# THE INFLUENCE OF READING UPON WRITING IN EFL STUDENTS' SUMMARISING PROCESS AN EXPERIMENT

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# 1. Introduction

Summarising has been widely used by teachers at all levels as an effective learning activity and study skill, and also as a determiner of academic success. However, students usually find difficulties in the summarising task (Tavares, 1991). This may be due to comprehension deficits or writing difficulties, or both, together with the demands of the summarising task. That is, some students lack summarising rules (Winograd, 1984).

Regarding the teaching of summarising rules, the pertinent literature is divided into researchers who favour direct teaching of these rules by

focusing on students' knowledge of text structure (Roller, 1985), those who find it is impossible to teach such rules (Williams, 1988) and those who find that teaching of not summarising rules is an unanswered question (Winograd, 1984). This last group of researchers suggest the stimuli of students' sensitivity to importance and the improvement of strategies such as the transformations required for summarising. Some other researchers (Hare, 1992) recommend that the students be given texts with familiar text structures to practice summarising.

The types of summary vary according to the text to be summarised. Informative summaries will be the focus of this study, since it involves the text, the summary writer, the form of writing and the reader (Kirkland and Saunders, 1991 and ABNT, 1988). Thus, instead of being simply a matter of rewriting texts briefly and in one's own words, summarising is a task which depends on textual variables such as: the ability to find the main ideas (Casazza,1993); the use of organisational patterns (Kintsch and van Dijk, 1978), the source text complexity (Kirkland and Saunders, 1991) and the topic of the source text (Gaskins, 1996). These variables will be the focus of this investigation and will be discussed in detail in the next section.

Summarising has been advocated by various reading and writing authorities as an effective activity to enhance reading and/or writing (writing through reading and reading through writing). These authorities consider summarising as a reading-writing activity (Hare, 1992).

A review of the literature on the interface of reading and writing has revealed a gap in the area, that is, apparently, no research has been carried out so far to investigate how reading and writing interact in the summarising process. Additionally, most researchers in this area have dealt with summarising as comprehension or knowledge assessment and have compared summarising to comprehension or recall tests. Very few researchers have looked at summarising as a means of enhancing reading and writing. (Carr and Ogle, 1987; Head, Readence and Buss, 1989). Thus, considering the dearth of the research on the interaction between reading and writing in the summarising process, and the influence of the four textual aspects of reading upon summary writing investigated in this experiment - main ideas, organisational patterns, source text complexity and topic, the research questions pursued in this study were:

- 1. Has the reading of texts in English influenced the subjects' summary writing?
- 2. Have the subjects identified the main ideas of the source texts?
- 3. Do the subjects' summaries follow one or more patterns of text organisation?
- 4. Do all summaries written by the subjects follow the same pattern/s of text organisation used in the source text?
- 5. Has the complexity of the source texts worked as a constraint to summarising?

6. Has the topic of the source text influenced the subjects' summaries positively or negatively?

# Elements influencing summarising and the reading-writing relationship

The reading-writing relationship has been of interest to many scholars for almost 20 years. One of the ways of combining reading and writing is summarising, through the reading of texts and writing summaries, which are the focus of this study. The classification of summaries as reading-writing activities is supported by Kintsch and van Dijk (1978).

An important aspect of summarising is to think of it as an umbrella of processes, strategies and concepts whose definition is not clear yet. Summarising depends on factors which, according to some authors (Hare 1992), may influence summarising. These factors are related to the individual (the reader) to the task (summarising), and to elements of the text referred to before (main ideas, organisational patterns, text complexity and topic). Some considerations about these elements will be made as follows.

Main ideas: the problems related to summarising do not seem to be the difficulties in summarising itself, but rather to the difficulty in finding the main ideas (Winograd, 1984) in the text read to be summarized.

Organisational patterns: the organisational patterns of a text seem to be related to the main ideas, as the finding of main ideas in a text is related to the organisational patterns (Baumann, 1984). The most common organisational patterns according to the literature surveyed, are: problem/solution, comparison/contrast, collection, and causation (Richgels, Mc Gee, and Lomax, 1987).

Text complexity: it is seen by some authors as an external constraint to summarising, related to the choice of materials to be summarised (Kirkland and Saunders, 1991).

Topic: the issue of the emotional arousal by the topic of the source text on the reader is emerging in the reading research literature, which considers the cultural values and beliefs of the readers to be confirmed or insulted by the topic of the text (Gaskins, 1996). Some authors suggest that this emotional arousal can be diminished or totally avoided by the students' choice of their own reading topics (Hunt Jr., 1997).

# Methodology

The subjects who took part in this experiment were nineteen¹ students from the College of Letters of Universidade Federal de Santa Catarina. These subjects read and summarised two texts on different topics, of different organisational patterns, and of different length. There was no time and summary length control, so that the subjects could feel at ease to perform the tasks. A questionnaire about the familiarity of the subjects with the topic of the source texts and how this familiarisation took place was applied. Text

one was entitled "The Growing of Green Cars" and text 2 was entitled "A Career woman looks at the future".

A Model of Analysis was built, in order to establish the main ideas, the frequency of the organisational patterns, the level of complexity and of emotional appeal by the topic of the source texts. The summaries were analysed and compared to the Model of Analysis and to the answers to the questionnaires.

# Results and discussion

The results of this experiment are being discussed in light of the research questions.

# Research question Has reading of texts in English influenced the subjects' summary writing?

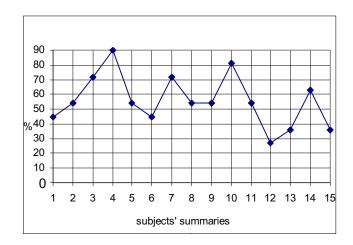
Authors in the pertinent literature contend that reading and writing are both composing processes (Squire, 1983) and thus they interact. This interaction has been observed in various experiments, which focused on main ideas identification (Winograd, 1984), text structure (Tomitch, 1995), text complexity (Kirkland and Saunders, 1991) and emotional appeal by the topic of the source text (Gaskins, 1996).

In the present study, apparently, the reading of the source texts has also influenced subjects' writing of their summaries. This influence was observed in terms of the elements mentioned above: main ideas, organisational patterns, text complexity and emotional arousal of the topic of the source texts. The effect of each of these elements on subjects' summaries will be discussed in detail in view of research questions 2 to 6.

# Research question Have subjects identified the main ideas of the source texts?

As it can be seen in Figure 4.1 below, the percentage of main ideas of the Model of Analysis included in most of the subjects' summaries of text 1 was above 40%. This means that most of the subjects were able to include some of the main ideas of the Model of Analysis in their summaries of text 1.

**Figure 4.1**Percentage of main ideas of the Model of Analysis in summaries - Text 1



The high percentage of inclusion of the main ideas in subjects' summaries on text 1 and the high value of the coefficient of correlation r, calculated by a Microsoft Excell Software®, indicate that the subjects' reading influenced their summary writing. According to the pertinent literature (Winograd, 1984; Allison, Berry and Lewcowicz, 1995), main ideas are the most important elements of the source text to be included in a summary, and thus indicate the success or failure of the summary writing task.

The results of the comparison between the main ideas in the Model of Analysis and in the subjects' summaries on text 1 are displayed in Table 4.1 below. They show that for most subjects the value of r was close to 1, which is a high correlation level, and that these results corroborate the high percentage values of inclusion of main ideas of the Model of Analysis in the summaries on text 1.

**Table 4.1** Percentage of inclusion and values of the coefficient of correlation r between the main ideas in the Model of Analysis and summaries - text 1.

SUBJECT No.	PERCENTAGE OF IDEAS	r
1	45%	.82
2	54%	.93
3	72%	.52
4	90%	.87
5	54%	.95
6	45%	.88

7	72%	.84
8	54%	.58
9	54%	.14
10	81%	.92
11	54%	.96
12	27%	.5
13	36%	.99
14	63%	.87
15	36%	.96

<sup>\*</sup>HIGH correlation means a positive trend in the correlation; LOW correlation means a negative trend in the correlation.

Figure 4.4 below shows the percentage of main ideas of the Model of Analysis included in *all* summaries written by subjects on text 2 was above 30%. This means that all the subjects were able to include *some* of the main ideas of the Model of Analysis in their summaries on text 2.

**Figure 4.4**Percentage of main ideas in the Model of Analysis and summaries - Text 2

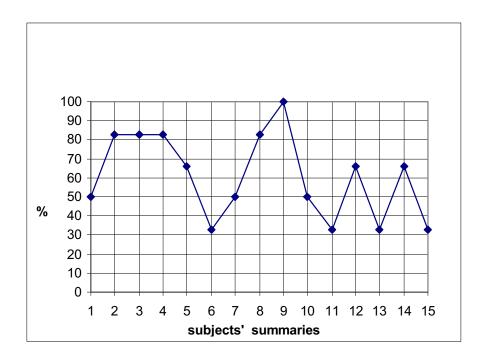


Table 4.2 below shows the percentage of main ideas listed in the Model of Analysis included in the summaries of text 2 and the values for the coefficient of correlation r.

**Table 4.2** Percentage of inclusion and values of the coefficient of correlation r between the main ideas in Model of Analysis and summaries - text 2.

SUBJECT No.	PERCENTAGE OF IDEAS	r
1	50%	.5
2	83%	.45
3	83%	.7
4	83%	.28
5	66%	.6
6	33%	1
7	50%	.96
8	83%	.91
9	100%	.86
10	50%	.99
11	33%	.77
12	66%	.27
13	33%	1
14	66%	.41
15	33%	1

<sup>\*</sup>HIGH correlation means a positive trend in the correlation;

The results of the correlation between the frequency of main ideas of the summaries and the main ideas in the Model of Analysis show that the value of r was close to 1 for some subjects (see column 3 in Table 4.2 above) and *equal* to 1 for subjects 6, 13, and 15. Thus, most subjects had *high* correlation values.

The results obtained in terms of the percentage of main ideas for text 2 and the values of the coefficient of correlation r corroborate the results obtained for text 1. If Winograd's (1984) statement that the main ideas are a fundamental component of the summary writing task is correct, these results indicate that the subjects performed their summaries successfully in terms of main idea identification.

Table 4.3 below shows the results of the *Chi-square test*. For r=.05 there was not a significant difference between the main ideas of the summaries on both texts and the main ideas of the Model of Analysis. This means that, statistically, the number of ideas included in the summaries of both texts was close to the number of ideas established by the Model of Analysis, and thus close to the ideal number.

Table 4.3

Chi-square test between main ideas in the Model of Analysis and summaries-Text 1 and Text 2.

LOW correlation means a negative trend in the correlation.

																	differences
	Subjects	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	r = <b>.05</b>
main	Model	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	not
ideas Text 1	Summaries	5	6	8	10	6	5	8	6	6	9	6	3	4	7	4	significantx <sup>2</sup> <sub>(o)</sub> =21.41
																	$x_{(e)}^2 = 23.7$
main																	
ideas	Model	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	not
text 2	Summaries	3	5	5	5	4	2	3	5	6	3	2	4	2	4	2	significant
																	$x^{2}_{(0)} = 1,12$
																	$x^2_{(e)} = 23,7$

The results of the first part of this analysis, which examined the issue of the influence of the main ideas of the source text on the subjects' summaries, related to research question number 2, for texts 1 and 2 respectively, show that there was a high proportion of the main ideas of the Model of Analysis included in the summaries of both texts. Most of the values of percentage of inclusion were above 50% for both texts; Most values of the coefficient of correlation r were close to 1, which means a positive correlation. In this case, the higher the value of r, the more the ideas of the summaries approximate to the ideas included in the Model of Analysis. This is true for both texts and the results corroborate each other.

Results of previous studies (Winograd, 1984; Johns, 1985; Tavares, 1991; Torija de Bendito, 1992; Allison, Berry, and Lewcowicz, 1995; Rekut, 1997) have shown that the summaries considered satisfactory by the experimenters included a high proportion of the pre-established main ideas. Although the experiments mentioned above were carried out under different conditions, the results obtained in terms of main idea identification and high percentage of inclusion of main ideas in the summaries of their subjects corroborate each other and corroborate the results of the present experiment. Additionally, based on her experiment, Torija de Bendito (1992) concludes that summarising is an activity that involves reading as well as writing.

In light of the above, for the present study, we may assume that the higher the percentage of inclusion of main ideas of the Model of Analysis in the summaries, and the higher the correlation between the order of these main ideas and their values for the coefficient correlation r, the stronger the influence that reading exerted upon writing. That is, in terms of main ideas, reading seems to have influenced these subjects' summary writing process.

In comparing the results of the present experiment to the results of previous studies mentioned in this chapter and in the previous section, we may say that the research question **Have subjects identified the main ideas of the source texts?** had a positive answer. That is, the subjects *did identify* the main ideas of the source texts.

Research question **Do subjects' summaries follow a pattern of text organisation?** 

The answer to this question, according to the results of the analysis of the summaries, is *yes*. With regard to the organisational patterns analysed *problem-solution, comparison-contrast, collection and causation*, considered by the pertinent literature as the most common ones (Richgels, Mc Gee, Lomax, & Sheard, 1987) we may state that, in this study, all summaries subjects wrote on text 1 as well as all those they wrote on text 2 *did follow a pattern of text organisation*.

# Research question Do all summaries written by subjects follow one or more pattern/s of text organisation used in the source texts?

The frequencies of occurrence of the organisational patterns in the summaries were compared to the frequency of occurrence of the organisational patterns established by the Model of Analysis. The analysis of the subjects' summaries was performed following a scale, adapted from Richgels, Mc Gee, Lomax, & Sheard (1987), also used by the judges to classify the source texts and to build the Model of Analysis.

According to the comparison between the frequencies of the organisational patterns in the summaries and in the Model of Analysis, there was some similarity between the frequencies of the organisational patterns in the Model of Analysis and those frequencies in the summaries written by the subjects on text 1.

More specifically, the level of similarity between the occurrence of the pattern of problem-solution in the whole group of subjects' summaries and in the Model of Analysis was *low*.

There was a similarity in the level of frequency of the pattern of *comparison and contrast* in most subjects' summaries when compared to the Model of Analysis. That is, this level of similarity was *high*.

Concerning the *collection* pattern, it seems that the level of similarity of occurrence of this pattern between the subjects' summaries and the Model of Analysis was *low*.

Finally, the *causation* pattern coincides in part with the *medium-high* level established by the Model of Analysis of the judges. Thus, only a *medium* level of similarity of frequency of occurrence of this pattern was observed when compared to the Model of Analysis.

As for text 2, some similarity was also observed between the frequencies of occurrence of the organisational patterns in the Model of Analysis and that in the summaries of text 2.

Specifically, there was a *medium-low* to *low* frequency of the *problem-solution* pattern in the subjects' summaries, which, according to the Model of Analysis, was *medium* in frequency.

Thus, the level of similarity of occurrence of this pattern in students' summaries and the Model of Analysis was *low*.

There was a *medium-high* similarity between the frequency of occurrence of the pattern *comparison and contrast* in the subjects' summaries and its frequency in the Model of Analysis.

Concerning the *collection* pattern, it seems that some subjects used a collection of ideas, as it happened with text 1. This means that the level of similarity between the frequency of occurrence of this pattern in subjects' summaries and in the Model of Analysis was *high*.

Finally, the *causation* pattern had a variation of *high*, *medium*, and *medium-high* frequencies, which does not coincide with the *high* level established by the Model of Analysis. The similarity between the frequency of occurrence of this pattern with the Model of Analysis was *low*.

Thus, we may assume that the general level of similarity between the organisational patterns of the source texts and the subjects' summaries was average. This means that, despite being a little different from the source text's organisation, the summaries composed by the subjects maintained some of the levels of frequency of the organisational patterns used by the authors in the source texts. Thus, the answer to the research question **Do all summaries written by subjects follow the same pattern/s of text organisation used in the source texts?** is that all subjects who took part in the experiment included, in their summaries, more than one of the patterns of text organisation present in the source texts. Only a few of them maintained some of the patterns of organisation of the source texts.

Relating these results to the pertinent literature, authors like Richgels, Mc Gee, Lomax & Sheard (1987), based on their findings, suggest that the inclusion of the organisational patterns of the source text in students' recall or composition, is due to students' awareness of a determined organisational pattern. With regard to the investigation being performed in this experiment, it seems that the higher the inclusion of organisational patterns of the source texts in subjects' summaries, the stronger the influence of reading upon writing, and this might be an indication that reading had *some* influence upon these EFL students' writing of summaries.

In order to answer the research questions Has the complexity of the source texts worked as a constraint to summarising? and Has the topic of the source texts influenced subjects' summaries positively or negatively?, an analysis in terms of quality of the subjects' summaries, and their answers to the questionnaires was performed, following the orientation in the literature surveyed and the parameters established by the author:

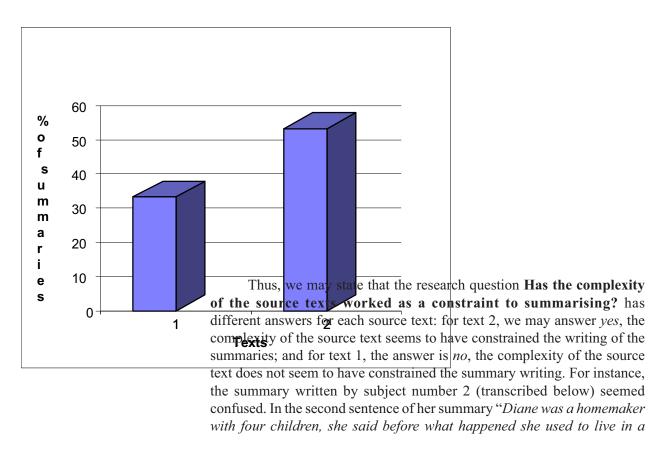
- Cohesion and coherence (Winograd, 1984);
- Inclusion of the main ideas of the source text (Winograd, 1984; Kirkland and Saunders, 1991 and Allison, Berry, and Lewkowicz, 1995);
  - Conciseness (Brown and Day, 1983, and Hare, 1992);
  - Information about the source text (Kirland and Saunders, 1991);
- Absence of personal opinion (Hare, 1992, and Allison, Berry, and Lewkowicz, 1995).

Research question Has the complexity of the source texts worked as a constraint to summarising?

According to the Model of Analysis, source text 1 had a lower level of complexity than source text 2. Thus, it would be expected that the quality of the summaries based on text 2 would be more highly influenced by the level of complexity of this text.

From the results displayed in Figure 4.12 below it appears that 53.3% of the summaries of the subjects suffered a high influence of the complexity of source text 2. Contrasted to the 33.3% of summaries of source text 1 which suffered high influence of its complexity, we can assume that it is possible that the summaries written about text 2 were more constrained by text complexity than the summaries written on text 1.

**Figure 4.12**Constraint of source text complexity on subjects' summaries - Texts 1 and 2



fantasy world, she never thought Jack could have done such thing like that" the subject wrote a collection of disconnected ideas, which makes the sentence almost incomprehensible.

To Kirkland and Saunders (1991), text complexity is a factor that is related to the clarity and readability of a text, determined by information density (frequency and nature of vocabulary, the extent of explanation contained in the text and the number of interrelationships between concepts). Besides these, the writing style and ability of the writer perceived by the reader of the source text are also important elements that may determine the source text complexity, but that may be controlled by teachers as they choose materials to assign students to summarise. Hare (1992) contends that the complexity of the source text is an element which influences the reading, comprehension, and summarising of texts. Thus, summaries performed based on more complex texts, are more subject to be constrained by the source text complexity. This was probably the case of text 2, which was considered by the Model of Analysis as more complex than text 1.

In terms of the influence of reading upon writing in these EFL students' summarising process and based on the results of the qualitative analysis of the subjects' summaries, it may be stated that the complexity of source text 2 influenced the reading and, consequently, also influenced the summary writing of some of the subjects who have participated in the present experiment.

Research question **Has the topic of the source texts influenced subjects' summaries positively or negatively?** *Positively* here means *enhancement* of the summary quality whereas *negatively* means *constraint* of the summary quality according to the parameters on which the analysis in terms of quality was based.

Based on the data from the analysis of the summaries, a comparison between source texts 1 and 2 in terms of topic constraint was performed. The results of this comparison are displayed in Figure 4.13 below. They show only average and low levels of topic constraint of source text 1 (40% and 60%, respectively) whereas for text 2 they show high (46.6%), average (13.3%) and low (26.6%) levels of constraint by the topic of the text.

# Figure 4.13

Comparison between the levels of constraint of the topics of source texts 1 and 2.

Similar to the prediction about the source text complexity, the Model of Analysis predicted a lower level of emotional appeal for text 1 than for text 2. Thus, a lower level of constraint of the topic of source text 1 - "The Growing of Green Cars" than by the topic of source text 2 - "A Career woman looks at the future" - was expected on subjects' summaries.

In the experiment conducted by Gaskins (1996), the results of the

emotional involvement expected were confirmed by the questionnaires. The present study also relied on questionnaires, to compare the answers given by the subjects and the signs of emotional involvement with the topic of the source text observed in the summaries through clues here referred to as distortions. Through the analysis of the information in some students' questionnaires, the experimenters were able to confirm this emotional involvement with the topic previously observed in the analysis of the summaries. For instance, the pieces of the summaries written by subjects 11 and 11 transcribed below, led the researchers to the conclusion that these subject were highly involved with the topic of source text 2:

High Average Low had to face... "(italics added); (S11)
"...because of this all her family was passing by a terrible situation...the main losers...if some catastrophe striked ..." (S15)

T1 T2...the *matter* of a career woman...this *matter* shows...the *hard* situation she

Furthermore, the distortions included in the summaries of these subjects (transcribed below) are also clues indicating their emotional involvement with the topic of source text 2:

"After 15 years she felt very well to be a housewife." (S11) "Her situation is an example for other men and women. (S15)

These statements are subjects' personal comments and evaluations, since there were no statements similar to them in the source text, which revealed their opinions about the facts and events narrated in the text, and consequently reduced the quality of their summaries.

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Through the analysis of the questionnaires answered by these subjects, the researchers could draw more evidence to strengthen their hypothesis of subjects' emotional involvement with the topic of source text 2. For example, subject 11 claims that he is familiar with the topic of source text 2 - "A Career Woman Looks at the Future". He has experienced something similar, and he has read and heard about it; a relative and a friend of his have also experienced something similar, and he has seen it on TV. He associates the topic of this text to other topics or areas such as *friendship, marriage, home environment, money matters,* and *family problems*. He considers this text a "great challenge", which "we can't face", and also a "great problem". He agrees that this woman "should look after her family" and disagrees with the fact that she "didn't understand her husband at the beginning". The solution he presents to this problem is that "she just do what she did, and continue to be a housewife".

Subject 15 also states that he is familiar with the topic of text 2; he has heard about it. He associates the topic to *friendship, marriage, home environment,* and *family problems*. In his view the text presents a "*great problem*", "faced by people nowadays", and this is a good example for women and men as well. He agrees that women should not "leave their feelings and thoughts due to marriage", and disagrees with the part of the text in which it says (according to his interpretation) that "marriage is a fantasy". The solution he presents is that "women shall go on living their lives, and that, even married, they must continue to study and to work".

Looking at this, one is tempted to say that the topic of source text 2 caused more constraint on the writing of the summaries than the topic of source text 1, as it was predicted by the Model of Analysis. But, in order to confirm this influence in general terms, it is important to observe the analysis of the answers to the questionnaires, displayed in table 4.6.

**Table 4.6**Summary of the results of the answers to the questionnaires

QUESTIONS		Text 1	Text 2
I.1 - Familiarity with			
	the topic	86%	100%
	heard about	80%	73%
I.2	seen on TV	80%	-
Subjects	read	66%	66%
relate the	been told	26%	13%
topic to	friend's experience	-	33%
something	relative's experience	-	26%
they have	experienced themselves	-	20%
	worked with	-	13%
	experienced with their family	-	6%
	health	93%	13%
1.3	technology	93%	-
Subjects	world environment	86%	-
associate	traffic problems	80%	-
the topic	money matters	6%	86%
to	marriage	-	100
	family problems	-	86%

	home environment	-	46%
	friendship	-	33%
	gender *	-	6%
	feminism *		6%
II.1	a problem	40%	40%
Subjects	a challenge	26%	40%
consider the	both	26%	26%
text as	none	6%	6%

<sup>\*</sup> The items "gender" and "feminism" were voluntarily included by the subjects; they were not included in the original list in the questionnaire.

The data drawn from the analysis of the questionnaires show that, for question I.1, more subjects were familiar with the topic of text 2 than with that of text 1, but with a slight difference (14%). The subjects relate the topic of text 1 - "the growing of green cars" (question I.2) to more impersonal experiences, such as something they have heard, read about, or seen on TV. The topic of text 2 - "a career woman looks at the future", in turn, the subjects related to friends', family's, or their own experiences, that is, to more personal experiences.

For question I.3, the subjects associated the topics of both texts with areas that are really related to them. For instance, "The Growing of Green Cars"- T1 was associated to "world environment" whereas the topic of text 2 was associated to "family problems". It is important to notice that some subjects added the topics "gender" and "feminism" to the list of options provided for this question. It seems that the subjects were concerned about the relationship between some aspects of feminism and the problem presented in source text 2. This may be interpreted as a higher level of involvement of the subjects with the topic of source text 2 because they show that this issue really matters to them. In question II.1, which asked if they considered the topic of the texts a problem or a challenge, the subjects gave almost the same answers to both texts. However, more subjects consider text 2 a challenge, corresponding to almost half of the answers for text 1. The issue of considering the text as a challenge may also be interpreted as a deeper involvement of these subjects with the topic of source text 2, since problems almost always demand a solution, whereas "challenges" have a stronger connotation and demand greater efforts from the person who is challenged.

These results suggest that the subjects may have become more involved with the topic of text 2 than with the topic of text 1. This confirms the expectations generated by the Model of Analysis, that text 2 would produce more emotional appeal than text 1. In some cases, the results were also consistent with the analysis of quality of the summaries, in terms of the involvement of the subjects with the topic of the source text.

Thus, the answer to the research question **Has the topic of the source texts influenced subjects' summaries positively or negatively?** is that the topic of source text 2 seems to have influenced negatively the writing of summaries by these subjects, whereas the topic of text 1 seems to have influenced the writing of summaries neither positively nor negatively.

In sum, the findings obtained in this experiment show that the subjects had a high percentage of inclusion of main ideas of the Model of Analysis in their summaries, and that these main ideas correlate with the ideas of the Model of analysis. In terms of frequency of the organisational patterns investigated, there was an average similarity between the subjects' summaries and the Model of Analysis. Finally, the complexity and the topic of source text 2 seem to have constrained most subjects' summary writing. However, text 1 does not seem to have constrained the subjects' summaries in terms of complexity and topic.

# **Conclusions**

This study certainly has its limitations and much further research is still needed before any definitive conclusions can be drawn. The general findings obtained in terms of the objectives and research questions addressed by this study allow us, however, to venture some summary statements:

The general findings of this study suggest that reading influences summary writing. Four aspects of reading were chosen from a larger list of aspects that are said to influence writing when the two skills - reading and writing - are used in an integrated way in language classes (Petrosky, 1982; Stotsky, 1982).

First, a reasonable number of the main ideas of the source texts were found in subjects' summaries, which is consistent with the outcomes of previous studies in this area (Winograd, 1984; Tavares, 1991; Allison, Berry, and Lewcowicz, 1995).

Second, with regard to the effect of the text organisational patterns investigated, in terms of their identification in the source texts and their transfer to the subjects' own writing - the summaries - the effects were somewhat below the expected ones according to results of similar studies (Carrell, 1984; Richgels, Mc Gee, Lomax and Sheard, 1987).

Third, as predicted by previous research, apparently, the greater complexity of source text 2 affected the summaries negatively. In other words, students produced summaries of lower quality than for text 1, which was not as complex. So, the complexity of the source text may determine the quality of a written summary.

Fourth, the emotional appeal of the topic of a text is an aspect of text that, according to previous research (Gaskins, 1996; Johns, 1988), strongly influences the writing of summaries, negatively or positively. In this study the findings suggest that the emotional appeal of the topic in source text 2 had some negative effect on subjects' summaries, i.e., it constrained the writing of the summaries to a certain extent, whereas the emotional appeal of the topic in source text 1, apparently, had no effect at all on students' summaries.

A number of limitations must be kept in mind when interpreting the results of this study. No definitive conclusions can be drawn and no generalisations to the whole group of Brazilian EFL College students can be made from the results.

With the shifting from methods of teaching reading and writing as separate skills towards an emphasis on the integration of reading and writing activities in language learning classrooms, the findings of studies like this may have important applications in the field of foreign language teaching, most specifically in what concerns the development of reading and writing.

It seems important that teachers perform a detailed analysis of the material at hand, before selecting the texts that they want students to read and summarise. Hunt Jr. (1997), suggests that teachers provide the opportunity for students themselves to select the material to read, according to their habits, needs, familiarity with topics, and their personal reading interest. However, it is also important to this author that the teachers themselves be aware of their role in guiding these students' choice of material, in order to avoid distortions of the main objectives of the reading and / or writing classes.

### Note

The experiment started with 19 subjects, but the analysis of data focused on 15 subjects only.

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