

# Rhetorical Structure Theory in study of the schematic, rhetorical and paragraph structure of matriculation essays in Finnish as a second language

## *La Teoría de Estructura Retórica empleada en estudio de estructura esquemática, retórica y párrafo en exámenes de Bachillerato del finés como segunda lengua*

**Johanna Komppa**

University of Helsinki

P.O. Box 3, FIN-00014 University of Helsinki

johanna.komppa@helsinki.fi

**Resumen:** Tesis doctoral en Lengua Finesa realizada por Johanna Komppa en la Universidad de Helsinki (HU) bajo la dirección del Dr. Jyrki Kalliokoski (HU) y la Dra. Susanna Shore (HU). El acto de defensa de la tesis tuvo lugar el viernes 31 de agosto de 2012 ante el tribunal formado por la Dra. Marja-Leena Kuronen (Aalto University School of Business), la Dra. Mirja Tarnanen (Universidad de Jyväskylä) y la Dra. Sanna Tanskanen (HU). La calificación obtenida fue 6 (eximia cum laude approbatur) en una escala de 1 (más bajo) - 7 (más alto).

**Palabras clave:** ensayo expositivo, La Teoría de Estructura Retórica (RST), estructura semántica, párrafo, salto de párrafo, escribir en segunda lengua, escribir en nivel preuniversitario, examen de bachillerato.

**Abstract:** A PhD thesis in Finnish by Johanna Komppa at the University of Helsinki under the supervision of Professor Jyrki Kalliokoski (University of Helsinki) and Susanna Shore, docent at the University of Helsinki. The thesis was defended on 31 August 2012. The members of the defence committee were Dr. Marja-Liisa Kuronen (Aalto University School of Business), Professor Mirja Tarnanen (University of Jyväskylä) and Professor Sanna Tanskanen (University of Helsinki). The thesis was rated 6 on a scale of 1 (lowest) to 7 (highest).

**Keywords:** expository essay, Rhetorical Structure Theory (RST), schematic structure, paragraph, paragraph break, second language writing, upper secondary school writing, matriculation examination.

### **1 Objectives and motivation**

In the Finnish Matriculation Examination, a candidate whose mother tongue is not Finnish can choose the test in Finnish as a second language (L2) instead of the test for native Finnish writers (MEB, 2015). Both tests include an essay and both evaluate the maturity of the candidates. Successfully passing either test permits the candidate to enrol in academic studies in any subject at the university level. From the perspective of a candidate's academic

language proficiency (Cummins, 2003) it is interesting to analyse how candidates with Finnish as a second language build the schematic and rhetorical structure of their essays and what common features can be found in the individual essay structures.

The incentive for writing this thesis is based on my experience in how writing is taught in Finland. Course instructors often evaluate the structure and paragraph breaks in students' texts and discuss essays in a prescriptive manner. Yet the descriptive knowledge about paragraphs and paragraph breaks is largely superficial. The

question arises of how teachers might discuss writing structure in a more detailed and descriptive manner than is now done. Could the concepts of Rhetorical Structure Theory (RST), namely nucleus and satellite, and the relations it outlines be used in teaching writing?

The PhD thesis analyses the schematic and rhetorical structure of matriculation essays written in Finnish as a second language in a descriptive manner. The objective is threefold: Firstly, the study focuses on increasing descriptive knowledge of the rhetorical and schematic structure of expository essays written in Finnish as a second language. Secondly, it examines the written texts according to their paragraph structure and combines the results of the analysis based on RST with the paragraph breaks made by the authors of the essays. Finally, the thesis tests a theory of text structure on texts written by non-native students.

The corpus for the thesis comes from matriculation essays written in Finnish as a second language test in the spring of 2001. There are 136 essays in total, but the main corpus is comprised of 96 expository essays. The essays have an average of 281 words, and their length is about one page (standard A4) when typed with 1.5 line spacing. The L2-writers' skills in Finnish can be placed on the level of B1 to C2 on the Common European Framework scale (CEFR, 2015). Most of the essays can be placed on the level of B1 to C1 though. The objective of the national core curriculum for writing in Finnish as a second language at the end of the upper secondary school is B2 (FNBE, 2003).

The study employs Rhetorical Structure Theory (Mann and Thompson, 1988) as a method for researching the structure of the essays and combines this theory with notions based on the Register and Genre Theory (Eggs and Martin, 1997), especially in analysing the schematic structures of the essays. The elementary discourse unit employed in the study is a clause, and the essays are analysed from the clause and clause complex level to whole-text level. For fulfilling the aims of the study, the rhetorical patterns at the whole-text level of the essays are particularly interesting.

The research questions are as follows:

- What is the RST structure of a matriculation examination essay written in a second language?
- What are the functional elements (Eggs, 2004) of an essay and how

can the elements be classified and separated from each other?

- What is a paragraph as a textual and discursive unit in an essay?

For annotation, the study employs O'Donnell's (2004) RST Tool 3.45 and, for the classification of the relations, ExtMT.rel in English.

## 2 Thesis overview

Chapter 1 of the thesis is an introduction to research on text structure, to research on second language writing and to the Finnish Matriculation Examination essay. The research questions are presented and the data are described in chapter 2.

Chapter 3 introduces RST as the theoretical framework and examines the rhetorical relations found in the data. In chapter 4, the focus is on the beginnings and the ends of the essays, while chapter 5 focuses on the middle part of the essays and the paragraph breaks.

Chapter 6 combines the perspectives of earlier chapters with a study of the schematic structure of the essays. Chapter 7 compiles the results and evaluates the method.

## 3 Main contributions

### 3.1 Answers to the research questions

The analysis concludes that the key rhetorical relations are ELABORATION, EVALUATION, CAUSAL RELATIONS (esp. VOLITIONAL CAUSE, VOLITIONAL RESULT, NON-VOLITIONAL RESULT), PREPARATION, SUMMARY, CONJUNCTION, CONTRAST and LIST. ELABORATION is especially frequent, both at the clause and clause complex and at the discourse level, i.e. between the elementary discourse units and large text spans. At the discourse level PREPARATION, SUMMARY, EVALUATION and LIST are common rhetorical relations. One could say that, in matriculation examination essays written in Finnish as a second language, the claims are specified using elaborations, but other relations are used less frequently.

PREPARATION, SUMMARY, EVALUATION and LIST are relations that appear in the schematic structures of the essays. The schematic structure of the expository essay typically consists of four parts: deductive or inductive orientation, topic or statement, elaboration and evaluating summary. There are also two divergent structures, which are referred to as the narrative structure and the

satellite structure. The narrative structure of the essay follows strongly the structure of narrative (e.g. Labov and Waletzky, 1967). The satellite structure is similar to the structure found in the Finnish text books (Karvonen, 1995): there is a nucleus-like topic presented at the beginning of the essay and subtopics are in a LIST relation with each other and with the nucleus.

The analysis of the interplay between rhetorical components proposed by the researcher and paragraph divisions made by the L2-writer supports the notion that the arrangement of the paragraphs both constructs and emphasises meanings in the texts (e.g. Chafe, 1994; Meyer, 1992; Stark, 1988). One paragraph can be comprised of one or several rhetorical structures, but it is noteworthy that the boundaries of a rhetorical structure may not coincide with the paragraph breaks. A rhetorical structure, which consists of two or more elementary discourse units, can be divided into two paragraphs by the author.

### 3.2 RST in the analysis of L2 texts

While the candidates are experienced in writing school essays and other texts, they are not professionals and, moreover, they are writing in a second language. In the study of texts written in a second language the plausibility of the analysis is essential. In addition to reliance on implicit relations, L2-writers use inappropriate word choices, and, for example, inappropriate discourse markers may lead to a wrong or a strange interpretation of relations. To avoid misinterpretation the researcher has to be open to differing analyses and subject the analysis to critique.

Furthermore, a reflective text written in the examination by L2-writers has the potential for various interpretations more often than texts of more precise structure, audience and aims, such as news texts or scientific articles. The essays analysed in this study were written to illustrate the language skills of the matriculation candidate. The candidate's attention may have been on such things as grammatical details, and he/she may have not paid attention to the rhetorical and argumentative structure of the essay, which can create obscurity in the essay structure. For example, once in a while a new subtopic seems to arise in the middle of a span but the proper processing of the topic comes much later in the essay. This produces

challenges to the analysis and especially to the graphical presentation of the annotation. From a teaching perspective, it is a question of lack of the planning of the essay.

Given the above, the annotation method and the tool (RST Tool version 3.45) was the source of the main challenges for the study. The tool does not allow linking one satellite to two different nuclei, and the relations between the units in the text are described horizontally rather than hierarchically. Horizontal links were needed in the analysis, for example, when the author referred to a theme discussed earlier in the essay in a satellite that is already linked to a nucleus. A relation, for example the RESTATEMENT or SUMMARY, may be evident, but it is impossible to show since the unit has already an explicit relation, such as an ELABORATION, with another nucleus. This can be seen as a problem of the tree structure of the annotation: because these cases highlight the need for links between "the branches" of the tree. Horizontal links make the representation of the spans difficult to perceive graphically.

Despite the challenges the RST and the annotation tool provided obvious advantages in analysing L2 texts. RST provides a systematic method for analysing a relatively large number of texts. The annotation tool can support the analysis effectively when the rhetorical units are compared with the paragraphs made by the author, and the different levels of the text (rhetorical and textual) are compared with each other. RST and the annotation tool make it possible to present quantitative findings about the rhetorical features of large data, although in this study the main focus was qualitative. The list of relations and their definitions tie the analysis to other studies, and the list can be modified and expanded if necessary.

### 3.3 Contributions to teaching L2 writing

The findings of this study suggest that the matriculation examination essay written in Finnish as a second language could be modified to give preference to more argumentative and expository texts by the candidates. The findings also suggest that L2 writers could benefit if they were given source material for the essays, such as letters to the editor or news articles; and the writers could use the given material when developing their arguments presented in the

essay. The given source material forces the authors to evaluate and compare their claims with the claims and arguments presented in the given material.

Furthermore, teaching the use of explicit signals, such as conjunctions and connectors, is essential if the writing skills of non-native writers are to be improved. The study supports the notion that correct use of conjunctions would improve the intelligibility of the essay even if there are several morphological or syntactical mistakes in the writing (e.g. McNamara, 2001).

The list of relations of RST may be useful in teaching writing. With the relations a student can learn to analyse his/her text and, for example, to learn how to emphasise the preferred claim by putting it in the nucleus.

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