about the discourse topic. All of the direct references to the discourse topic are not, however, top-hierarchy propositions. Some of them may be subordinate to the top-hierarchy ones or stand even lower in the chain of propositional hierarchy. This finding, which was first made when logical functions were studied (see e.g. text sample 44), became even more obvious in the analysis of the corpus, because still longer hierarchical distances were found between the discourse topic and a direct reference to it. The finding raised the question whether it is appropriate for structural description to code such connections between the discourse topic and hierarchically remote propositions. It was decided that the system of coding is maintained because in similar cases with less hierarchical distance it produces a necessary description of what is said about the discourse topic. This decision greatly affected the structural description of a press reportage text ('Champion of the Premier League') where a great number of propositions, which hierarchically were evaluations of a setting by the topical participant, were, accordingly, coded also as evaluation attributions to the topical participant.

The finding that references to the discourse topic may be made from any level of textual hierarchy brings up the wider question about the extent to which readers read for propositional meanings and the extent to which they recognize meanings created by interpropositional relations. If there is variation in the degree to which readers tend to recognize interpropositional relations and the hierarchies of meanings such relations create; if, in the extreme case, the reader reads the text for what is said about the discourse topic at the propositional level only, then different interpretations of the meaning of the text are created. Thus it seems to be possible that the readers' varying ability and willingness to recognize interpropositional relations bring about varying interpretations of textual meanings.

(4) The present method suggests that the structural framework of the text is partly constructed by following reference to the discourse topic throughout the text. Thus the reader's choice for the discourse topic is crucial for the way in which he sees the text to be structured and how he, subsequently, understands it. The reader's idea of the discourse topic may, however, be affected by factors external to the text itself such as his knowledge of the context of the text, and his purpose for and interest in reading it. This means that the above factors may constitute a further source of interpretational variation. The text 'Champion of the Premier League' provides an example which supports this assumption. It is a text which in an authentic reading situation can be approached by the reader from either of two alternative perspectives. It can be seen as a description of a future setting (the year 1997 in English political life) to which various events and evaluations are assigned by a textual participant (Tony Blair). According to this view the setting constitutes the discourse topic while the participant may be regarded merely as an observer who stands aside and does little more than represents the writer's voice; he is a teller of what happened and an evaluator of those events. Alternatively, the text can be looked at as a description of a topical participant (Tony Blair) in a setting (the year 1997 in English political life) which constitutes a subordinate discourse-topical continuity. The topical participant is described in terms of how he experiences and responds to the events that are attributed to the setting. This is the way in which a reader unfamiliar with the context of the text would probably interpret it. The latter view was adopted for the structural description of the text in the present study because it represented what could be said about the structure of the text

in objective terms. However, it can be assumed that the readers who know the context, i.e. the time of writing and the British political situation, tend to topicalize the setting and see the text as the writer's prediction of what the year 1997 was going to be like. The conclusion to be made in the above case is that the discourse topic may be set as well by the contextual knowledge of the reader as by the concrete text itself. The structure of the text will subsequently be seen as a function of the chosen discourse topic. Similarly, it can be expected that the reader may read the text for any piece of information that he is interested in or looking for and, accordingly, organize what he reads in terms of his own topical idea.

(5) Text-structural functions are not always unambiguously inferable from textual clues. This means that a certain scope is left for the reader to give his own interpretation. It seems that the reader compensates for this lack of overt clues by using his world-knowledge. This point was highlighted by a press reportage text ('A Smasher for Tim'), which dealt with British sports from an insider's point of view. Its structural description, even though it was not a structurally complex text, involved much more points of hesitation than that of the other texts the worlds of which were more familiar to the analyst. Thus it seems that the identification of interpropositional relations is a process where world-knowledge plays a role in the construction of textual meaning. As world-knowledge among the readers varies varying interpretations are likely to be produced.

(6) The analyses of the corpus revealed the problematic nature of the evaluation function. Evaluations, which in terms of their mode of discourse may be spatial and attributive or conceptual and analytical, have been defined as either subjective value-evaluations or subjective views of relationship between phenomena, i.e. implications. Such a primarily modality-based function as evaluation necessarily had to be incorporated because it frequently constitutes the point of a message: Writers describe situations to be able to tell their opinions about them. Thus evaluation represents the writer's voice. Moreover, it is the distinctive feature of the argumentative mode. It is also crucial for the reader to read critically and distinguish between facts reported by the writer and his opinions.

Yet it is, occasionally, difficult to judge whether an utterance is a subjective evaluation or an objective statement of facts. This is because observations frequently involve some degree of evaluation and implication by the observer. Writers occasionally indicate their own idea of this modality aspect (the degree of subjectivity/objectivity of their message) by lexical means or by providing their argument with a basis, but they do not do it regularly. This state of affairs leaves the analyst puzzled by the basic ambiguity of such simple propositions as *They are hospitable people*, *The fields are well-cultivated*, or *He is a tall man*. Do these propositions state facts or communicate opinions? Should they be coded as attributions or evaluations?

The study of the evaluation function as it appeared in the corpus suggested that the fact-opinion distinction is largely based on the cultural context of the text. It may be expected that there are within cultures shared ideas about how certain values are realized. Thus the writer when saying that someone is hospitable or tall, or that a field is well-cultivated may refer to a culturally adopted standard of that quality and from his own point of view make a statement of fact. In an intercultural setting such cultural facts may, however, deteriorate into evaluations. Accordingly, it seems that subjective evaluations are fundamentally only those propositions about which there is no or little agreement within a culture.

However, even though some propositions do not contain explicit clues for the attribution / evaluation distinction others occur in positions in which there is no doubt about their subjective modality. Thus the conclusion must be made that evaluation is a real and essential operational message-core function but forms a continuum with clearly recognizable instances in the one end and

border line cases in the other, which show some degree of evaluation but could also be understood as factual attributions which are based on shared cultural assumptions.

9.4 Conclusions

The above observations suggesting

- that when looking for the main message the reader may be selective with respect to the lines of reference he follows and, consequently, ignore some of the lower-level messages of the text
- that there may be variation in the degree to which different readers recognize interpropositional meanings
- that the way the readers see the discourse-topic and consequently the structure of the text and its meaning may be affected by their purpose for and interest in reading the text and their contextual knowledge
- that meaning is likely to involve interpretation because texts often do not provide readers with appropriate textual clues as to the semantics of interpropositional relations
- that the fact-opinion distinction may be dependent on cultural assumptions

argue for the view that the text does not necessarily have a single fixed meaning or message. Instead it seems that different interpretations can be extracted from it. Yet, the MSU-MSA model presumes that texts are studied as objects, as sets of visible symbols with meaning involved in the way in which these symbols are organized. This approach was adopted because it is seen as one indispensable aspect of the study of textual meaning: texts are concrete media for the transfer of messages and must, accordingly, also be studied as such. It is believed that before variation in the interpretation of a message can be explained the basic elements which enable the construction of textual meaning must be mapped. Thus, in this study an attempt has been made to define those elements of textual meaning which together with propositions make the message, i.e. interpropositional relations/functions. The message-structural functions identified for the model are assumed to constitute universal frames for messages in the same way as the main parts of speech do at the sentence level, while the strategies used for conveying them may well be a more open culture or social context -specific category, which may function as one source of interpretational variation. In addition to this, as suggested by the above observations, readers themselves as decoders of the message necessarily bring an element of interpretational variety to the process of text comprehension because they approach the text from different cultural backgrounds and social contexts, bring different world-knowledge to the text, and have different purposes for and interests in reading. A comprehensive study of textual meaning should, thus, include also a study of such cultural, social, contextual, and cognitive factors that can be expected to affect the ways in which messages are constructed and interpreted. In such a study of textual pragmatics, which would require a comparative empirical setting, the present model could contribute by providing a system in terms of which interpretational differences could be described.

Bibliography

Primary Sources

Adams, B. 1990. Abstract baroque, *Art in America*, November 1990, 183-187.

Allen, J.P.B., and H.G. Widdowson 1978. *English in social studies*. Oxford: University Press.

Attila, M., A. Mauranen, M. Palomäki, R. Sallinen, and H. Stotesbury 1992. *Reading comprehension materials for students of social and behavioural sciences: I Social and political sciences*, Jyväskylä: Language Centre for Finnish Universities, University of Jyväskylä.

Bromhead, P. 1962 (1967). *Life in modern Britain*. London: Longmans.

Bromhead, P. 1970 (1992). *Life in modern America*. Harlow, Essex: Longman.

Childers, E. 1903 (1993). *The riddle of the sands*. Ware, Hertfordshire: Wordsworth.

Defoe, D. 1719 (1993). *Robinson Crusoe*. Ware, Hertfordshire: Wordsworth.

Donovan, P. 1978 (1992). *Basic English for science*. Oxford: University Press.

English Language Services, Inc. 1966 (1975) *Special English: Book 2 Engineering: Electrical engineering*. New York: Macmillan.

Goldman, A. H. 1990. The education of taste, *British Journal of Aesthetics*, Vol. 30, 105-116.

Gray, B. 1977. *The grammatical foundations of rhetoric*. The Hague: Mouton.

Grillot, H. J. 1979. *Introduction to law and the legal system. 2nd edition*. Boston: Houghton Mifflin.

Hakulinen-Sipilä, H. and S. Norko-Turja 1961 (1973). *A collection of exercises: Englannin kielen pro exercitio harjoituksia*. Helsinki: Otava.

Hardwick, N. 1989. *Hardwick's sauce eli Neilin tähteet*. Helsinki: Tammi.

Hemingway, E. 1929 (1966). *Farewell to arms*. Harmondsworth, Middlesex: Penguin Books.

Hutchinson, T. and A. Waters 1987. *English for specific purposes: A learning-centred approach*. Cambridge: Cambridge University Press.

Kingston, W.H. 1851(1919). *Peter the Whaler*. London: Cassell.

Koskinen, L., M. Margelin, E. May, and H. Valtanen 1990. *Reading comprehension materials for students of the humanities: I The arts*. Jyväskylä: Language Centre for Finnish Universities, University of Jyväskylä.

Libassi, M. 1988. The chronically mentally ill: A practice approach. *Social Casework: The Journal of Contemporary Social Work*, February 1988, 88-96.

Lopez, L. and E. Shannon 1992. Bloodying the drug hydra, *Time*, March 2, 1992.

Marriner, A. 1986. *Nursing theorists and their work*. St. Louis: Mobsby.

Sallinen, R. 1990. *English reading comprehension texts for law students*. Rovaniemi: Lapin korkeakoulu.

Singleton, F. 1989. *A short history of Finland*. Cambridge: University Press.

Steinbeck, J. 1939 (1975). *The long valley*. London: Pan Books.

Tirkkonen-Condit, S. 1985. *Argumentative text structure and translation*. Jyväskylä: University of Jyväskylä.

Titmuss, R. M. 1968 (1976). *Commitment to welfare*. London: Allen & Unwin.

Toffler, A. 1980. *The third wave*. New York: Bantam Books.

Toufexis, A. 1993. The personality pill, *Time*, October 11, 1993.

Twain, Mark (1876) 1992. *Tom Sayer & Huckleberry Finn*. Ware, Hertfordshire: Wordsworth.

Wahlke, J. C. , H. Eulau, W. Buchanan, and L. Ferguson 1962. *The legislative system: Explorations in legislative behavior*. New York: John Wiley.

Walsh, M. 1993. Spoil of World War II, *Time*, October 25, 1993.

Woodward, E.L. 1947 (1967). *History of England*. London: Methuen.

Secondary Sources

Abelson, R.P. and M. Lalljee 1988. Knowledge structures and causal explanation, in D.J. Hilton (ed.), *Contemporary science and natural explanation*. New York: New York University Press.

Abraham, E. 1991. Why "because"?; The management of given/new information as a constraint on the selection of causal alternatives, *Text* 11 (3),323-339.

Aston, G. 1977. Comprehending value: Aspects of the structure of argumentative discourse, *Studi Italiani di linguistica teorica ed applicata* 6, 3, 465-509.

Austin, J.L. 1962 (1980). *How to do things with words*. Oxford: University Press.

Bartlett. F.C. 1932. *Remembering: A study in experimental and social psychology*. Cambridge: Cambridge University Press.

- Barth, E.M. and E.C.W. Krabbe 1982. *From axiom to dialogue*. Berlin: De Gruyter.
- Barthes, R. 1970. To write: an intransitive verb?, in R. Macksey and E. Donato (eds.), *The Structuralist controversy: the languages of criticism and the sciences of man*. Baltimore: John Hopkins University Press, 134-144
- Bateson, G. 1955 (1972). A theory of play and phantasy, in *Steps to an ecology of mind*. New York: Ballantine Books, 117-193.
- Beaugrande, R. de. 1980. *Text, discourse and process*. N.J.: Ablex.
- Beekman, J. and J. Callow 1974. *Translating the word of God*. Grand Rapids, MI: Zondervan.
- Benveniste, E. 1971. *Problems in general linguistics* (trans. Mary E. Meek). Coral Gables, FL.: University of Miami Press.
- Biber, D. 1988. *Variation across speech and writing*. New York: Cambridge University Press.
- Black, J.B. 1985. An exposition on understanding expository text, in Bruce K. Britton and John B. Black (eds.), *Understanding expository text: A theoretical and practical handbook for analyzing explanatory text*, Hillsdale, N.J.: Lawrence Erlbaum Associates, 249-267.
- Brandsford, J. 1979. *Human cognition: learning, understanding and remembering*. California: Wadsworth.
- Bremond, C. 1970. Morphology of the French folktale, *Semiotica* 2, 247-276.
- Brewer, W.F. 1980. Literary theory, rhetoric, and stylistics: Implications for psychology, in R.J. Spiro, B.C. Bruce, and W.F. Brewer (eds.), *Theoretical issues in reading comprehension*. Hillsdale, N.J.: Lawrence Erlbaum.
- Britton, K. 1939. *Communication: A philosophical theory of language*. New York: Harcourt, Brace & World.
- Britton, B. and J. Black 1985. Understanding expository text : From structure to process and world knowledge, in B. Britton and J. Black (eds.), *Understanding expository text: a theoretical and practical handbook for analyzing explanatory text*. Hillsdale, N.J.: Lawrence Erlbaum Associates, 1-9.
- Brown, S.J. 1985. Cognitive and social ergonomics: from our house to Bauhaus. *Human-Computer Interaction*, 1: 359-91.
- Brown, G and G. Yule 1983. *Discourse analysis*. Cambridge: Cambridge University Press.
- Bühler, K. 1934. *Sprachtheorie*. Jena: Fischer.

- Callow, K. and Callow, J.C. 1992. Text as purposive communication: A meaning-based analysis, in W.C. Mann and S.A. Thompson (eds.), *Discourse description: Diverse linguistic analyses of a fund-raising text*. Amsterdam/Philadelphia: John Benjamins, 5-37.
- Carver, R.P. 1977-78. Toward a theory of reading comprehension and reading. *Reading Research Quarterly* 13 (1), 8-63.
- Chafe, W. 1977. The recall and verbalization of past experience, in R.W. Cole (ed.), *Current issues in linguistic theory*. Bloomington, Indiana: Indiana University Press, 215-246.
- Coulthard, M. (ed.) 1994. *Advances in written text analysis*. London/New York: Routledge.
- Daneš, F. 1974. Functional sentence perspective and the organization of the text, in F. Daneš (ed.), *Papers on functional sentence perspective*. Prague: Academia, 106-128.
- Daneš, F. 1995. The paragraph - a central unit of the thematic and compositional build-up of texts, in B. Wårvik, S-K. Tanskanen, and R. Hiltunen (eds.) *Organization in discourse. Proceedings from the Turku conference*. Turku: University of Turku.
- D'Angelo, F. 1975. *A conceptual theory of rhetoric*. Cambridge, Mass.: Winthrop.
- Day, J. P. 1961. *Inductive probability*. New York: Humanities Press.
- Dijk, T.A. van 1977. *Text and context: Explorations in the semantics and pragmatics of discourse*. London: Longman.
- Dijk, T.A. van (ed.) 1988. *News as discourse*. Hillsdale, NJ: Lawrence Erlbaum.
- Dijk, T.A. van and W. Kintsch 1983. *Strategies of discourse comprehension*. New York: Academic Press.
- Dillon, G. 1981. *Constructing texts*. Bloomington: Indiana University Press.
- Dolezel, L. 1973. *Narrative modes in Czech literature*. Toronto: University of Toronto Press.
- Dudley-Evans, T. 1986. *Genre Analysis: an investigation of the instruction and discussion sections of MSc. dissertation*. LSU.ESP. Collection 3.5H/16.
- Dudley-Evans, T. 1994. Genre analysis: an approach to text analysis for ESP, in M. Coulthard (ed.), *Advances in written text analysis*. London/New York: Routledge, 219-228.
- Edmondson, W. 1981. *Spoken discourse: A model for analysis*. London: Longman.
- Eemeren, F.H. van and R. Grootendorst 1983. *Speech acts in argumentative discussion*. Dordrecht: Foris.
- Eemeren, F.H. van, R. Grootendorst, and Tjark Kruijer 1987. *Handbook of argumentation theory: A critical survey of classical backgrounds and modern studies*. Dordrecht: Foris

Enkvist, N. E. 1975. *Tekstilingvistiikan peruskäsitteitä*. Helsinki: Gaudeamus.

Fillmore, C.J. 1975. An alternative to checklist theories of meaning, in *Proceedings of the first annual meeting of the Berkeley Linguistic Society*. Berkeley: Institute of Human Learning, University of California.

Fox, B. 1987. *Discourse structure and anaphora: Written and conversational English*. Cambridge Studies in Linguistics 48. Cambridge: Cambridge University Press.

Frake, C.O. 1977. Plying frames can be dangerous: Some reflections on methodology in cognitive anthropology. *The Quarterly Newsletter of the Institute for Comparative Human Development*, The Rockefeller University, 1, 1-7.

Fuller, D.P. 1959. *The inductive method of Bible study*. 3rd ed. Mimeo. Pasadena: Fuller Theological Seminary.

Givón, T. 1983. Topic continuity in discourse: An introduction, in T. Givon (ed.) *Topic continuity in discourse: A quantitative cross-language study*. Typological Studies in Language 3. Amsterdam: John Benjamins 1-42.

Gleason, A.H., Jr. 1968. Contrastive analysis in discourse structure, in *Georgetown University Monograph Series on Languages and Linguistics* 21, 39-64.

Goffman, E. 1974. *Frame analysis*. New York: Harper & Row.

Goodman, K.S. 1967. Reading: A psycholinguistic guessing game, in F.V. Gollasch (ed.) *Language and literacy: The selected writings of Kenneth S. Goodman. Vol I Process, theory, research*. Boston: Routledge & Kegan Paul, 33-43.

Goodman, K.S. 1994. Reading, writing and written texts: A transactional sociopsycholinguistic view, in R.B. Ruddel, M. Rapp Ruddel, and M. Singer (eds.) *Theoretical models and processes of reading*. Newark, Delaware: International Reading Association, 1093-1129.

Gough, P.B. 1972. One second of reading, in J.F. Kavanagh and I.G. Mattingly (eds.) *Language by ear and by eye. The relationship between speech and reading*. Cambridge, Massachusetts: The MIT Press, 331-358.

Graesser, A.C. and S.M. Goodman 1985. Implicit knowledge, question answering, and the representation of expository text, in B.K. Britton and J.B. Black (eds.), *Understanding expository text: A theoretical handbook for analyzing explanatory text*. Hillsdale, N.J.: Lawrence Erlbaum Associates.

Graesser, A.C. and G. Nakamura 1982. The impact of a schema on comprehension and memory, in G.H. Bower (ed.), *The psychology of learning and motivation* (Vol. 16). New York: Academic Press.

Gray, B. 1977. *The grammatical foundations of rhetoric*. The Hague: Mouton.

- Grimes, J.E. 1975. *The thread of discourse*. Janua Linguarum: Series Minor 207. The Hague: Mouton.
- Grosse, E.U. 1976. *Text und Kommunikation. Eine linguistische Einführung in die Funktionen der Texte*. Stuttgart: Kohlhammer.
- Halliday, M.A.K. 1967. Notes on transitivity and theme in English. P 2. *Journal of Linguistics* 3, 177- 274.
- Halliday, M.A.K. 1970. Language structure and language function, in J. Lyons (ed.), *New horizons in linguistics*. Harmondsworth, Middlesex: Penguin Books, 140-165.
- Halliday, M.A.K. 1976. Theme and information in the English clause, in G. Kress (ed.), *Halliday: System and function in language*, 174-188.
- Halliday, M.A.K. 1985. *An introduction to functional grammar*. London: Edward Arnold.
- Halliday, M.A.K. and R. Hasan 1976. *Cohesion in English*. Longman, London.
- Harste, J.C. 1985. Portrait of a new paradigm: reading comprehension research, in C. Avon (ed.) *Landscapes: A state-of-the-art assessment of reading comprehension research 1974-1984*. Final report Project USDE-C-300-83-0130, Indiana University, School of Education.
- Hatim, B. 1983. Discourse structure in advanced language teaching: Contributions from Arabic. Paper read at the Hatfield (BAAL) Conference on Discourse structure.
- Hawkins, J.A. (1978). *Definiteness and indefiniteness*. London: Croom Helm.
- Hoey, M.P. 1979. *Signalling in discourse*. (Discourse Analysis Monograph No. 6). University of Birmingham, England.
- Hoey, M.P. 1983. *On the surface of discourse*. London: Allen and Unwin.
- Hoey, M.P. 1986. The discourse colony: A preliminary study of a neglected discourse type. In M. Coulthard (ed.) *Talking about Text: Studies Presented to David Brazil on his Retirement*. English Language Research, Discourse Analysis Monograph 13. Birmingham: University of Birmingham.
- Housenblas, K. 1966. On the characterization and classification of discourse. *Travaux Linguistiques de Prague* 1: 67-83.
- Hunston, S. 1994. Evaluation and organization in a sample of written academic discourse, in M. Coulthard (ed.), *Advances in written text analysis*. London: Routledge, 191-218.
- Hutchins, J. 1977. On the structure of scientific texts, *UEA Papers in Linguistics*, 5, 18-39.
- Hymes, D. 1974. Ways of speaking, in R. Bauman and J. Sherzer (eds.), *Explorations in the ethnography of speaking*. London: Cambridge University Press.

- Jacobson, R. 1960. Closing statement: Linguistics and poetics, in T. Sebeok (ed.), *Style in language*, Cambridge, Mass.: MIT Press, 350-377.
- Jordan, M.P. 1978. *The principal semantics of the nominals 'this' and 'that' in contemporary English writing*. PhD Thesis, The Hatfield Polytechnic and Birmingham University, England (see *Dissertation Abstracts International*, sec. C, Summer 1978, 38,533).
- Jordan, M.P. 1981. Some associated nominals in technical writing. *Journal of Technical Writing and Communication* 11/3.
- Jordan, M.P. 1982a. The thread of continuity in functional writing. *Journal of Business Communication* 19/4.
- Jordan, M.P. 1982b. Co-associative lexical cohesion in English texts. *Technostyle* 2/2.
- Jordan, M.P. 1984. *Rhetoric of everyday English texts*. London: Allen & Unwin.
- Jordan, M.P. 1985a. Complex lexical cohesion in English clause and sentence, in A. Manning, P. Martin, and K. McCalla (eds.), *The 10th LACUS Forum*. Columbia, SC: Hornbeam Press.
- Jordan, M.P. 1985b. Non-thematic re-entry, in J.D. Benson and W.S. Greaves (eds.), *Systemic Perspectives in Discourse*. Vol 1, Norwood, NJ: Ablex.
- Jordan, M.P. 1986. Co-associative lexical cohesion in promotional literature. *Journal of Technical Writing and Communication* 16/1 and 2.
- Jordan, M.P. 1992. An integrated three-pronged analysis of a fund-raising letter in W.C. Mann and S.A. Thompson (eds.), *Discourse description: Diverse linguistic analyses of a fund-raising text*. Amsterdam/Philadelphia: John Benjamins, 171-226.
- Kauppinen, A. and L. Laurinen 1988. *Tekstioppi*. Vaasa: Kirjayhtymä.
- Keenan, E.O. and B.B. Schieffelin 1976. Topic as a discourse notion: a study of topic in the conversations of children and adults, in C.N. Li (ed.) *Subject and topic*. Academic Press, New York. pp. 335-384. (6.3)
- Kinneavy, J. L. 1971. *A theory of discourse*. Englewood Cliffs, N.J. : Prentice-Hall.
- Kintsch, W. and T.A. van Dijk 1978. Toward a model of text comprehension and production. *Psychological Review* 85 (5), 363-394.
- Kummer, W. 1972. Aspects of a theory of argumentation, in E. Gülich and W. Raibe (eds.), *Textsorten*. Frankfurt: Athenäum, 25-49.
- LaBerge, D. and S.J. Samuels 1974. Toward a theory of automatic information processing in reading. *Cognitive Psychology* 6, 293-323.
- Labov, W. 1972. *Sociolinguistic patterns*. Philadelphia: University of Pennsylvania Press.

- Leppo, J. and R.P. Abelson 1986. The nature of explanation, in J.A. Galambos, R.P. Abelson, and J.B. Black (eds.), *Knowledge structures*. Hillsdale, N.J.: Lawrence Erlbaum Associates, 103-122.
- Leech, G.N. 1983. *Principles of pragmatics*. New York: Longman.
- Levinson, S. 1983. *Pragmatics*. Cambridge: Cambridge University Press.
- Linde, C. and W. Labov. 1975. Spatial networks as a site for the study of language and thought. *Language* 51:4. 924-939.
- Longacre, R.E. 1968. Discourse, paragraph and sentence structure in selected Philippine languages. Dallas TX: *Summer Institute of Linguistics Publications in Linguistics and Related Fields* 21/1 and 2.
- Longacre, R.E. 1974. Narrative versus other discourse genre, in R.M. Brend (ed.), *Advances in tagmemics*. Amsterdam: North-Holland Publishing Co., 357-376.
- Longacre, R.E. 1979. Paragraph as a grammatical unit. *Syntax and Semantics*, Vol 12: Discourse and Syntax. New York: Academic Press.
- Longacre, R.E. 1983. *The grammar of discourse*. New York: Plenum Press.
- Longacre, R.E. 1992. The discourse strategy of an appeals letter, in W.C. Mann and S.A. Thompson (eds.), *Discourse description: Diverse linguistic analyses of a fund-raising letter*. Amsterdam/Philadelphia: John Benjamins, 109-130.
- Lyons, J. 1977. *Semantics*. Cambridge: Cambridge University Press.
- Malinowski, B. 1923, in C.K. Ogden and I.A. Richards, *The Meaning of meaning*. 2nd ed. London: Routledge & Kegan Paul, 296-336.
- Mann W.C., C.M. Matthiessen, and S.A. Thompson 1982. Rhetorical structure report. MS.
- Mann W.C., C.M. Matthiessen, and S.A. Thompson 1992. Rhetorical structure theory and text analysis, in W.C. Mann and S.A. Thompson (eds.), *Discourse description: Diverse linguistic analyses of a fund-raising letter*. Amsterdam/Philadelphia: John Benjamins, 39-78.
- Mann W.C. and S.A. Thompson 1988. Rhetorical structure theory: Toward a functional theory of text organization, *Text*, Volume 8-3, 1988, 243-281.
- Mann W.C. and S.A. Thompson (eds.) 1992. *Discourse description: Diverse linguistic analyses of a fund-raising letter*. Amsterdam/Philadelphia: John Benjamins.
- Markkanen, R., M.S. Steffensen, and M. Crismore 1990. Quantitative contrastive study of metadiscourse: Problems in design and analysis of data. Paper presented at the XXV Conference of Contrastive Linguistics and Cross-Cultural Studies. Rydzyna, Poland 6-8 December 1990.
- Mauranen, A. 1993. *Cultural differences in academic rhetoric: A textlinguistic study*. Frankfurt am Main: Peter Lang.

Mauranen, A. ja E. Ventola 1992. *Tieteellinen kirjoittaminen englanniksi: Tekstilägyptinen näkökulma opetukseen*. Jyväskylä: Jyväskylän yliopisto, Korkeakoulujen tiedokeskus.

McKeown, K. 1982. Generating natural language text in response to questions about data base structure. PhD Dissertation, University of Pennsylvania.

McKinlay, J. 1983. *An analysis of the discussion section of medical journal articles*. LSU/ESP Collection 3, 4/B University of Birmingham

Meyer, B.J.F. 1975. *The organization of prose and its effects on memory*. Amsterdam: North-Holland Publishing Company.

Meyer, B.J.F. 1985. Prose analysis: purposes, procedures, and problems, in B.K. Britton and J.B. Blacks (eds.), *Understanding expository text*. Hillsdale, N.J.: Lawrence Erlbaum Associates, 11-64, 269-304.

Meyer, B.J.F. 1992. An analysis of a plea for money, in W.C. Mann and S.A. Thompson (eds.), *Discourse description: Diverse linguistic analyses of a fund-raising letter*. Amsterdam/Philadelphia: John Benjamins, 79-108.

Meyer, B.J.F. and R.O. Freedle 1984. The effects of different discourse types on recall. *American Educational Research Journal*. 21:1, 121-143.

Meyer, B.J.F. and G.E. Rice 1982. The interaction of reader strategies and the organization of text, *Text*, 2 (1): 155-192.

Meyer, B.J.F. and G.E. Rice 1984. The structure of text, in P.D. Pearson and M. Kamil (eds.), *Handbook of research in reading*. New York: Longman.

Minsky, M. 1975. A framework for representing knowledge, in P.H. Winston (ed.), *The psychology of computer vision*. New York : McGraw Hill, 211-277.

Morris, C.W. 1938. *Foundations of the theory of signs* reprinted in Morris, C.W. 1971 *Writings on the general theory of signs*. The Hague: Mouton.

Myhill, J. 1992. *Typological Discourse analysis*. Oxford: Blackwell.

Perelman, Ch. and L. Olbrechts-Tyteca 1971. *The new rhetoric: A treatise on argumentation*. 2nd ed. Notre Dame: University of Notre Dame Press. Translated by J. Wilkinson and P. Weaver. Originally published as: *La Nouvelle Rhétorique: Traité de l'Argumentation* 1958.

Pike, E.G. 1992. How I understand a text -via the structure of the happenings and the telling of them, in W.C. Mann and S.A. Thompson (eds.), *Discourse description: Diverse linguistic analyses of a fund-raising letter*. Amsterdam/Philadelphia: John Benjamins, 227-261.

Pitkänen-Huhta, A. 1997. Tiivistelmä ja lukemisen mallit: teoriaa ja käsityksiä. *Finlance. A Finnish Journal of Applied Linguistics*. Vol XVII: 57-69.

- Read, S.J. 1987. Constructing causal scenarios: A knowledge structure approach to causal reasoning, *Journal of Personality and Social Psychology*, 50, 288-302.
- Renkema, J. 1993. *Discourse studies: an introductory textbook*. Amsterdam: Benjamins.
- Rosenberg, St.T. 1980. Frame-based text processing, in D. Metzger (ed.), *Frame conceptions and text understanding*. Berlin: Walter de Gruyter.
- Rosenblatt, L.M. 1988. *Writing and reading: The transactional theory*. Technical Report No. 13. Berkeley, Pittsburgh: Center for the Study of Writing. University of California and Carnegie Mellon University.
- Rumelhart, D.E. 1975. Notes on a schema for stories, in D.G. Bobrow and A. Collins (eds.), *Representation and understanding*. New York: Academic Press.
- Rumelhart, D.E. 1977a. Understanding and summarizing brief stories, in D. Laberge and S.J. Samuels (eds.), *Basic processes in reading: perception and comprehension*. Hillsdale, N.J.: Lawrence Erlbaum Associates.
- Rumelhart, D.E. 1977b. Toward an interactive model of reading, in S. Dornic (ed.) *Attention and performance VI*. Proceedings of the Sixth International Symposium on Attention and Performance, Stockholm, Sweden, July 28-August 1, 1975, Hillsdale, New Jersey: Lawrence Erlbaum, 573-603.
- Rumelhart, D.E. 1980. Schemata: The building blocks of cognition, in R.J. Spiro, B.C. Bruce, and W.F. Brewer (eds.), *Theoretical issues in reading comprehension*. Hillsdale, N.J.: Lawrence Erlbaum Associates.
- Sallinen, R. 1994. Three perspectives to text structure representation. Unpublished licentiate thesis. University of Jyväskylä.
- Sanford, A. and S. Garrod 1981. *Understanding written language*. Chichester: Wiley.
- Schank, R. 1982. *Reading and understanding teaching from the perspective of artificial intelligence*. Hillsdale, N.J. Lawrence Erlbaum Associates.
- Schank, R.C. 1986. *Explanation patterns: Understanding mechanically and creatively*. Hillsdale, N.J.: Lawrence Erlbaum Associates.
- Schank, R.C. and R. Abelson 1977. *Scripts, plans, goals, and understanding*. Hillsdale, N.J.: Lawrence Erlbaum Associates.
- Searle, J.R. 1976. Classification of illocutionary acts, *Language in Society* 5, 1-23.
- Searle, J.R. and D. Vanderveken 1985. *Foundations of illocutionary logic*. Cambridge: Cambridge University Press.
- Sinclair, J. McH. and R.M. Coulthard 1975. *Towards an analysis of discourse*. London: Oxford University Press.

- Smith, F. 1978. *Reading*. Cambridge: Cambridge University Press.
- Stubbs, Michael 1983. *Discourse Analysis: The sociolinguistic analysis of natural language*. Oxford: Basil Blackwell.
- Swales, J. 1981. *Aspects of article introduction*. Aston ESP Report 1. Birmingham: University of Aston.
- Swales, J. 1990. *Genre analysis: English in academic and research settings*. Cambridge: Cambridge University Press.
- Tadros, A. 1994. Predictive categories in expository text, in M. Coulthard (ed.), *Advances in written text analysis*. London: Routledge, 69-82.
- Tirkkonen-Condit, S. 1985. *Argumentative text structure and translation*. Jyväskylä: University of Jyväskylä
- Toulmin, S. E. 1976. *Knowing and acting: An invitation to philosophy*. New York: Macmillan.
- Vande Kopple, W.J. 1985. Some exploratory discourse on metadiscourse, *College Composition and Communication* 36, 82-83.
- Vanderveken, D. 1990. *Meaning and speech act. Volume 1: Principles of language use*. Cambridge: Cambridge University Press.
- Wenzel, J.W. 1979. Jürgen Habermas and the dialectical perspective on argumentation, *Journal of American Forensic Association* 16(2), 83-94.
- Werlich, E. 1976 (1982). *A text grammar of English*. Heidelberg: Quelle & Meyer.
- Widdowson, H.G. 1978. *Teaching language as communication*. Oxford: Oxford University press.
- Winter, E.O. 1968. Some aspects of cohesion, in R.D. Huddleston, R.A. Hudson, E.O.O. Winter, and A. Henrici, (eds.), *Sentence and Clause in Scientific English*. University of London OSTI Project.
- Winter, E.O. 1971. Connection in science material: A proposition about the semantics of clause relations. *CILT (Centre for Information on English Language Teaching and Research) Papers*, December.
- Winter, E.O. 1974. *Replacement as a function of repetition*. PhD Thesis, University of London (see Dissertation Abstracts International, sec. C, Autumn 1977, 38,4)
- Winter, E.O. 1977. A clause-relational approach to English texts: A study of some predictive items in written discourse, *Instructional Science: An International Journal*, Volume 6 (1977), 1-91.
- Winter, E.O. 1979. Replacement as a fundamental function of the sentence in context. *Forum Linguisticum* 4.

Winter, E.O. 1986. Clause relations as information structure: Two basic text structures in English, in M. Coulthard (ed.), *Talking about text*. English Language Research. Birmingham: University of Birmingham.

Winter, E.O.: 1992. The notion of unspecific versus specific as one way of analysing the information of a fund-raising letter, in W.C. Mann and S.A. Thompson (eds.), *Discourse description: Diverse linguistic analyses of a fund-raising text*. Amsterdam/Philadelphia: John Benjamins, 131-170.

Winter, E.O. 1994. Clause relations as information structure: two basic text structures in English, in M. Coulthard (ed.), *Advances in written text analysis*. London/ New York: Routledge, 27-46.

Winterowd, W. (ed.) 1975. *Contemporary rhetoric: a conceptual background with readings*. New York: Harcourt Brace Jovanovich.

Virtanen, Tuija 1992. *Discourse functions and adverbial placement in English*. Åbo: Åbo Akademi University Press.

Voss, J.F. and G.L. Bisanz 1985. Knowledge and the processing of narrative and expository texts, in B.K. Britton and J.B. Black (eds.), *Understanding expository text: A theoretical and practical handbook for analyzing explanatory text*. Hillsdale, N.J.: Lawrence Erlbaum Associates.

Young, R., A. Becker, and K. Pike 1970. *Rhetoric: discovery and change*. New York: Harcourt, Brace & World.

APPENDIX 1

CITIZENSHIP AND THE PLACE OF THE PUBLIC SPHERE: LAW, COMMUNITY, AND POLITICAL CULTURE IN THE TRANSITION TO DEMOCRACY*

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*Democratic revolutions and global transitions have again thrust debates about citizenship and social class onto the sociological agenda. I use institutional and relational/network analysis to reconsider three tacit assumptions of these debates: (1) citizenship must be defined as a status; (2) capitalist development and citizenship formation must occur together; and (3) theories of citizenship must be based on the relationship between the state and capitalism. These assumptions are examined in T. H. Marshall's ([1949] 1964) classic historical sociological work, *Citizenship and Social Class*. By examining Marshall's thesis in its original empirical context of eighteenth-century English history, I demonstrate that varying patterns of institutional relationships among law, communities, and political cultures were central factors in shaping modern citizenship rights. Focusing on regional variation in citizenship practices among eighteenth-century English working communities, I suggest that: (1) citizenship should be redefined as an "instituted process" rather than a status; (2) the development of citizenship rights depended on the nexus of England's national legal infrastructure and the varying community capacities for participatory association; and (3) future research on citizenship and democratization expand beyond a focus on states and capitalism to include a sociology of relationships among public spheres, community associational life, and patterns of political culture.*

① Citizenship and democratization are back on the sociological agenda after a prolonged focus on issues of class and state formation (Brubaker 1989, 1992; Orloff 1992; Tilly 1990a, 1990b; Alexander 1991, 1992; Wolfe 1989, 1992; Zaret 1989; Mann 1987).

② The resurgence of sociological interest is clearly a response to world events. Escalating international migration and the resurgence of nationalism have forced attention to the incongruous benefits of membership in different na-

tion-states. Social movements in Eastern Europe have mobilized revolutionary transformations around demands for democratic political and civil liberties despite the existence of socioeconomic guarantees constituting what T. H. Marshall ([1949] 1964) called the rights of social citizenship, e.g., public education, social entitlements, and welfare provisioning. In Western Europe and the United States, the question is whether the formal equality embodied in citizenship will continue partially to ameliorate, or compensate for, the economic

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inequalities we now accept as a cost of market capitalism (Hirschman 1991).¹

⑥ Three points of agreement dominate the sociology of citizenship. First, the basic definition of citizenship provokes little controversy. Usually modern citizenship is defined as a personal status consisting of a body of universal rights (i.e., legal claims on the state) and duties held equally by all legal members of a nation-state (Marshall 1964; Brubaker 1992).²

⑨ Second, sociologists tend to agree on the historical development of citizenship. Despite contributions that stress the importance of war for formation of the state (Tilly 1990a, 1990b; Giddens 1982, 1987; Therborn 1977; Turner 1986), most scholars assume that the legal requirements of an emergent capitalist society were chiefly responsible for the birth of modern citizenship rights (Bendix [1964] 1977; Moore 1966; Giddens 1982, 1987; Barbalet 1989). Third, most scholars agree that theories of citizenship should be based on an exploration of the sometimes contentious, sometimes cooperative, sometimes legitimating dyadic relationship between the state and the capitalist economy (Offe 1984; Lindblom 1977; Habermas 1975; Bowles and Gintis 1983).

⑬ One issue, however, generates continuing debate — the problematic relationship between “citizenship and social class.” Inspired by Marshall’s (1964) famous lectures, the enduring question is: Do the “equalizing principles” of citizenship mitigate the economic inequalities of social class? The oldest and perhaps most influential position is that they do not (Marx [1843] 1975), whereas sociologists of the 1950s and 1960s have interpreted Marshall to argue that they do — that citizenship eliminates social conflict and “incorporates” the working class (Dahrendorf 1959; Bendix 1964; Lipset 1964). Recent approaches cite Marshall to argue that citizenship modifies social class just enough to create a social truce between the

two (Giddens 1982; Turner 1986; Janowitz 1980, p. 4).

⑱ I contend that further explorations of the relationship between citizenship and social class must first question the three basic premises of the sociology of citizenship — the historical development of citizenship, its conceptual definition, and its theoretical propositions. I first re-analyze Marshall’s exemplary case of late seventeenth- and eighteenth-century English patterns of citizenship. This period is generally seen as the “take-off” period of modern citizenship rights, and much of the discussion of citizenship is based on it (Marshall 1964; Moore 1966; Giddens 1982; Fraser and Gordon 1992). I explore why in eighteenth-century England popular citizenship practices and identities were present only among working-class communities in the rural industrial regions of the countryside (excluding urban areas), and not in the arable regions. Using an institutional, relational, and network approach, I suggest that the conditions that supported these early popular citizenship rights were based on variable relationships among England’s legal sphere, regional political geographies, and the political cultures and associational life of local communities. Most important was the effect of the interaction among these factors on the political *public sphere*.⁴

³ Some historical traditions trace the history of modern citizenship to Athens, Rome, and Machiavelli’s Italy, through the “liberties” of the medieval mercantile cities. Recognizing the classical dimensions of citizenship does not conflict with finding the cultural “moment” of English citizenship in a convergence of factors in the fourteenth century. The importance of mercantile cities is incontestable, but analyses of citizenship must expand beyond traditional urban settings (Somers forthcoming).

⁴ My use of the term “public sphere” is adapted from Habermas ([1962] 1989, p. 49). I do not, however, incorporate several aspects of his conceptualization: (1) that public spheres in the eighteenth century resulted from long-term transformations in western European trade and commerce; (2) that, as a normative ideal, the term “public sphere” refers only to bourgeois rational discourse; (3) that identities are formed *prior* to participation in the public sphere; and (4) that the public sphere can be understood analytically or historically without challenging the exclusionary gender practices built into Habermas’s normative ideal. My conception shares much with others’ critiques, including an emphasis

¹ Bell correctly noted that, among others, Parsons, Lipset, D. Rostow, Sievert (and Bell [1976] himself) never stopped addressing these issues. Why their work has been slighted in the renewed attention to citizenship would be the topic for another paper.

² Janowitz (1980) — citing the *Oxford English Dictionary* (1961) — argued that the *duties* component of citizenship has disappeared from modern usage. He appropriately exempted Marshall from this “rights-oriented” imbalance.

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- (24) The public sphere denotes a contested participatory site in which actors with overlapping identities as legal subjects, citizens, economic actors, and family and community members, form a public body and engage in negotiations and contestations over political and social life.
- (25) Patterns of citizenship formation in eighteenth-century England depended on the character of the public sphere (elite or popular) and its *place*, i.e., social and political geography (Agnew and Duncan 1989; Entrikin 1991). Although all regions had public spheres based on modes of local governance, they differed dramatically in whether their character and place allowed the appropriation of national laws as citizenship rights. Only certain measures of the law, political geography, and community life, and only certain distributions of power and public participation allowed the public sphere to be transformed into a quasi-democratic arena of popular participation buttressed by a political culture of rights that generated *popular* citizenship identities.
- (28) On the basis of this historical analysis, I question the definition of citizenship as a status or attribute of a category of persons. Instead I propose that citizenship be defined as an "instituted process" (Polanyi 1957a), i.e., citizenship is a set of institutionally embedded social practices. These practices are contingent upon and constituted by networks of relationships and political idioms that stress membership and universal rights and duties in a national community. Rather than a body of rights granted "ready-made" by the state and attached to individual persons, however, citizenship rights are only *one* potential outcome of a configuration of national membership rules. These rules are normatized and transmitted via national laws and institutions (common law and statutory law, courts and judicial offices). Whether or not these rules are converted into actual universal rights depends fully on the local contexts — the social and political place — in which

on the constitutive role of the family in the public world (Fraser 1989) and the centrality of conflict and negotiation in a broad conceptualization of popular and working-class publics (Eley 1992). Davidoff and Hall (1987), Zaret (1992), and Eley (1992) are among the few writers in English (there are many in German) who present historically-grounded discussions of the public sphere or use it as a central concept in historical analyses of England.

they are activated. And finally, although modern citizenship is normatized by national and universal laws rather than corporate or particularistic laws, it is not in practice exclusively a national and universal institution. Rather, citizenship practices emerge from the *articulation* of national organizations and universal rules with the particularisms and varying political cultures of local environments (types of civil society). Thus, citizenship is reconceptualized as the outcome of political, legal, and symbolic practices enacted through relational matrices of universal membership rules and legal institutions that are activated in combination with the particularistic political cultures of different types of civil societies. As such, citizenship practices are also a source of political identity and the translation of this identity into a rights-based positive citizenship identity depends entirely on the contexts of activation.

- (41) There are also theoretical implications: Quasi-democratic citizenship rights can emerge only in certain institution-specific relational settings and only in the context of particular social practices, namely practices that support popular public spheres. Popular public spheres must be infused by participation from members of active civil societies. They must also mediate between civil society and the towering forces of nation-states and national markets. Thus, theories of citizenship and social class can no longer be confined to the opposition between the state and the economy. Such a dichotomy masks the centrality to macro-analytic analysis of nonstate forms of political participation and discourse (public spheres), and of such social institutions as family, community, voluntary organizations, and other aspects of civil society and associational life.
- (47) Recognizable popular citizenship rights have only emerged historically in the participatory spaces of public spheres in tandem with "relationally-sturdy" civil societies. Theorizing about citizenship must expand beyond the relationship between the state and capitalism to

⁵ Debate over the meaning of rights has recently occupied scholars in several disciplines. My definition resembles that of Minow (1985, 1987), who combined autonomy and relationality to derive a conception of rights from "a conception of self . . . [that locates] each individual within social networks [where] membership helps constitute the 'I', and belonging is essential to becoming" (Minow 1985, pp. 819, 894).

include a sociology of public spheres and their relationships to the associational practices of civil societies.

T. H. MARSHALL AND THE SOCIOLOGY OF CITIZENSHIP

A rethinking of citizenship must begin with the classic work of T. H. Marshall (1964), *Citizenship and Social Class*.⁶ Marshall's core conceptions remain the touchstone for much recent scholarly work on citizenship.⁷ Virtually all current analyses of contemporary democratization and market transitions take Marshall's analysis as a point of departure. However, these new theories of citizenship formation often are generalized from or contrasted to unexamined axioms derived from Marshall. The applicability of Marshall's work to current concerns with democratization and marketization thus prompts a reconsideration of his original formulation.

Marshall's lasting intellectual contribution was his redefinition of modern citizenship. He rejected as too limited the prevailing definition of citizenship as a minimum body of legal and political rights and duties. Marshall (1964) argued that the history of citizenship mandates that the concept include not only formal rights but social entitlements — "the whole range from the right to a modicum of economic welfare and security to the right to share to the full in the social heritage and to live the life of a civilized being according to the standards prevailing in the society" (p. 72). Modern citizenship thus embraces three kinds of rights: civil

rights, such as the right to sell one's labor in a free market, and the right to due process of law; political rights, such as the right to vote; and social rights, such as the right to social justice through institutions like unemployment insurance, welfare provisions, education, and social security. These three components of citizenship attach to members of a polity through the personal status as citizen.

Marshall's expanded conception of citizenship allowed him to develop a theory that explained citizenship's paradoxical consequences for mid-twentieth century welfare-state politics. His theory explored the inherent but inexorable tension between capitalism's market and class inequalities on the one hand, and the equalizing principles of citizenship on the other hand: "Is it still true that basic equality . . . embodied in the formal rights of citizenship, is consistent with the inequalities of social class? I shall suggest that our society today assumes that the two are still compatible, so much so that citizenship has itself become, in certain respects, the architect of legitimate social inequality" (Marshall 1964, p. 70). Marshall's account of the historical processes that led to this paradox of modern twentieth-century citizenship is sketchy in comparison with his sociological thesis. But his theory of contemporary society is not structurally static and his historical analysis is not provided as "background." Marshall builds his powerful analysis of the dynamic tensions between citizenship and social class entirely from the history of their emergence. His historical and sociological analyses are analytically interdependent.

Marshall (1964) called modern citizenship "the latest phase of an evolution of citizenship which has been in continuous progress for some 250 years" (p. 71). Thus, while he found early prototypical but particularistic rights in the medieval period, he grounded the social genesis of modern citizenship firmly in England's dramatic transformations of the seventeenth and eighteenth centuries. The decisive changes entailed universality and differentiation. While citizenship became national in scope, previously undifferentiated "bundles" of local medieval rights and duties were disaggregated into civil, political, and social components. The three components became so distinct over time that historians could safely "assign the formative period in the life of each to a different century" (Marshall 1964, p. 74).

⁶ "Marshall's essay is the most outstanding British contribution to the analysis of the structure and dynamics of capitalist societies as this has taken shape in the last two decades . . . the only work of post-war British sociology which in the boldness of its perspective and conceptualization bears comparison with, and stands in a direct line of succession to those classical texts which mark the origins of modern sociology" (Lockwood 1974, pp. 363–64; also see Lipset 1964 and Halsey 1984).

⁷ Brubaker (1990, 1992) and Tilly (1990a, 1990b) are important exceptions. Brubaker is concerned with citizenship and national immigration, which is a different area of inquiry from citizenship and social class in Marshall's tradition. Tilly's main work is a large macro and world-comparative study of long-term capital and state formation.

To what remarkable

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Here is so that these flourish s explanati ship at the [for] these ties of ca trary, nec ticular fo pensable gave to e: the power economic was clear and the dominate

These se dation of M opment of that coinci socioecon Citizenship teenth cent cided with freedom (t outdated fo (pre-modern like the Po it possible protection with the n 1964, p. 8 economic l growth of law played registering economic horrence of from work 1964, pp. 7 gal econon sion to a logic: "Wh zenship gre tution" (M liberties ar

APPENDIX 2

Table 4: The distribution of message-core, logical and message-strategic functions in scientific articles, textbook texts, and press reportage

Text-structural functions	Total corpus		Scientific articles		Textbook texts + 'The Man of the Year'		Press reportage	
	N	%	N	%	N	%	N	%
Message-core functions	492	52 %	125	47 %	138	48 %	229	58 %
Logical functions	322	34 %	94	36 %	93	33 %	135	34 %
Message strategic functions	134	14 %	45	17 %	55	19 %	34	9 %
	948	100 %	264	100 %	286	100 %	398	100 %

Table 5: The distribution of message-core functions in scientific articles, textbook texts, and press reportage

Message-core functions	Total corpus		Scientific articles		Textbook texts + 'The Man of the Year'		Press reportage	
	N	%	N	%	N	%	N	%
Attribution	160	33 %	19	15 %	22	16 %	119	52 %
Elaboration	145	29 %	43	34 %	71	51 %	31	14 %
Evaluation	91	18 %	37	30 %	11	8 %	43	19 %
Implication	26	5 %	5	4 %	13	9 %	8	3 %
Interpretation	1	0 %	1	1 %	0	0 %	0	0 %
Basis	24	5 %	10	8 %	4	3 %	10	4 %
Motivation	2	0 %	0	0 %	1	1 %	1	0 %
Instruction	10	2 %	1	1 %	3	2 %	6	3 %
Commitment	15	3 %	6	5 %	4	3 %	5	2 %
Matching	18	4 %	3	2 %	9	7 %	6	3 %
	492	100 %	125	100 %	138	100 %	229	100 %

Table 6: The distribution of logical functions in scientific articles, textbook texts, and press reportage

Logical functions	Total corpus		Scientific articles		Textbook texts + 'The Man of the Year		Press reportage	
	N	%	N	%	N	%	N	%
Additive conjunction:	62	19 %	23	24 %	14	15 %	25	19 %
Addition	61	19 %	23	24 %	14	15 %	24	18 %
Hypothesis-Affirmation	1	0 %	0	0 %	0	0 %	1	1 %
Temporal conjunction:	54	17 %	14	15 %	13	14 %	27	20 %
Succession	33	10 %	5	5 %	8	9 %	20	15 %
Overlap	4	1 %	0	0 %	0	0 %	4	3 %
Setting	17	5 %	9	10 %	5	5 %	3	2 %
Causal conjunction:	95	30 %	25	27 %	30	32 %	40	30 %
Cause-Consequence	28	9 %	9	10 %	11	12 %	8	6 %
Causal Explanation	67	21 %	16	17 %	19	20 %	32	24 %
Final conjunction:	26	8 %	8	9 %	5	5 %	13	10 %
Purpose	7	2 %	1	1 %	1	1 %	5	4 %
Result	19	6 %	7	7 %	4	4 %	8	6 %
Conditional conjunction:	6	2 %	2	2 %	3	3 %	1	1 %
Condition-Consequence	3	1 %	0	0 %	3	3 %	0	0 %
Conditinal evaluation	3	1 %	2	2 %	0	0 %	1	1 %
Concessive conjunction	30	9 %	10	11 %	10	11 %	10	7 %
Ineffective cause-Concession	29	9 %	9	10 %	10	11 %	10	7 %
Concessive aspects	1	0 %	1	1 %	0	0 %	0	0 %
Adversative conjunction	42	13 %	12	13 %	12	13 %	18	13 %
Contrast	12	4 %	4	4 %	5	5 %	3	2 %
Wish-Frustration	3	1 %	1	1 %	0	0 %	2	1 %
Intent-Frustration	2	1 %	0	0 %	0	0 %	2	1 %
Hypothesis-Frustration	6	2 %	2	2 %	0	0 %	4	3 %
Restriction	14	4 %	4	4 %	7	8 %	3	2 %
Rejection-Replacement	5	2 %	1	1 %	0	0 %	4	3 %
Disjunctive conjunction	7	2 %	0	0 %	6	6 %	1	1 %
Hypothesis-Alternative	0	0 %	0	0 %	0	0 %	0	0 %
Alternative	7	2 %	0	0 %	6	6 %	1	1 %
	322	100 %	94	100 %	93	100 %	135	100 %

Table 7: The distribution of message-strategic functions in scientific articles, textbook texts, and press reportage

Message-strategic functions:	Total corpus		Scientific articles		Textbook texts + 'The Man of the Year'		Press reportage	
	N	%	N	%	N	%	N	%
Background creating generic - Specific	0	0 %	0	0 %	0	0 %	0	0 %
Topic controlling generic - Specific	55	41 %	13	29 %	22	40 %	20	59 %
Text organizing generic - Specific	12	9 %	7	16 %	3	5 %	2	6 %
Generic - Interest arousing specific	4	3 %	0	0 %	1	2 %	3	9 %
Interest arousing specific - Generic	0	0 %	0	0 %	0	0 %	0	0 %
Labelling generic-Explanatory specific	27	20 %	12	27 %	12	22 %	3	9 %
Explanatory specific - Labelling generic	1	1 %	0	0 %	1	2 %	0	0 %
Assertion - Evidence - Conclusion	1	1 %	1	2 %	0	0 %	0	0 %
Evidence - conclusion	5	4 %	3	7 %	1	2 %	1	3 %
Reformulation	4	3 %	4	9 %	0	0 %	0	0 %
Question - Answer	5	4 %	2	4 %	0	0 %	3	9 %
Metastatement	19	14 %	3	7 %	15	27 %	1	3 %
Summary	1	1 %	0	0 %	0	0 %	1	3 %
	134	100 %	45	100 %	55	100 %	34	100 %

YHTEENVETO

Kaksi näkökulmaa tekstirakenteen kuvaukseen

1 Tausta ja tavoitteet

Tutkimuksen tavoitteena on ollut hahmotella ja testata tekstirakenteen kuvausmalli, joka soveltuu erityisesti englanninkielisten asiatekstien (oppikirjatekstit, tieteelliset artikkelit, sanomalehti- ja aikakauslehtitekstit) tekstirakenteen kuvaukseen. Mallin edellytettiin selittävän sekä tekstin semantiikkaan (informaation kulkuun) että sen pragmatiikkaan (kerronnalliseen, tietoa lisäämättömään ainekseen) perustuvia rakenteellisia piirteitä. Tutkimuksessa on myös pyritty selittämään tekstirakenteen piirteitä tekstilingvistiseltä ja diskurssianalyttiseltä teoriapohjalta.

Ajatus tekstirakenteen kuvausmallin kehittelystä syntyi alunperin kielikeskustyössä englannin kielen tekstinyymmärtämisen tunneilla. Oletuksena oli, että vieraskielistä tekstiä on helpompi ymmärtää, jos lukijalla on käsitys tekstin jäsentymisestä. Useat tutkijat pitävät tekstirakenteen ymmärtämistä yhtenä tekstinyymmärtämisen prosessin tekijänä (Van Dijk ja Kintsch 1983, Black 1985, Minsky 1975, Schank ja Abelson 1977, Rumelhart 1980, Rosenberg 1980, Graesser ja Nakamura 1982, Voss ja Bisanz 1985).

Vaikka alkuperäisenä motivaationa työn aloittamiseen oli pedagogisesti sovellettavan kuvausmallin luominen, tekstirakenteiden tarkastelu houkutteli kuitenkin yritykseen ymmärtää tekstirakenteen piirteitä mahdollisimman perinpohjaisesti. Tuloksena on propositionaalisen tasolle viety malli, joka osoittaa tekstistä sen viestirakenteen, eli tekstin viestille välttämättömän informaation jäsentymisen, ja strategisen aineksen, joka ei kartuta tekstin tietoa, vaan on olemassa tekstin ymmärrettävyyden, vakuuttavuuden, luettavuuden tai kiintoisuuden lisäämiseksi. Pedagogisiin tarkoituksiin malli soveltuu parhaiten pääkategorioidensa tasolla toimivana tekstirakenteen piirteiden tunnistamistapana. Edellä esitetty havainto perustuu usean vuoden kokemukseen mallin pelkistetyin versioin käytöstä tekstinyymmärtämisen harjoituksissa. Tutkimuksen tarkoituksena ei missään vaiheessa ollut mallin pedagogisen soveltuvuuden testaaminen.

Aikaisemmin tekstilingvistisessä kirjallisuudessa esitetyt mallit keskittyivät ensisijaisesti propositionaalisten ja propositionaalisten välisten suhteiden tarkasteluun (Grimes 1975, Aston 1977, Longacre 1983, Tirkkonen-Conditt 1985 ja Mann ja Thompson 1988). Niissä ei ole pohdittu eri propositionaalisten funktioita viestin muodostumisessa. Joitakin viestirakenteen malleja (esim. Winter 1986 ja Hoey 1983) on kuvattu ja erilaisia tekstistrategisia ilmiöitä tunnistettu, mutta yhtenäistä teoriaa, joka selittäisi sekä viestirakenteen että strategisen aineksen vaihteluita eri tekstityypeissä ei ole esitetty.

2 Teksti ja tekstirakenne: Käsitteet

Tekstirakenteen kuvausmallin perustana täytyy olla käsitys tekstistä ja tekstirakenteesta. Tässä tutkimuksessa tekstin käsitetään muodostuvan joukosta propositionia (lauseen merkitysisältöjä), jotka liittyvät toisiinsa siten, että syntyy käsitys yhteisestä aiheesta (tekstipiiikista), jonka käsittelyyn kaikki propositionit osallistuvat. Yllä esitetty käsitys tekstistä jättää määritelmän ulkopuolelle luettelotyyppiset tekstit, dialogin sekä yhden proposition ja yhden sanan tekstit. Tämä on kuitenkin tarkoituksenmukaista, koska tämän tutkimuksen tavoitteena on kuvata tavanomaisten asiatekstien (oppikirjatekstit, tieteelliset tekstit, sanomalehti- ja aikakauslehtitekstit) rakenteellisia piirteitä.

Tekstirakenne muodostuu niistä erilaisista sidoksista (text-structural relations), joilla tekstin propositionit/ propositioniryhmät liittyvät edeltäviin propositioneihin/propositioniryhmiin ja välittömästi tai välillisesti tekstipiiikkiin.

Tutkimuksen tarkoituksena on ollut selvittää minkälaisia edellä mainitut propositioiden väliset ja propositioiden ja tekstitopiikin väliset sidokset ovat.

3 Viestirakenne (message structure: MSU) ja viestistrategia (message strategies: MSA): kaksitasoinen tekstirakenteen kuvausmalli (the MSU-MSA model)

Tekstirakenteen tarkastelun yhtenä perusoletuksena on, että tekstissä esiintyy sekä tekstin viestin välittymisen kannalta välttämättömiä propositioita että sellaisia, jotka eivät kyseisessä kontekstissa lisää tietoa vaan ovat joko aikaisemman toistamista (esim. parafrasit, yhteenvedot, esimerkit) tai muuten tekstitopiikin kehittymisen kannalta toisarvoisia (esim. kirjoittajan selostus tekstin kulusta). Jälkimmäisten, *viestistrategisten propositioiden (message-strategic propositions)*, oletetaan lisäävän tekstin ymmärrettävyyttä, vakuuttavuutta tai kiintoisuutta. Ne ovat osoituksena kirjoittajan lukijalle osoittamasta huomiosta. Edellä esitetyn propositioiden erilaisia funktioita koskevan oletuksen perusteella mallissa on määritelty kaksi näkökulmaa tekstirakenteen kuvaukseen: *viestirakenne (message structure)* ja *viestistrategiat (message strategies)*. Tekstin viestistrategiat muodostuvat niistä sidoksista, joilla tekstin viestistrategiset propositiot liittyvät informatiivisesti välttämättömiin propositioihin. Viestirakenne muodostuu puolestaan sidoksista, joilla tekstin informatiivisesti välttämättömät propositiot liittyvät toisiinsa ja välittömästi tai välillisesti tekstitopiikkiin. Viestirakenteen sidoksissa erotetaan kaksi päätyyppiä: *ydinsidokset (message-core relations/functions)* ja *loogiset sidokset (logical relations/functions)*. Vastaavia propositioita kutsutaan *ydinpropositioiksi (message-core propositions)* ja *loogisiksi propositioiksi (logical propositions)*. Loogisten sidoksien merkitykset ovat samoja kuin lausetason alistus- ja rinnastuskonjunktioiden (esim. addition, cause-consequence, condition, alternative). Ydinsidokset on ilmaistu kirjoittajan toimintana eli mitä kirjoittaja on tehnyt tekstitopiikille sanoessaan siitä jotakin (esim. attribuutio, elaboraatio, evaluaatio, instruktio, sitoutuminen). Edellä mainittujen eri ydinsidostyyppien on oletettu määräytyvän tekstin tarkoituksesta (illocutionary purpose) yhtenä kirjoittajan puheaktina. Tutkimuksessa on pyritty osoittamaan, että tekstitason ja lausetason puheakteilla on samanlaiset tarkoitukset. Täten erilaiset ydinsidostyyppit on johdettu lausetason puheaktien tarkoituksista.

Tekstityyppiteorian perusteella on oletettu, että teksteissä on erotettavissa vallitseva ydinsidostyyppi, joka määräytyy tekstin tarkoituksesta yhtenä kirjoittajan puheaktina. Tämän perusteella on laadittu tekstityyppikohtaisia viestirakenteen malleja. Tekstityyppien tavoin nämä mallit ovat teoreettisia konstruktioita.

Tekstirakenne -käsitteen hahmottamista vaikeuttaa se, että rakenne muodostuu abstrakteista merkityksistä, jotka sitovat tekstin propositioita. Tämän vaikeuden minimoimiseksi tutkimuksessa on mallin idean selostamisen jälkeen otettu käyttöön funktio -käsite (function), jota käytetään viittaamaan sekä tekstirakennesidokseen että propositioon, joka liittyy tämän sidoksen kautta toiseen propositioon. Mallissa on eritelty ja määritelty erilaiset viestirakenteen ydinfunktiot (esim. attribution, elaboration, evaluation, basis) ja loogiset funktiot (esim. addition, cause, consequence, condition) sekä erilaiset viestistrategiset funktiot (esim. reformulation, summary, metastatement). Kutakin funktiota on havainnollistettu tekstiesimerkeillä. Tekstirakenteen analyysissä viestirakenteen ja viestistrategioiden kuvaus kulkee sisäkkäin siten, että viestirakenteen funktioiden voidaan osoittaa toteutuvan viestistrategisten funktioiden kautta silloin, kun strategista ainesta esiintyy.

4 MSU-MSA -mallin testaus

Mallin soveltuvuutta englanninkielisten asiatekstien tekstirakenteen kuvaukseen testattiin 18 tekstin aineistolla, johon sisältyi otteita (kolmen kokonaisen artikkelin/luvun lisäksi) tieteellisistä artikkeleista, yliopiston kurssikirjoista ja *the Guardian* ja *Time* -lehdistä. Otteet olivat artikkeleiden/kurssikirjan lukujen alusta. Koska malli perustuu käsitykseen, että tekstillä on tekstitopiikki, jonka käsittelyyn kaikki tekstin propositiot osallistuvat, malli etsii jokaisesta tekstiotteesta sen tekstitopiikin ja kuvaa tekstiotetta itsenäisenä tekstinä.

Mallin testauksella haluttiin selvittää

(1) tarjosiko malli riittävän rakennefunktioiden valikoiman aineiston tekstiotteiden tekstirakenteen kuvaamiseksi

(2) sisältyikö malliin funktioita, jotka osoittautuivat päällekkäisiksi tai muuten tarpeettomiksi

(3) ydinfunktioiden, loogisten funktioiden ja viestistrategisten funktioiden jakaumaa eri tekstityyppejä edustavissa tekstiryhmissä

(4) yksilöityjen ydinfunktioiden, loogisten funktioiden ja viestistrategisten funktioiden jakaumaa eri tekstityyppejä edustavissa tekstiryhmissä

(5) MSU-MSA -mallin yleistä soveltuvuutta autenttisten asiatekstien rakenteelliseen kuvaukseen.

5 Havainnot

MSU-MSA -malliin määritellyt tekstirakenteen funktiot 'riittivät' aineiston tekstien rakennekuvaukseen. Aineistossa ei esiintynyt kolmea malliin sisällytettyä funktiota mutta niiden puuttuminen voitiin selittää aineiston valintaan ja suhteelliseen suppeuteen viitaten.

Ydinfunktioiden, loogisten funktioiden ja viestistrategisten funktioiden jakauma eri tekstityyppejä edustavissa tekstiryhmissä osoitti, että loogisten funktioiden määrä ei ole tekstityyppisidonnainen ja että viestistrategisten funktioiden määrä on odotetusti suhteellisesti suurempi käsitteellisesti vaikeampiselkoisissa expositorisessa ja argumentoivassa tekstityypissä kuin konkreettisemmalla tasolla liikkuvassa narratiivissa. Ydinfunktioita oli luonnollisesti eniten kaikissa tekstityypeissä, koska ne muodostavat viestin rungon. Edellisten ohella funktioiden kvantitatiivisen tarkastelun tuottama tärkeä havainto oli, että eri ydinfunktioiden jakauma eri tekstityyppejä edustavissa tekstiryhmissä tuki tämän tutkimuksen perusoletusta siitä, että eri tekstityypit erilaisine puheaktin tarkoituksineen tuottavat erilaisen viestirakenteen, jossa esiintyy tietty vallitseva ydinfunktioityyppi.

Kvantitatiivisen tarkastelun tuloksia tärkeämpiä olivat pitkien autenttisten tekstiotteiden rakenneanalyysistä nousseet yleiset tekstiä, tekstin merkitystä ja tekstirakenteen kuvausta koskevat havainnot. Seuraavat seikat nousivat esiin analyysistä:

(1) Tekstirakenteen hahmottuminen on riippuvainen tekstitopiikin valinnasta. Käsitys tekstirakenteesta ja tekstin merkityksestä voi vaihdella riippuen siitä minkä asian lukija tunnistaa tekstin topiikiksi. Jotkut tekstit näyttävät jättävän enemmän tulkinnan varaa kuin toiset tekstitopiikin määrittämisessä. Toisaalta lukijat voivat myös valita 'oman' tekstitopiikkinsa kiinnostuksensa,

maailmantietonsa, tai lukemisen tarkoituksensa mukaisesti. Erot tekstitopiikin mieltämisessä voivat johtaa eroihin tekstin merkityksen tulkinnassa.

(2) Suoria viittauksia tekstitopiikkiin voi tulla myös tekstirakennehierarkian alemmilta tasoilta. Mikäli on eroja siinä, miten eri lukijat painottavat propositionaalisia merkityksiä ja miten he tunnistavat ja huomioivat tekstirakenteellisia sidoksia, rakennehierarkian eri tasoilta tulevat viittaukset tekstitopiikkiin voivat aiheuttaa erilaisia tulkintoja tekstin välittämästä viestistä.

(3) Teksti ei aina tarjoa yksiselitteisiä vihjeitä tekstirakenteen sidoksien merkityksistä. Tällöin lukijat tulkitsevat niitä omaan maailmantietoonsa nojaten. Täten tekstirakenteen sidokset muodostavat yhden tekstin merkityksen tulkintaerojen lähteen.

(4) Tekstin lähestymistapa, joka MSU-MSA -mallin tavoin perustuu tekstitopiikkiin tehtyjen viittausten seuraamiseen, jättää huomiotta lukuisat muiden viittaussuhteiden seurauksena syntyneet tekstin 'sivukertomukset'. Tämä seikka todennäköisesti lisää tekstin merkityksestä syntyvien tulkintojen määrää.

(5) Sen lisäksi, että tekstin propositioilla on välitön tai välillinen sidos tekstitopiikkiin, ne voivat liittyä tekstirakennesidoksin useampaan kuin yhteen edeltävistä propositioista. Tämä tarkoittaa sitä, että propositiolla voi olla useampia tekstirakenteellisia funktioita. Tätä mahdollisuutta ei ole otettu huomioon MSU-MSA -mallin alkuperäisessä kuvauksessa. Tekstirakenne voi olla mallin hahmottelemaa rakennelmaa huomattavasti monimutkaisempi. Kuitenkin mallin kuvaus yhä pätee, koska se osoittaa sidosten minimitilan.

6 Johtopäätökset

MSU-MSA -malli perustuu oletukseen, että tekstin merkitys on löydettävissä tekstistä, kun vain riittävän hyvin tunnetaan tekstin ominaisuudet. Tekstiligvistikissa kirjallisuudessa on esitetty näkemyksiä, että tekstin merkitys syntyy aina vasta lukijan tulkinnasta. Edellä esitetyt havainnot osoittavat useita selityksiä erilaisten tulkintojen syntymiselle tekstin merkityksestä (kohdat 1-4 yllä). On ilmeistä, että erilaiset käsitykset tekstin merkityksestä liittyvät erityisesti tekstirakenteen sidosmerkityksien tulkintaan. Erilaisten tulkintojen mahdollisuus ei kuitenkaan horjuta käsitystä, että teksti kuljettaa merkitystä ja merkityksen osatekijöiden tunteminen voi helpottaa ymmärtämistä. Täten tässä tutkimuksessa on pyritty määrittelemään propositioiden välisiä sidoksia, jotka yhdessä propositionaalisten merkitysten kanssa muodostavat tekstin viestin. Erilaiset sidosmerkitykset ovat todellisia ja optimaalisissa tapauksissa teksteistä kiistatta osoitettavia, vaikka on mahdollista, että eri lukijat erilaisine kulttuurisine taustoineen ja erilaista maailmantietoa omaavina tulkitsevat tekstin merkitysvihjeitä eri tavalla. Mallissa määriteltyjen viestirakenteen funktioiden voidaan olettaa muodostavan universaaleja viestirunkoja. Viestistrategiat sen sijaan ovat todennäköisesti avoimempi kulttuurisidonnainen kategoria.

Laajan tekstin merkitystä koskevan tutkimuksen pitäisi tarkastella myös niitä kulttuurisia tekijöitä, joiden voidaan olettaa vaikuttavan tekstien laatimiseen ja tulkitsemiseen. Sellaisessa vertailevassa tekstipragmaattisessa tutkimuksessa MSU-MSA -tyyppinen malli voisi toimia tulkintaerojen kuvausjärjestelmänä.