

THE USE OF METACOGNITIVE STRATEGIES IN L2 READING

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ABSTRACT: Reading comprehension strategies become relevant as they reveal, not only the way in which the learner organizes and evaluates de completion of a task, but also the way in which he or she interacts with the learning materials, applies specific resources and makes use of social interaction devices. In this small-scale research work, the author has attempted to give an account of the use of metacognitive strategies in reading comprehension by successful and unsuccessful learners of English as a foreign language, establishing possible relations between these two variables. For the accomplishment of such objective, specific models were used. A taxonomy of learning strategies proposed by O'Malley and Chamot (1990) and the concept of 'good learner' proposed by Ellis (1994) were used to classify the subjects of this study. Results show that successful learners were more effective in using metacognitive strategies when performing reading comprehension tasks.

KEY WORDS: Metacognitive strategies, reading comprehension, successful learners.

USO DE ESTRATEGIAS METACOGNITIVAS EN LECTURA DE L2

RESUMEN: Las estrategias de comprensión de lectura son muy relevantes, pues revelan no solo la manera en que el aprendiente organiza y evalúa la realización de una tarea, sino también la forma en que interactúa con el material de aprendizaje, aplica recursos específicos y utiliza formas de interacción social. En este trabajo, se intenta dar cuenta del uso de estrategias metacognitivas en comprensión lectora por parte de aprendientes exitosos y no exitosos de inglés como lengua extranjera, tratando de establecer posibles vinculaciones entre ambas variables. Para el cumplimiento de tal objetivo, se aplicó la taxonomía de estrategias de O'Malley y Chamot (1990) y el concepto de buen aprendiente propuesto por Ellis (1994). Los resultados muestran que los sujetos exitosos tienden a ser más efectivos al usar las estrategias metacognitivas cuando realizan una tarea de comprensión lectora.

PALABRAS CLAVE: estrategias metacognitivas, comprensión de lectura, aprendientes exitosos.

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1. INTRODUCTION

The growing interest in the research of reading comprehension in the acquisition of a second language¹ has focused the attention on the strategies used by the learners to carry out the process of reading. Reading comprehension strategies are relevant in the sense that they help identify the way in which the learner organises and assesses the completion of a task, interacts with the learning material applying specific resources and, uses means related to social interaction.

Research in the field of L2 reading comprehension reveals the use of a variety of strategies by learners of a second language to facilitate the decoding, storage and retrieval of information (Rigney 1978, in Singhal 2001). There are various approximations to a definition of strategy by different linguists. For example, Oxford (1990) considers the learning strategies as techniques and abilities used to solve problems that allow learners a more efficient learning. Ellis (1994), on the other hand, characterises learning strategies as attempts to develop linguistic and sociolinguistic competences in the target language. He also suggests that, due to the vastness of approaches in relation to the conceptualisation of strategy, is advisable to characterise them by means of a list of attributes, rather than trying to define them through a single proposition.

Learning strategies are relevant in the acquisition of a foreign or second language due to the fact that they allow us to get information about the cognitive, metacognitive and socioaffective aspects involved in the acquisition process (O'Malley and Chamot 1990) and, on the other hand, they provide us with the possibility of being taught to unsuccessful learners, improving their performance in the target language (Grenfell and Harris 1999, in Chamot 2005). This relevance also holds important pedagogical implications; research in this respect reveals that strategy training does contribute in the learning of a second language (Nunan 1997).

The use of reading comprehension strategies makes it possible to establish the way in which the learners perceive the learning task, and the steps they take when the task is complex. In summary, such strategies are resources used by the learners with the purpose of facilitating the comprehension of a text to overcome possible obstacles in the completion of the task (Singhal 2001).

The execution of a learning task by learners of a second or foreign language has attracted a great deal of research interest. This research makes possible to identify and examine specific strategies used by learners when performing a given task (Cohen 1998, Hsiao and Oxford 2002, in Oxford et al. 2004). Different learning tasks require the use of different strategies, for example, when reading a scientific, narrative or epistolary text, the cognitive and linguistic demands of each text will be different. Therefore, the learners will be required to use different resources and strategies to

¹ In this paper, for the purposes and context of this research work, the terms 'second language', foreign language', 'acquisition' and 'learning' will be used indistinctively.

decode and interpret the texts. For this reason, several studies (Ikeda and Takeuchi 2000, Singhal 2001, Oxford et al. 2004) have focused on identifying the strategies based on the realisation of specific learning tasks. This approach has led to the analysis of a more detailed and contextualised use of these resources.

For the purposes of this paper, it is necessary to give an account of the existing conceptualisations in relation to the process of reading. The literature suggests the impossibility of establishing a complete view of the process as such, due to the great number of theories related, not only to its definition, acquisition and teaching, but also to the difference between first and second language and to the relationship between the reading process and other cognitive abilities.

According to Alderson (2000), all the aspects involved in the reading comprehension process are important. He tries to establish a conceptualisation of the reading process and a description of what it means to be able to read. According to this author, the reading comprehension process is dynamic, variable and, carried out in different ways by different subjects, at different times, with different kinds of texts and reading purposes. Alderson acknowledges that research in this field is difficult, mainly, because of its silent, internal and private nature. For this reason, an alternative approximation to the study of the comprehension phenomenon is the study of its product in relation to the original text. It is believed that two individuals will arrive at similar comprehension products, even though they may perform different reading processes. Thus, although there may be various ways to reach the product (comprehension), the fact of reaching it becomes more relevant.

This approach, however, suffers from two limitations - variations in the product and the product evaluation method. The first one is related not only to the ability to remember what was read, but also to the learner's ability to create meaning from what is read, as Halliday and Widowson (1979) suggest (in Alderson 2000), the text does not contain meaning to be discovered by the reader. Instead, meaning is created by the interaction between the reader and the text. The second limitation is associated with the selection of the reading assessment method, which must show suitability for the kind of text to be assessed and the evaluation purpose.

Another accepted view in the reading comprehension field is the one that divides this process into two elements, decoding and comprehension. The first one consists of identifying the lexical elements, whereas the second one consists of separating the propositional components, understand them as parts of the discourse forming a structure to, then, integrate these aspects to the reader's previous knowledge (Gough et al. 1992, in Alderson 2000).

Research in L1 reading has revealed the existence of a relationship between metacognition and comprehension. Such relation shows that poor readers do not have great knowledge of learning strategies and, often, do not know when nor how to apply the knowledge they have. They are also unable to infer meaning and have not acquired knowledge about the way in which the reading process is done, being difficult for them to assess a text with clarity, consistency and credibility. These kinds of readers, normally, believe that the purpose of reading is to be able to remember

lexical elements and read with no pronunciation problems. In contrast, Block (1992, in Alderson 2000) explains that good readers have greater control of the reading process and they can verbalise that level of control in a better way. In addition, they show themselves more attentive to the inconsistencies of the text privileging a coherent comprehension of it. Finally, good readers, following Block, tend to use aspects of the semantic level to assess their degree of comprehension, whereas poor readers tend to rely too much on aspects of the lexical level focusing more on the intrasentential rather than the intersentential consistency.

2. THE STUDY

2.1. *Theoretical framework*

According to the objectives of this small-scale research paper, this study is rooted in the conception of learning strategy proposed by O'Malley and Chamot (1990), which is supported by the Adaptive Control of Thought model (ACT) (Anderson 1976, 1980 1983 in Doddis y Novoa 1997). Anderson posits that knowledge is used repeatedly in the realisation of any procedure; it is possible to lose the capacity of verbalising the rule that originally initiated such procedure and, in this way, this knowledge that was possible to explain (declarative) transforms into procedural when performing any action in an automatic way (O'Malley and Chamot 1990: 24). This transformation is achieved, according to Anderson, in three stages: a) cognitive stage, in which theoretical knowledge about the realisation of a procedure is acquired; b) associative stage, in which a system of rehearsal of the learnt ability is devised; and c) autonomous stage, in which the performing of the ability becomes virtually automatic (O'Malley and Chamot 1990: 25-26). By means of these postulates, it is possible to explain the use of complex abilities such as learning strategies.

O'Malley and Chamot describe the strategies as 'complex procedures applied to tasks; consequently, they may be represented as procedural knowledge which may be acquired through cognitive, associative and autonomous stages of learning' (1990:52). From these basic theoretical principals, these researchers have proposed different versions of a taxonomy of learning strategies. In this paper, I will use the latest one from 1990. In it, they classify the strategies in three main categories: 1) metacognitive strategies, which allow learners to plan, control and asses learning tasks; 2) cognitive strategies, which involve direct interaction with the learning material and the application of specific resources; and 3) socioaffective strategies, which are related to activities of social mediation and individuals' interaction.

In this study, due to the nature of reading process, I will research the use of metacognitive strategies, namely, planning, directed attention, selective attention, self-management, self-monitoring, problem identification and self-evaluation. For a details characterisation see table 1 in the appendix section.

Another relevant aspect to be considered in the theoretical framework of this study is the concept the good language learner. This is how, from the works of Rubin

(1975 in Ellis 1994) an important number of studies on this kind of learner have been conducted. Ellis (1994) identifies a descriptive general pattern, taking evidence from studies done since 1975 to 1990 approximately. This author suggests there are five main aspects that would help to configure a good language learner: 1) a concern for language form; 2) a concern for communication (functional practice); 3) an active task approach; 4) an awareness of the learning process, and 5) a capacity to use strategies flexibly in accordance with task requirements (p. 546).

According to Ellis, successful learners are aware of their own learning process, make informed decisions and use their own learning style making use of their metacognitive knowledge. This allows them to evaluate their needs, measure their progress and guide their own learning. Chamot (1988, in Ellis 1994) refers to interesting empirical evidence in relation to the fifth aspect of the good language learner profile, a capacity to use strategies flexibly in accordance with task requirements. Her study showed that the successful learners use a wider range of strategies, whereas the less successful ones use a smaller number of a certain type of strategies. On the other hand, successful learners make a more extensive use of their general knowledge as well as of their linguistic one.

2.2. Objectives and research questions

The general objective of this study is to establish a link, from a qualitative point of view, between the use of metacognitive strategies and the execution of a reading task by successful and unsuccessful learners in English as a foreign language. To accomplish the stated above, specific objectives were outlined:

- Analyse the propositional content to identify and classify the reading strategies used by the subjects in the reading task.
- Analyse the use of metacognitive strategies from a qualitative point of view.
- Establish qualitative relations between the use of metacognitive strategies and both groups of subjects, successful and unsuccessful ones.

In addition, the following research questions were formulated:

- a. Is there a relationship between the use of metacognitive strategies and the reading comprehension process?
- b. Is there a relationship between the successful learners and the use of metacognitive strategies?
- c. Is there a relationship between the unsuccessful learners and the use of metacognitive strategies?

2.3. Methodology

2.3.1. Subjects

The sample of this case study was formed by six students of the English Linguistics programme at the University of Chile in their fourth year. They constituted two

multiple cases of three subjects each, successful and unsuccessful ones according to the following parameters:

- Group 1: three students considered successful, i.e., those whose final marks in the English Language III lecture (taken the previous year) were equal to or higher than 5,0 in a scale of 1 to 7, where 4 is the minimum passing mark.
- Group 2: three students considered unsuccessful, i.e., those whose final marks in the English Language III lecture (taken the previous year) were equal to 4,0 or not higher than 4,9 in a scale of 1 to 7, where 4 is the minimum passing mark.

It is worth mentioning that all the subjects had not failed this subject and none of them had had an English learning experience in an English-speaking environment before.

2.3.2. Data collection

For the reading tasks, different passages were selected from one standardised international test (TOEFL) and a textbook called English in Fact (Lucas 1981) appropriate to the level of the subjects collaborating in this study (advanced). The reading tasks were performed by the subjects in different sessions providing the appropriate conditions of infrastructure, materials and time; namely, a classroom with appropriate desks, worksheets, pencils, etc. Once the tasks were completed, all the subjects were interviewed. Different sessions had to be organised to meet the subjects' time availability constraints.

A semi-structured interview was applied to all the subjects immediately after they were finished with the reading tasks. In them, the subjects gave an account of the way they carried out the different tasks associated to the reading passages and solved the reading problems. Prior to this, and taking into consideration the complexity of the introspection and retrospection processes involved in reading, all subjects were invited to an induction session. Each interview had a duration of about eight minutes; it was tape-recorded and conducted in the subjects' mother tongue.

2.3.3. Data processing

To process the data the following steps were undertaken:

- a. All reading tasks were marked by this researcher.
- b. All interviews were transcribed with the purpose of analysing their propositional content.
- c. The propositional content (the verbal reports) was examined and analysed to identify metacognitive strategies, to be later matched with the taxonomy of metacognitive strategies model included in the theoretical framework of this study.
- d. A quantitative account was made in terms of occurrences of strategies used between successful and unsuccessful subjects.

- e. A qualitative analysis was carried out to be able to find links between the metacognitive strategies use and the condition of successful/unsuccessful learner when doing a reading task.

2.4. Results

In the following section, I will present the results from a quantitative and qualitative perspective, organised according to both groups of subjects, i.e., successful and unsuccessful ones and, their use of metacognitive strategies in the realisation of the different reading tasks.

2.4.1. Quantitative discussion

In this part, I will give an account of the analysis of the propositional content obtained from the verbal reports, in terms of the number of instances in which the subjects used a metacognitive resource. A summary table is presented for each group of subjects.

2.4.1.1. Successful subjects

As mentioned above, the propositional content was analysed and matched with the characterisation of metacognitive strategies of the taxonomy proposed by O'Malley and Chamot (1990). What is shown in the following table is the result of an analytical process of elicitation of strategies from the verbal reports.

Table 1: instances of use of metacognitive strategies in reading the tasks by the successful group

Successful group. Task 1	Number of instances of strategy use				
	Subject 1	Subject 2	Subject 3	Instances Total	% Of use
Advance organization	0	0	1	1	2,12
Organisational planning	7	5	5	17	36,17
Directed attention	1	2	0	3	6,38
Selective attention	0	1	2	3	6,38
Self-management	3	2	0	5	10,63
Self-monitoring	4	3	1	8	17,02
Problem identification	0	2	1	3	6,38
Self-evaluation	2	4	1	7	14,89
Total	17	19	11	47	99,97
Successful group. Task 2	Number of instances of strategy use				
	Subject 1	Subject 2	Subject 3	Instances Total	% Of use
Advance organization	1	0	0	1	3,33
Organisational planning	1	5	2	8	26,66
Directed attention	1	0	1	2	6,66
Selective attention	1	2	1	4	13,33
Self-management	0	0	1	1	3,33

Self-monitoring	2	1	0	3	10,00
Problem identification	0	1	0	1	3,33
Self-evaluation	4	3	3	10	33,33
Total	9	13	8	30	99,97

In this table, we can see that there are three strategies that are most significantly used in both tasks. These are organisational planning, self-evaluation and self-monitoring in exponential order. Additionally, there are two others, self-management and selective attention that also seem to be used consistently, although not in both tasks, probably due to their differentiating characteristics (see appendix 2). Task 1 involved a more reflexive process in a single assignment, whereas task 2 consisted of different topics arranged in different passages with special markings that needed to be taken into account to successfully complete multiple assignments. As for the other strategy categories, the percentage of use is not as significant, however, the scope is worth noticing. Every category was employed at least once by at least one of the subjects.

2.4.1.2. Unsuccessful Subjects

In a similar way, the propositional content obtained by the verbal reports was analysed to elicit the metacognitive strategies used by these subjects in both tasks. Table 2 shows the number of instances per strategy and subject, together with the corresponding use percentage.

Table 2: instances of use of metacognitive strategies in the reading tasks by the unsuccessful group

Unsuccessful group. Task 1	Number of instances of strategy use				
	Subject 1	Subject 2	Subject 3	Instances Total	% Of use
Advance organization	0	0	1	1	2,04
Organisational planning	4	5	2	11	22,44
Directed attention	2	1	2	5	10,20
Selective attention	4	3	1	8	16,32
Self-management	5	2	0	7	14,28
Self-monitoring	1	1	1	3	6,12
Problem identification	1	0	0	1	2,04
Self-evaluation	5	5	3	13	26,53
Total	22	17	10	49	99,97
Unsuccessful group. Task 2	Number of instances of strategy use				
	Subject 1	Subject 2	Subject 3	Instances Total	% Of use
Advance organization	0	0	0	0	0,0
Organisational planning	3	1	1	5	17,85
Directed attention	1	1	1	3	10,71
Selective attention	0	0	1	1	3,57
Self-management	1	1	0	2	7,14

Self-monitoring	1	2	1	4	14,28
Problem identification	0	0	0	0	0,0
Self-evaluation	6	5	2	13	46,42
Total	12	10	6	28	99,97

In contrast with their successful counterpart, this group seems to show a greater use of the strategy of self-evaluation, both in task 1 and 2, probably caused by a lesser degree of confidence in their linguistic ability to carry out the task. On the other hand, the second most significant use in both tasks is shown by the strategy of organisational planning. The use they make in relation to the other most noteworthy strategies does not coincide, showing a less consistent selection. For example, selective attention is employed 16.32% in task 1, whereas in task 2 only 3.57%. On the other hand, self-monitoring in task 2, being the third most important resource used, in task 1 was applied only 6.12%. In a similar way, self-management in task 1 with 14.28% against 7.14% in task 2. Directed attention, though, seems to have been exploited in a similar way. The rest of the strategy categories do not show a significant use; some were not used at all, showing a more limited range. And while it is true that a different task will require a differentiated use of strategies, this performance seems to be less consistent than their successful equivalent, who coincide in three out of four of the most widely used strategy categories, in contrast with the two out of five ratio from the unsuccessful group.

2.4.1.3. Synthesis

To synthesise, I would like to refer to the most significant strategy used in each of the groups and how this particular strategy may be influencing their performance. The strategy of organisational planning is the most widely applied by the successful subjects in both tasks. This shows that they seem to possess a plan for the parts, sequence, main ideas or language functions to be used in handling the tasks. This macro strategy also allows the occurrence of other strategies working in tandem as apart of a continuum of strategies serving different and common purposes at the same time. Hence the relevance of this particular strategy when attempting a comprehension task. According to the good language learner profile (Ellis, 1994), this behaviour is consistent with what is expected from successful learners. In contrast, it is noticeable the use that the unsuccessful group makes of the strategy of self-evaluation, which is the most prominent one in their group. This fact may be indicating, to some extent, a lack confidence in their completion of the task if we consider that this strategy consists of checking the outcome of one's own language performance against an internal measure of accuracy, particularly, that of the ability to perform the task at hand.

2.4.2. Qualitative discussion

In this section, I will present a qualitative impression of the results organised according to both successful and unsuccessful groups and their use of metacognitive strategies in the realisation of the different reading tasks.

2.4.2.1. Successful subjects

In relation to the use of the macro strategy organisational planning, it is possible to observe that the successful subjects possess a methodology to carry out the task. They have an action plan following different stages to the successful realisation of the task. This behaviour is characteristic of this kind of learners, who seem to be more aware of their own use of strategies than their counterparts (Doddis and Novoa 1997). This is illustrated in the following abstract.

Subject 1	<p>“Well, first I read the text¹, I tried to associate a paragraph to the main idea², in fact, I put it in writing. Well, ahh, after doing that, ah, I read the text once³, read the questions once⁴. I read, more or less, the statements, then I read the text again⁵ trying to relate the statements with the text, then I went on trying to put the events in a sequential order⁶ (as asked) according to what I remembered. At some point, I returned to the text to try to continue linking the main idea, that was normally represented in the phrases that you put later⁷.”</p>
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We can see there are seven instances (shown in superscript) of this macro strategy; such instances constitute the stages this particular subject suggests to do the reading task. In fact, it is possible to identify embedded strategies like self-monitoring (3 and 4), and self-management; this last one it is possible to notice in all the report.

Subject number 3 makes a similar use of the macro strategy of organisational planning, being possible to identify five instances, as shown below.

Subject 3	<p>“First, I had to read the instructions¹, I noticed I was asked some dates², and therefore, it was going to be easier if I located those dates first to know the chronological order³. Then, as I was doing some markings in the text, I was matching the events with the dates in a sequential order⁴ and I tried to... for example, if there was any reference and no exact date, for instance, thirty years later, or in such a century, I tried to jot those down and select the possible date⁵.”</p>
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Similarly, in subject number 3 we observe the use of embedded strategies, i.e., integrated in macro strategies and sometimes used sequentially. Within the macro strategy there are other metacognitive strategies serving different purposes. For example, in this particular extract, it is possible to see that the subject describes five stages to realise the task as part of the strategy organisational planning. However, it is also possible to observe the use of the strategy problem identification in the instances two and three. Additionally, the strategy of selective attention is present in the instances four (... *I was doing some markings in the text*) and five (... *I tried to jot those down and select the possible date*).

Although a taxonomy of strategies facilitates the researcher’s work when analysing the data for identification and elicitation purposes, in certain cases it is hard to determine a clear cut distinction between the use of one from the other. As a consequence, it is necessary to consider these taxonomies as a methodological resource, which makes possible the systematisation of analytical work. As pointed out previously, in a continuum of strategies it is possible to observe the use of some cognitive strategies, but that in these particular tasks they are used with clear metacognitive purposes.

To exemplify this, an extract from subject number 2’s verbal report is presented.

Subject 2	“Ahh, I underlined things I found strange or words that seemed that maybe, I did not understand, or that perhaps were misspelled.”
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Underlining constitutes a cognitive strategy (O’Malley and Chamot 1990); however this report corresponds to the use of the metacognitive strategy of selective attention, since the subject decides in advance to attend to specific aspects of language input or situational details that assist in the performance of the task at hand.

Finally, and with the idea of presenting the most significant strategies used by the subjects, I will close this section with the identification problem strategy. In the following extracts, it is possible to notice that subject 2, for example, is concerned with identifying explicitly the central point requiring solution before realising the reading task. Subject 3, on the other hand, identifies an aspect of the task that makes its successful conclusion difficult once the task is initiated. In contrast, subject 1 does not report the use of this resource in any of the tasks.

Subject 1	“... I mean, I started by reading the questions, I didn’t know if could. I always try to read the questions. Then, I read the text, then reread it and took some notes.”
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Subject 2	“Ahh, because that’s the way one reads... if you have to answer questions from the text you’re reading. I believe that if you read the questions you know the points on what to focus.”
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Subject 3	“No, I didn’t if I could. I would have done it if I had known I could. Ahh, I underlined things and then I got what the task consisted of and went on underlining some information in relation to the questions, making little notes and stuff.”
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2.4.2.2. Unsuccessful subjects

In general, from a qualitative point of view, it is possible to establish differences between the groups, mainly in relation to the range of strategies used and the level of awareness unsuccessful subjects show when describing the metacognitive processes they carry out while doing a reading comprehension task.

In relation to the organisational planning, we can observe they have a plan to do the task; however, their reports are more limited than those delivered by their successful counterparts. It is believed that one of the reasons why these reports are less detailed is because unsuccessful readers have lower degree of awareness of the plan they execute to realise a reading task. In the following extracts, reports of their plans to do the tasks are shown in contrast to illustrate the stated above.

Subject 1	“I read the whole thing once ¹ , then I read the questions ² , I tried to answer them and then I went back to the text according to the question ³ .”
Subject 2	“First, I did a quick reading to the whole text ¹ . Then, I tried to get the main paragraphs ² and I tried to find the main idea in the first paragraph to put my ideas in order ³ .”
Subject 3	“First, I read the instructions of the task ¹ and I read the questions to read the text ² .”

With the purpose of a comparative analysis, I include the extract corresponding to the plan the successful subject 1 has to realise the reading task.

Subject 1	“Well, first I read the text ¹ , I tried to associate a paragraph to the main idea ² , in fact, I put it in writing. Well, ah, after doing that, ah, I read the text once ³ , read the questions once ⁴ . I read, more or less, the statements, then I read the text again ⁵ trying to relate the statements with the text, then I went on trying to put the events in a sequential order ⁶ (as asked) according to what I remembered. At some point, I returned to the text to try to continue linking the main idea, that was normally represented in the phrases that you put later ⁷ .”
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In this report from successful subject 1, it is possible to observe that he verbalises, in a complex and detailed manner, the steps he follows to complete the task. The numbers in superscript indicate the stages or phases he goes through to tackle the task. On the other hand, the reports from the unsuccessful group evidence a less elaborate plan to execute the task, together with a limited use of embedded strategies that are constituent parts of the macro strategy of organisational planning.

In relation to other strategies of significant use by the subjects of the unsuccessful group, subject 2, for example, gives a name to the method he uses to do any reading task; certainly, without noticing he is making use of the strategy of self-evaluation (ability evaluation). He calls it the ‘hardworking method’ as it is show below.

Subject 2

“... I call it the ‘hardworking method’, a way to understand each part of the text or paragraphs. There are a lot of people who read and do not get the content of what is reading. It is a slow work but I think it’s necessary and thus, one learns vocabulary and grammatical structures and all....”

In relation to subject 3, the use he makes of the strategy of self-evaluation is notorious. He verbalises the difficulties that he encounters as he progresses doing the task. He shows to be uncertain at the moment of identifying a part of the problem or the main elements to the task discarding distractors. He constantly judges his linguistic repertoire and he doubts about the resources he has to effectively complete the task.

Subject 3

“Ahh, I could say it was difficult. The first two questions I did I found that if I based on theory only, the volcanic one, why there should have been other theories in the chronogram. That worried me, then I had certain doubts in what happened first with one of the cities involved, what was destroyed? First the capital city? Then the civilisation? What was first? And so on...”

In general terms, and as it was stated at the beginning of this section, this group of subjects makes a less varied use of metacognitive resources in the realisation of the different reading tasks. In this respect, one of the most consistently used strategies was the self-evaluation one. Through this learning strategy, these subjects seek examining the results of their own linguistic performance in relation to an internal measure of completeness and accuracy. The use these subjects make of this particular resource draws attention in relation to the use their successful counterparts make of this technique. This fact may reveal, on the one hand, a higher degree of insecurity on the part of the unsuccessful group, and on the other hand, the erroneous use of certain strategies, which impede an adequate decoding of the linguistic input.

3. CONCLUSIONS

In this section, I will try to account for the formulations made in the hypothesis of this study by establishing links between the variables of this work. These variables are related to the use of metacognitive strategies in reading comprehension tasks and the condition of successful and unsuccessful learner. Additionally, I will present reflections in relation to the use of verbal reports as part of the research methodology applied in this study. Lastly, I will close with final considerations in relation to some pedagogical implications derived from this paper.

3.1. Metacognitive strategies and the condition of successful and unsuccessful learner

In relation to the use of metacognitive strategies and the condition of successful and unsuccessful learner in this small-scale research paper, the results show that the successful subjects use a slightly greater number of strategies, although a wider variety than their unsuccessful counterpart. Similarly, successful subjects show to possess a complex and developed plan of actions when realising a reading task, this situation differs considerably in the unsuccessful group. The successful members showed an active and direct linguistic participation, not only doing the different tasks but also in reporting what they did; characteristic behaviour in good language learners (Ellis 1994).

Additionally, the successful subjects' development of the verbal reports show a higher degree of awareness and commitment in the realisation of the different tasks, which leads them not to discard a priori the use of any strategy, as unsuccessful subjects do. Another interesting differentiating trait between the groups is that the successful ones reveal a significant degree of autonomy. An example of this is the independence with which they did the reading tasks, the absence of further instructions and the security with which they reported their plan to realise the tasks.

Remarkably, this autonomy is directly related to a higher degree of awareness the successful subjects show about the use of metacognitive resources proposed by O'Malley and Chamot (1990). This more aware use is evident in the relation these subjects establish with the world that surrounds them through reading, listening to music, the movies, etc. (Doddis and Novoa 1997). These subjects also show the capacity of transferability of strategies from one type of task to another according to the situation and task (Macaro 2006), without which learners lower their potential for learning. That, in contrast, would have a relation with the poor elaboration of the verbal reports the unsuccessful subjects did, who also showed difficulties in explaining the way they executed the different reading tasks.

Similar studies, like those of Oxford's (2000, in Oxford et al. 2004) about the relationship between learning strategies and level of competence, show that successful learners not only use appropriate strategies according to the task, but they also do it sequentially, or in chain, i.e. a group of strategies that are interrelated and that meet the requirements of a learning task. In synthesis, it is possible to assert, though not conclusively, that in contrast with their counterparts, the successful subjects make an aware, selective and assessed use of the strategies they need, showing an important degree of flexibility with task at hand.

3.2. Considerations on the verbal reports

In relation to the use of verbal reports as means to constitute the data of this case study paper, it is necessary to point out that these are the result of an introspection process carried out by the subjects during the interviews applied after the completion of the reading tasks. They also have a retrospective character, since they were asked to report what they remembered about doing the reading tasks. Allowing, in this way,

more clarity and richness in the reports, which would be the propositional content for the later analysis.

On the other hand, there are various studies that inquire about the value of the verbal reports in relation to processing functions of information as reliable means of data collection (Froufe 1985 and Seliger 1983, in Macaro 2006). Similarly, Ericson and Simon (1993, in Doddis and Novoa 1999-2000) posit a model that accounts for the processes that allow access to information stored in the long-term memory, retrieve it and report it. Consequently, the validity and reliability of such models are acknowledged as means of data collection, despite some criticism these methodological resources have received.

Finally, it is important to mention the relevance of the induction session prior to the application of the interview, since one of the problems encountered at this stage was the availability of time the subjects had to realise the interview. Similarly, infrastructure and adequate facilities to carry out the different activities to collect the data were other limitations to overcome.

3.3. Final considerations

Firstly, it is important to point out, as it has been in the pertinent literature, that the use of metacognitive strategies is conditioned not only by the task at hand, but, to varying extents, to multiple factors. Among them, those related to the individual differences such as motivation, anxiety and others. Social factors, cultural and cognitive ones also play a relevant role in the use of learning strategies. Along these lines, what I have tried to do in this study was to identify the use of metacognitive strategies through the execution of reading comprehension tasks on a very delimited segment of the population, as it is a group of university students in the area of linguistics, belonging to an undetermined social class, with different degrees of motivation, cultural backgrounds and cognitive abilities. Future endeavours in this field should account for wider and larger samples covering not only the university level, but also the primary and secondary school levels. It is these EFL contexts that can greatly benefit from the use of learning strategies.

In relation to the pedagogical implications of this study, particularly in the Chilean context, it is possible to perceive the need for the implementation of a methodological design that allows the learning of strategies and the promotion of its use (Nunan, 1997). This will foster autonomous learning not only in the successful learners but also in the unsuccessful ones. Various authors like Oxford (2003), O'Malley and Chamot (1990), Oxford et al. (2004), Doddis and Novoa (1999-2000), Macaro (2006) suggest that the success in the learning process in a second language is greatly influenced by a wide use of learning strategies that are interrelated and that serve common purposes.

Finally, it is important to remember that the learning of a second or foreign language is a process in constant evolution; therefore, if we promote the use of learning strategies in our students, we will be contributing to the development of the necessary autonomy, fostering a more active and independent learning. This does not, in any case, imply to diminish or compress the role of the teacher, whose work allow to establish the

necessary links between the teaching and learning processes, but to encourage their role as a facilitator. Thus, learners will be able to generate more autonomous acquisition processes; they will be constantly aware of their progress and, in conclusion, will be more responsible of their own learning.

REFERENCES

- ALDERSON, C. 2000. *Assessing reading*. Cambridge: Cambridge University Press.
- CHAMOT, A. U. 2005. Language learning strategy instruction: current issues and research. *Annual Review of Applied Linguistics* 25: 112-130.
- COHEN, A. D. 1998. *Strategies in learning and using a second language*. Londres: Longman.
- COHEN, A. D. 2003. The learner's side of foreign language learning: where do styles, strategies, and tasks meet? *IRAL* 41, 4: 279-291.
- DODDIS, A. Y NOVOA, P. 1996. Estrategias de aprendizaje y niveles de competencia en comprensión y producción escrita en inglés como segunda lengua. *Lenguas Modernas* 23: 133-150.
- DODDIS, A. Y NOVOA, P. 1997. Estrategias de aprendizaje metacognitivas en la producción escrita en inglés como segunda lengua. *Lenguas Modernas* 24: 143-167.
- DODDIS, A. Y NOVOA, P. 1999-2000. Estrategias de aprendizaje metacognitivas en la comprensión de lectura en inglés como segunda lengua: un estudio de casos. *Lenguas Modernas* 26-27: 79- 94.
- ELLIS, R. 1994. *The study of second language acquisition*. Oxford: Oxford University Press.
- ELLIS, R. 2003. *Task-based language learning and teaching*. Oxford: Oxford University Press.
- FROUFE, G. 1985. Introspección e informes verbales en procesamiento humano de información. *Estudios de Psicología* 19-20: 135-155.
- GEAR, J. Y GEAR, G. 2002. *Cambridge preparation for the TOEFL test*. Cambridge: Cambridge University Press.
- IKEDA, M. AND O. TAKEUCHI. 2000. Tasks and strategy use: Empirical implications for questionnaire studies. *JACET Bulletin* 31: 21-32.
- LUCAS, M. 1981. *English in fact*. Londres: Heinemann.
- MACARO, E. 2006. Strategies for language learning and for language use: revising the theoretical framework. *The Modern Language Journal* 90, 3: 320-337.
- NUNAN, D. 1997. Does learner strategy training make a difference? *Lenguas Modernas* 24: 127-142.
- NUNAN, D. 2001. Aspects of task-based syllabus design. Publicación electrónica en: <http://www3.telus.net/linguisticsissues/syllabusdesign.html>
- O'MALLEY, J. M. Y CHAMOT, A. U. 1990. *Learning strategies in second language acquisition*. Cambridge: Cambridge University Press.
- O'MALLEY, J. M., CHAMOT, A. U. Y WALKER, C. 1987. Some applications of cognitive theory to second language acquisition. *Studies in Second Language Acquisition* 9 (3): 287-306.
- OXFORD, R. 1990. *Language learning strategies. What every teacher should know*. Nueva York: Newbury House Publishers.
- OXFORD, R. 2003. Language learning styles and strategies: concepts and relationships. *IRAL* 41/4: 271-278.
- OXFORD, R., CHO, Y., LEUNG, S. Y KIM, H. J. 2004. Effect of the presence and difficulty of task on strategy use: an exploratory study. *IRAL* 42/1: 1-47.
- SINGHAL, M. 2001. Reading proficiency, reading strategies, metacognitive awareness and L2 readers. *The Reading Matrix* 1 (1). Disponible en: <http://readingmatrix.com/articles>.

- SKEHAN, P. 2001. Task and language performance assessment, en Bygate, M., Skehan, P., and Swain, M. (Eds.), *Researching pedagogic tasks: second language learning, teaching and testing*. Harlow: Pearson Education Limited.
- TAKEUCHI, O. 2003. *Searching for better language learning strategies: studies on good language learners in the Japanese FL context*. Institute of Foreign Language Education and Research. Tokio: Shohakusha.
- TAKEUCHI, O. Y WAKAMOTO, N. 2001. Language learning strategies used by Japanese college learners of English: a synthesis of four empirical studies. *Language Education and Technology* 38: 21-43.

APPENDIX 1

Metacognitive strategies

1. Planning	Previewing the organizing concept or principle of an anticipated learning task (advanced organisation); proposing strategies for handling an upcoming task; generating a plan for the parts, sequence, main ideas, or language functions to be used in handling a task (organisational planning).
2. Directed attention	Deciding in advance to attend in general to a learning task and to ignore irrelevant distractors; maintaining attention during task execution.
3. Selective attention	Deciding in advance to attend to specific aspects of language input or situational details that assist in performance of a task; attending to specific aspects of language input during task execution.
4. Self-management	Understanding the conditions that help one successfully accomplish language tasks and arranging for the presence of those conditions; controlling one's language performance to maximise use of what is already known.
5. Self-monitoring	Checking, verifying, or correcting one's comprehension or performance in the course of a language task. This has been coded in the think-alouds in the following ways:
a) Comprehension monitoring	Checking, verifying, or correcting one's understanding.
b) Production monitoring	Checking, verifying, or correcting one's language production.
c) Auditory monitoring	Using one's "ear" for the language (how something sounds) to make decisions.
d) Visual monitoring	Using one's "eye" for the language (how something looks) to make decisions.
e) Style monitoring	Checking, verifying, or correcting based upon an internal stylistic register.
f) Strategy monitoring	Tracking use of how well a strategy is working.
g) Plan monitoring	Tracking how well a plan is working
h) Double-check monitoring	Tracking, across the task, previously undertaken acts or possibilities considered.

6. Problem identification	Explicitly identifying the central point needing resolution in a task or identifying an aspect of the task that hinders its successful completion.
7. Self-evaluation	Checking the outcomes of one's own language performance against an internal measure of completeness and accuracy; checking one's language repertoire, strategy use, or ability to perform the task at hand. This has been coded in the think-alouds as:
a) Production evaluation	Checking one's work when task is finished.
b) Performance evaluation	Judging one's overall execution of the task.
c) Ability evaluation	Judging one's ability to perform the task.
d) Strategy evaluation	Judging one's strategy use when the task is completed.
e) Language repertoire evaluation	Judging how much one knows of the L2, at the word, phrase, sentence or concept level.

Source: from O'Malley and Chamot (1990, pp. 137-138).

APPENDIX 2: READING TASKS

Task 1: THE END OF THE MINOAN CIVILISATION

From about 2,000 B.C. for over 500 years, there flourished on the island of Crete in the eastern Mediterranean one of the most splendid civilisations of the ancient world. This was the Minoan civilisation. Its capital was Knossos, a city dominated by the palace of Minos the king. All over the eastern half of Crete there were cities, each with its own palace, and the population of the island must have been at least a quarter of a million.

Minoan power and influence, however, were not confined to Crete alone, for the Minoans, by means of their ships, ruled the surrounding seas, set up colonies on the Aegean islands to the north, and established trade links with other peoples on the mainlands of Anatolia and Greece and with the pharaohs of Egypt. Minoan objects and cultural influence have been found, for example, in the ruins of Mycenae in Greece.

Suddenly, between 1,500 B.C. and 1,400 B.C., the Minoan civilisation came to an end, and was forgotten by the world for over 3,000 years. In the early years of this century, archaeologists discovered the remains of the Minoan civilisation and evidence of its abrupt end. At first they thought that the Minoans had been overthrown by the invasion of a powerful enemy, the Mycenaean from mainland Greece, but they could not explain why the Minoans, with their large fleet, should be taken by surprise before they could protect their cities, for there were no signs of defensive walls around them; nor could they explain why the invaders left the capital, Knossos, intact, yet destroyed all the other cities.

Another theory was that the Minoan civilisation was destroyed by earthquakes. But there had been a severe earthquake 200 years earlier which had destroyed Knossos,

and the Minoans had quickly recovered. It was not until the results of excavations on Thera, an island 100 kilometres north of Crete, became known that another theory began to be taken seriously.

There is a volcanic island. Geologists have established that it has been shattered by two massive explosions in the last 25,000 years. At one time, Thera was a volcanic cone. The first explosions it suffered blew the top off, leaving a caldera. The sea entered through the gaps in the ring of cliffs surrounding the caldera and flooded it. During the thousands of years since the explosion of 23,000 B.C. pressure built up beneath the caldera, relieved from time to time by eruptions which formed small cones.

In about 1,500 B.C. Thera entered into another phase of intense volcanic activity. Enormous quantities of tephra were thrown out on to the edges of the caldera, which at the time was the site of a thriving Minoan colony. The inhabitants fled. The volcano then went into phase of subdued activity for about thirty years, at the end of which it exploded with a violence never witnessed before or seen by civilised men.

The effects were catastrophic. This time the tephra was rejected much higher into the atmosphere, where it spread out and fell over a wide area stretching from central Crete nearly as far as Cyprus 600 kilometres to the east. And as the floor of the caldera collapsed, tsunamis raced in ever-widening circles to devastate the coasts of Greece, Anatolia, and Crete.

Thus was the Minoan civilisation destroyed. Most of its cities, being on the coast, were flattened by the tsunamis, and the people who escaped the deluge found themselves facing starvation, for their crops lay under a thick blanket of tephra. Knossos, standing on a hill out of reach of the tsunamis, was damaged, but it was now like a head without a body, and within a very few years it was in the hands of the Mycenaeans.

1. Arrange the following statements in the correct chronological sequence according to the volcanic theory, supply a probable date or century for each.
 1. The Minoan civilisation emerged.
 2. The Minoan civilisation was destroyed.
 3. The Thera Volcano exploded, but without damage to human civilisation.
 4. The Thera volcano exploded, causing tsunamis which destroyed cities on Crete.
 5. The Thera volcano ejected a lot of tephra, which buried the Minoan settlements on the island at its rim.
 6. The Mycenaeans captured Knossos.
 7. The Minoan inhabitants of Thera left the island.
 8. The findings of archaeological excavations on Thera were published.
 9. The Minoan civilisation was rediscovered.
 10. Thera was a volcanic cone.
 11. Knossos was destroyed by an earthquake.

Task 1 Answer key

ORDER	STATEMENT	DATE
1	10	Before 23,000 B.C.
2	3	23,000 B.C.
3	1	2,000 B.C.
4	11	1,700 B.C.
5	5	1,500 B.C.
6	7	1,500 B.C.
7	4	1,470 B.C.
8	2	1,470 B.C.
9	6	Soon after 1,470 B.C.
10	9	Early 20th century A.D.
11	8	Later in the 20th century A.D.

Source: Lucas, M. 1981. *English in fact*. Londres: Heinemann.

Task 2

<p>One of the foremost American entertainers of the first part of the twentieth century was a part-Cherokee Native American named Will Rogers (1879-1935). Rogers was born in territory that would later become the state of Oklahoma and spent much of his youth riding horses and mastering the use of the lariat. These skills were refined into an entertainment act based on fancy rope tricks interspersed with humorous anecdotes and witty remarks. Travelling widely as a vaudeville entertainer, Rogers had become a star act by 1915 with the Ziegfeld Follies, a famous stage show. In 1918 his stage skills led to a new career as a movie actor in silent films and later in the “talkies.”</p> <p>→ <input type="checkbox"/> In the early 1920s, Rogers embarked on another profession, this time as a journalist writing weekly newspaper columns that reached millions of people worldwide. <input type="checkbox"/> Beginning in 1930 he also broadcast regular radio addresses.</p>	<ol style="list-style-type: none"> 1. What is the passage mainly about? <ol style="list-style-type: none"> a. The death of an ambassador. b. An epitaph to a remarkable person. c. An entertaining and accomplished man. d. The anecdotes of a humorous journalist. 2. According to the passage, which of the following statements is true? <ol style="list-style-type: none"> a. Rogers had Native-American blood. b. Rogers told stories about his Native-American upbringing. c. Rogers learned rope tricks from Native Americans. d. Rogers portrayed Native Americans on films. 3. Select a sentence in paragraph 2 in which the author implies that the writing of some journalists was not humorous. <p>→ marks paragraph 2.</p>
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<p><input type="checkbox"/> What distinguished his journalistic approach were his firsthand experience of ordinary people and places and a wry sense of humour, often debunking establishment figures and institutions.</p> <p><input type="checkbox"/> This poking fun at the serious side of life, combined with an optimistic homespun philosophy, gave him immense popular appeal. <input type="checkbox"/> He became a national and international celebrity and acquired the unofficial status of a goodwill ambassador during his travels in Europe. <input type="checkbox"/> He also had a strong philanthropic streak and devoted money and time to charitable causes.</p> <p>Rogers also had a keen interest in flying. He often wrote about the development of aviation and made friends with trailblazing flyers such as Charles Lindbergh. Another pioneering aviator, Wiley Post, invited Rogers to join him in testing the viability of a commercial route between United States and Asia. Tragically, both Rogers and Post were killed when their plane crashed in northern Alaska. Rogers's death was felt deeply throughout the United States and the public displays of mourning were heartfelt and widespread. The epitaph by his tomb is taken from one of his numerous quotable remarks and reminds us of the essential dignity of the man. It reads, "Never Met A Man I Didn't Like."</p>	<p>4. Look at the word debunking in the passage. Select another word or phrase in the bold text that is closest in meaning to the word debunking.</p> <p>_____.</p> <p>5. What does the author mean by a <i>goodwill ambassador</i> in paragraph 2 (→)?</p> <ol style="list-style-type: none"> Rogers worked in American embassies in European countries. Rogers's homespun philosophy made him an international celebrity. Rogers travelled the world projecting a kindly image of his country. Rogers's immense popular appeal helped him to establish charitable institutions. <p>6. The following sentence can be added to the paragraph.</p> <p style="text-align: center;">Among his preferred causes was alleviating the plight of Native Americans and the needy victims of the Great Depression.</p> <p>- Where would it best fit in the paragraph? Select the square <input type="checkbox"/> that shows where the sentence should be added.</p> <p>7. Why does the author mention Rogers's <i>philanthropic streak</i> in this paragraph?</p> <ol style="list-style-type: none"> To show Rogers's main preoccupation. To indicate how serious poverty was at the time To outline Rogers's journalistic career. To emphasize the variety of his interests.
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<p>→ In the early 1920s, Rogers embarked on another profession, this time as a journalist writing weekly newspaper columns that reached millions of people worldwide. Beginning in 1930 he also broadcast regular radio addresses. □What distinguished his journalistic approach were his firsthand experience of ordinary people and places and a wry sense of humour, often debunking establishment figures and institutions. □This poking fun at the serious side of life, combined with an optimistic homespun philosophy, gave him immense popular appeal. □He became a national and international celebrity and acquired the unofficial status of a goodwill ambassador during his travels in Europe. □He also had a strong philanthropic streak and devoted money and time to charitable causes.□</p>	<p>8. According to the passage, which of the following is true of Rogers?</p> <ol style="list-style-type: none"> He was well known outside the United States. His journalism was read especially by the establishment. He did not enjoy making fun of serious issues. His humour was not appreciated by many radio listeners.
<p>Rogers also had a keen interest in flying. He often wrote about the development of aviation and made friends with <u>trailblazing</u> flyers such as Charles Lindbergh. Another pioneering aviator, Wiley Post, invited Rogers to join him in testing the viability of a commercial route between United States and Asia. Tragically, both Rogers and Post were killed when their plane crashed in northern Alaska. Rogers's death was felt deeply throughout the United States and the public displays of mourning were heartfelt and widespread. The epitaph by his tomb is taken from one of his numerous quotable remarks and reminds us of the essential dignity of the man. It reads, "Never Met A Man I Didn't Like."</p>	<p>9. Look at the word trailblazing in the passage. Select another word or phrase in the bold text that is closest in meaning to the word trailblazing.</p> <p>_____.</p> <p>_____.</p> <p>10. Look at the word <i>It</i> in the passage. Select the word or phrase in the <i>italic</i> text that <i>It</i> refers to.</p> <p>_____.</p> <p>_____.</p> <p>11. The author implies that Will Rogers was popular.</p> <ol style="list-style-type: none"> Only after he became a radio journalist. Especially because of his charitable concerns. Largely with establishment figures. Throughout most of his career.

Source: Gear, J. y Gear, G. 2002. Cambridge preparation for the TOEFL test. Cambridge: Cambridge University Press.

Task 2 Answer Key

- 1 (C) The passage is mainly the accomplishments of Will Rogers a man who started out in the entertainment industry and moved into journalism, where he became most widely known for his humorous approach.
- 2 (A) According to the passage, Rogers was a part-Cherokee Native American.
- 3 (3) Rogers's use of humor in his writing, which often debunked the establishment, is what made him different (distinguished him) from other journalists.
- 4 (poke fun) When people "debunk" or "poke fun" at something, they ridicule it.
- 5 (C) An ambassador is a person who represents the policies of one particular country while in another country. A goodwill ambassador is one who travels around projecting a good image of his or her country.
- 6 (5) This sentence gives examples of Rogers's preferred causes and would follow the sentence that introduces his being devoted to charitable causes.
- 7 (D) The author has outlined the diverse interests and occupations that Rogers had. His philanthropic streak is one of these.
- 8 (A) According to the passage, Rogers was both a national and international celebrity.
- 9 (pioneer) A "trailblazer" or "pioneer" explores something new. Aviation was a relatively new field in Rogers's time.
- 10 (the epitaph) "The epitaph reads, "Never Met A Man I Didn't Like."
- 11 (D) The passage indicates that Will Rogers achieved popularity and success in all his endeavors.

