

Rhetorical functions and techniques and their influence on academic reading and writing

CÉSAR MORALES PÉREZ

University of Córdoba

I. INTRODUCTION

A. Literature review

Many attempts have been made to demonstrate the influence of rhetorical structure in general English; The most outstanding ones have been conducted by P.L. Carrell (1984-5); apart from these some others investigations have been performed with the aim of giving evidence to the fact that knowing rhetorical structure of texts does play an concrete examples on this subject reported by Shepherd (1984). Clark (1975: 329) jumbled the order of rhetorical functions of a paragraph as a consequence her students found it difficult to reconstruct the argument of a text. A year later Urquhart compared the readability of narrative texts containing the same information but differing in overall organization. He found that the chronological order texts proved significantly faster to read and easy to recall than non cronologically equivalent. Augstein (1973: 30) taught rhetorical organization using flowcharts; This technique results in an outstanding improvement on the part of the subjects in their ability to write down summaries.

Finally as Santos (1987) points out "the recognition of markers as elements of text organization appears to be an important factor in helping students attain a detailed comprehension of the text.

B. Statement of purpose

The purpose of this research was to confirm or reject the following investigation questions:

- 1.— Does the recognition fo rhetorical functions and techniques help students understand a piece of written information better?
- 2.— Are subjects better prepared to write accurate summaries of scientific or technical

texts if they have been taught rhetorical functions and techniques?

II. METHODS

A. Subjects

Sixty students were chosen to participate in the experience. They were first year students of English Philology. All of them have been studying English for seven years, 3 years in EGB (Primary Education) and 3 years in BUP (Secondary education) and 1 year in COU (university bound course). Some subjects have been excluded from the project as they have a different ESL background, among these we can name the following:

- Those who had studied French as a foreign language in BUP
- Those who had visited an English speaking country
- Those who took either private English lessons at home or attended English lessons at a language school
- Those who resat the first course, as a result of having failed their exams in the previous year

With respect to the method of selection we have to make clear that subjects of both groups were assigned to each group randomly.

An important issue to take into account is the one of mortality, in other words, the students who self-select themselves out of a group for any number of reasons. There were five students who dropped out of the study (two of them belonged to the experimental group and the remaining to the control one); Among the reason for this attrition we could count on serious illness (one), transfer to another institution (one), dropping out of Faculty (one) a repetitive unattendance to lessons (three).

B. Materials

Both groups have worked with 36 authentic British and American short stories with an average length of 7.55 pages each story roughly 3552 words. These short stories have not been especially written for students of English as a Foreign Language; All the stories have been selected from the books "British Short Stories of Today" as well as "American Short Stories of Today" whose editor is Esmor Jones (see references). The mentioned texts deal with a wide range of topics related to the British and American way of life and consequently gives the reader a bird's eye view of the Anglo-American civilization.

We used two kinds of tests:

1.— The first type was designed to check reading skill. It consists of a two pages text of one of those stories previously mentioned and six comprehension questions. These questions were of the following types:

- Three questions of literal comprehension, also called factual "whose answers are directly and explicitly available in the text" (Nuttall, 1982: 132).
- Two questions involving reorganization or reinterpretations, "these are questions which require the students to obtain literal information from various part of the text and put it together, or to reinterpret information (Nuttall, 1982: 132). As it can be easily

deduced these types of questions require on the part of the student to see the text as a whole instead of looking at it as a set of independent sentences.

— One question of inference, "these are questions that oblige the students to 'read between the lines' to consider what is implied but not explicitly stated (...) They require the student to understand the text well enough to work out its implications. (Nuttall, 1982: 132).

2.— The second type of test was prepared to check writing skill, this test consists of summarizing a text. The reason for choosing such an exercise is the simple fact that we consider a summary as an activity impossible to be performed accurately if students have not fully understood the passage. Furthermore, the student has to master cohesion devices in order to write a coherent text.

We have designed two ways of summarizing:

— Traditional summary. Students are asked to sum up a text in, let us say, one third of total length.

— Functional summary. Students are given instructions to resume a specific or concrete aspect of a passage; In this case students have to select and summarize as well.

C. Procedures

We have used 32 short stories (as four of them have been prepared for testing) to illustrate lexical, syntactic and cohesive items as well as specific rhetorical functions and rhetorical techniques.

1.— The control group has been taught the following items:

— Morphological level:

- * How to deduce meaning through word formations (root and affixes).
- * How to deduce meaning through context (definition, synonym, antonym, hyponym, features or characteristics and general knowledge).
- * How to deduce meaning through word origin (cognate).

— Syntactic level:

- * Ways to understand complex noun groups
- * Ways to understand nominalization
- * Ways to understand coordination
- * Ways to understand subordination
- * Ways to understand participial & prepositional phrases

2.— The experimental group, apart from what have already been mentioned, has been taught:

— Cohesion level:

- * How to spot implicit cohesive devices, such as reference and substitution, ellipsis, metaphor, synonym, etc.
- * How to recognize explicit cohesive devices, namely, signals of sequencing of events, signals of discourse organization (exemplifying, focusing, specifying, etc), signals of the writer's point of view (additives, adversatives, causals). (Halliday & Hasan 1976).

— The specific rhetorical functions most commonly used in written discourse, such as

- * Description
- * Definition
- * Classification (to a lesser extend)

— The rhetorical techniques that provide relationships within the specific rhetorical functions already mentioned, the former are the following:

- * Orders (Time order, space order, causality and result)
- * Patterns (Causality and result, order of importance, comparison and contrast, analogy, exemplification and illustrations) (Trimble, 1985)

Four tests have been used to test this experiment; two of them have been devoted to check reading comprehension (pre- & post-test) and two dedicated to do the summary (pre- & post-test) as well.

The approach that we have utilized to avoid the practice effect was the counterbalance (Brown 1988) The purpose of this procedure was to see that no individual took the same test twice; So two different but equivalent tests were administered to both groups. The pre-tests of the control group were the post-tests of the experimental group. Then the opposite forms were given to each group, in other words, the pre-tests of the experimental group were the post-tests of the control group.

The score on the tests were assigned as follows:

— Reading comprehension test:

Each questions of literal comprehension	10 x 3 = 30
Each questions of reorganization or reinterpretation	20 x 2 = 40
The question of inference	30 x 1 = 30
	100

An answer to be given the total punctuation should be fully understood and correctly expressed avoiding copying word by word from the text, so paraphrasing was a useful technique especially when answering literal comprehension questions.

— Summary test:

Traditional summary	70
Functional summary	30
	100

A summary to score the highest mark has to be summed up in such a way that all important ideas have been included and that details have been left out; all these ideas should be chained together with the most appropriate text markers avoiding repeating the same structures as those in the text.

Now we will describe the conditions during the study. First of all we have to say that both groups took their tests the same day of the week (on Monday); The control group took their tests from 12:00 to 13:00 while the experimental group sat for their exams from 13:10 to 14:20. Both classrooms were situated in a quiet area of the same building. As a consequence it is obvious that these tests were performed under similar conditions.

Both groups have had a total of 19 classes (60 minutes each) once a week. The control group had lessons on Thursday from 9:00 to 10:00 while the experimental group had lessons on the same day from 13:00 to 14:00. The experience lasted six months, from mid-November till Mid-may during the academic year 1991-2. It took place at the Faculty of Letters-University of Córdoba, Spain.

D. Analyses

The data have been grouped into two different ways:

First, the scores obtained by each individual of the experimental group has been presented (table n.º 1) including both the ones of the reading and as the writing tests. In the same way as the table 1 the outcome of the control group has been presented (table n.º 2).

Second, the distribution of scores on two different frequency tables has been displayed (Valette 1977), table n.º 3 presenting the four reading tests performed by both the control and the experimental groups. Table n.º 4 showing the outcome of the pre-and post-tests on writing which have been done by both groups.

IV. RESULTS

If we look careful at the results obtained by the test-takers of the experimental group in the reading post-test (table 1) we can realize that the mentioned group has got slightly higher scores (average score X 63) than the control one (average score X 51) see table n.º 2.

On the other hand if we observe the outcome obtained by the subjects of the experimental group in the writing post-test (table n.º 1) we can notice that, again, this group got an average score of X 61 while the control group got only X 49 (table n.º 2), a remarkable difference as the latter group obtained poorer score.

The next section (Discussion/conclusions) will be devoted to comment on the results just expressed.

TABLE n.º 1
Experimental group's on the four tests.

NAME	EXPERIMENTAL GROUP		EXPERIMENTAL GROUP	
	PRE-TEST R E A D I N G	POST-TEST	PRE-TEST W R I T I N G	POST-TEST
1. FDEZ DE M.	80	100	90	100
2. SALAS S.	65	95	80	90
3. OJEDA G.	65	95	75	90
4. PENCO V.	60	90	75	85
5. ROJAS P.	55	85	70	80
6. CRESPO F.	55	80	60	75
7. CRESPO M.	55	75	65	75
8. GUTIERREZ G.	55	75	65	70
9. LEON G.	50	70	55	70
10. LEON P.	50	70	55	70
11. CABRERA P.	45	65	50	65
12. BENITEZ P.	45	65	50	60

EXPERIMENTAL GROUP

NAME	PRE-TEST	POST-TEST	PRE-TEST	POST-TEST
	R E A D I N G		W R I T I N G	
13. GRACIA S.	45	60	45	60
14. ARIZA D.	45	60	45	60
15. HUERTAS V.	45	60	45	55
16. LOPEZ R.	45	55	45	55
17. CAÑETE	45	55	45	50
18. ALCAIDE V.	45	*	45	*
19. ALCANTARA	45	50	45	50
20. JIMENA G.	45	50	45	50
21. LOSADA P.	45	50	45	50
22. CORRAL M.	45	*	40	*
23. DOBLAS L.	40	50	40	50
24. DOMINGUEZ J.	40	50	40	45
25. LIÑAN S.	40	50	40	45
26. ENRIQUEZ S.	40	45	40	45
27. ADAMUZ R.	40	45	35	45
28. AGUILERA D.	35	45	35	40
29. ARIES T.	35	45	35	40
30. ANERI B.	35	40	35	40

TABLE n.º 2

Control group's scores on the four tests

CONTROL GROUP

NAME	PRE-TEST	POST-TEST	PRE-TEST	POST-TEST
	R E A D I N G		W R I T I N G	
1. RUIZ R.	70	95	80	85
2. REINA O.	65	90	75	80
3. REVUELTA L.	65	65	60	65
4. RUIZ M.	60	60	55	60
5. SANCHEZ C.	55	55	55	55
6. SANCHEZ E.	55	55	55	55
7. TEJERO N.	55	55	55	55
8. TORRUS C.	55	55	50	55
9. PALOMARES H.	50	55	50	55
10. RELAÑO V.	45	55	50	50
11. ROMERO M.	45	50	45	50
12. SANTOS R.	45	50	50	50
13. VALENZUELA	45	50	45	50

CONTROL GROUP

NAME	PRE-TEST	POST-TEST	PRE-TEST	POST-TEST
	R E A D I N G		W R I T I N G	
14. VARGAS V.	45	50	45	45
15. OÑA S.	45	45	45	45
16. RAMIREZ L.	45	45	45	45
17. RODRIGUEZ G.	45	45	45	45
18. PALLERO M.	45	*	45	*
19. RODRIGUEZ R.	45	45	45	45
20. MORENO P.	45	45	45	45
21. NAVAJAS P.	40	45	45	45
22. RIEGO	40	45	40	40
23. MIRANDA B.	40	45	40	40
24. MURILLO I.P.	40	45	40	40
25. MURILLO I.R.	40	40	40	40
26. MEDINA V.	40	*	40	*
27. MENDOZA B.	40	*	40	*
28. MARTINEZ M.	35	40	35	35
29. PALMA C.	35	40	35	35
30. SORIA G.E.	35	35	35	35

(*) Drops-outs

TABLE n.º 3
Frequency table of the four reading tests

SCORES	CONTROL PRE-TEST READING	GROUP POST-TEST READING	EXPERIMENTAL PRE-TEST READING	GROUP POST-TEST READING
95-100		3		1
90-94		1		1
85-89		1		
80-84	1(*)	1		
75-79		2		
70-74		2	1	
65-69	2	2	2	1
60-64	1	3	1	1
55-59	4	2	4	6
50-54	2	6	1	4
45-49	12	4	11	9
40-44	5	1	7	3
35-39	3		3	1
Drop-otus		2		3

(*) These figures represent the numbers of subjects who got these scores.

TABLE n.º 4
Frequency table with the four writing tests

SCORES	CONTROL PRE-TEST WRITING	GROUP POST-TEST WRITING	EXPERIMENTAL PRE-TEST WRITING	GROUP POST-TEST WRITING
95-100		3		1
95-100		1		
90-94	1	2		
85-89		1		1
80-84	1	1	1	1
75-79	2	2	1	
70-74	1	3		
65-69	1	1		1
60-64	2	3	1	1
55-59	2	2	4	5
50-54	2	5	4	4
45-49	9	4	10	7
40-44	5	3	6	4
35-39	4		3	3
Drop-outs		2		3

V. DISCUSSION/CONCLUSIONS

Let us go back now to the introduction section to see if the research questions have been confirmed or rejected and if so, to what extent. The first investigation question was: "Does the recognition of rhetorical functions and techniques help students understand a piece of information better?".

As a result of having analysed the data in the tables we come to the conclusion that, in fact, the recognitions of these rhetorical functions and techniques do help subjects get more detailed comprehension of a text, also we have to take into account that half of the questions (reorganization, reinterpretation and inference) require the students to understand the underlying network of the text to find out the answers requested, that is to say, to fulfill their task.

After having examined closely these tests we noticed that high scores on the experimental group were due to the right answers of those questions requesting the test-takers not merely explicit information but implicit one, we mean, the ones dealing with reinterpretation, reorganization and inference.

With respect to the second investigation question, if subjects are better equipped to write precise summaries as a consequence of having been taught rhetorical functions and techniques, we have to confirm that, according to the present results, students, being able to recognize the text structure of a passage, could better distinguish main ideas from supporting details, important statements from illustrations or examples as well as they can make more appropriate use of discourse markers to link together the essential of a text.

Nevertheless we should be cautious not to think that these considerations can be applied to every teaching situation. Because elaborating detailed comprehension and accurate summaries involved other factors studied also by both groups such as deducing meaning of words and decodifying complex syntactic phrases. So subjects could have coped with the reading and writing difficulties activating the other strategies mentioned.

There are also some extraneous variables that could influence the results of a research if they are not controlled; Let us have a close look at this situation "It is possible for subjects to be so pleased at being included in a study that the results of the investigation are more closely related to this pleasure than to anything that actually occurs in the research" (Brown 1988: 32). This is the so called Hawthorne effect. This effect in our reported researcher has not been controlled as a consequence is likely to have a positive influence on the outcome. Another important uncontrolled variable is the one called subject expectancy, "which occurs when the subjects think they have figured out what a study is about and try to 'help' the researcher to achieve the apparent aims" (Brown 1988: 34). In this case the mentioned variable has been under control as a result of having been minimized the obviousness of the aims. Finally, we have to realize that "researchers have expectations that may color the results of a study" (Brown 1988: 34).

We also have to point out that students in the control group got poorer marks in other subjects of the curriculum.

A remarkable fact that occurred during the experience was that texts containing few discourse markers and consequently more implicit cohesive items had a similar difficulty for both groups and for this reason the outcome of the control and experimental group were very much alike. Because subjects in the second group even activating their links which facilitate their comprehension and ease the way to resume the texts.

To finish with we would like to offer a suggestion for further research that, from our point of view, could be quite useful: to what extent are the results of this investigation due to the other strategies that students have activated (lexical level, syntactic level, cohesion level) or as Santos stated in a recent research: "The best proportion of each of the ingredients to make the cake more delicious may serve as a very interesting topic for investigation in another piece of research by those interested in the subject. (Santos, 1987: 42).

VI. REFERENCES

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