The Impact of EFL Learners' Rhetorical Organization Awareness on English Academic/Expository Text Comprehension

Soryya Vahidi
Lecturer; University of Tehran, Iran

(Received: 5 September 2006, Accepted: 27 December 2006)

Abstract
This study investigates reading comprehension from the discourse point of view. It basically examined discourse knowledge of paragraph structure and the comprehension of academic/expository text. In this regard, it is assumed that it is the interaction between textual competence, including textual cohesion or rhetorical organization, and the text that can lead to discourse comprehension. Results of the study on 155 participants, consisted of two groups in two faculties of the University of Tehran, indicated that in terms of one group, there is a relationship between knowledge of text integration and text comprehension. The findings also revealed that the stage of discourse comprehension requires sufficient knowledge of discourse pattern to enable the readers to use clues for coherence and to focus on markers bringing logical relationship to the comprehension of academic text. However, regarding the results of the other group no significant differences between the experimental group and the control one was observed.

Key Words: Discourse Analysis, Text, Logical Relationship, Rhetorical Organization, Reading Comprehension, Academic/Expository Text.

1- This article is an extract from a research project entitled “On the role of knowledge of rhetorical organization on academic expository text comprehension” with the financial support of the University of Tehran.
* Tel: 021-61119125, Fax: 021-88634500, E-mail: Svahidi@ut.ac.ir
Introduction

The ability to read academic texts is considered as one of the most important skills that university students of English as a Foreign Language (EFL) need to acquire. It is argued that academic reading is often a process of actively engaging with what is read, picking up information and then fitting this information by thinking things through and finally being able to interpret. Sengupta (11) stated that academic reading is complex, multi-level and different from other kinds of reading. She also described academic reading as purposeful and critical reading of a range of lengthy academic texts for completing the study of specific major subject areas.

To help students cope with texts they may encounter in an academic setting, we need to know how the different strategies and pedagogies impact on the ways in which students approach reading in academic subjects.

Reading comprehension is described as a highly interactive phenomenon in which different interactions take place through the activity of reading. Reading itself is a complex interplay between local level bottom-up strategies (identification of meaning from the level of word upwards) and increasingly more global levels of top down, higher order mental processes and background knowledge. The interactions that develop reading ability are often brought in through strategy-related instruction—essentially a process approach to reading which goes beyond a simple set of strategies. It includes knowledge about the processes and actions involved in reading as well as knowledge about how to monitor these processes.

According to Carrell, Pharis and Liberto (647) the process approach followed in second language reading classroom might make readers aware of the available reading strategies. Indeed, if suitably contextualized, second language students could become aware of how these strategies could be used to read purposefully, actively and critically (Auerbach and Paxton, 237, Kasper, 45). Grabe (375) stated, the term interactive approach can refer both to the general interaction which takes place between the reader and the text, and to that of many component skills operating simultaneously. In the former the basic concept is that the reader reconstructs the text information based in part, on the knowledge drawn from the text and in part,
from the prior knowledge available to the reader (Barnett, 55; Carrell and Eisterhold 37). In the latter, the interaction of the cognitive skills simultaneously leads to fluent reading comprehension. Some authorities in second language reading believe that reading involves both of the interactions, i.e., lower level identification and higher level comprehension skills. However, Grabe believes that these two perspectives are complementary. Widdowson has discussed reading in this light as the process of combining textual information with the information a reader brings to a text (71).

So far, two types of interactions are distinguished. First, it is the general interaction, which occurs between the reader and the text. Second, there is an interaction between the readers' background knowledge and the text. However, apart from these two interactions, another interaction has been discussed. This refers to the interactive nature of text and discourse, i.e., reader-text or textual interaction. Since textual interaction is the concern of this study it is elaborated more here.

**Background to the study**

Language studies which are basically under the influence of communicative competence theory (Hymes, 31) deal with the type of language which has been used to communicate messages and is considered to be unified. This type of language which is language in use and for communication is called discourse. Discourse is defined as a piece of language which is meaningful and unified, i.e. coherent and contains a message for the listener / reader and it has, thus, a function. According to Cook (1989) the search for what gives discourse coherence and the analysis of the functions of language can be referred to as discourse analysis.

Discourse approach is mainly concerned with the aspects of communication and exclusively involves the quality of being unified and meaningful. Widdowson defines discourse analysis as “the use of sentence in combination” (66). Furthermore, Widdowson makes a distinction between two types of approaches in the analysis of discourse: Textual approach that concentrates on sentence in combination, and discourse approach on the use of sentences. By textual approach Widdowson emphasizes the intersentential relationships that bound the sentences
together and give them cohesion. In discourse approach he defines discourse as “language in use for communication” and discourse analysis as “the search for what gives discourse coherence”.

Carrell and Eisterhold (647) provided useful evidence for gains in reading comprehension as a consequence of teaching text structure. According to Carrell (1982), textual features in discourse such as cohesive devices, discourse markers, rhetorical organization or paragraphing are common terms that need to be considered in teaching reading skills and strategies (479). It is believed that readers, in addition to other pieces of information, should be informed about the pattern of organization and relationships among sentences in paragraph such as time order, comparison and contrast, or cause and effect.

Different studies have already discussed that the readers' knowledge of paragraph structure i.e., the knowledge of logical organization underlying each paragraph influences positively their reading comprehension ability. These studies provided evidences and claimed that if the students are aware of logical pattern of paragraph organizations, they will be more able to employ them as advanced organizers: Such meaningful organization, then, may enhance the learners' ability in reading comprehension and developing reading skill.

Another line of research is done by Carrell (1992) who worked on text structure and reading recall. In her research in addition to reporting her own study, she provided evidence from other pieces of research. She reported that research has shown not only significant effects of differences in rhetorical pattern but has also shown that students' awareness of structural pattern, especially in expository text also affect reading. Conjunctions are among those elements which bring logical relationship to the text and provide intended textual structure (3). Vahidi (1996) investigated the role of conjunctions in reading comprehension in expository/academic text (73). She tried to find out whether knowledge of logical relationships facilitates reading comprehension or not. In her research work, the subjects were examined by three conjunction tasks at three discourse levels, i.e., intra-sentential, inter-sentential and discourse level, together with a task of reading
comprehension of logical relationships of academic/expository text. The results pointed to the conclusion that knowledge of conjunction at discourse level is highly influential in academic text comprehension.

Varaprasad (3) also reports that students can be led from an application of reader-centered content-based local reading strategies to an application of writer-centered, organization-based paragraph level reading strategies, with positive impact on reading comprehension of expository/academic text (3). Sharp (111) examined the role of text structure awareness in the recall of information of expository text type: description, collection, comparison/contrast, cause/effect, and problem/solution. The result showed that text structure awareness was positively related to recall of information across all text types studied.

Theoretical Framework

There are controversial debates on the distinction between discourse and text. According to Haiday, discourse is a process that is realized in the form of text. “The term text is usually taken as referring to the products of discourse, especially, the product in its written form” (290). Brown and Yule make a distinction between discourse and text by saying that discourse is oral and text is the written form of language (48).

Since Halliday and Hassan's (1985) view is the theoretical framework on which this study has been designed, and this view has been accepted as the most comprehensive treatment of the subject "text", the discussion will mainly focus on Halliday and Hassan's theory.

In defining text, Halliday and Hassan state that “the word text is used in linguistics to refer to any passage, spoken or written, of whatever length, that does form a unified whole” (1). Halliday and Hassan strongly disagree with the opinion that text is a unit of language, rather "a semantic unit, a unit not of form but meaning" (2). They emphasize the notion that this semantic unit is realized in the form of sentences which are meaningfully interrelated with each other. They are not put together by chance to form a piece of text, but they possess unification and unity.
called by Haliday and Hassan "texture". It is the texture that identifies a text from a piece of language that is not a text. Therefore, the main issue within text analysis is the investigation of the existing relations among sentences in a text. So, in order for a text to be identified and accepted as a unified whole, there must be some sort of relations among its sentences. These intersentential relations are the subjects of the study of text analysis.

Haliday and Hassan take the view that the primary determinant of whether a set of sentences, do or do not constitute a text, depends on cohesive relationships within and between the sentences which create texture. They present a category of types of cohesive relationships which can be formally established within a text, providing cohesive "ties" that bind a text together. It is worth mentioning, however, that they refer to these cohesive ties as a device for establishing relationships within a text. This leads to textual schematic structure or the overall structure or macrostructure of the text.

Talking about above sentence level or macrostructure implies concerning with "rhetoric" and "logic". Logic itself is considered the basis of rhetoric. Closely related to an actual representation of logic and rhetoric is paragraph.

**Paragraph**

"Paragraph" equals to discourse in the sense that they both deal with stretches of sentences above the single sentence level. Paragraphs are devices for showing the minor divisions of thought within the whole text. Paragraphs are functional units in the sense that they are sentence groups that form links in a chain of thought. A paragraph may be defined as a "rounded development of a single idea" (Davidson, 52). The single idea is called the topic of a paragraph. Writing researchers believe that there are four basic forms of discourse: exposition, description, narration and argumentation. In this project, the focus of attention is on the expository paragraph. This is due to the fact that the most important way of expressing facts and ideas in science is exposition. Although other types of paragraph may also be used in scientific materials, expository text is, by far, the most frequent one used in
Exposition is the straightforward presentation of facts and ideas with the objective of informing the reader. It is done in direct and concise manner. Expository text attempts to explain to the reader what its subject is, how it works, and how it relates to something else. Because of being the most effective form of discourse for explaining difficult subjects, exposition is widely used in technical texts. "In practice, however the four types of paragraphs mentioned above may be used in a single essay; in fact one shade another" (Ibid, 52).

There are three important principles in an expository paragraph: unity, coherence, and completeness. Unity refers to the fact that all sentences of a paragraph are directly or indirectly developing the topic sentence which is either clearly stated or implied. Coherence implies that all sentences are related to one another in terms of the ideas (i.e., main, major and minor supporting) they express. And finally, a complete paragraph is as long as the writer needs to serve a purpose.

Academic/Expository text employs different methods of logic to develop the topic sentence, they are: (1) details, (2) illustration, (3) classification, (4) comparison and contrast, (5) cause and effect, and definition. "Combined method" or "composite paragraph" is not a special type of paragraph. Normally, writers use different methods of paragraph development in their writing. Thus, a single paragraph may use one or more of the methods mentioned previously. It is the nature of topic sentence or main idea that accounts for a certain method or methods of organization in exposition.

The study

In order to find out how far rhetorical consciousness works with regard to Iranian students, a representative sample of 120 Tehran University students from two faculties, (Fine Arts and Engineering) were randomly selected. All were enrolled in English courses. The participants represented the same level of proficiency. This report was made on the basis of the obtained mean score of their English scores at university entrance exam. Using T-test showed no significant
difference between two groups. The subjects were divided into four groups: two experimental groups and two control groups. Each faculty included one experimental and one control group.

The instrument used in this study to collect data consisted of two tasks. The first task was a test of reading comprehension as a criterion to evaluate participants' ability in comprehending academic text. This comprised thirty multiple-choice items based on relatively short reading selections (130 to 208 words) drawn from a variety of standard sources such as TOFEL. The expository texts were scientific and similar to those seen in college text books. They were followed by a number of multiple-choice comprehension questions (3 to 9). This academic text comprehension task was intended as an overall measure of comprehension of academic discourse.

The second task was specifically devised to measure the participants' knowledge of paragraph structure or their rhetorical consciousness. Questions were designed to elicit their awareness on certain characteristics of different methods of paragraph development. This contained three passages each followed by five questions focused on various elements involving in creating rhetorical structure in a paragraph: Questions on the types of organizational pattern of paragraph and the characteristics (i.e., discourse markers, transitional words or ...) that make them different from other types. Items such as "How ideas are organized in a classification method?" or "What establishes relationship among the sentences in cause-effect method?". These questions were followed by multiple choices related to the given passage. For Example:

In this paragraph coherence is achieved through the use of ________.

a. transition  b. illustration
b. repetition  d. exemplification

This task was only distributed to the experimental groups as a device for a further check to the results of the first task.

To prepare the material for the instruction, a ten-week lesson plan was developed. Each experimental group met one session weekly devoted to the intended treatment: the aim of the treatment was to make the participants in the experimental
groups familiar with paragraph organization and make them conscious to rhetorical structure of a paragraph. The instruction mainly consisted of two parts. First, experimental groups received some general information such as, what the purpose of developing a paragraph is, and what the common structure of a paragraph consists of. Second, they were exposed to input showing how information in a paragraph is organized and developed and what the elements involving in the development of a paragraph are. During the course of treatment, they got aware of issues such as "topic", "topic sentence" and ....... . They were also taught different methods of paragraph development including (1) details; (2) exemplification; (3) illustration; (4) cause and effect; (5) description; (6) comparison and contrast; (7) classification and definition. Considering the nature of these methods, each of them was accompanied with two or more sample paragraphs analyzed and discussed. This would help them to have practice on what they had already acquired and get master of it.

Results

The data were analyzed using T-tests and correlation statistics. Descriptive values are presented in table (1). The table depicts that the mean score of the experimental group A (15.15) overrides that of the control group A, (12.36). And for group B, as the table shows, the mean score of the experimental group (25.9) is over the mean score of the control group (27.7) as well.

<table>
<thead>
<tr>
<th>GROUP</th>
<th>N</th>
<th>Mean</th>
<th>Std.Deviation</th>
<th>Std.Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>control</td>
<td>38</td>
<td>12.368</td>
<td>3.996</td>
<td>.648</td>
</tr>
<tr>
<td>exp.</td>
<td>40</td>
<td>15.150</td>
<td>2.547</td>
<td>.403</td>
</tr>
<tr>
<td>B</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>control</td>
<td>41</td>
<td>25.915</td>
<td>3.977</td>
<td>.580</td>
</tr>
<tr>
<td>exp.</td>
<td>36</td>
<td>27.733</td>
<td>3.991</td>
<td>.729</td>
</tr>
</tbody>
</table>

This implies that the participants in the experimental groups took advantage of
the instruction and gained reasonable increase in their comprehension score.

Table (2) presents the t-value obtained from comparing the experimental group with the control group. The results show that there is a significant difference between the two groups in group A. With respect to significant differences observed in group A, it was found that, indeed, the experimental group outperformed the control group on the test of reading comprehension. This is a significant implication, and makes it possible to claim that it is due to the lack of knowledge of paragraph structure in discourse that the control group was deterred from focusing on logical relationships among text segments.

**Table 2: T-value for the comparison of two groups**

<table>
<thead>
<tr>
<th>GROUP</th>
<th>N</th>
<th>df</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>78</td>
<td>76</td>
<td>3.7*</td>
</tr>
<tr>
<td>B</td>
<td>77</td>
<td>75</td>
<td>2</td>
</tr>
</tbody>
</table>

* significant at .001

The table also depicts the t-value obtained from comparing the experimental group and the control one in group B. As we observe, the result in this group indicates no significant difference between the two groups. However, the mean score of the experimental group in group B, (table 1), overrides the control group.

As a further check, a correlation between the scores on the task of reading comprehension and the scores of the task of rhetorical structure in the experimental groups was also computed. The result showed a significant pattern of correlation ($r = .53$ at .05 level) between the scores of the task of rhetorical structure and that of reading comprehension. This clearly indicates the relationship between these two variables. Thus it can be considered that the knowledge of rhetorical structure does, indeed, play a role in EFL Learners comprehension of academic text. However, the obtained co-relational pattern is not as high as it was expected. This may be due to other factors not controlled in this study such as few outliers.
Conclusion

The purpose of this study was to investigate the relationship between the discourse knowledge of paragraph structure (rhetorical organization) and the comprehension of academic text. In terms of group A, the findings clearly indicate that subjects with better knowledge of paragraph structure in the context of academic environment demonstrate a better ability in dealing with the logical implications of the pattern of discourse in academic reading tasks. As a result, what seems quite likely to have differentiated the subjects in experimental group is their discourse knowledge (textual knowledge) that facilitates their comprehension. The significantly moderate co-relational pattern can also be interpreted as evidence that the ability to process the logical relationship within discourse, i.e. paragraph or text, is positively related to the knowledge and recognition of structural pattern of the text. So far, it can be seen that such results support the overall theoretical framework of the study. That is, there is a relationship between the knowledge of text integration and text comprehension (in this case academic text). It suggests that, the stage of discourse comprehension requires sufficient knowledge of discourse pattern to enable learners use cues for coherence and to focus on markers bringing logical relationship in a text. This makes the learners gain automaticity in processing logical relationships and ability to integrate logical information related to the comprehension of academic text.

The argument is raised here regarding the result of group B. If the learners in experimental group have gained the adequate knowledge of discourse, they should be able to perform reasonably well and significantly different. But this is not the case for group B. Then one can conclude that there may be variables -rather than the one discussed here- influential in this process. This can be attributed to variables such as discipline or cultural differences in rhetorical preferences. Regarding cultural differences, somehow relevant to this study, is the controversial area of contrastive rhetoric (CR). Interesting findings have been found in this area. In terms of Iranian EFL learners, contrastive study of written discourse with the focus on Kaplan's (1966:5) model of linearity and circularity of the English and Asian
languages pointed to some differences in rhetorical structure (Vahidi 2004:183). The study reported that in Persian writing samples (paragraphs), the idea was not as directly stated and tightly organized as English. The subjects appeared not to follow any particular organizational pattern. However, they were ultimately able to convey their ideas and serve their purpose. It seemed that they were rarely educated and well informed in their writing style. With this concern, it may be possible to relate contrastive rhetoric (CR) to reading and claim that one explanation is that the inability of learners to recognize particular organizational patterns in English means that learners see text as a series of unconnected ideas rather than an integrated piece of language. Here, one can postulate that it is due to the fact that they have no schemata of these patterns in their native language. This, therefore, tends to drawing attention to the close connection between reading, knowledge of rhetoric, and effective writing not only in English but in mother tongue as well.

In sum, discussing the findings of current study in the light of issues relevant to this line of research provides insights into the complex nature of reading and the interactions of language, culture, and education, as well as the complexity of investigating reading behavior. According to the controversial findings of the study and keeping in mind that the findings are quite tentative, no firm conclusion can be drawn. This research, thus suggests further support for, a) text-based teaching approach in practice, which includes explicit classroom analysis of text organization and integrates the teaching of reading and writing, b) explicit teaching of text structure and moving away from "lexically based strategies" common in teaching reading comprehension skills here in Iran. However, as already mentioned, what seems to be taken into consideration is that besides rhetorical awareness, other variables such as cultural differences in rhetorical preferences should be also taken into account.

Finally, it is worth mentioning that, there has been plenty of literature in this regard. However, replicating research in this line of study may provide not only the opportunity to challenge the previous findings but also to consider other aspects of the field already ignored.
References


Sengupta, S. (2002). Developing academic reading at tertiary level: A longitudinal study tracing conceptual change. The reading matrix. 2/1: 11-17


