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Cross-cultural Aspects of Academic writing: a Study of Hungarian and North American College Students L1 Argumentative Essays

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ABSTRACT

The paper presents the findings and implications of a contrastive rhetorical study of Hungarian and North American college students' L1 argumentative writing. With the help of the refined version of Mann &Thompson's Rhetorical Structure Analysis, the investigation highlights potentially culture-bound differences in the positioning and function of nuclear or thesis statements, logical organisation in terms of rhetorical structure relations on different levels of text and the representation of alternative viewpoints. Differing argumentative schemata are related to different underlying intellectual traditions, and suggestions are made for the pedagogical integration of findings.

KEYWORDS: Rhetorical structure, nucleus, satellite, hierarchical text organisation, plausibility judgment, inductive/deductive argumentation, opposing/supporting argument, listing/alternating/elaborating argument structure

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I. INTRODUCTION

Enkvist (1990) voices a common complaint of writing teachers when he says, discussing questions of coherence and interpretability, that the problem with students is not that they do not know enough English but that they cannot think. This obviously does not mean that teachers actually know what is going on in their students' heads but that they are dissatisfied with the written products that reflect students' thinking processes. In this sense, "thinking" may be interpreted as "the capacity for logical argumentation" (Enkvist, 1990: 22), the ability to present one's propositions in a justifiable order and in a coherent manner, complying with the restrictions of linearity that writing imposes on writers as opposed to the unconstrained freedom of thinking. As a teacher of Anglo-American academic writing, I have often shared the concerns described by Enkvist wondering why advancing an opinion in second language (henceforth L2) writing means such a demanding task for most of my students, who otherwise possess advanced language skills in English. While they master description or explanation relatively easily, there are aspects of Anglo-American argumentative rhetoric that pose notorious difficulty for them, which suggests that Hungarian students may have different first language (henceforth L1)-based concepts of argumentation than what is expected of them in an English writing class. The issue is all the more relevant today as the worldwide spread of English as a lingua franca raises not only questions of foreign language learning efficiency but also the controversial problem of acquiring ways of reasoning and expression inherent in the target language culture. It was this recognition that has inspired me to explore argumentation as a cultural and rhetorical phenomenon, and compare Hungarian and North American college students' L1 argumentative writing to trace elements of culture-bound difference. In the following, I shall present the most important findings of my investigation and point out some pedagogical implications.

II. CONTRASTIVE RHETORICAL PERSPECTIVES

The idiosyncratic rhetorical features of writers from different cultural backgrounds and the difficulties they face in L2 communication have been widely explored by Contrastive Rhetoric. Ever since Robert Kaplan first pointed out that "rhetoric is not universal, but varies from culture to culture" (1966: 2), there has been increasing interest in the "cultural thought patterns" of second language writers. In cross-cultural research into argumentation, different tendencies can be observed in terms of the cultures involved in and the main objectives of the investigations. Fuelled by the Kaplanean idea, attention in the 1980s was focused on the

problems second language students faced in acquiring North American rhetorical standards in US educational environments (e.g. Connor, 1984, 1987; Kroll, 1990; Stalker & Stalker, 1989). Numerous research studies aimed to contrast oriental languages with English (e.g. Hazen, 1986; Hinds, 1983, 1987; Kamel, 1989), and less attention was directed to European languages (Clyne, 1987; Tirkkonen-Condit, 1985). The 1990s have brought a shift of interest towards foreign language contexts and international academic communication, and involved different European languages such as German (Clyne, 1994), Polish (Duszak, 1994), Finnish (Connor & Mayberry, 1996) or Czech (Cmerjková, 1996) besides the continued interest in Arab (Hatim, 1997) and Asian (Fakhri, 1994) languages. The representatives of this new line of research emphasise the awareness and appreciation of cultural differences, and the need to utilise L1 literacy experience in acquiring L2 rhetoric.

To date few contrastive rhetorical investigations have been conducted involving English and Hungarian despite the increased interest in and prevalent use of the English language in Hungary (Kádár-Fülöp, 1990; Kiszely, 2001). While the quality of Hungarian English majors' L2 writing has attracted some attention recently (Horváth, 1999; Károly, 1998), these investigations do not comprise a contrastive perspective. The present study is an attempt to generate information and inspire further research in this area.

III. METHODOLOGICAL APPROACH TO THE STUDY

III.1. Aims and data collection procedures

In this exploratory, hypothesis-generating study, Hungarian and North American college students' L1 argumentative writing is examined

- to describe, on an empirical basis, argumentative schemata that have been proposed as potentially sound by the writers from the two cultures, and
- to explore potentially culture-based rhetorical differences through Rhetorical Structure Analysis.

The **main questions** to be answered are the following:

Does Rhetorical Structure Analysis indicate any differences between the two essay groups in terms of

1. superstructure organisation?

2. the function and positioning of superstructure nuclear claims (thesis statements)?

3. reasoning demonstrated in macrostructure and microstructure organisation?

The **participants** included two groups of North American and Hungarian college students, who completed an essay task in their mother tongues. The 37 Hungarian students were first-year English majors at Miskolc University; the 34 American students were mixed first-year Arts students at Southampton University, New York. Both groups of student writers can be regarded randomly selected from the point of view of L1 writing ability. The Hungarian college students had been assigned to their groups according to alphabetical order having previously passed an entrance exam, while the American students attended an optional course on Cultural Anthropology. Both groups completed the assignment in the first week of the semester before any systematic writing instruction had started. It is acknowledged that both the Hungarian and North American students had had basic writing studies in their L1 in the course of their high school studies, which may have contained elements of argumentation. This, however, does not influence the validity of the present study as it aims to explore L1 culture-based rhetorical styles which are largely transmitted through education (cf. Clyne, 1994).

The **writing task** consisted of a written clue in the students' mother tongue presenting a controversial issue (genetic engineering) followed by a question (Do you think genetic engineering will benefit people in the future?) and L1 instructions asking students to give an answer to that question and justify their opinions in about 400-500 words in their mother tongue. The context they had to imagine was entering into a public discussion about the topic on the pages of the department journal read by their peers and teachers. The task sheet can be found in Appendix 1. The task had to be completed in classroom circumstances, in 90 minutes. When picking the topic, care was taken to choose a culturally neutral topic which had been reasonably well publicised in the media. The rationale behind the mother tongue orientation both in the instructions and task completion was that 1) in this way interference of reading comprehension problems could be eliminated in understanding the clue text, and 2) difficulties of expression in L2 did not mar rhetoric in the execution of the task, either.

For the purposes of the study, it seemed preferable to limit the number of essays in the comparison to 30-30. Therefore, the shortest essays have been removed from both groups (7 from the Hungarian group and 4 from the American).

III.2. The analytical tool

Based on insights from argumentation theory, discourse analysis and related contrastive rhetorical research, the analytical tool for the present comparative study was to be one that

- is capable of capturing the generic structural potential of argumentation, i.e. accounting for different structural patterns,
- not being dependent on formal signals, lends itself easily to cross-linguistic study,
- captures the multi-level organisation of text,
- offers multiple, functional/formal criteria for identifying text components.

A framework that offers such potential is Mann & Thompson's Rhetorical Structure Theory (RST) (1988). RST is a genre-neutral analytical tool that conceptualises text as a hierarchical structure connected through logico-semantic relations termed relational propositions, which are asymmetrical binary relations between text spans. One text span in this binary relation is always more important as it carries the central proposition, while the other complements or modifies it: the former is called **Nucleus**, and the latter - **Satellite**. During the investigation, the analyst makes **plausibility judgements** about the relations that hold between the Nucleus and the Satellite and decides on schema applications that define the structural constituency of the text. To minimise subjectivity of judgement, Mann & Thompson provide a set of relations and relational definitions that hold for most logical connections in texts including, for instance, Elaboration, Reason, Circumstance or Solutionhood.

Despite being a flexible, functionally oriented and productive tool, RST has certain shortcomings as well (e.g. overlapping categories, lack of formal clues, determining text span boundaries), which has necessitated the **refinement of the taxonomy** for the purposes of the present investigation. The set of relational propositions has been tailored to reflect the characteristic components of argumentative texts identified by previous research (Grimes, 1975; Hatim, 1997; Hoey, 2001; Tirkkonen-Condit, 1985) to include Elaboration, Evaluation, Solutionhood, Justification, Situation, Background, Result, Condition, Alternatives, Concession, Contrast, Restatement, Summary, Sequence and Joint (see definitions in Appendix 2). Relational definitions have been modified to distinguish between overlapping functions. To provide supportive formal clues for identifying relational propositions, it has been supplemented by the analysis of modal/illocutionary value as modelled by Tirkkonen-Condit (1985) and Hunston (2001).

III.3. Procedures of analysis

The procedures of analysis involved four main steps: determining the formal units and yardsticks of RST analysis; performing RST analysis on three levels of text; comparing alternative viewpoints; and statistical analysis.

Determining the formal units of analysis was important for two reasons in this investigation. Firstly, in a cross-linguistic study, it is imperative that the basic units of analysis should yield comparable data. Secondly, as RST even with the adjustments for the purposes of this study, is an interpretative tool, well-defined units and some formal yardsticks can greatly enhance the reliability of the study.

The **basic unit of analysis** in the present study is the **t-unit** with the extension that reported t-units are counted separately. The t-unit, which is the main clause with its subordinated clauses, is a commonly used unit in the discourse analysis of student writing (e.g. Schneider & Connor, 1990; Witte, 1983), as it enables the researcher to include all main topics/propositions in text even in the face of improper punctuation. It is an intermediate functional unit between the sentence and the clause, which makes it possible in this particular study to include all functionally independent clauses (co-ordinate clauses and simple sentences) in the analysis, yet to exclude superfluous micro-level details arising in subordinate clauses.

Further **formal clues** have been introduced by basing the RST analysis on **thesis and topic sentences**, which have been identified on the basis of matching judgements of 3-3 trained native readers in both languages. Thesis and topic sentences are also commonly used orientation points in discourse analysis, see e.g., Tirkkonen-Condit's "dominant sentences" (1985).

Based on such formal criteria, RST analysis has been performed on **three levels of text**: superstructure, macrostructure and microstructure. **Superstructure**, a concept borrowed from Tirkkonen-Condit (1985), denotes the central relational proposition in the essays arising between the thesis and the rest of the text, as well as among the main argumentative components realised by paragraph or paragraph blocks. **Macrostructure** or paragraph structure refers to relational propositions evolving within the components of superstructure units, that is, between paragraph-level discourse blocks developing a single theme unified by a recognisable central idea or signalled by a topic sentence. Finally, **microstructure** relations are recognised as relational propositions arising between units within the macrostructure components, practically meaning sentence and t-unit level relations.

The **analysis of alternative viewpoints** is an extension of RST analysis to examine a specific feature of argumentation that has surfaced as a key feature of the present comparison. For the purposes of this aspect of the analysis, relational propositions supporting the writer's (explicitly or implicitly stated) dominant view have been termed **Supporting relations** (Supporting 1, 2, 3) and those representing other views, considerations or mitigating claims are **Opposing relations** (Opposing 1, 2, 3). Supporting and Opposing relations have been identified at super(1)-, macro(2)- and microstructure (3) levels.

The following sample analysis demonstrates the variables investigated. The analysis will be illustrated on one of the American essays that can be considered typical of its group on most measures. Figure 1. presents the essay, in which the thesis statement is highlighted in bold type and the topic sentences are italicised.

- 1. As the years roll by and scientists gain ever increasing knowledge about genes and how to manipulate them,/ more and more controversy comes to surface about whether or not this is "right"./
- 2. Should every parent be screened before they are allowed to have a child?/
- 3. Do insurance companies have the right to raise the rates of customers with "bad" genes?/
- 4. These are only two of the questions that come to mind when genetic engineering is talked about in everyday conversation./
- 5. Genetic engineering, like many modern day technologies, can, and will, be a very beneficial tool for the future if it is used in a positive manner.
- 6. When it comes to the medical field, genetic testing has become highly beneficial./
- 7. Certain diseases can be traced in genes allowing doctors to know a problem could arise at any time, and therefore catch and treat that disease before it gets out of hand.
- 8. Likewise, a couple planning their future family could know ahead of time if a possibly threatening gene is being carried./
- 9. They could then make an educated decision on when or if they should have children./
- 10. However, genetic engineering can be taken too far./
- 11. It is unethical for doctors to manipulate a fetus's genes for the sole purpose of making it a certain gender or have certain characteristics./
- 12. In addition to medicine, genetic engineering could also be used in plant biology./
- 13. Imagine growing huge foods, big enough to feed entire families./
- 14. There is no telling how much good that could do to help stop world hunger for good.
- 15. The possibilities are endless.
- 16. On the other hand, if genetic engineering and gene screening results were not kept confidential, it could be disastrous.

17. Insurance companies would try to raise rates left and right for people with certain genes./

- 18. That is hardly fair./
- 19. Individuals cannot choose genes that they are born with.
- 20. Overall, I believe genetic engineering will only be as beneficial as humans allow it to be./
- 21. If people are so intent on making a buck or manipulating fetal genes then it is obviously not as beneficial./
- 22. However, if people are ethical and have others' best interest in mind/ then the future for the concept of genetic engineering looks bright.

Table 1. American sample essay

A look at the visual representation of the essay informs the reader about the main structural units of the text as it has clear paragraph divisions marking thematic units. *The* **initial thesis statement** is also recognisable (5) following a Background passage. The thesis is a modally marked Speculative Assertion, which contains a mitigating Condition in its clausal structure. It presents an evaluative statement realising a Deductive Claim – Justification relation with the following three paragraphs.

The main **superstructure components** include Background, Justification and Summary, which are clearly indicated by visual representation, propositional content and illocutionary features. The Background section presents various aspects of the issue to be discussed in the form of Interrogatives, and is closed with an appeal to shared experience preparing the ground for the writer's position statement. The thesis statement initiates a Justification relation, in which advance organisers signal the introduction of the first argument theme (*When it comes to the medical field, ...*), the connection between the first two supporting paragraphs (*In addition to medicine...*), and the transition to the third paragraph containing alternative considerations (*On the other hand...*). Finally, although Emphatic Self-Related Assertions (EMP) are atypical, the one at the end clearly marks out the modified evaluative assertion introducing the Summary. On the basis of these surface features, the super- and macrostructure of the essay can be visualised in Figure 2.

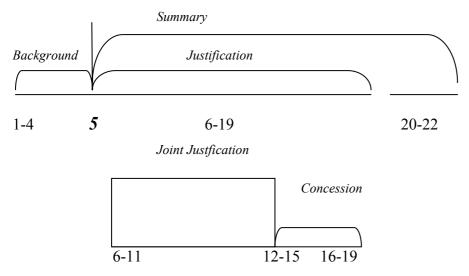


Figure 1. Super- and macrostructure relations of sample American essay

Sentences 1, 6, 12, 16 and 20 have been identified as topic sentences acting as the Nucleus in the macrostructure unit they introduce. The central Justification part is clearly distinguished by Claim – Justification - Concession, or Claim – Elaboration/Justification - Evaluation patterns, while the scene-setting and closing components are essentially elaborative. There is only one doubtful case, the relation between 14 and 15, where the non-modal t-unit contains a lexical evaluator. On the basis of the supporting modal/illocutionary analysis, in such cases the relation was identified as Elaboration in lack of any modal markedness. The microstructure of the macrostructure components is illustrated in figure 3.

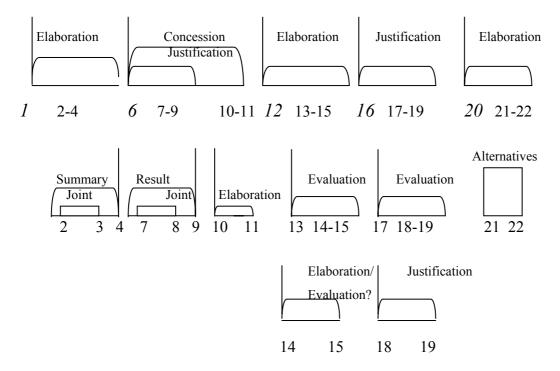


Figure 2. Microstructure relations of sample American essay

The rhetorical structure analysis is followed by the identification of **Supporting and Opposing relations** in the central Justification relation. Having a look at the RS diagrams of the sample essay, we can see that there is no complex Supporting or Opposing relation comprising further fully elaborated themes (level 3). The first two of the Justifying paragraphs represent macro-level (level 2) Supporting relations to the thesis, whereas the third paragraph is a macro-level Opposing theme expressing a Concession to the dominant position.

Concerning micro-level (level 1) unelaborated relations, the first Supporting paragraph contains two further Joint Supporting relations, (7) and (8-9), and an Opposing relation (10-11). The second Supporting and the third Opposing paragraphs contain no further extensions. The first Supporting paragraph realises a "listing " structure incorporating two Joint micro-level Supporting relations to justify the claim, and there are no examples of macro-level units foregrounding Concession or integrating alternating viewpoints.

As is indicated by the above sample analysis, the data to be investigated are dominantly qualitative, based on interpretative judgements about the text. However, to be able to compare the data from the two corpora, quantitative **statistical procedures** have also been conducted. As a result, in the analysis of the textual information both qualitative and quantitative measures are reported, jointly providing a complex picture.

To investigate if the two groups differ significantly in statistical terms along the parameters observed, t-tests for two independent groups have been performed in all instances when percentage data were available. In the case of comparing the representation of Supporting and Opposing relations in the two groups, when only numerical data could be calculated and the sample was small, a Mann & Whitney U-test has been conducted to check the significance of difference between the two groups.

IV. RESULTS AND DISCUSSION

Although, admittedly, effective argumentation comprises a host of varied features –from personal appeal through the effectiveness of evidence to logical organisation–, in the following Hungarian and North American college students argumentative rhetoric will be compared along three parameters: the positioning and function of nuclear or thesis statements, logical organisation in terms of RST relations on different levels of text and the representation of alternative viewpoints. Hungarian text examples will appear in square brackets in my translation.

IV.1 Thesis statements: Milestones in superstructure organisation

Thesis statements merit special attention in the analysis of argumentative essays for two reasons. Ideally, they are the carriers of the central evaluative idea, and as such, they determine the structure of the essay. On the level of superstructure organisation, initial position-taking thesis statements signal a deductive argument, while closing thesis statements result in inductive structures. In the following, I shall focus on the position and function of thesis statements.

IV.1.1 Positioning thesis statement

In the positioning of the thesis statements, the two groups demonstrate remarkable differences as highlighted in figure 4. While American students clearly favour an initial thesis placed within the first third of the essay, Hungarian students seem to be divided between the initial and closing thesis options, the closing thesis gaining a slight majority.

The position of the thesis statement essentially determines the structure of the essay in terms of **inductive and deductive organisation**. Inductive essays first present the supportive material and conclude the writer's position from it; deductive essays declare the thesis statement at the beginning and then justify it.

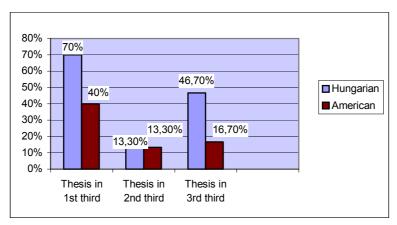


Figure 3. Position of thesis statements

American writers show a clear tendency to opt for the deductive pattern, while for Hungarian students both the inductive and deductive organisational patterns are acceptable schemata, slightly more writers choosing inductive organisation. When the thesis statement is declared in the second third of the essay, the writers attempt to combine the two patterns by devoting

the first half to a lengthy Situation and/or Background that also serves to justify the thesis, which is further supported or evaluated in the second half. This pattern was characteristic of the few solution–proposing essays in both groups, where the thesis, the proposed solution, is preceded by the Elaboration and Justification of the problem, and followed by the Elaboration and /or Evaluation of the Solution. It is interesting to observe that the number of students placing their thesis statements in the second third of the essay is similarly low in both groups, confirming the deep-lying recognition of the two basic organising schemata.

IV.1.2. Superstructure organising function of thesis statements

As follows from the differing preferences for positioning thesis statements, their function in organising the structure of the essay also varies across the two groups, as illustrated by figure 5. In the present corpus, six thesis statement types have surfaced: evaluative claim to be justified, elaborative claim to be evaluated, elaborative claim to be further elaborated, claim evaluating previous justification or solution, summarising claim, and solution-proposing claim. The thesis type appearing dominant in both essay groups is the first one, which indicates the students' recognition of the fact that the **evaluative claim to be justified** is one of the genre-specific thesis types in argumentation.

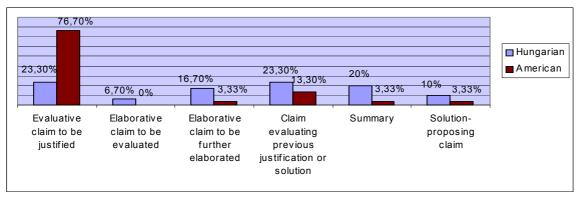


Figure 3. Superstructure organising function of thesis statements

It is the starting point of a deductive argument as exemplified by the following:

1. Even though genetic engineering seems to be beneficial for people in the future, it cannot restrain the outcome of peoples' lives./

American students clearly prefer such evaluative claims to be justified (76.7%); it also explains the dominance of initial thesis statements in the American corpus as this thesis type characteristically occurs in initial position. Although in the Hungarian corpus no such clearly

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dominating type has arisen, the justified evaluative thesis is one of the two most common choices with 23.3%.

The second dominant choice in both corpora is the **claim evaluating previous Justification or Solution.** While it is preferred to the same degree as the previous type by the Hungarian students (23.3%), it is less frequent in the American essays (13.3%). The large proportion of thesis statements evaluating or **summarising previous material** (20%) in the Hungarian group accounts for the dominance of closing thesis statements. These are also the preferable thesis statements for inductive argumentation, with the enumeration of arguments preceding the concluding evaluation as in text span (33) or summary as in units (22-23):

[33Intrusion of such quality and proportions into the workings of nature would bring into realistic and close perspective our extinction, which we have already promoted with our civil wars and environmental pollution.] (Evaluation)

[22Therefore I think that under close supervision and the widespread informing of the public, genetic experiment must be supported and not attacked,/ 23but no one should be forced to use such information or medical treatments, if they do not want to.](Summary)

It has to be noted, though, that closing evaluative and summarising thesis statements do not necessarily function as real evaluatives or reiterations of evaluative content in either group. In contrast, they may explicitly or implicitly declare a lack of opinion as in example (22-23),

[22Unfortunately, I cannot take a clear position in connection with this topic as my heart and head prompt different things,/23but I do trust that experts will serve the interests of the human kind with these scientific experiments.]

or summarise elaborative content as in:

29. The similar problem in both scenarios is this:/ 30is it better to have a less imperfect world with less ways to help the imperfect/ 31or to have an imperfect world (like we have now) with many ways to help those who aren't.

Knowledge-demonstrating, non-committal thesis statements, on the whole, seem more characteristic of Hungarian writing. Besides "false" closing evaluatives and elaborative summative statements, it is the **elaborative thesis statements to be further elaborated or evaluated** that create neutral or vague argumentation in 23.4% of Hungarian essays (7 essays), while it is only 3.3% (1 essay) in the American corpus. If such a thesis statement has been identified in an essay, it means that there is no other summative-evaluative claim in it; thus even if various viewpoints are represented in the essay, the author's position remains unclear. The two Hungarian elaborative theses to be evaluated are questions (one direct the other one indirect) asking for a problematic situation to be assessed:

- [2. Is it worth interfering with the workings of nature in the hope of a better future?]
- [3. However, what we cannot know for sure is whether genetic research will not lead the human kind to extinction.]

Such Question - Response patterns would be acceptable argumentative superstructure models if they also contained a position claim in addition to the problem-setting elaborative statement. In these two cases such position claims are missing.

The extreme examples of non-committal elaborative argumentation in the Hungarian corpus are the five essays containing an elaborative thesis further elaborated by the rest of the text. In these instances the thesis statement is typically a declaration of the fact that the problem has "two sides", which is followed by the further listing/elaboration, and perhaps lower-level evaluation, of these viewpoints. The following statement represents this category:

[4.These days we already know that the knowledge of the results of genetic testing has great advantages and disadvantages.]

Again, although some of these elaborative essays represent different viewpoints even with Concessive superstructure and macrostructure links, owing to the lack of a position statement, they do not have strong argumentative potential.

Solution-proposing thesis statements, also acceptable alternatives both in inductive and deductive argumentation, are atypical in both groups.

Overall, what the emerging picture shows is that while American students tend to follow one dominant pattern by formulating their thesis statements as evaluative claims to be justified, in the Hungarian essay group there is a greater variety of possible patterns. Closing thesis types dominate and there is also significant preference for elaborative thesis statements.

IV.2. Logical organisation in terms of RST relations on different levels of text

The variety of RST relations has made it possible to discern varied patterns of logical organization on all levels of text. The first step in the analysis was the statistical analysis of all RST relations, which gave a quantitatively-based, overall picture of dominant relational propositions. This was followed by a detailed, largely qualitative study of logical relations on superstructure, macrostructure and microstructure levels.

IV.2.1. Overview of relational propositions: Quantitative differences

Although the hierarchical organisation of text is accepted as a kernel principle in the present study, it is still worthwhile having an initial look at all relational propositions regardless of the level of text organisation at which they occur. Figure 6. presents the relational propositions where significant differences have appeared.

RSA		No	Group Means	Standard	T-Value	Significance
Categories				Deviation		Value
Concession	ı 1	30	1.2E+08	84010317,9	3.3137	.003*
	2	30	5.7E+07	68861330,6		
Justific.	1	30	7.5E+07	58773067,4	-1.857	.068*
	2	30	1.1E+08	78072579,6		
Result	1	30	3.0E+07	32058399,0	-2.161	.035*
	2	30	5.3E+07	49065956,6		
Backgr.	1	30	1.7E+07	20271703,6	-2.248	.028*
	2	30	3.1E+07	29344525,8		
Condition	1	30	9510841	17160815,3	1.943	.057*
	2	30	2792445	8004467,84		
		1		1	1	1

Hungarian essays are No.1, American essays are No.2

Figure 6. Comparison of relation types: Statistical results

The statistical analysis of relational propositions demonstrated that there are three relations in the occurrence of which there is a significant difference (p<.05) between the two groups (Background, Concession and Results), and further two relations are on the borderline of significance (Justification and Condition), which indicates a strong tendency.

Background has been identified as a relational proposition which sets the scene for a new topic at different levels of organisation. The American students provide more Background links (t=2.248 S=.028), which can be conceived as part of the Problem element, highlighting the different aspects of the topic or the possible viewpoints related to it, and as such acts a springboard for the writer to develop a position.

Justification, Result, Concession and Condition are all important ways of proposing and supporting claims. With t=1.857 S=.068, American students show a strong tendency to use more **Justification** links, which is an indication of striving for proof-oriented rhetoric. An important aspect of this rhetoric is pointing at the consequences or results of various courses of action, demonstrated by the preference of American students for **Result** relations (t=2.161 S=.035). The following passage is an example in which the claim against genetic engineering rests on the undesirable result as justification:

14. Genetic engineering alters the natural way of things/15. and could lead to the creation of a whole new race of "perfect" people./16. This could lead to discrimination, by insurance companies, employers, and even the government due to crossing genes, something they can't control - something that shouldn't be controlled./17. For as people are increasingly more programmed to become "perfect" they may lose their individuality and eventually even themselves, / only to become a product of science, rather than a human.

The topic sentence introduces the idea of the negative consequence (15), and then the effect is reinforced by adding another undesirable Result (16) justified by (17).

In contrast, Hungarian students find it important to bring in others' views as well as voice their doubts or reservations in connection with a topic. **Concession**, essentially representing a new viewpoint which is in contrast with the preceding or following one, is a significant feature of Hungarian students' writing (t=3.137 S=.003), resulting, on the one hand, in knowledge demonstration, an emphasis on giving a thorough treatment of the issue, and, on the other hand, in vagueness due to the lack of a final position statement. This vagueness is also reinforced by the Hungarian students' preference for **Conditionals** (t=1.943 S=.057), which dominate Justification components with imagined, hypothetical examples and

claims. The following extract illustrates a typical combination of multiple Concessive relations with a non-committal topic sentence and a Conditional relation:

[9.Gene manipulation is extremely dangerous/ 10. and involves huge responsibility./ 11In my opinion, it will definitely benefit people up to a certain point,/ 12. and it will be a scientific breakthrough in medicine as well./ 13. However, it is quite frightening that one can decide what qualities his/her child should inherit./ 14. At the same time, if all this can be realised, I think many will undergo different tests,/ 15. and I can also imagine that the medicine for cancer, one of the most horrible diseases of our time, will also be discovered./]

Here, a seemingly evaluative, but in fact non-committal, topic sentence (9-10) is elaborated by units (11-12). This is followed by a Concession (13), which, in turn, is countered by another Concession (14-15) proposing a hypothetical positive claim with a Conditional link (14) as well.

In sum, a general overview of relational propositions at all levels of rhetorical organisation already suggests **two different profiles** for the two groups of writers. The American students lay emphasis on creating a Background to the topic, which contains the main aspects of the issue acting as a starting point for further evaluation, tend to devote more space to Justification and prefer indicating Result as a supporting device. Hungarian students, in contrast, strive for providing a complete picture by showing varied viewpoints demonstrated by a multitude of Concessive relations, and at the same time, often seem vague because of failing to draw a final conclusion and resorting to many Conditionals.

IV. 2.2. Components of argumentative superstructure

The argumentative superstructure of essays is compared on the basis of a limited set of relational propositions that can be related to argumentative components identified by earlier research. The RST relations involved in superstructure analysis are Elaboration, Evaluation, Justification, Concession, Solutionhood, Situation, Background, and Summary. First, the relation of the thesis statement to other superstructure text spans is determined, then scene-setting and closing relations are also identified. The definition of relational propositions at the superstructure level is identical with that of these relations at lower levels. However, in initial "scene-setting" position only Situation and/or Background relations were identified, while in "closing" position only Summary, Evaluation or Solution. The internal structure of

superstructure components is not analysed at this level; if there are several joint arguments in the central Justification or Elaboration relation, it will be discussed in the macrostructure analysis. This section will first examine the scene-setting component, then the discussion component and finally, the closing section.

IV.2.2.a. Scene-setting

My initial impression that the Hungarian students "find it difficult to come to the point" and take great care to set the scene before declaring their purpose or opinion has not been supported by the t-test (t= .231 S= .818). However, different patterns have emerged regarding the quality of scene-setting components. Figure 7. presents the four observed features: absence/presence of a scene-setting component, Situation or Background, and double introduction containing both Situation and Background or two independent Background sections.

The number of essays which start "in medias res" without any scene-setting is approximately the same in both groups. However, in terms of the type of scene-setting presented in the other 80%, the two groups display distinctly different tendencies. While 43.3% of the Hungarian students prefer **Situation**, describing the circumstances in which the problem has to be interpreted or the actions that have led to it, the American writers clearly favour **Background** (53.3%), which highlights the different aspects or viewpoints related to the problem, and which often contains the writer's evaluative judgement.

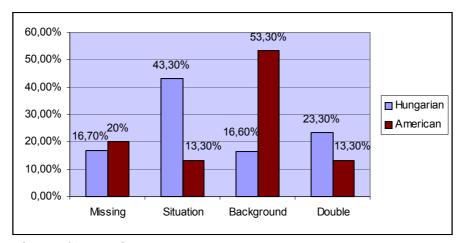


Figure 7. Scene-setting

A typical Situation passage is illustrated by (1-6), and a characteristic Background by (1-4):

1A few decades ago genetic engineering was considered a thing of the future./
2Most people couldn't fathom this "science fiction" to ever become reality./ 3But
as technology and science progress,/ the ideas got bigger and bigger./ 4As
scientist learned to read DNA strands,/ they wonder if it would ever be possible to
map the human genome./ 5That would mean decoding billions of strands of DNA,/
which would mean the project would cost millions of dollars./ 6As technology
slowly began making this dream a reality, so grew the ethical and moral issue that
come with experiments./ (Situation)

IIt has been speculated that genetic engineering will prove to be beneficial to the human race in the future./ 2This is due to its potential to revolutionize medicine and decrease the occurrence of certain diseases in babies./ 3However in addition to these possibly positive outcomes, there is a myriad of negative affects which would accompany gene testing./ 4These include the possibility of gene discrimination or prejudice, a disruption of the natural order of things, and the creation of and autonomous race./ (Background)

The American writers' tendency to establish more Background relations has already been foreshadowed by the overall comparison of relational propositions, but at that level, there was no difference in the occurrence of Situation relations in the two groups. On the superstructure level, however, Background clearly dominates at the cost of Situation.

The **double scene-setting** component is present slightly more frequently in Hungarian essays (23.3%) than in American ones (13.3%). This is probably one of the rhetorical phenomena that create the impression of delaying the purpose as in the following passage, where the thesis is in the middle of the essay and the first two paragraphs are devoted to a lengthy Situation + Background combination:

[IIn recent years research has turned into a new direction./ 2In human history exploring the surrounding environment has always been of primary concern./ 3We have wanted to get to know and influence the world around us since ancient times./ 4We have indeed succeeded./ 5Often, we did not make positive changes in our environment,/ 6but, although from our faults, the human kind has discovered the laws of nature./ 7There are increasingly few unexplored areas,/ 8the white spots have been 'coloured'./ 9However, we don't know ourselves and our inner world./ 10It was only recently that science has become able to study the genes that determine our whole existence./

11The composition of every single cell of ours is coded in these organic substances./ 12This information provides us with a host of great possibilities./ 13Let's just imagine that we would be able to cut out and correct a problematic DNA part./ 14There would be a cure for such illnesses that are — according to some, at least — inflicted upon us by God./15 At random./ 16Because why else are children born with illnesses?/ 17Why do they have diseases the causes of which are completely independent of them?/ 18As they didn't ask for/ 19or didn't cause,/ 20simply had these illnesses?/ 21By curing inborn diseases we could play God./ 22For a noble cause.

23But the coin has another side as well./ 24We face a similar decision as the designers of the nuclear bomb./ 25Nuclear energy is a wonderful thing./ 26However, as everything wonderful, this could also turn into a disaster./ 27The inextinguishable energy source — embodied by power stations — has become a nuclear bomb./ 28An invention causing death and suffering to thousands of people./ 29NOW WE ALSO HAVE TWO PATHS IN FRONT OF US. (T)

4.2.2 b. Discussion

The discussion component is the central part of the essay, which ideally contains the writer's evaluative claim and justification. As it can be seen in Figure 8, several other composition schemata have been identified in the present corpus in addition to Evaluation and Justification. An initial look at the two bottom lines shows that the general tendencies of argument composition correspond to the findings yielded by the analysis of thesis statements:

- the majority of American students (80%) follow a dominant pattern in which at least part of the discussion component justifies the thesis,
- Hungarian students are divided between two options, the same number of students (43.3% 43.3%) realising a Claim + Justification pattern as a Statement + Elaboration pattern.

	Elab	Elaboration+		Evaluation+		Justification+			Solution+		
	-	Con-	Eval	-	Jus-	Con-	-	Elab	Con-	Solu	-
		cess			tific	cess			cess		
Hun	6	5	2	2	1	1	3	-	7	3	-
Am	1	-	-	2	1	1	16*	1	4	3	1
Hun	13 (4	43.3%)* 4		I.	13 (43.3%)*				-		
Am	1*	1*		4		24 (80%)*			1		

Figure 8. Discussion

It is interesting to observe that in the American group the most dominant pattern is Justification (16 instances, 53.3%), in which no opposite view is represented on the superstructure level, and there are only 5 (16.7%) essays with superstructure Concession extensions. In the Hungarian group, however, the superstructure representation of Concession is a strong tendency with 13 occurrences (43.3%). Almost half of the Hungarian students, on the other hand, devote space to alternative viewpoints in their main argumentation as well.

4.2.2 c. Closing

To investigate the closing components of essays, five distinctions have been made: missing conclusions, evaluative conclusions, summary-type conclusions, solution-proposing conclusions and double conclusions representing a combination of the previous three types. Figure 9 displays the closing features of the two essay groups.

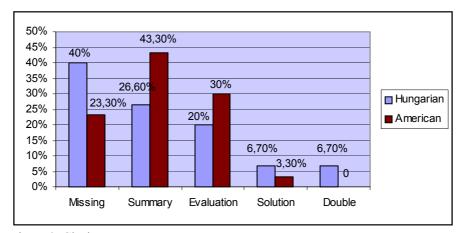


Figure 9. Closing

The only noticeable quantitative difference in this area is that the **closing section is missing** in 40% of the Hungarian essays, but only in 23.3% of American writings. Even in most of these problematic cases, however, it is possible to discern attempts to signal closing in different ways in both essay groups. One of the options appears to be including a **final argument considered to have more persuasive power than the others**. Such closing arguments are sometimes specifically signposted as in

[28And one more important thing:/29for gene technology to operate appropriately, people have to be persuaded to trust more in the successful outcome.]

A second, characteristically Hungarian, option is including a **final reservation mitigating the effect of previous arguments** as in the closing section below, following an essentially antigene testing argumentation:

[24However, I don't think that the detrimental effects of genetic manipulation will show during my or my generation's lifetime./ 25These are indeed distant perspectives/ 26and I think today's people face much graver problems, ones that call for urgent solutions.]

Finally, a third variation for attempted closing is to **evaluate or summarise the last argument, not the whole of the previous argumentation**. In the following example, the idea of perfection is one of several arguments, yet the closing (36-37) includes the writer's position only on this issue:

31By performing genetic engineering we are saying that we want to be perfect, something that can never happen./ 32Genetic engineering in the future might harm people more than it benefits them./ 33By knowing what will happen to a person, diseases, risks, etc., we are in effect laying the base for a whole new type of segregation./ 34This segregation will be based upon who has the "good" genes and who has the "bad" genes./35While from this a perfect race may be formed, but exactly what is perfect?

36In my opinion, there is no such thing as being perfect./ 37Everyone and everything is subject to being of fault in one way or another.

On the whole, American writers attach more importance to rounding off their arguments, and also use slightly more **Summary**-type closures, in which they do not introduce any new element but reiterate the most important points as in:

29The similar problem in both scenarios is this:/ 30is it better to have a less imperfect world with less ways to help the imperfect/ 31or to have an imperfect world/ (like we have now) with many ways to help those who aren't.

Evaluative closures were dominant in both essay groups, American writers opting more frequently for it. In such cases, as in the example below, the evaluative element contains new information in the sense that it **draws a conclusion** from the previous argumentation in the case of inductive argumentation or **specifies**, **extends or narrows the original evaluative thesis statement** in deductive argumentation (text span 38-45)

[Thesis: I BELIEVE THAT GENETIC ENGINEERING SHOULD NOT OCCUR.]38I see very little positive outcomes from genetic engineering at all!!/ 39I mean, I haven't even touched on the disturbances it would make with our environment, with our food, business, economy, family life .../ 40basically, genetic engineering affects the entire world/ if it gets out of hand./ 41It's UNNATURAL,/ 42and there is NO way of knowing it's true potential,/ 43and there is no way to keep it in check, or insure that it's going to stay under control!

44Now, I do favor progress,/45but this is insane!]

A third type of evaluative closing simply **reiterates the judgement** formulated in the thesis as well:

Solution-proposing closing (cf. sample (33-34) below) is uncommon, and the two instances of **double closing** found in Hungarian essays and illustrated by (20-23) are also uncharacteristic peculiarities.

33. I think as a whole race we have to decide about the genome project/ 34its not up to just one singular person because it could change the face of humanity. (Solution-proposing closing)

[20Genetic testing and genetic manipulation are integrated into medicine definitely with good intentions,/ 21but it is impossible to foretell what kind of unforeseen unexpected problems may interfere which divert these scientific experiments into bad directions and so they will not serve the interest of mankind./

22Unfortunately, I cannot take position in connection with the topic, as my heart and head prompt different things,/ 23but I do trust that experts will make sure scientific experiments shall benefit humans.] (Double closing)

The reason why this particular instance of double closing merits attention, though, is that it is a spectacular demonstration of the unwillingness of some Hungarian student writers to weigh arguments and draw a conclusion recognising that the opposite viewpoint can also be true to a certain extent. Units (20-21) quite clearly suggest that the writer judges the dangers inherent in the application of the new technology more overwhelming that the possible advantages (pros included in the concessive clause). However, she rushes to mitigate the force of the claim by adding a straightforward assertion declaring her inability to take a position and expressing a unsupported idealistic hope for something that runs counter to the previous argumentation.

IV.3. Patterns of Justification

After the overview of argumentative superstructure components, this part will focus on patterns and strategies of argumentation on all three levels of discourse organisation. As the most prominent difference that has surfaced in the quantitative comparison of RST relations is the treatment of alternative viewpoints in Concessive relations, central concern will be the further analysis of the representation of different viewpoints and arguments. This facet of the investigation stretches the scope of viewpoints beyond specific RST relations and examines the ways in which the writer's views (Supporting relations) and other, alternative considerations are represented (Opposing relations).

As this aspect of the analysis yielded a small set of numerical data on higher levels of text organisation (codes 1 and 2) and the data did not demonstrate normal distribution, a Mann & Whitney U-test has been performed to examine the differences between the two groups. Figure 10. shows the results of the statistical analysis, and figure 11. - the item number data.

Mann &	Support	Support	Support	Oppose	Oppose	Oppose	SUM	SUM	SUM
Whitney	1	2	3	1	2	3	1	2	3
U Test									
Z	-2.260	713	-2.246	-1.000	-2.440	-3.026	-2.510	-2.008	-3.883
Asymp.	.024	.476	.025	.317	.015	.002	.012	.045	.000
Sig.									
(2-tailed)									

Figure 10. Representation of alternative viewpoints at different levels of text

No	Support	Support	Support	Oppose	Oppose	Oppose	SUM	SUM	SUM
	1	2	3	1	2	3	1	2	3
Hun	7	77	101	2	23	123	9	100	224
Am	1	71	62	0	10	45	1	81	107

Figure 11. Supporting and Opposite relations at different levels of text

IV.3.1 Superstructure

Hungarian students introduce significantly more themes on all levels of organisation (SUM1=9 Z=2.510 S=.012; SUM2=100 Z=2.008 S=.045; SUM3=224 Z=3.883 S=.000). The higher representation of superstructure Supporting and Opposing relations indicates that the Hungarian essays more characteristically propose complex arguments. Among the American essays there was only a single instance of a complex superstructure theme incorporating further macro- and micro-level components (SUM1=1). On the superstructure level, both Hungarian and American student writers focus on their dominant viewpoints, and alternative views are not typically mentioned (only two Opposing1 relations for seven Supporting1 in the Hungarian group and no Opposing1 superstructure relations in the American group).

IV.3.2 Macrostructure

On the level of fully elaborated, essentially macro-level relations, there is no significant difference in the number of Supporting2 relations that the writers in the two groups introduced (77 Hungarian, 71 American), but Hungarian students proposed significantly more fully developed Opposing2 relations (Z=2.440 S=.015). (In such cases the Opposing relation is thematically related to a Supporting nuclear unit, which is why it does not appear as a separate superstructure component, but its level of elaboration satisfies the criteria for macrostructure themes.) On average, roughly every third paragraph-level Hungarian Supporting argument is accompanied by one macrostructure–level Opposing argument, when in the American essays - every seventh. These figures confirm the tendency of Hungarian student writers to include more alternative viewpoints on the macrostructure level as well.

IV.3.3. Microstructure level

In the inner structure of paragraphs, Hungarian students proposed significantly more undeveloped Supporting3 (Z=2.246 S=.025) as well as Opposing3 themes (Z=2.510 S=.002) than American writers. The Support3/SUM2, and Oppose3/SUM2 ratios (i.e. the average number of micro-level Supporting and Opposing arguments integrated into any paragraph-level argument) are also higher in the Hungarian group as illustrated in figure 12:

	Support3/SUM2	Oppose3/SUM2	SUM3/SUM2
Hungarian	101/100=1.01	123/100=1.23	224/100=2.24
American	62/81=0.765	45/81=0.555	107/81=1.32

Figure 12. Proportion of micro-level relations in macro-level units

In general terms, the above figures indicate a tendency for Hungarian writers to include minimally one undeveloped Joint Supporting argument within every macro-level unit, while only 76.5% of American macrostructure units contain such a co-ordinated lower-level support. The difference is more striking in the case of Opposing relations, where Hungarian paragraph-level arguments contain

- more than twice as many microstructure Opposing3 relations (1.23) than American macro-level units (0.555), and
- a larger number of microstructure Opposing3 relations (1.23) than microstructure Joint Supporting3 relations (1.01).

American essays, in contrast, contain more Supporting3 minimal relations per paragraph (0.765) than undeveloped Opposing3 relations (0.555). In other words, it can be stated that while every Hungarian paragraph-level claim is accompanied by at least one alternative view or mitigating claim, and a quarter of macrostructure claims by two, only half of all American paragraph-level relations contain a microstructure Opposing3 idea as well.

In reality, the distribution of Supporting3 and Opposing3 relations within macrostructure components is not so even, but the general tendencies remain, and a detailed analysis demonstrates three distinctive paragraph patterns in the representation of which the two groups differ:

- 1. "Listing" paragraph structure, enumerating several Joint relations as support material rather than, or in addition to, elaborating on the central claim,
- 2. paragraphs with alternative viewpoints incl. Counter Arguments with an initial Opposing relation, and
- 3. problematic "Alternating blocks", containing minimally two shifts of viewpoint blurring the central claim.

IV.3.3.a. Listing versus elaboration in microstructure support

The high SUM3/SUM2 ratio of the Hungarian essay group unambiguously indicates that paragraph units tend to contain a higher number of Joint Supporting and Opposing relation in the microstructure, whereas a larger proportion of American macrostructure relations comprises a fully elaborated single thematic idea. As figure 13 shows, 53% of Hungarian and 37% of American macrostructure units contain minimally

one Joint micro-level relation in addition to the central Supporting relation of the macrostructure unit.

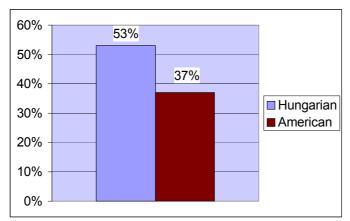


Figure 13. Proportion of "Listing" macrostructure units

Listing macrostructure units may introduce the main theme in a topic sentence Nucleus, which is in turn elaborated on or justified by joint micro-level relations without any Evaluation or Summary, as in the following:

[11The discovery of DNA chains and genes has indeed revolutionised medicine./
12The origin of several illnesses can be explored with the help of genes, which brings us one step closer to finding the cures as well./

13The transmission of a given disease from generation to generation can also be prevented by genetic manipulation./

14Besides, it is also a positive point that it is possible to check who is predisposed to a given illness and so the problem can be cured in time, perhaps even before birth./

15Another great advantage of genetic testing is that parents get to know even before the birth of the child if their offspring will be healthy/ 16and they can decide whether or not they want to take the risk.]

In this passage, the main claim (11) is supported by listing four different arguments presented in maximum two t-units (12, 13, 14, 15-16) without a paragraph-final closing relation. Figure 14 illustrates the RST structure of this passage:

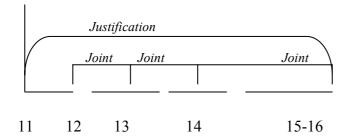


Figure 14. RST graph of "Listing" paragraph

There is an opposite tendency in American macrostructure units, where the SUM3/SUM2 ratio is lower and 63% of macrostructure units do not contain lower-level Joint relations: writers typically formulate one argument in one macrostructure relation:

12In addition to medicine, genetic engineering could also be used in plant biology./ 13Imagine growing huge foods, big enough to feed entire families./ 14There is no telling how much good that could do to help stop world hunger for good./15The possibilities are endless.

The theme introduced by unit (12) is elaborated by (13), and the whole proposition is evaluated by (14-15).

IV.3.3.b. Introducing alternative viewpoints in microstructure

The SUM3/SUM2 ratio indicates not only micro-level Joint Supporting3 relations, but also undeveloped, thematically related Opposing3 relation(s), which lead on to the second paragraph organising strategy: the representation of alternative approaches. Hungarian essays not only contain a significantly higher number of Opposing relations on the macro- and microstructure levels, but the Opposing3/SUM2 ratio is also higher (2.24) than in the American essay group (1.32). Besides integration of alternative viewpoints and mitigating remarks, the two groups also differ concerning the **positioning of Opposing views** within paragraphs. Figure 15. shows the figures indicating the number of macro-level paragraph

units integrating minimally one Opposing3 relation, and the distribution of macrostructure units containing initial, mid/final or both initial and mid/final Opposing relations:

% of Paragraphs/ All Macrostr. Units	% of Paragraphs with Min. 1 Opposing Relation	Both Initial +Mid/Final Opposing Relations	Initial Opposing Relation Only	Mid/Final Opposing Relation Only
Hungarian	57%	18%	13%	26%
American	40.7%	6.2%	14.8%	19.7%

Figure 15. Position of Opposing3 relations in macrostructure units

In the Hungarian essays, the higher number of microstructure-level Opposing relations is distributed in 57% of all macrostructure units, while in the American corpus, 40.7% of all paragraphs integrate a related micro-level alternative view. Accordingly, the number of paragraphs containing alternative views both in initial and mid/final position is also significantly higher in the Hungarian group (18%) than in the American (6.2%) as illustrated in this example:

[17I have reservations/, 18 but I do not completely refuse the issue./ 19If they can prove that it serves good causes, if I can see that those get help who are in need of it, if it is made sure that that it cannot be abused, then I may accept and even appreciate this development./ 20Indeed, I think if I get into such a situation, if my child turns out to have a disease, I would be grateful for such intervention./ 21I am aware that this procedure may never get to Hungary/ 22and if it does, it will take a long time.]

This passage is a macrostructure level Concessive relation in an essay which argues against genetic engineering. The highlighted units represent the writer's dominant opinion which act as Concessive relations to the alternative viewpoint formulated in this paragraph. While unit (17) confirms the writer's dominant opinion and acts as a transition from the previous paragraph, (21-22) are an addition which mitigates the view expressed in the paragraph.

The tendency to foreground Opposing views or mitigating remarks in paragraphs is stronger in the Hungarian group, where 31% of all macrostructure units integrates such a relation as opposed to 21% in the American essays. One of the possible functions of initial

Opposing relations, as illustrated in the previous passage, is to create transition from the previous paragraph. In other cases, initial Opposing relations contain others' views to be evaluated by the writer as in (14-16) or an alternative viewpoint of lesser significance demonstrating the writer's recognition of other, less acceptable approaches as in (5-8). The RST relations embodying alternative considerations in these examples are illustrated in figures 16 and 17.

14The second statement forms the question, "Used properly, it can give people unprecedented power over their lives"./ 15This statement boasts an aura of marketing fervor, again containing a message similar to the first statement: that the future is the answer./ 16Emphasis must be placed on the measure that actions are only accomplished now, in the present, and at no other time./

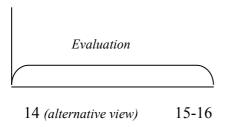


Figure 16. Example of integrated alternative consideration 1: Evaluation

5Personally, I'm not sure if I would want to alter the appearance of my child,/6but the idea of ridding a terminal disease sounds inviting./7Also, if finding a disease, or the gene for a disease, that can be stalled or prevented on some sort of way may help./8Whether or not I choose to do this or not, the possibility is still out there.

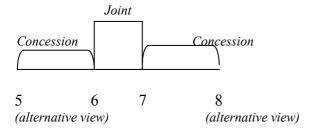


Figure 17. Example of integrated alternative consideration 2: Concession

Mid/final Opposing relations fulfil similar functions, but initial Opposing relations more strongly emphasise the writers' concern for demonstrating awareness of other possible approaches and opinions.

IV.3.3.c. Alternating paragraphs

The high representation of alternative positions is a tendency which often blurs the writer's dominant opinion and results in "alternating" presentation of Supporting and Opposing material. In the present corpus, this problematic feature is more typical of Hungarian essays (18%) than of American student writing (7.4%) as illustrated by Figure 18.

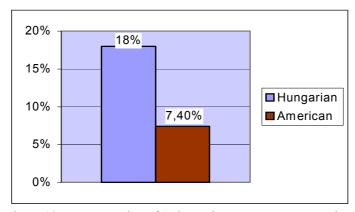


Figure 18. Representation of "Alternating" macrostructure units

In alternating units, the writer's uncertainty about the issue is reflected by shifting viewpoints several times within a single paragraph introducing alternative opinions of the same force. Consequently, it remains unclear to which opinion the writer commits himself/herself. The RST structure of this example is demonstrated in figure 19.

[32According to other opinions, however, there is "no place" in society for those who cannot live a complete life./ 33Those who are unable to work and live on state benefits only hinder social progress./ 34In fact, they promote the spiritual development of society./ 35From them, we can learn to accept differences, and help those in need./ 36Of course, it would be better for them as well if it wasn't necessary./ 37Maybe we could rather help them by re-programming their genetic material./ 38We cannot be sure whether this will ever be possible.]

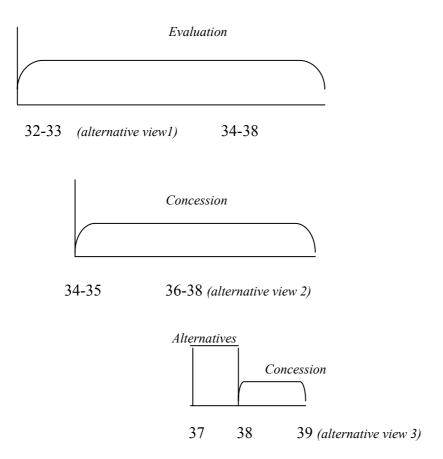


Figure 19. RST graph of the sample "Alternating" paragraph

In this example, units (32-33) initiate the discussion of the topic by an Opposing viewpoint (people who cannot contribute to economic progress have no place in society) to be evaluated and criticised by the writer (we do need them as they help our spiritual development) in (34-35). However, after the negative evaluation of the initial claim, the writer attaches a Concessive relation (36-38) essentially acknowledging the previously discarded alternative opinion from another aspect (maybe such disadvantaged people would in fact need genetic engineering). In addition, the (36-38) Concessive relation contains a further Concession (38), which mitigates the final claim too (nobody knows when it will be possible). The contrast between the first two viewpoints is clearly indicated by signalling them with "according to other opinions" and "we can learn...", but in the final Concessive, the General Inclusive Reference continues after the shift of viewpoint as well, which renders the argument confusing.

An additional problem in alternating paragraphs is the inappropriate signalling of logical relations. In such cases the signal used to connect two propositions may not

correspond to the actual logical relation between them. In the following example, supportive material is introduced as if it was a Concession relation introducing an alternative viewpoint:

[12It is indeed useful if we can develop new medicines with the help of genetics to cure as yet incurable illnesses./ 13However, it is a different question when we use genetic testing to see if the person can have a healthy child./ 14If someone feels that s/he couldn't love his/her child if it was born with a disease and wouldn't undertake bringing it up, I think it is by all means useful to undergo the test.]

The nuclear unit of this paragraph (12) declares a positive evaluative claim in connection with genetic engineering. Unit (13), while adding another potentially positive aspect justified in (14-16), is related to the nucleus with a concessive conjunction "viszont" (however) confusing the reader. The final unit (17) of the paragraph relates another Concessive, which, however, is not directly related to the previous topic presented in (13-16).

In conclusion, Hungarian student writers introduce significantly more Opposing relations on all levels of text organisation. Four patterns of organisation have been identified on the microstructure level in terms of representing alternative positions: paragraphs developing a single thematic argument, listing paragraphs, paragraphs with alternative views, alternating paragraphs. While American students opt more dominantly for single-theme paragraphs, Hungarian students typically include minimally one Opposing view in every paragraph and develop a paragraph-level argument by listing microstructure Supporting themes. Their insistence to represent a variety of viewpoints more often leads to problematic alternating paragraph structure than in the case of American writers.

V. SUMMARY AND IMPLICATIONS

The aim of my investigation was to generate information about the potentially culturally rooted differences in Hungarian and North American college students' argumentative rhetoric and to use it for awareness raising for Hungarian (or perhaps other Central European)EFL students who learn to write academic English.

The findings have in many was justified my initial hypothesis, that there are different intellectual traditions in the two language cultures that underlie rhetorical practices. Hungarian education, similarly to the Czech and Polish contexts, follows the intellectual value

system of Classical Humanism (White, 1988), where the focus is on preserving and passing on the intellectual heritage of the community without re-interpreting or re-evaluating it. All-encompassing lexical knowledge is highly valued and is a basic source of intellectual prestige. Consequently, the preferred academic practice is demonstrating one's awareness of the relevant knowledge systems appreciated by the community rather than forming an individual opinion about it. In contrast, North American educational culture can be characterised as Progressivist in White's terms, which emphasises the value of individual experience and interpretation as opposed to knowledge–preservation. Social progress is seen to result from providing individuals with the chance to develop their capacities and personalities, and enrich community culture with new insights, interpretations and values. The focus is on continuous change rather than on preservation. Accordingly, valued academic practices include the reevaluation and re-interpretation of communal knowledge systems, the contribution of individual insights, as well as the formation and justification of clear personal viewpoints.

This contrast explains most of the rhetorical differences that Hungarian and American students have demonstrated in the present study. The Hungarian students' preference for elaborating many alternative viewpoints and their resistance to evaluate and form an opinion about them reflect a school practice that values knowledge presentation. The hesitation about the use of thesis statements and the missing closing components show a focus on meaning and less concern for form. In contrast, the American student essays are characterised by a high awareness of form in terms of thesis statement formation and positioning as well as essay components. There is also a clear tendency for evaluation and justification, and a more careful elaboration of fewer viewpoints. In the foreground are the writers' own views; alternative considerations are significantly underrepresented. All this reflect an educational tradition in which individual insight and opinion, as well as the capacity to evaluate and argue are highly valued.

By becoming aware of differing intellectual backgrounds, students may see more distinctly the need to accommodate their rhetoric to the expectations of the given writing community as the reader's perception of the persuasiveness or overall quality of a piece of writing is strongly determined by these requirements. Consequently, a useful element of EFL writing programmes could be awareness raising in terms of the intellectual traditions and literary practices of both the students' L1 and L2 cultures. A comparative perspective on genre characteristics, audience awareness or acceptable degrees of assertiveness not only make interesting food for thought and project work, but also help students see their L1

background as an asset and take a more conscious – audience and context-based – attitude to academic writing.

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Appendix 1. Task sheet

Dear First Year Students,

I would like to ask you to participate in an ongoing project. As a tutor working at the Department of English Linguistics, Miskolc University, one of my primary concerns is teaching Anglo-American rhetoric and comparing it to our Hungarian standards and traditions. To be able to base my observations on authentic materials, I am collecting essays from Hungarian and British/American college students and relying on these essays, I explore the cultural differences that influence writers when putting their ideas on paper.

Please, share your ideas with me on the topic below in English. Imagine that you are writing for a departmental journal called "Coffeebreak", which is a forum for students and teachers to share their opinions on controversial issues. The text below presents such a controversial topic. Please, react to it in 400 - 500 words by stating your opinion about the issue and justifying your viewpoint.

I will be pleased to inform you about the findings of the investigation if you give me your e-mail address.

Thank you for your help in advance.

Gene testing - wanna know your future?

The Human Genome Project proves that genetic testing has the potential to revolutionize medicine. Used properly, it can give people unprecedented power over their lives. Prospective parents who discover they are silent carriers of the gene for a disease like Tay-Sachs, which causes death by the age of 3, can make better informed decisions about whether and how to have kids. Some genetic maladies can be managed through medication and lifestyle changes once they are identified. While knowing that you are at special risk for cancer may be an emotional burden, it can also alert you to the need for intensive monitoring. In spite of all these advantages however, the number of volunteers for genetic testing is still low. Sometimes not even people who might benefit from the test want to know their future. Many fear that no one can actually guarantee the privacy of genetic information and insurance companies and employers might negatively discriminate people with bad genetic "record". Others are worried that using genetic information might interfere with the workings of nature

and will lead to selective reproduction - foreshadowing a "brave new world" with perfect but inhuman beings. Although these perspectives are distant, they are becoming increasingly real.

Do you think genetic engineering will benefit people in the future? Why/why not?

Appendix 2. Refined definitions of RST relational propositions

Defining criteria for Justification

Criteria	Description
Constraints on	Modal/illocutionary character and Propositional content: N
the N*:	contains Self- or Other-Related Representative that the reader
	might not believe or consider valid to a degree satisfactory to the
	writer.
Constraints on	Typical illocutionary functions: to justify, to convince, to
the S**:	persuade, to prove
	Propositional content: rationale, reason, evidence
Constraints on	S provides rationale or support for volitional or non-volitional act,
the N+S	or claim in N, which increases the Reader's willingness to believe
combination:	or accept the situation in the N. No position constraint.
	Typical sub-relations between N-S: symptom,
	comparison/contrast, cause-effect
Effect on	Reader's belief of N is increased.
Reader:	
Dominant	Evaluative, causal or solution-proposing thesis or topic to be
sentences:	justified.
Characteristic	Causal adjuncts and prepositions: therefore, for this reason,
linguistic	consequently, despite, in spite of, as a result, as a consequence,
devices:	etc.
Example	When it comes to the medical field, genetic testing has become
_	highly beneficial. (N) Certain diseases can be traced in genes
	allowing doctors to know a problem could arise at any time, and
	therefore catch and treat that disease before it gets out of
	hand.(S)

^{*, **} In definitions Nucleus is abbreviated as N, and Satellite as S.

Defining criteria for Elaboration

Criteria	Description
Constraints on	Modal/illocutionary character: typically non-evaluative World-
the N:	Reflecting Representatives, but also Interrogatives
Constraints on	Modal/illocutionary character: typically non-evaluative World-
the S:	Reflecting Representatives
	Typical illocutionary functions: to inform, to explain, to clarify
	S provides further detail about N either by providing descriptive
	information or by relating N to another frame of reference in one or
combination:	more of the ways listed below.
	1. "Inclusion" relation
	1.1 set: member (a member of, belong to, included in)
	1.2 abstract: instance (be exemplified by)
	1.3 general: specific (a variety of)
	1.4 whole: part (be a component of, consists of)
	1.5 whole: piece (be a piece of)
	1.6 object: attribute (be characteristic of)
	2."Exclusion" relations
	2.1 whole: excluded part (be absent from)
	3. "Process" relations
	3.1 process: step (the first step in)
	3.2 process: product (result of)
	3.3 origin: product (<i>arise from</i>)
	4. "Function" relations
	4.1 Object: function attribute (<i>act as</i>)
	5. "Quality Modification"
	5.1 statement: modified statement
	5.2 statement: clarified statement
	5.3 statement: qualified statement
	Constraint on position: in the list, N represents the first member of
	the pair and S the second
	As a result of receiving additional information provided in S, the
Reader:	reader comprehends the situation in N better
Dominant	Elaborative thesis or topic
sentences:	A 1' A M 1/1 A 2' C A 27 1' 1 A 2'
Characteristic	Adjuncts: Mood/Intensity, Comment/Validation
modal	
adjuncts and conjunctions:	
	The story of eventionism explains the helief in that God evented the
Example	The story of creationism explains the belief in that God created the world.(N) Therefore with this belief, comes along the belief that
	everything happens for a purpose and that everything is basically
	predetermined.(S)
	predetermined.(5)

Defining criteria for Evaluation

Criteria	Description
Constraints on	Modal/illocutionary character: typically Emphatic Self-Related
the S:	Confident and Speculative Assertions
	Typical illocutionary functions: to assess, to evaluate
	Propositional content: represents subjective judgement of the
	attainment of a desired goal in terms of "good/bad",
	"absence/presence"
	S relates subjective positive or negative value to N.
the N+S	Constraint on position: N representing the situation to be
combination:	evaluated precedes the Evaluation S
Effect on	Reader recognises that the situation presented in S, assesses the
Reader:	situation presented in N and recognises the value it assigns
Dominant	Elaborative or solution-proposing thesis/topic to be evaluated
sentences:	·
Characteristic	Non-identifying adjectives
linguistic	Comparative adjectives and adverbials
devices:	Modal and comment adjuncts of evaluation
	Attitudinal and stance adjuncts
	Sentence patterns:
	1) It+Link Verb+Adjective Phrase +Clause
	It was certain that he was much to blame.
	2) There+LinkVerb+some/any/nothing+Adjective
	Phrase+About/In+ Clause
	There is something rather appealing about being able to spend the evening in town.
	3) Link Verb+Adjective Phrase+ Infinitive-ing clause You are right to say that.
	4) Link Verb+Adjective Phrase +That clause
	I'm fairly certain that he is an American.
	5) Pseudo clefts
	What's very good about this play is that it presents real life
	characters.
	6) Patterns with general nouns
	The surprising thing about chess is that you can get addicted to it
	quite soon.
Example	The second statement forms the question, "Used properly, it can
	give people unprecedented power over their lives."(N) This
	statement boast an aura of marketing fervor, again containing the
	message similar to the first statement: that the future is the
	answer.(S)

Defining criteria for Solutionhood

Criteria	Description
Constraints on	Modal/illocutionary character: typically Directives, but also
the N:	Assertions and even Interrogatives which contain explicit lexical
	or modal reference to the solution
	<i>Typical illocutionary functions:</i> to propose/advise/order a solution
Constraints on	Modal/illocutionary character: Interrogatives (questions,
the S:	requests), Statements and Assertions
	Propositional content: Presents a problem (descriptions of
	desires, goals, intellectual issues, gaps in knowledge or other
	expressions of needs, conditions that carry negative values, either
	expressly or culturally, including calamities and frustrations)
Constraints on	The situation presented in N is a (partial) solution to the problem
the N+S	stated in S
combination:	
	Constraint on position: S presenting problem precedes N
	proposing solution
Effect on	Reader recognises the situation presented in N as a (partial)
Reader:	solution to the problem presented in S
Dominant	Elaborative or causal thesis or topic
sentences:	
Example	The second statement forms the question, "Used properly, it can
	give people unprecedented power over their lives." This statement
	boast an aura of marketing fervor, again containing the message
	similar to the first statement: that the future is the answer.(S)
	Emphasis must be placed on the measure that actions are
	accomplished now, in the present, and at no other time. (N)

Defining criteria for Situation

Criteria	Description				
Constraints on	Modal/illocutionary character: typically World-Reflecting				
the S:	Statements and Confident Assertions				
	Typical illocutionary function: to inform				
	Propositional content: presents a situation (not unrealised)				
Constraints on	on S sets a framework in the subject matter within which the Reade				
the N+S	is intended to interpret the situation presented in the N in terms				
combination:	1) a situation in which the nuclear action is realised,				
	2) a state of the world in which the nuclear action is realised,				
	3) shared experiences to set the frame of reference for the				
	nuclear action,				
	4) development of events that have led to the present state of the				
	world.				
	No constraint on position.				
Effect on	Reader recognises that the situation presented in S provides the				
Reader:	framework for interpreting N				

Dominant	Elaborative thesis or topics
sentences:	
Example	Genetic testing has presented itself in such ways as testing for the breast cancer gene. As scientists locate positions of genes, more and more tests will become available.(S) The testing will not present a problem, but it is the way in which the information from genetic testing is handled that will present controversies.(N)

Defining criteria for Background

Criteria	Description
Constraints on	N cannot be comprehended sufficiently before reading S
the N:	
Constraints on	Modal/illocutionary character: often contains Other-Related
the S:	Representatives
	Typical illocutionary function: to inform
	Propositional content: presents background information not
	directly elaborating the theme of N
	S provides information which makes it possible for the Reader to
	better comprehend N, or creates the background to N by
combination:	highlighting the different aspects of viewpoints in connection
	with N
	No position constraints
Effect on	Reader's ability to comprehend N increases
Reader:	
Dominant	Elaborative or evaluative thesis or topics
sentences:	
Example	As the years roll by and scientists gain ever increasing knowledge
	about genes and how to manipulate them, more and more
	controversy comes to surface about whether or not this is "right".
	Should every parent be screened before they are allowed to have
	a child? Do insurance companies have the right to raise the rates
	of customers with "bad" genes? These are only two of the
	questions that come to mind when genetic engineering is talked
	about in everyday conversation.(S) Genetic engineering, like
	many modern day technologies can, and will, be a very beneficial
	tool for the future if it is used in a positive manner. (N)

Defining criteria for Concession

Criteri	Description
Constraints of S:	<i>Propositional content:</i> Writer is not claiming that the situation presented in S doesn't hold
8Constraints of the N:	Propositional content: Writer has positive regard for the situation presented in N

	Writer acknowledges a potential or apparent incompatibility between the situations presented in N and S; Writer regards the situations compatible; recognising that the compatibility between the situations presented in N and S increases Reader's positive regard for the situation presented in N No position constraints
	Reader's positive regard for the situation presented in N increases
Reader:	
Dominant	Concessive topic sentence with the conjunctions although, while,
sentences:	whereas, but
Characteristic	Concessive conjunctions, disjuncts and conjuncts (but, yet, still,
linguistic	however, on the other hand,)
devices:	
Example	The previous example is a far cry from engineering big, juicy
_	beefsteak tomatoes,(S) but it leads to the question: What next?(N)

Defining criteria for Summary

Cuitonio	Decemention
Criteria	1
Constraints on	<i>Modal/illocutionary value:</i> Mirrors that of N
the S:	Propositional character: Contains lexical or grammatical
	reference to that of N
Constraints on	N must be more than one unit
the N:	
Constraints on	S presents a restatement of the content of N, which is shorter in
the N+S	bulk
combination:	Constraint on position: N precedes S
Effect on	Reader recognises S as a shorter restatement of N.
Reader:	
Characteristic	Closing disjuncts: in sum, in conclusion, finally, all in all, to
linguistic	conclude,
devices:	
Example	As the years roll by and scientists gain ever increasing knowledge about genes and how to manipulate them, more and more controversy comes to surface about whether or not this is "right". Should every parent be screened before they are allowed to have a child? Do insurance companies have the right to raise the rates of customers with "bad" genes?(N) These are only two of the questions that come to mind when genetic engineering is talked about in everyday conversation.(S)

Defining criteria for Comparison/Contrast

Criteria	Description
Constraints on	Multinuclear, no more than two Nuclei
the N:	
Constraints on	The situations presented in these two Nuclei are a) comprehended
the combination	as the same in some respects, b) comprehended as differing in
of nuclei:	some respects and c) compared with respect to one or more of
	these differences or similarities. Writer may or may not assign
	evaluative judgement to one of the Nuclei.
Effect on	Reader recognises the comparability and the differences or
Reader:	similarities yielded by the comparison
Dominant	Evaluative or elaborative thesis or topics
sentences:	
Example	To take it to an extreme, this can be compared to the policies in
	Germany. Hitler made the Germans feel so proud about their
	traits and that they were the stronger and smarter people that
	they went out to rid the world of the weak. (N1) Are we not doing
	the same just with new technology.(N2)

Defining criteria for Alternatives

Criteria	Description
Constraints on	Multinuclear
the N:	
Constraints on	The situations presented in the Nuclei are alternatively realised or
the combination	accepted.
of nuclei:	
Effect on	Reader recognises Nuclei as alternative courses of action or states
Reader:	of the world
Characteristic	One – other, alternatively,
linguistic	
devices:	
Example	If people are so intent on making a buck or manipulating fetal
	genes then it is obviously not as beneficial. However, if people are
	ethical and have others' best interests in mind, then the future for
	the concept of genetic engineering looks bright.

Defining criteria for Result

Criteria	Description
Constraints on	S presents a volitional or non-volitional action or a situation
the N+S	which could have caused the action or situation presented in N.
combination:	The situation in N is more central to the Writer's purposes.
	No position constraints
Effect on	Reader recognises that the situation presented in S could be a
Reader:	cause for the situation presented in N.
Dominant	Causal thesis or topic, but elaborative and evaluative are also
sentences:	possible
Characteristic	Causal disjuncts and conjuncts: so, thus, as a result, as a
linguistic	consequence, etc.
devices:	
Example	Genetic engineering alters the natural way of things and could
	lead to the creation of a whole new race of "perfect" people.(N)
	This could lead to discrimination, by insurance companies,
	employers and even the government(S)

Defining criteria for Condition

Criteria	Description
Constraints on	Propositional content: S presents a hypothetical, future, or
S:	otherwise unrealised situation (relative to the situational context
	of S)
Constraints on	Realisation of the situation presented in N depends on the
the combination	realisation of the situation presented in S
of N and S	No position constraints
Effect on	Reader recognises how the realisation of the situation presented in
Reader:	N depends on the realisation of the situation presented in S
Dominant	Conditional topic sentence with the conjunctions if, in case,
sentences:	whenever, on condition that, provided that
Example	Take that away (S) and there is nothing left for people to do. (N)

Defining criteria for Restatement

Criteria	Description
Constraints on	S restates N, where S and N are of comparable bulk
the	
combination of	
N and S:	Constraints in position: N precedes S
Effect on	Reader recognises that S is the restatement of N
Reader:	
Example	The field of medicine is among the several fields that benefit from
_	the new technology.(N) Research to find cures for common
	illnesses has benefited greatly from technology.(S)

Defining criteria for Sequence

Criteria	Description
Constraints on	Multi-nuclear
N :	
Constraints on	A succession relationship between the situations presented in the
the combination	Nuclei
of nuclei:	
Effect on	Reader recognises the succession relationship between the Nuclei
Reader:	
Characteristic	Conjunctions and adjuncts of succession: then, later, after that,
linguistic	afterwards, before, beforehand,
devices:	
Example	My cousin was born with a disease that could not have been treated, the name skips my mind. He was born fine but as he grew older his eyesight motor skills and brain started to deteriorate and there was nothing we could do.
	S