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# The Use of Lexical Communication Strategies in the Performance of Oral Tasks by Learners of English as a Second Language 

Tesis para optar al grado de Magíster en Lingüística con mención en Lengua Inglesa.

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## 1. Introduction

As learning English has become a necessity all over the world for some time now, due to the phenomenon of globalisation, analysing the aspects involved in second language-acquisition studies has acquired great relevance in the field of applied linguistics.

During the past three decades, much attention has been given to the cognitively oriented models of L2 learning and acquisition with greater emphasis being put on learners and learning rather than on teachers and teaching, as was the tendency in the past. The way learners process new information and the different strategies
they employ to understand, learn and communicate this information have been primary concerns of researchers of foreign language learning. In that context, the study of the different strategies used by learners of an L2 to resolve communication problems so as to effectively convey their messages has become a relevant issue.

In the literature there is a distinction among three kinds of strategies: production, communication and learning. Tarone (1980 in Ellis, 1994: 530) considers the first two "strategies of language use." A production strategy, she says, consists of an attempt to use the linguistic system efficiently with the minimum effort possible. Examples of such strategies are simplification, rehearsal, and discourse planning. In turn, communication strategies consist of "attempts to deal with problems of communication that have arisen in interaction." Paraphrasing and describing are examples of these strategies. Finally, a learning strategy is defined by Tarone (1980 in Ellis, 1994: 530) as "an attempt to develop linguistic and sociolinguistic competence in the target language." These include memorization, initiation of conversation with native speakers, and inference.

The focus of the present study is on communication strategies. The term 'communication strategy', was first coined by Selinker in 1972 in his discussion of learner interlanguage. A number of definitions of these strategies were subsequently proposed, the broadest being that of Canale (1983) (see section on Review of the Literature). Moreover, although several taxonomies of
communication strategies have emerged over the years, most researchers agree on the various kinds of communication strategies observable in non-native performance.

There have been two approaches to the study of communication strategies. The sociolinguistic approach, which examines communication strategies as part of socially-situated interaction, and the psycholinguistic approach, the one adopted for this study, that analyses the psychological processes underlying the use of communication strategies and the linguistic resources available to the learner to realise his/her communicative intentions.

This research reports on the communication strategies used by a group of students to communicate efficiently in their L2, i.e., English. Based on grounds set by Nanda Poulisse (1990) in her work 'The Use of Compensatory Strategies by Dutch Learners of English', this study intends to discover whether the choice of strategy is task-related and/or proficiency-level dependent.

The sections in this dissertation have been divided as follows:

- Review of the Literature. Some of the most important studies in the field of communication strategies are described.
- The Study. This chapter presents the theory underlying the present research, the objectives and hypotheses, as well as a complete description of the methodology used.
- Results. This section is the product of the data analysis, where results are presented and discussed.
- Conclusions. This final section consists of partial and final conclusions, recommendations and implications that can be drawn from the results.


## 2. Review of the Literature

The study of communication strategies can be traced back to the beginning of the 70's when researchers realised that L2 speakers used language devices systematically to overcome problems they encountered in the target language. Since then, several studies have been conducted on this subject and the study of communication strategies (CSs) has become a topic of interest within the area of applied linguistics nowadays. However, researchers have not agreed on one universal definition of communication strategies, and as a result, several taxonomies have been presented in the literature.

### 2.1. Definitions

Tarone (1977) provided the first definition and taxonomy of CSs, which have been influential in the field to this day:

Conscious communication strategies are used by an individual to overcome the crisis which occurs when language structures are inadequate to convey the individual's thought. (Tarone, 1977: 195).

This definition has its roots in the traditional view of CSs in which some problem-solving devices such as meaning-negotiation and repair mechanisms were not included. Although this definition was rather limited, it was the starting point for research and other definitions of CSs.

Later, Tarone provided a broader definition according to which CSs
relate to a mutual attempt of two interlocutors to agree on a meaning in situations when requisite meaning structures do not seem to be shared. (Tarone, 1980: 420).

This definition introduced the interactional perspective, which is a key issue when defining CSs as these relate to the negotiation of meaning in which two people attempt to cope with language-related problems.

The study of CSs gained importance in the 80's. Firstly, with Canale and Swain's publication (1980), in which they included CSs in their influential model of communicative competence as the primary constituents of one of the
subcompetencies, namely strategic competence. Then, Faerch and Kasper (1983a) published a collection of papers which contained the most important studies in the area of CSs (Bialystok, 1983; Dechert, 1983; Faerch and Kasper, 1983b; Haastrup and Phillipson, 1983; Raupach, 1983; Wagner, 1983). In their paper, Faerch and Kasper adopt two defining criteria for identifying CSs: problem-orientedness and consciousness. The first one refers to the problems learners encounter in different types of interaction and the way in which they can handle these difficulties. Consciousness refers to awareness on the part of the learners when they encounter communication problems in their L2 and of the strategies they can employ to solve such problems. Considering these two criteria Faerch and Kasper propose the following definition of CSs:
communication strategies are potentially conscious plans for solving what to an individual presents itself as a problem in reaching a particular communication goal. (Faerch and Kasper, 1983b: 36)

Bialystok's (1990) definition of CSs is framed in a cognitive perspective where the two components of language processing - analysis of knowledge and control of processing - give rise to two strategy types. The first component refers to "the process of structuring mental representations of language which are organized at the level of meanings (knowledge of the world) into explicit representations of structure organized at the level of symbols (forms)." (Bialystok, 1990: 118) The second component refers to "the ability to control attention to relevant and appropriate information and to integrate those forms in real time." (Bialystok, 1990: 125) Based on this framework she defines CSs as
the dynamic interaction of the components of language processing that balance each other in their level of involvement to meet tasks demands (Bialystok, 1990: 138).

Canale (1983: 11) offered the broadest definition of CSs since he suggested that these involve any attempt to "enhance the effectiveness of communication." This definition goes beyond the approaches adopted by other authors such as Tarone (1977), Faerch and Kasper (1983b), Dornyei and Scott (1995), who restrict the use of CSs to problem-solving devices.

Later, Poulisse (1990) and a group of researchers at Nijmegen University in The Netherlands performed a large-scale study whose results shed light on different aspects of CS use (see Descriptive Framework section for Poulisse's definition on CSs). One of the most important achievements of the study was to identify the relationship between strategy choice and task-type, which is one of the aspects included in this research work.

### 2.2. Taxonomies

As in the case of definitions, there are several taxonomies and their corresponding lists of strategies. Tarone (1977) proposes five main categories: avoidance, paraphrase, conscious transfer, appeal for assistance and mime. Avoidance is used when the learner decides not to say anything due to a lack of linguistic resources in the target language, which can be manifested either as
topic avoidance or message abandonment. Paraphrase is divided into approximation, word coinage and circumlocution and refers to the rewording of the message when the target item is not available in the learner's L2 lexicon. Conscious transfer includes literal translation, which is a word-for-word translation from the native language, and language switch, which involves the use of a native language term. In appeal for assistance, the learner asks for the correct term, while mime is the use of non-verbal strategies. In turn, Faerch and Kasper (1983b) place their taxonomy of communication strategies in a model of speech production. This taxonomy consists of formal reduction strategies, functional reduction strategies and achievement strategies. When using formal reduction strategies the learner communicates by means of a system that has been phonologically, morphologically, syntactically or lexically reduced. Functional reduction involves a reduced communicative goal. Achievement strategies can either be used to solve problems in the planning phase (compensatory strategies), or to have access to the missing term (retrieval strategies). These taxonomies have been criticised regarding their psychological plausibility. Kellerman (1991) says that some of the strategies involve the same underlying processes and consequently, they should not be classified as different strategies. They are also criticised for not being generalised over task, language, and learner.

Recent taxonomies are grounded in their psychological plausibility paying special attention to the underlying processes involved in the production of communication strategies. Two taxonomies framed in this view are those by Bialystok (1990) and Poulisse (1990). Bialystok's taxonomy is divided into
analysis-based strategies, which include paraphrase, mime, motivated (semantic) word coinages, and morphological creativity, and into control-based strategies, which include appeal to authority, message abandonment and topic avoidance. Poulisse's taxonomy used by the Nijmegen research group, also based on underlying processes, consists of conceptual and linguistic strategies (see Descriptive Framework section for a detailed explanation of this taxonomy).
3. The Study

### 3.1. Objectives

It is well known that learners of an L2 sometimes encounter problems to express their communicative intentions, and it is here that communication strategies play a significant role. Learners make use of these strategies to communicate efficiently. Concerning strategy use, this study aims to identify to what extent the type of task constrains strategy choice. It is also important to identify what circumstances the strategies are being employed in, that is, the
kind of task being performed, e.g., Is the learner alone or with a tutor? Is he/she describing something? Is he/she telling a story? Is he/she being interviewed? All these factors may affect the choice of strategies made by the learners. This study also aims at identifying whether the number and choice of strategy is related to the learners' proficiency level. Therefore, the research questions are the following:

1. How does the nature of the tasks performed by a group of English L2 learners affect the number and choice of strategy in the following tasks?
a) a story retell task
b) an oral interview.
2. How does the level of proficiency of each of the learners affect the number and choice of strategy?

### 3.2. Hypotheses

The research hypotheses formulated in this study are the following:

1. L2 learners of English, depending on their proficiency level and the task assigned, employ different kinds of communication strategies to compensate for the lexical problems they confront in the oral production of the second language.
2. Less proficient L2 learners of English use more communication strategies than the more proficient ones to compensate for the lexical problems they confront in the oral production of the second language.

### 3.3. Descriptive Framework

This study applies the model proposed by Nanda Poulisse (1990) of CSs who, in turn, based her taxonomy to classify CSs on Levelt's model of speech production (1989). Poulisse most probably used this model because it addresses the two points criticized in the previous model proposed by Shannon and Weaver in 1949 (The Code Model), in which communication is seen as a uni-directional process where the addressee is completely ignored, making it impossible for the addressor, as the model lacks a monitoring device, to repair the communication process when the message has not properly been decoded by the addressee.

Levelt's model of speech production acknowledged that "the generation of messages is subject to contextual factors, and it includes a monitor that evaluates the comprehensibility of messages at various stages of the speech production process." (1989 in Poulisse, 1990: 55) Therefore, the addressor of the message, who was ignored in Shannon and Weaver's model, is included in the communication process. Levelt's model of speech production is sufficiently comprehensive to be used as a theory of communication, including conversational rules and discourse models. Therefore, Poulisse adapted it to make it applicable to L2 communication as Levelt's model was originally meant to account for speech production in the L1. Poulisse's definition of CSs used in the Nijmegen project reads as follows: "Compensatory strategies are processes, operating on conceptual and linguistic knowledge representations, which are adopted by language users in the creation of alternative means of
expression when linguistic shortcomings make it impossible for them to communicate their intended meanings in the preferred manner." (Poulisse, 1990: 192-193) Based on this definition, Poulisse classifies the strategies into conceptual strategies and linguistic strategies. Conceptual strategies consist of listing some of the concept's characteristics or of substituting the word for a related concept which shares some of the criterial properties. In turn, linguistic strategies contain the syntactic, morphological and phonological rules of the speaker's L1, L2 and Ln's and the similarities between them. Additionally, Poulisse proposes subdivisions in both strategies. Analytic conceptual strategies allow the speaker to refer to an intended concept by listing its properties while holistic conceptual strategies allow the speaker to refer to a concept by using the word for a related concept. Linguistic strategies are subclassified into morphological creativity and linguistic transfer. Morphological creativity consists of the use of existing L2 words to which L2 morphemes have been added, and linguistic transfer exploits the similarities between languages. Linguistic transfer is further subdivided into borrowing, foreignizing and literal translation. The first one refers to the use of an L1 word without any phonological or morphological adaptation; foreignizing, to the use of an L1 word with phonological and/or morphological adaptation; and literal translation, to the word-for-word translation of an L1 word or phrase into the target language.

One of the most interesting findings in the Nijmegen project carried out by Nanda Poulisse, referred to in the previous section, was the effect of task on the choice of particular strategy types. Poulisse (1997 in Kasper and Kellerman, 1997) argues that these task-related differences can be explained by two
general principles of communication: the Principle of Clarity and the Principle of Economy. These require the speaker to be informative and clear, and brief and economical, respectively. In other words, whenever a speaker wants to refer to a person or object they will use the person's or object's name. The problem becomes evident when that name is not available in the speaker's lexicon. Poulisse states that "if the clearest and most economical means of reference are ruled out, we should find that CSs users will nevertheless try to produce references which are clear and effective, that is, which enable them to reach their communicative goals while attempting to keep their own (and their listeners') processing efforts to a minimum." (In Kasper and Kellerman, 1997: 54)

### 3.4. Methodology

### 3.4.1. Design

This research intends to shed light on the strategies used by a group of students and the relationship between their level of competence, the nature of the task performed and the CSs choice and frequency of use.

The survey design in this research covers its two types, longitudinal and crosssectional. The first one (longitudinal) involves the collection of data over a twoyear period, which enabled the researcher to study change over time. In
contrast to the longitudinal design, the cross-sectional one involves the collection of data at one point in time. This cannot be used for measuring change in an individual, as each individual is measured only once.

### 3.4.2. Subjects

The subjects were 6 native speakers of Spanish with different proficiency levels in English, pre-intermediate to advanced. The relationship between level of proficiency and years of study is the following: Year 1: elementary/preintermediate. Year 2: intermediate-upper intermediate. Year 3: pre-advanced. Year 4: advanced. All the subjects were studying at the Instituto Profesional Chileno Británico Teacher Training College. The criterion for the selection of the sample was their average mark ( 5,5 or higher in a scale of 1,0 to 7,0 ) in oral English (see Appendix 7.2), which is the only subject that has to be taken in every term of the four-year program. Two students took part in the longitudinal part of the study. One of them was in her first year in the year 2002, and the other one in her second year of training. In the year 2004, they were in their third and fourth years, respectively. Therefore, four different interlanguage stages were analysed. At this point, it is necessary to point out that the criteria for the selection of the sample (i.e., 5,5 or higher average mark) was not applied in the second stage of the experiment, that is, in the longitudinal study, as the same subjects participated in both stages $(2002,2004)$ which partially explains some of the implications in the results obtained (see Results section for details).

The four students who took part in the cross-sectional part of the study in the year 2004 were one student from first year, one from second year, one from third and one from fourth year. All of the students who took part in both the cross-sectional and longitudinal studies (except for one student from first year in the cross-sectional study), had been or were the researcher's students by the time the experiment took place, which provided for a relaxed interaction with the students during the experiment.

### 3.4.3. Data

### 3.4.3.1. Elicitation of the Data

The data were elicited in two different rooms (depending on availability), at the Instituto Profesional Chileno Británico. The students were tested individually and both tasks were performed in one session of approximately 15 to 25 minutes. The students sat opposite the researcher, facing each other. There was a desk in between the student and researcher where a tape recorder and microphone were placed. The order of the tasks was the same for all the students, the story retell task being the first one and the interview the second. The researcher met the students in the main entrance hall and took them to the
room where the experiment would take place. The tape recorder, microphone and furniture of the room had previously been arranged. Once inside the room the students were asked to sit down. Then they were given the story retell task instructions and the opportunity to ask questions in Spanish or English. After they had finished the story retell task, the interview was carried out. The researcher tried to provide a stress-free environment so that students could feel at ease and therefore eager to participate.

### 3.4.3.1.1. Tasks

All the students who took part in the experiment performed the same tasks to ensure that the CSs produced by each of the subjects could be compared. Two types of tasks were performed by the subjects so that "a more generalizable picture of communicative strategies use could be obtained." (Poulisse, 1990: 81) The two tasks were taken from Poulisse's work. The first (task 1) was a story retell task, a controlled task in which disturbing factors are controlled as much as possible. This task is classified as 'controlled' in that the contents of the story and problematic items can be largely determined by the experimenter. The story retell task contained a ten-line story accompanied by pictures so that students would not forget important details when retelling the story (see Appendixes 7.6.1. and 7.6.2.). The pictures are by André Fekkes of the AudioVisual Service Centre at Nijmegen University (Poulisse, 1990: 216). The students were asked to listen to the story recorded by the researcher in Spanish while looking at the pictures which illustrated the story. They were then asked
to retell the story in English and allowed to look at the pictures while executing the task.

The second (task 2) was an oral interview, a less controlled task, where familiar topics were chosen so that the students were freer to solve or avoid problems. It also served as an adequate method for eliciting spontaneous data. The topics chosen were determined beforehand and the selection criteria included 'simple' and 'complex' topics. Simple ones, such as holidays, aimed to place the subjects in real communicative situations that did not pressure them to use any specific vocabulary and therefore they would not require the use of many CSs. On the contrary, complex topics, such as cooking and certain sports, would require the use of specific vocabulary so that students would necessarily have to resort to the use of CSs.

At this point it is important to mention that research in ESL suggests that task characteristics influence the task performance and thus might influence the choice of strategies as well. Peter Skehan (1998) proposes a set of task characteristics that might influence the nature of performance which include 'familiarity of information', 'dialogic versus monologic', 'degree of structure', 'complex outcomes' and 'transformation'. He tested these in different studies to see whether these characteristics had systematic influences upon performance in terms of accuracy, complexity and fluency on the part of the students who participated in the different studies. In a later collection of papers, Robinson (2001a: 296) acknowledges that "task complexity and task difficulty, as well as task condition factors, interact to determine performance outcomes". This corroborates the information stated in the objectives in The Study section in
terms of the influence that the kind of task being performed has, in this study, on the choice of communication strategies.

### 3.4.3.2. Processing of the Data

It took up to three hours to collect the data to be analysed in this study, 20 minutes per student being the average time to perform the two tasks. The data were transcribed orthographically from the audio-tapes (see Appendix 7.1. for details on the Codes and Method of Transcription used). The tasks were carried out in eight different sessions depending on schedule availability on the part of the students and researcher.

The tasks of identifying and classifying the strategies were performed by the researcher and a second judge. The resulting identification and classification of CSs were compared and discussed and after a close examination, a definite evaluation of lexical problem-solving utterances was established by the researcher.

At this point, it should be noted that phrasal verbs were considered lexical items in the analyses of the data as they constitute a semantic unit equivalent to a single morpheme.

### 3.4.3.2.1. Data Adjustment

An adjustment formula is proposed, so as to take into consideration the difference in the number of words used by each subject in the story retell task
and the interview. This is because the longer the subject speaks, the more likely that he/she will use a greater number of strategies. The proposed formula standardises all strategies used within a task into one relative set, i.e., the number produced will not necessarily reflect the absolute strategy count (i.e., the figures derived directly from the interviews), but rather a relative amount that will enable the researcher to determine an order within one group (task). This adjusted data set is meaningful only in the context of this particular study group, since it stems from the mathematical manipulation of the original data set.

Mathematically, this is formulated as follows:

Sc=(Ns*WcMax)/Wc

Where

Sc: Strategy count
Ns: $\quad$ Number of strategies used
WcMax: Maximum word count
Wc: Actual word count

The results discussed in the following sections will, therefore, use adjusted data and all conclusions will be drawn from this modified data set, in order to
minimise external distortions, such as those introduced by variable-length interviews. Thus, in those cases in which the researcher analyses the relationship between the number of CSs and proficiency levels, task adjusted data will be used. In practical terms, this means that data will be adjusted only for subjects within a certain task group. Tables and graphs produced with this data adjustment method will be identified as 'task adjusted'. However, in those cases in which two or more tasks are involved and the aim is to determine if there is a relationship between the number of CSs used and the task itself, data will be adjusted for all tasks in one single adjustment. This implies that the whole student universe is considered, and not just constrained to one particular task. Tables and graphs produced with this adjustment method will be identified as ‘universe adjusted’.

## 4. Discussion of Results

In this section it will be possible to test the two questions and hypothesis established in the objectives of this study. These aim to test whether the number and type of strategies used by a group of English L2 learners are related to their proficiency level and/or the task assigned. In the first part, a quantitative analysis of the data, concerning the number and type of CSs used by four students in tasks 1 and 2 , will be provided. The second part, a qualitative analysis of the data, will be focused on the differences in the realization of CSs. This will allow us to establish whether the students' use of embedded ${ }^{1}$ CSs is related to their proficiency level or not and whether this is also the case with respect to the number of properties mentioned in the analytic

[^0]strategies. It will also be possible to verify whether the holistic strategies are realised by means of superordinate or subordinate lexical items or through words at the same hierarchical level of the intended target item. The data in the cross-sectional and longitudinal studies will be analysed separately.

### 4.1. Quantitative Analysis of the Data: Cross-Sectional Study

4.1.1. Relationship between Proficiency Level and Number of Strategies Used

An inverse relationship between the proficiency level and the number of strategies used was established. As can be seen in table 1, the higher the proficiency level, the less likely the subjects are to use communication strategies. Table 1 shows that student 4, the most proficient one, used half the amount of strategies student 1 did in task 1; this difference is even more noticeable in task 2, in which student 4 used 24 strategies versus 73 of student 1.

| TASK 1 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Student | ANCO $^{2}$ | $\mathrm{HOCO}^{3}$ | LIMO $^{4}$ | LITRA $^{5}$ | SUM |

[^1]| $S^{6} 1$ | 2,07 | 5,18 | 0,00 | 7,25 | 14,50 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| S2 | 1,36 | 6,80 | 0,00 | 8,16 | 16,32 |
| S3 | 1,00 | 2,00 | 0,00 | 2,00 | 5,00 |
| S4 | 0,00 | 2,47 | 0,00 | 4,95 | 7,42 |
| TOTAL | 4,43 | 16,45 | 0,00 | 22,35 | 43,24 |

Table 1
Adjusted number of strategies per student, task 1. 'Task Adjusted'.


Figure 1
Total number of strategies used in task 1 per student. 'Task Adjusted'.

Figure 1 shows the absolute amount (total sum) of adjusted strategies used by each subject.

The trend established for task 1 can also be clearly seen in task 2. Again, at higher proficiency levels, fewer strategies are used, both at specific and general levels (Table 2, Figure 2).

TASK 2

[^2]| Student | ANCO | HOCO | LIMO | LITRA | SUM |
| :---: | :---: | :---: | :---: | :---: | :---: |
| S1 | 8,68 | 8,68 | 4,34 | 52,06 | 73,75 |
| S2 | 13,90 | 4,63 | 0,00 | 32,43 | 50,96 |
| S3 | 3,01 | 0,00 | 1,00 | 10,04 | 14,06 |
| S4 | 12,00 | 2,00 | 0,00 | 10,00 | 24,00 |
| TOTAL | 37,59 | 15,31 | 5,34 | 104,53 | 162,77 |

Table 2
Adjusted number of strategies per student, task 2. 'Task Adjusted'.


Figure 2
Total number of strategies used in task 2 per student. 'Task Adjusted'.

### 4.1.2. Relationship between Task and Number of Strategies Used

A positive relationship between task control level and the number of strategies used, as opposed to proficiency level and number of CSs, was established when using universe adjusted data. The total number of strategies used in task 1 (more controlled) was 239 whereas in task 2 (less controlled), 162 strategies were produced. As suggested in section 3.4.3., subjects tend to use more CSs
when the task is more controlled, that is, when the subjects have less freedom to construct their oral discourse.

| TASK 1 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Student | ANCO | HOCO | LIMO | LITRA | SUM |
| S1 | 11,45 | 28,63 | 0,00 | 40,08 | 80,16 |
| S2 | 7,52 | 37,60 | 0,00 | 45,12 | 90,24 |
| S3 | 5,53 | 11,06 | 0,00 | 11,06 | 27,65 |
| S4 | 0,00 | 13,67 | 0,00 | 27,35 | 41,02 |
| TOTAL | 24,50 | 90,96 | 0,00 | 123,61 | 239,07 |

Table 3
Adjusted number of strategies per student, task 1. 'Universe Adjusted'.

| TASK 2 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Student | ANCO | HOCO | LIMO | LITRA | SUM |
| S1 | 8,68 | 8,68 | 4,34 | 52,06 | 73,75 |
| S2 | 13,90 | 4,63 | 0,00 | 32,43 | 50,96 |
| S3 | 3,01 | 0,00 | 1,00 | 10,04 | 14,06 |
| S4 | 12,00 | 2,00 | 0,00 | 10,00 | 24,00 |
| TOTAL | 37,59 | 15,31 | 5,34 | 104,53 | 162,77 |

Table 4
Adjusted number of strategies per student, task 2. 'Universe Adjusted'.

### 4.1.3. Relationship between Proficiency Level and Type of Strategy Used

From this adjusted data set the researcher cannot clearly infer that the type of strategy used varies according to the proficiency level of the subjects. The data are too weak to support any such claims, as seen in Figures 3 and 4. However,
these figures do show that the most proficient subjects have a tendency to use less strategies of any kind than their less proficient counterparts while they also show that regardless of proficiency level, CSs of the transfer (LITRA) type are the most favoured.


Figure 3
Strategies used at different proficiency levels, task 1. 'Task Adjusted'.


Figure 4
Strategies used at different proficiency levels, task 2. 'Task Adjusted'.

### 4.1.4. Relationship between Task and Type of Strategy Used

In general terms, it can be seen that the mix of strategies used by the subjects varies according to the kind of task they are confronted with. In spite of the fact that in both tasks studied in this research work the transfer (LITRA) strategies were the ones most widely used by a large margin (52\% in task 1 and $65 \%$ in task 2), the results also show that, overall, in those tasks characterised by being more controlled in terms of its length and content, such as task 1, more strategies of the holistic (HOCO) type are used than any other strategy type with the exception of transfer (LITRA), (Figure 5 and Figure 6), whereas in task 2, which is less controlled in terms of length and content, analytic (ANCO) strategies tend to prevail over the holistic (HOCO) ones.

Tables 1 and 2 (pp. 21-22) show the number of conceptual (analytic (ANCO) + holistic (HOCO)) strategies made versus the number of linguistic (morphological creativity (LIMO) + transfer (LITRA)) strategies used. In task 1 (Figure 5) there is an even proportion of conceptual and linguistic strategies ( $48 \%$ and $52 \%$ respectively) used, whereas in task 2 (Figure 6) there is a considerably high proportion of linguistic ones (68\%). Of these, only $3 \%$ correspond to the morphological creativity (LIMO) type and 65\% to the transfer (LITRA) type, borrowing being the most favoured ones. A possible explanation for this phenomenon could be the nature of the task. In an interview the subjects are so involved that they resort to the use of words in their native language instead
of stopping to give long explanations which eventually might lead them to lose the focus of the conversation.

Strategies used as percentage of total, TASK 1, adjusted


| $\square \square$ ANCO |
| :--- |
| $\square \mathrm{HOCO}$ |
| $\square$ LIMO |
| $\square$ LITRA |

Figure 5
Strategies used as percentage of total, task 1. 'Task Adjusted'.

Strategies used as percentage of total, TASK 2, adjusted


| $\square$ ANCO |
| :--- |
| $\square$ HOCO |
| $\square$ LIMO |
| $\square$ LITRA |

Figure 6
Strategies used as percentage of total, task 2. 'Task Adjusted'.
4.2. Quantitative Analysis of the Data: Longitudinal Study

### 4.2.1. Relationship between Proficiency Level and Number of Strategies Used

The results concerning this relationship show that in task 2 there is no inverse relationship between the number of strategies used and proficiency level, which was expected to occur, but actually a positive one (Figure 7). This is in contradiction with the results obtained in the cross-sectional section of the study and indeed with those reported by other authors (Poulisse, 1990 and Tabilo, 2000). On the contrary, in task 1, an inverse relationship between number of CSs and proficiency level is in fact revealed (Figure 8).

With relation to this section of the study, the same subject group was studied at two different time points, separated by an interval of two years. In the time span between the two time references selected, the subjects had been active students of the English language and had passed all their respective courses; therefore it was assumed that they would demonstrate a higher level of proficiency in the language after two years of studies. However, the two subjects of this part of the study lowered their marks significantly in the year 2004, which is clearly one of the reasons for the results commented above. In fact, their marks were lower than 5,5 , which was the selection criterion for the sample in this research (see marks in Appendix 7.2.). This was an aspect out of the control of the researcher, since the students who participated in the second interlanguage stage (2004) had to be the same subjects who participated in the first stage of the study (2002).


Figure 7
Difference in number of strategies used, 2004 vs. 2002, task 2. 'Task Adjusted'.


Figure 8
Average increase in number of strategies used, 2004 vs. 2002, task 1. 'Task Adjusted'.

As was the case in the cross-sectional study, a positive relationship between task control level (the amount of problematic items that can be determined by the experimenter) and the number of strategies used was observed when using universe adjusted data. The total number of strategies used in task 1 (more controlled) was higher in both years, 2002 and 2004, than the total number of CSs used in task 2 (Tables 5, 6, 7 and 8 ). This seems to support the fact that subjects tend to use more CSs when the task is more controlled. In the story retell task (more controlled) the students were required to pay attention to the syntactic structures used and memorise the whole story so that they could retell it in a way that resembled the original story they heard in Spanish.

| TASK 1 | 2002 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Student | ANCO | HOCO | LIMO | LITRA | SUM |
| SA | 3,83 | 11,50 | 3,83 | 26,83 | 46,00 |
| SB | 11,57 | 7,71 | 0,00 | 19,29 | 38,57 |
| TOTAL | 15,40 | 19,21 | 3,83 | 46,12 | 84,57 |

Table 5
Adjusted number of strategies per student, task 1, year 2002. 'Universe Adjusted'.

| TASK 1 | 2004 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Student | ANCO | HOCO | LIMO | LITRA | SUM |
| SA | 4,37 | 8,75 | 4,37 | 26,24 | 43,73 |
| SB | 3,72 | 11,16 | 0,00 | 11,16 | 26,03 |
| TOTAL | 8,09 | 19,90 | 4,37 | 37,40 | 69,76 |

Table 6
Adjusted number of strategies per student, task 1, year 2004. 'Universe Adjusted'.

| TASK 2 | 2002 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Student | ANCO | HOCO | LIMO | LITRA | SUM |
| SA | 0,00 | 2,35 | 2,35 | 7,06 | 11,76 |
| SB | 0,00 | 2,81 | 0,00 | 2,81 | 5,62 |
| TOTAL | 0,00 | 5,16 | 2,35 | 9,87 | 17,38 |

Table 7

Adjusted number of strategies per student, task 2, year 2002. 'Universe Adjusted'.

| TASK 2 | 2004 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Student | ANCO | HOCO | LIMO | LITRA | SUM |
| SA | 0,00 | 0,00 | 0,00 | 28,00 | 28,00 |
| SB | 3,00 | 3,00 | 1,00 | 8,00 | 15,00 |
| TOTAL | 3,00 | 3,00 | 1,00 | 36,00 | 43,00 |

Table 8
Adjusted number of strategies per student, task 2, year 2004. 'Universe Adjusted'.

### 4.2.3. Relationship between Proficiency Level and Type of Strategy Used

Again, as observed in the cross-sectional study, there appears to be no clear link between the type of CSs used and the proficiency level of the subject with the exception of transfer (LITRA) strategies. Even though the more proficient subject uses on average less CSs than the less proficient subject, the mix of chosen strategy types does not follow a determined pattern (no trend was established) for all strategies except transfer (LITRA) (Figures 9, 10, 11 and 12). The only constant feature is that the less proficient subject consistently uses more transfer (LITRA) CSs than his more proficient counterpart (Figures 13 and 14). This tendency indicates that there is an inverse relationship between proficiency level and the amount of transfer (LITRA) strategies used, so the more proficient subjects will tend to use proportionately less of these.


Figure 9
Strategies used at different proficiency levels, task 1, year 2002. 'Task Adjusted'.


Figure 10
Strategies used at different proficiency levels, task 1, year 2004. 'Task Adjusted'.


Figure 11
Strategies used at different proficiency levels, task 2, year 2002. 'Task Adjusted'.


Figure 12
Strategies used at different proficiency levels, task 2, year 2004. 'Task Adjusted'.

## Use of LITRA CSs, Average Task 1 2002-2004



Figure 13
Use of LITRA CSs. Average, task 1, 2002-2004.

## Use of LITRA CSs, Average Task 2 2002-2004



Figure 14
Use of LITRA CSs. Average, task 2, 2002-2004.
4.2.4. Relationship between Task and Type of Strategy Used

Figures 15 and $16^{7}$ show that the number of conceptual i.e., analytic and holistic (ANCO + HOCO) strategies used versus the number of linguistic i.e., morphological creativity and transfer (LIMO + LITRA) strategies used is very similar to that proportion found in the cross-sectional part of this study. In the cross-sectional part the percentage of conceptual strategies used in task 1 and task 2 is $48 \%$ and $32 \%$ respectively, while in the longitudinal part the percentage of conceptual CSs for task 1 and task 2 is $43 \%$ and $28 \%$. In task 1 , the difference in the use of conceptual and linguistic strategies is also less noticeable than in task 2, where a more evident difference is observed. This is a tendency which is also clearly observable in the cross-sectional study. However, the proportion of analytic (ANCO) and holistic (HOCO) CSs was not similar in the cross-sectional and the longitudinal study, which is a fact that can be attributed to statistical error due to sample size in the latter.


Figure 15

[^3]Type of strategy used. Average, task 1, 2002-2004.


Figure 16
Type of strategy used. Average, task 2, 2002-2004.

### 4.3. Qualitative Analysis of the Data: Cross-Sectional Study

In this section the results yielded in the quantitative analysis will be complemented with a discussion focused on the differences in the realizations of the strategies used by the subjects.

### 4.3.1. The Use of Analytic Strategies with a Fixed Formula

The data analysis revealed the use of a common formula, a definition-like type of pattern, in the realization of analytic strategies. This use has a close
connection with the task being performed. Thus, in the story retell task (task 1), only 1 out of 4 (equivalent to $25 \%$ ) of the analytic (ANCO) strategies used showed the use of a definition form whereas in the interview (task 2), 11 out of 23 (equivalent to $47,8 \%$ ) of the strategies were realized through this pattern. Consider the following examples:
(1) "it isn't a corkscrew but something like that, the other part of the corkscrew." (S4, task 2)
film picker:
ANCO
(2) "you make a kind of, uh... paste, that's not the word, I don't remember but you have to put some flour and eggs." (S3, task 2) dough: ANCO

The larger number in the use of long fixed formulas in the realization of ANCO strategies in task 2 can be partially explained by the fact that students had less time constraints when compared to task 1. Although it is true that none of the two tasks had restriction in terms of time, the story retell task carried an implicit restriction in that the subjects had to retell the story as close as possible to the one they listened to in their native language (Spanish), which automatically limits the time and vocabulary to be used, while in the interview the students could take as much time as they wanted to complete the task.

### 4.3.2. Number of Properties Mentioned within Analytic Strategies

As Figure 17 shows, there is a clear correspondence between the task performed and the number of target items' properties mentioned by the subjects when using analytic (ANCO) strategies. In task 1 only 8 properties were mentioned whereas in task 2,48 properties were mentioned (see Appendix 7.4.). This was particularly striking in the case of student 4 who mentioned 26 (equivalent to $54 \%$ ) properties out of a total of 48 produced by all students in task 2. One possible reason for this could be the fact that the topic chosen by student 4 in the interview (task 2) was highly technical which made it necessary for the student to resort to long explanations and therefore use more properties to refer to the intended item. Actually, student 4 was the one who gave the longest explanation and mentioned the largest number of properties for one word as illustrated in the following example:
(1) "it's something that you can't take out... it's when you, when you... eh... have a photograph and... and the little... eh... transparent paper is... is going out... it's the same but you cannot take it out, because it's something... it's part of... of the photograph." (S4, task 2) overdeveloped: ANCO


Figure 17
Number of properties mentioned per task.

There is no correspondence between proficiency level and number of properties mentioned in task 1 (see Appendix 7.4.1.) since the least proficient student (student 1) used 2 properties and the most proficient student (student 4) used no properties at all. This can be explained because student 4 did not use analytic (ANCO) strategies at all in task 1.

In task 2 there is correspondence between proficiency level and number of properties mentioned. Student 1, the least proficient one, used 6 properties, and student 2, the most proficient one, used 26 properties (see Appendix 7.4.2.).

### 4.3.3. Number of Embedded Strategies

The use of embedded strategies, that is, strategies which have given rise to new encoding problems within analytic strategies, had direct connection with
the task performed. In task 1 there was not a single case of embedding, whereas in task 2 there were four cases of embedding. Three of these involved the production of an embedded strategy of the transfer (LITRA) type, this is illustrated in the following examples (the embedded strategy is marked in bold):
(1) "there are pants that are like brilliant and the water can't pass through them." (S2, task 2) shiny fabric: LITRA
(foreignizing)
(2) "like the form you want them." (S2, task 2) shape:

LITRA
(literal
translation)
(3) "you make a kind of, uh... paste, that's not the word, I don't remember but you have to put some flour and eggs." (S3, task 2) dough: LITRA
(foreignizing)

There is no correspondence between proficiency level and number of embedded strategies used, since subject 4 , who was the most proficient student, did not produce embedded strategies at all. In fact, as expected, the more proficient the students the less inclined they are to use communication strategies as this case shows.

### 4.3.4. Holistic Strategies

As Poulisse (1990: 61) points out, "the speaker who adopts a holistic strategy refers to a concept by using the word for a related concept. The related concept can be superordinate or subordinate to the intended referent, but it can also be at the same hierarchical level." Most of the items used, both in task 1 and 2, to refer to the intended meaning were at the same hierarchical level (see Appendixes 7.5.1. and 7.5.2.). Thus, in task 1 out of a total of 12 holistic strategies used, 10 were realized by words at the same hierarchical level and 2 were superordinate items as the following examples illustrate:
(1) watch (S1, task 1) looked at: HOCO
(2) backside (S2, task 1)
back:
HOCO
(3) ticket (S4, task 1)
card:
HOCO
(4) machine (S1, task 1)
weighing scale:
HOCO
(superordinate)
(5) money (S1, task 1)

HOCO

In task 2, out of the 6 holistic strategies used, 3 included items at the same hierarchical level and the other 3 were superordinate terms. There were no cases of subordinate words used in either of the two tasks. This implies that the subjects did not know specific vocabulary as they always resorted to the use of a superordinate item. However, this is only the case for students 1 and 2 as would be expected from less proficient subjects.

### 4.4. Qualitative Analysis of the Data: Longitudinal Study

This section will focus on the realization of the strategies in the longitudinal study.

The same topics discussed for the cross-sectional study will be tackled.

### 4.4.1. The Use of Analytic Strategies with a Fixed Formula

None of the analytic strategies (6) used in both tasks 1 and 2, in the year 2002, started with a similar pattern and only 1 of these strategies (out of 3 ) in task 2 , in the year 2004, was produced with a fixed formula:
(1) "Those with cream and ham, ham." (Student B, task 2, 2004)
alfredo:
ANCO

### 4.4.2. Number of Properties Mentioned within Analytic Strategies

Tables 1 and 2 show, same as in the cross-sectional part, that there is a link between the task and number of properties named by the subjects. Nevertheless, the opposite occurred, more properties were mentioned in task 1 (15) than in task 2 (6). Verouden (1987 in Poulisse, 1990: 129) suggests that there is a relationship between the number of properties mentioned and the proficiency level of the subjects. Thus, she reports that the least advanced pupils mentioned fewer properties. If the assumption is that the more proficient the student the more number of properties he/she should mention, then these tables show that this relationship between proficiency level and number of properties is not very clear. Although it is true that student $B$ (the most proficient) mentions the most properties, in task 1 she mentions 7 properties in the year 2002 and 3 in the year 2004 for the same task. The result should have been the opposite, more properties should have been mentioned in the year 2004 as with two more years of studies this subject was supposed to be more proficient.

| NUMBER OF <br> PROPERTIES <br> MENTIONED |  |  |
| :---: | :---: | :---: |
| Student | TASK 1 | TASK 2 |
| SA | 2 | 0 |
| SB | 7 | 0 |

Number of Properties mentioned, 2002.

| NUMBER OF <br> PROPERTIES |  | 2004 |
| :---: | :---: | :---: |
| Student | TASK 1 | TASK 2 |
| SA | 3 | 0 |
| SB | 3 | 6 |

Table 10
Number of properties mentioned, 2004.

### 4.4.3. Number of Embedded Strategies

The results show that there is no clear tendency with relation to the number of embedded strategies and other variables. The only case of embedding was produced by student $B$ in task 1 (2002):
(1) "a machine eh... that is used to high ${ }^{1}$ to... to measure your weight ${ }^{2}$."
weighing scale:
ANCO
measure ${ }^{1}$ :
HOCO

to weigh yourself ${ }^{2}$ : LITRA

### 4.4.4. Holistic Strategies

All of the holistic strategies used in both tasks and in both periods (2002, 2004) were realized by lexical items at the same hierarchical level of the intended concept. There were neither cases of superordinate nor subordinate terms (see Appendixes 7.5.3., 7.5.4., 7.5.5. and 7.5.6.).

## 5. Conclusions

In relation to the first hypothesis that stated that L2 learners employ different kinds of communication strategies to compensate for lexical problems, it can be said that there is effectively a link between the type of strategy used and the task performed. The use of strategy of transfer (LITRA) is more frequent in the interview (task 2), borrowing being the most favoured one in both the crosssectional and longitudinal studies. This can be explained by the two general principles of communication, namely, the Principle of Clarity and the Principle of Economy, which require the speaker to produce clear messages and with the least possible effort, respectively. The students, applying these two principles, reached their communicative goals by using transfer strategies, which require minimal cognitive effort.

The results also revealed that proficiency-related differences in the choice of CSs used, are not clear, especially in the story retell task (task 1) of the crosssectional study, where the less proficient learners used an even proportion of conceptual and linguistic strategies. In the longitudinal section of the study, it is interesting to highlight the outstanding use of transfer strategies on the part of student A in the interview (task 2), 2004. In fact, 100\% of the CSs used by this student in this task belonged to this type of strategy, as this subject, being less proficient, required to resort to her L1 more often than the most proficient student. Two of the reasons for the inconsistencies in the results could be that first, the sample was too small to be conclusive and second, the criterion for the selection of the sample could not be repeated in the second stage of the experiment (2004) as the students had to be the same who had participated in the first stage of the experiment.

Regarding the second hypothesis, that states that less proficient L2 learners use more communication strategies than more proficient ones, the results confirmed it and coincide with those reported by Poulisse (1990). Thus, it can be stated that the number of CSs produced is inversely related to the subjects' proficiency level. In both studies, longitudinal and cross-sectional, the least proficient students used more CSs to achieve their intended meaning, this being a consequence of the less proficient students' more limited command in the L2.

The first shortcoming in this research was that the taxonomy adopted (Poulisse's taxonomy) is not comprehensive enough to account for cases in which a strategy, which is neither conceptual nor linguistic, is being used. This
was the case of student 3 in the cross-sectional study in the story retell task (task 1), where he referred to the intended concept 'weighing scale’ as 'lift'. He did not know this term and used a word which had no connection at all with the intended concept. The use of this item could be considered as a strategy, since the student maintained his communicative intention, though an unsuccessful one. This type of CS is not included in any of the categories in the Nijmegen taxonomy.

A second shortcoming was that the availability of suitable subjects was very limited, due to the fact that students were not willing to sacrifice either classtime or their own free time to participate in this research and thus, the study had to be performed with these limitations from the very beginning. This added to the fact that the researcher worked alone in the gathering of the data and also had schedule restrictions.

Finally, the third shortcoming was that retrospective interviews ${ }^{8}$ were not carried out. The reason for this, once again, was the limited time availability on the part of the subjects. Nevertheless, this lack of retrospective interviews was somehow countered by the fact that the researcher personally knew the subjects as they had been her students in the past. Moreover, the effectiveness of retrospective interviews has been put to doubt by previous researchers (Ericsson and Simon 1984, in Poulisse, 1990: 97). These authors claim that retrospective interviews can be considered a reliable source of information given the condition, among others, that the data are collected

[^4]immediately after task performance, which was not possible in this research work.

Future research should be directed at trying to explain what causes a speaker to choose a certain strategy. Thus, it would be possible to establish what the process underlying communication strategy use is. This would also shed light on the issue of whether encouraging learners to use communication strategies and instructing them, would make the learning process more efficient. It would be of particular interest to carry out an experiment involving two student groups, one of which would have received direct communication strategy training, while the other group would have not. The comparison of these two groups would enable the researcher to verify whether communication strategy instruction has an effect on second language performance and particularly on the use of communication strategies.

It would also be interesting for future research to focus on studying one type of strategy. In this way it would be possible to establish more clearly the conditions under which a specific strategy is used. This would lead to understand more thoroughly to what extent the characteristics of a task affect the choice of one strategy or another. It has previously been mentioned that the nature of the task (picture story retell, real-world objects' description, abstract objects' description, interview, etc.) together with the conditions under which the task is being performed (Are the students alone performing the task or with a teacher?, Is the teacher a native speaker of the L2 or Ln language or not?, Are the students being video-taped or tape-recorded?) may influence the type of
strategy the learner uses. Therefore, further research is needed to find out in what ways these factors affect the use of communication strategies.

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7. Appendixes

### 7.1. Codes and Method of Transcription

The codes used to classify the strategies were the following:

Analytic strategy $=$ ANCO
Holistic strategy $=\mathrm{HOCO}$
Morphological creativity $=$ LIMO
Linguistic transfer = LITRA. This strategy is subdivided into 'literal translation', 'borrowing' and 'foreignizing'.

All data transcription was made orthographically. Whenever a strategy was used, this was marked in bold and the intended meaning was placed to the right followed by the type of strategy in capital letters. When the type of strategy had subtypes, as is the case of LITRA CSs, these subcategories were written in brackets in the following line. When there were cases of embedding, the embedded strategies were given a number. Strategies were not counted more than once if repeated. The total number of words used by the students is given at the end of each task.
7.1.1. Orthographic Transcription, task 1, Cross-Sectional Study

Student 1

There is a time a men eh who... who who was going to visit
visit to
visit:

LITRA
(literal
translation)
a cou... I don't remember
this word is a person who is a son of your aunt
cousin:
ANCO
and with eh... eh this men went to visit this person with his wife. While they wait for the train in the andén
platform: LITRA
(borrowing)
eh... the men the man saw a machine weighing scale:
HOCO
eh... which give you a ticket card:

HOCO
and in it, is your weight and your future and eh... the men decide get your... get his weight and stand up in it stepped on it: LITRA
(literal
translation)
and put some money a coin:
HOCO
in it eh... and wait for the ticket. As he don't wear his glasses he eh... asked eh... his wife that she read. In it was... there was eh... writing and it said "you are a special men and have got eh... big
great: LITRA
and perseverancia perseverance:
LITRA
you'll be able to a brilliant future." After eh... eh... she said eh... after eh... his wife eh... give the ticket and read read out: LITRA
(literal translation)
eh... watch
looked at:
HOCO
the back of the ticket for one moment and she did ${ }^{1}$ a joke sneered: ANCO

$$
\text { made }^{1} \text { : }
$$

LITRA
(literal
translation)
and said "Oh! And this machine is wrong about your weight too."
Total number of words $=197$

Student 2

Once upon a time there was a man that was going to visit a... a cousin but it's not a close cousin with wife and meanwhile they were waiting for the train, the man saw a machine to... that shows you your weight. weighing
scale: ANCO
where there is printed your weight and your future. So he stand on stepped on:
LITRA
(literal translation)
the machine, he put the coin and he wait to... for the ticket card:

HOCO
to came out. And so as he was without his glasses
as he was not wearing glasses: LITRA

the card for him. And the ticket said "you are a very special man, you have a big
great:
LITRA
(literal
translation)
courage and... brave.
willpower:
HOCO
Well you are going to have a brilliant future." So after reading this, his wife turned the card turned the card over:
LITRA
(literal translation)
for a while and she laugh.
sneered:
HOCO
Total number of words $=150$

## Student 3

C: Ok, there was uh... once upon a time there was a man who was planning to visit a cousin who lived far away with his... with his wife, while they were waiting on the... for the train to come, the man saw a lift, it was one of these machines that gives you, uh... a paper
card: HOCO
where you can find the... your weight and also your, the future, your future plans, future plans... the man decided to... to have a try and he stepped on the lift and he put a coin and he waited for a piece of paper to come out of the machine but he was not wearing his glasses so he asked his wife to read read out: LITRA
(literal
translation)
the piece of paper for him... On the piece of paper there was written "you are a very special man, you have a lot a courage, uh... will
willpower:
HOCO
and you are very perseverant, persevering:
LITRA
(foreignizing)
you are going to have a brilliant future." After he read this, the wife turned the paper over and looked at the back of the paper for a moment and he made a joke

## ANCO

and she said, "Oh! And the paper also, uh... got your wrong weight."
Total number of words $=204$

Student 4

So, there was a man... eh... who was going to visit his cousin with his wife. While they were waiting... eh... for the train the man saw a scale. It was one of those things that gives you a card in which... eh... your weight and your future is impressed... printed:

LITRA
(literal
translation)
impressed? No, it's printed, printed. The man decided to... weigh himself and he stood...
stepped on:
LITRA
(literal
translation)

## eh... on the scale, he inserted a coin and waited for the... ticket card:

HOCO
to come out. As he was not wearing his glasses, he asked her wife to
read read out: LITRA
(literal
translation)
the card for him. In the card was said or was written "you are a special man, you are brave, you have... eh... lots of will
willpower: HOCO
and you're perseverant.
persevering:
LITRA
(foreignizing)
You are going to have a... a brilliant future." After reading this, the wife of the man turned the card over she looked at the back of the card for a moment and she said "Oh! And is also wrong about your weight"

Total number of words $=165$
7.1.2. Orthographic Transcription, task 2, Cross-Sectional Study

Student 1
$\mathrm{T}^{9}$ : Could you tell me about your hobbies?
$S^{10}$ : Swimming and dance.
T: What are the things and/or clothes people need when they swim?
S: Eh... a special... I don't remember the word
traje de baño swimming costume:
LITRA
(borrowing)
a special clothes eh... eh... which it is for swim and it is eh... one piece no bikini.
ANCO
T : Anything on the head?
S: A hat ${ }^{1}$, a plastic hat
swimming costume:

HOCO
and glasses.
HOCO

T : And erm... do you need anything to dance?
S: Eh... I need a special shoes because eh... you can't eh... wear trainers on the pista de baile. dance floor:
LITRA
(borrowing)
Eh... you eh... I use
wear:
LITRA
(literal
translation)
I wear a special dress eh... very sexy.

[^5]T : Do you like cooking?
S: Yes, yes because my husband say I cooking... cook very well.
T: Can you name the ingredients you need to make pasta, spaghetti for example?
S: To make pasta you need eh... tomatoes, meat.
T: But that's for the sauce...
S: Aha, onions, spices and salt.
T: So what do you do with these ingredients?
S: I put eh... oil into the pan and then I put... I put the meat and eh...
pico
chop:
LITRA
(borrowing)
the onion and put the spices and tomatoes and I wait eh... for a moment, 10 moments minutes:

LITRA
(foreignizing)
o sea... that is:
LITRA
(borrowing)
10 minutes and eh... the pasta I buy the pasta.
T : But do you know the ingredients you need to prepare pasta?
S: Flour eh... eh... water, eggs, maybe salt. You must uslerear
roll:
LITRA
(borrowing)
eh... and with your hand you must eh... apretar
squeeze:
LITRA

## amasar

knead:
LITRA
and then you eh... eh... did eh... do the pasta the form shape:
LITRA

> (literal
> translation)
you want.
T: Do you like salads?
S: Yes.
T : What kind of salads?
S: All kind eh... and special specially:
LIMO
lettuce with onions and tomatoes... mixed, yes.
T: What do you put on top of the salad before you eat it?
S: Ah... lemon, salt and oil and sometimes some spices.
T : Any vegetables that you like?
S: Potatoes with mayonesa.
mayonnaise:
LITRA
(borrowing)
T : When you eat meat, how do you prepare it?
S: I put the meat eh... on a bowl eh... metal bowl into the eh... oven and wait and I wait 10 minutes, and eh... I put the meat, some onions, spices,
vinagre,
vinegar:
LITRA
(borrowing)
I don't know and salt and wait... I always wait.
T: Thank you very much.

Student 2

T: And Trini could you tell me about your hobbies?
S: Well, now my hobbies are sports.
T: Sports, what kind of sports?
S: I love going to the gym.
T: Could you tell me... could you describe the outfit that you need to go to the gym, what do you have to wear?

S: Well, it's very simple. Like a T- shirt, I always wear like old T-shirts and...
pants
tracksuit pants:
HOCO
I use
wear:
LITRA
(literal
translation)
those that I used to wear for school when I had gym classes,
tracksuit pants: ANCO
and sneakers. That's all.
T : And what kind of exercises do you do?
S: Well I have a routine, first I do 20 minutes of bicycle with an specific programme and then I go upstairs for the other machines and I do there lots of exercises with lots of machines and everything, and then I...
T : Do you know the names of any of those machines?
S : For example one is called abductor. abductor machine:
LITRA
(borrowing)
That is for the legs...
abductor
machine:
ANCO
T : Any other that you remember?
S: No. There's one to do abdominales
(borrowing)
and I have also to do abdominales in the floor. Different kinds of them and...

## pesas

weights:
LITRA
(borrowing)
also, also different exercises. What else...
T : Any other hobby?
S: Well, this is like a new hobby for me. Because last year I was very, very lazy and I didn't do anything and so this year like in June I said "I'm going to go to the gym," and well, now I go every day.

T : And is there anything that you would like to do but you don't have time? Would you like to go skiing, for example?
S: Yes, I also love skiing. I started skiing when I was like 3 years old because my parents used to ski always but now it's too expensive. And also, I used to have a house in La Parva but it's too expensive to have a house so my parents sold it and bought a house in the beach.

T: Could you tell me what outfit you need to go skiing?
S: Well, you need... well, many people go with jeans but if you fall you are going
to wet. to get wet:
LITRA
(literal
translation)
T : So, what is it that you need?
S: Well there are pants that are like brilliant ${ }^{1}$ and the water can't pass through them ${ }^{2}$ ski pants:

## ANCO

shiny fabric ${ }^{1}$ :
LITRA
(foreignizing)
waterproof ${ }^{2}$ :
and also with a jacket of the same material.
T : And what do you need to ski?
S: Skies, the special boots, ski boots:

## ANCO

you need glasses goggles:
HOCO
and you need...bastones ski poles:
LITRA
(borrowing)
T : Do you need to wear anything here (showing head)?
S: You have to use
to wear:
LITRA
(literal
translation)
glasses, you must wear glasses because it's very dangerous if you don't wear them and...
T : On the head, any protection?
S: No, I don't use anything.
T : And what do you call those things that take you up the mountain?
S: In English... I don't know. Andarivel.
ski lift:
LITRA
(borrowing)
T: OK. And Trini tell me about the food you like.
S: Well, I don't use to eat fruits or vegetables so I have to take vitamins. And I love meat and chicken, I like barbecues.

T : And how do you like your meat?
S: Well done, very well done.
T : What do you eat the meat with?
S: Well, rice or potatoes or French fries.
T : Do you know how to prepare those things?
S: No, I have no idea how to cook anything.
T : And have you seen anybody cooking the...

S: Yes.
T: So how do they do it?
S: Because my boyfriend, ex boyfriend, used to love barbecues, so we had like from Monday to Sunday, every day.
T: How do people prepare the potatoes that you mention, the rice, the French fries?
S: Well the French fries, you cut them and you put them...
T: And before you chop them?
S: You peel them and then you cut it in sticks and you put them in a...
sartén frying pan:
LITRA
(borrowing)
with oil and that...
T: And do you like pasta?
S: Yes.
T : Have you seen anybody cooking pasta, I mean making pasta?
S: Making it or cooking it?
T : Making it.
S: Uh, no.
T: Have you got any idea of the ingredients you need?
S: Harina,
flour:
LITRA
(borrowing)
I think eggs and what else? Salt could be.
T : So if you mix all those things, how do you think they make the spaghetti? What do you have to do with these ingredients that you mention?

S: Mix them.
T : You mix them and then what?
S: To make a masa.
dough:
LITRA

T : And then?
S: To cut them like the form ${ }^{1}$ you want them.
in shapes:
ANCO
the shape ${ }^{1}$ :
LITRA
(literal
translation)
T : But before that, what do you use to do this?
S: The uslero.
rolling pin:
LITRA
(borrowing)
T: And then you cut the...
S: Yes.
T: O.K. Thanks.
Total number of words $=487$

Student 3

T: Now, do you know your parents' story, how they met?
S: Uh, yes, yes, but not with so many details, kind of...
T : Could you tell me the story of how they met?
S: Well, the thing is that... well, now my parents are 62 both of them and they met when my mother was about 30 years or maybe 28. My father had already got married and he had already had a son so... but he didn't married, he didn't get married to the... his son's mother so they started dating because they lived nearby and I think it was pretty much like that my mother

## knew

met:
LITRA
(literal
translation)
him and she knew that he was the man love:
LITRA
(literal
translation)
of her life so they got married, yeah, but the thing is that they lived together, they lived on the same neighbourhood.
T: Could you tell me about your last holidays? What you did, where you went. S: Yes, I went, it was this summer, I went to the United States, uh... because I have some kind of relatives, they are not close relatives but they are relatives of a friend, of one of my best friends so we went to, we always go to LA, but this time we first arrived in LA, and then we went to New York and then we met with my friend's family in Orlando. So we went from LA, which is on the west coast, then to New York and then to Miami and then again to LA and then to Chile, so it was a lot of travelling.
T : So, how long were you there for?
S: Three weeks.
T : And what activities did you do in the different places?
S: Well, in LA, there, I didn't do much because l've been there about four times so I know the place, so it's nothing new for me but on New York we spent about a week and we walked everyday. It was wintertime, it was snowing and the temperature was 10 below zero degrees so we walked..., what I remember is that we walked a lot. There was a friend who took us to the places that we had to visit and... but it was walking and

## knowing

visiting:
LITRA
(literal
translation)
the typical places that you must go to and then in Orlando we went to Disney, yes, so it was..., yeah, for me it was a brilliant, brilliant experience because l've never been there and since I was a child I wanted to go there, so I felt like a child and
I enjoyed it to the most, I thoroughly enjoyed it:
LITRA

T: It's a nice place... what things did you eat in The States? Something typical that you hadn't eaten before.
S: Well, what I... what I remember that maybe is not something typical but I remember eating a turkey leg which is roasted and you eat it. You are given this leg just like that and you eat it with your hands, yes. This was in Orlando, and it was the most delicious turkey grilled leg l've ever eaten, because the food in America it's not very much, it's not different from the one we have and also everytime I'm there, I go to Mc Donald's to have breakfast because the breakfasts they have are delicious.
T: And what kind of food do you eat here?
S: Here, I love pasta.
T. What kind of pasta?

S: Any kind of pasta, I mean, anything of pasta with some sauce, tomato sauce, and lasagna and all that, I could eat pasta everyday, I wouldn't uh... get bored of eating pasta.
T: Do you know what you call the ones that have got a filling inside?
$\mathrm{S}: \mathrm{Ah}$, those are named, are called: LITRA
those are called ravioli I think, but ravioli are small.
T : Can you explain to me how they are made?
S: Well, you make a kind of, uh... paste ${ }^{1}$, that's not the word, I don't remember but you have to put some flour and eggs dough: ANCO
dough ${ }^{1}$ :
LITRA
(foreignizing)
and you have to, I don't know, to use a special, uh... tool to make this, uh... paste I don't know the name for the tool
pin: ANCO
and you have to make... it's pretty much the same kind of, type of paste, I don't know, it's not the word, but that you use for spaghetti... dough: ANCO
but that... the difference is that you fill these, you have to cut this paste in, onto squares and then you have to fill it with meat and something else, and that's... and I think that's the difference.

T: And the last thing Claudio, could you tell me about your hobbies?
S: My hobbies, well, they... I don't practice any kind of sports because I'm very lazy but the thing I really like and that I could say that is one of my hobbies is listening to music and knowing discovering:
LITRA
(literal translation)
about different kinds of music, trying to be updated up to date: LIMO
with uh... the music that
is taking place is being played: LITRA
(literal
translation)
in different parts of the world, yes, because I collect music for instance and I have a special uh... favorite band...

T : Which is that?
S: It's a British 80's band, it's called Bananarama, and I collect their records so I'm always trying to look for things that I don't have, I'm looking, I look on the internet, there are some places where you can bid. So, I get some new items, I think, a new item once in a month, because some of them are expensive but some others are cheap and I also like reading a lot and my love of reading is something that has developed uh... through time has grown over time: LITRA
(literal
translation)
because when I was at school I was forced to read but nowadays I read uh... out of uh... because I like to.

T: For pleasure.
S: Yes, for pleasure.
T : And this band that you mentioned, I guess they played different instruments...

S: No, they didn't, because they were three girls who only uh... sing, they didn't play any kind of instruments. They only stand in front of their microphones and sing, and that was their charm.
T : Is there another band that you like in which people are actually musicians?
S: Uh yes, but the thing with, about music is that I love music and I love different, different kinds of music but if you ask me for a band that play instruments I would

## say

mention:
LITRA
(literal
translation)
uh... another British band which is Duran Duran, and because all of... there were five guys, and all of them, each one played, plays an instrument except for the singer.
T : And could you name those instruments?
S: Yes, there's a guy who play the drums, another one who play the bass, another one who play the guitar and there is also another one who plays the keyboard.
T: You mentioned that you also like reading. Any specific genre?
S: Any specific, sorry?
T: Genre, that's a French word which means kind of literature; fiction, drama, poetry...
S: Uh, yes, yes, I have one special genre, yeah, which is anything that it is, can be at first thought that is oriented to children but is not. For instance, my favourite writer is another British guy, who is called C. S. Lewis, the one who wrote the Chronicles of Narnia and the thing about his books is that it may be read by children, but the thing that I can get from the books is that they are so many uh... messages, hidden messages that every time I read it I get some new ones and I also, for instance, I love the Harry Potter series, but I think they are more oriented to children but the thing is that I love, what I love on uh...
about reading is that it must be something with uh... with a lot of ... magic and fantasy, yes.

T: O.K. Thank you very much.
S: Welcome.
Number of words $=1123$

Student 4

T : Ale, tell me about your hobbies.
S: Taking photographs and developing them is one of my hobbies.
T : What do you need to take photographs?
S: A camera and you need the film... eh... and depending on the picture that you want to take is that you are going or not to... to need an... well, those things that you put the camera on
tripod: ANCO
so you don't need to... to... to hold it and I think you call it the tripod.
T : And after you take the picture, what do you do?
S: After taking the picture you have to eh... take out the film and eh... go into a... well, the... the dark room eh... for I don't know how to say it you have to... to make the impressions keep on the negative. you have to fix the image: ANCO
So... eh... you need to go to the dark room in order to develop
the negative the film:
LITRA
(literal
translation)
and when it's finished then you can... you can turn on the red light.
T : And how do you do all that?
S: Eh... in... yes... first of all, when you have the... the film, you have to... eh... to take the... it's a kind of I don't know how to say 'tapa',
lid:
LITRA

I forgot. The film has got a... a 'tapa' and you have to take it out with a... it isn't a corkscrew but something like that, the other part of the corkscrew,
film picker:
ANCO
and after that, eh... you have to... to take the negative but without touching the middle of it you have to do it like this (showing how to do it) just eh...
the sides the edges: HOCO
eh... well if you don't do that, the picture will be... will have printed your fingerprints.
And after that, you have to put the negative, you have to enrollar wind:

LITRA
(borrowing)
you have to enrollar the negative eh... on a... kind of... in a kind of tin... it's a tin that... eh... has a... a hole in the middle spiral:

ANCO
so after you had... eh... put all the negative around it, you have winded the film:

ANCO
you have to put inside it a special liquid.
solution:

## ANCO

After that, eh... you have to let it rest for about, I don't remember... half an hour, one hour, and then you have to... to... to take out the... the liquid and you have to wash it. A lot of times maybe 3 or 4 times in order to...
T : With water?
S: Yes... with water, in order to take out all the things that could stay in the film... on the film.
And after that, you have to eh... let it dry and you have to... yeah, you have to hang it with those perritos de ropa... film hanging clips: LITRA
yes... but they're special perros de ropa because they are made of iron and they are heavy film hanging clips: ANCO
so they... eh... they keep straight the film... one up and one down and it has to be like this (showing how to do it).
T: O.K. Interesting.
S: Eh... after that... well, after that, you can start developing the... the photographs and, for that you need... eh... two chemicals. Eh... you buy them anywhere... well... the problem with them is that... eh... when you buy them... they are a powder and you have to... to... to make them... you have to make them... you have to make the... the... the liquid. It's like eh...
it's something similar to... to... eh... juice. emulsion:
ANCO
When you buy a sachet of juice and you add water, it's the same. So, well... as it happens with the juice, if you add too much water, it won't be as good as if you... you add the exact amount. And, well, these chemicals eh...
have a... a time for being used... expire:

## ANCO

You... eh... you cannot have them forever... eh... thinking that they will be as good as the first time you use them. And... well you have one for developing... for developing the picture and one for fixing the picture.
image: HOCO
T : Now, what are the stages for developing the pictures?
S: The first stage is when you... add, well you have the negative, you have the paper and you eh... put on light with the... I forgot the name of the machine... eh....
ampliadora
LITRA
enlarger:
(borrowing)
and... eh... well with the machine you put on light to the negative and then... eh... well it seems that it is on the picture because you cannot see it. After giving some light to the... negative... and to the paper, you take it and you put it
in the... well, the first chemical that is called revelador, developer: LITRA
(borrowing)
it's for developing the picture and...
developer:
ANCO
T : ...but you don't see it until the next stage...
S: until, no, no, no, no, eh... you don't see it when you just give it light, when you put it on the... on... well the chemical, after... I don't know... 5 or 6 seconds, the picture starts to appear and... well, I like that part very much because... eh... there is where you... when you see your picture and if... and if you have done everything O.K. and all that. And... well, eh... you waited for 2 or 3 minutes, it depends on the quality of the chemical because it... if it's the first time you use it, it will work much better than if you have used it for... I don't know 6 or 7 times, and it depends on that... that the picture is going to... to eh... be nitid clear: LITRA
or not.
Well, it also has to do with... with the... with the lenses of the camera and also with the ampliadora, but here if you let the... the picture more time than is needed, something like a... a... like a capa de cebolla fogged layer: LITRA
(borrowing)
will appear over it.
T: ...so you have to be very careful...
S: Yes... it's called sobrerevelado
over-developed:
LITRA
(borrowing)
and you will notice it, it's something that you can't take out... it's when you, when you... eh... have a photograph and... and the little... eh... transparent paper is... is going out... it's the same but you cannot take it out, because
it's something... it's part of... of the photograph. over-developed:
ANCO
And if you give it less time, something called eh...
bajo revelado under-developed:
LITRA
(borrowing)
I think... but it's just the opposite... yes... and you have to... to take that things into account because you have to... to be aware of what is happening... you have to... you can't stay like saying "oh, no, that's not my picture" you have to control everything.

After... the... the revelador liquid, you have to take it, you have to take the picture and put it into the... the...
the fixing liquid,
fixer:

## ANCO

because, if... you let the... let the picture stay with the first liquid, it won't stop developing eh... even if you have taken it out from the... yes... you have to change the chemical so what was happening to the photograph stops. And with that fixing liquid, the picture stays on the paper. And then... well, that's the moment when you can turn on the lights. Eh... well, you just let him, just let it stay there for 10, 15 minutes, it depends on you.

T: So, the whole process takes around 4 or 5 hours.
S: Yes, yes.
T : Right. Thank you very much for that long explanation. I learnt a lot about the process of developing pictures (laughs).

Number of words $=1128$
7.1.3. Orthographic Transcription, task 1, Longitudinal Study 2002

Student A

Eh... a man with her husband decide to eh... visit eh... her
relative:
(literal
translation)
in other city eh... suddenly he look at saw:
HOCO
a weigh, scale:

LIMO
a weigh to... to a ver $\quad$ how can I put it:
LITRA
(borrowing)
eh... he looks, he looks a weigh and decide to
stand up stepped on it:

LITRA
(literal
translation)
eh... then he eh... a ver then he eh...
no sé como se dice I don't know how to say: LITRA
(borrowing)

## metió la moneda...

put the coin:
LITRA
(borrowing)
inside the ... the... the money coin:
HOCO
the coin and the man eh... not eh... wearing glasses and her husband read the ticket... card:

HOCO
put the coin in the weigh then he... he waits for the ticket and the information but she's not wearing glasses so her husband eh...
read read out:

## (literal <br> translation)

the ticket and she said to him that eh... will be a great man and an honest man eh... and then eh... her husband eh... turn off turned the card over: LITRA (literal translation)
... the turn off the ticket and... and... and lies, because eh... she... she told her husband that her... that he... a ver that
it is not his weight and... his weight was wrong: ANCO

Number of words $=162$

## Student B

Well, there was a woman with his with her husband and they were going to visit a cousin of the husband and... and then he saw
a machine eh... that is used to high ${ }^{1}$ to... to measure your weight ${ }^{2}$
weighing scale:
ANCO
measure ${ }^{1}$ :
HOCO
weigh yourself ${ }^{2}$ :
LITRA
(literal
translation)
and then he decides to... to eh... to know his weight weigh himself:
ANCO and... and... and then he, I don't know... well..., then he then he... he receives the
paper
card
HOCO
with his weight and as he wasn't able to see the weight because of... eh...
he didn't have a good sight he wasn't wearing his glasses:
ANCO
and so he asked his wife for help to

and the paper said that eh... his... he was going to have a good future, that he was eh...very... that definitely that... we that he will have a very good future and then the... wife eh... turns the paper turned over: LITRA
(literal
translation)
and... and noticed that the... that his weight
was not good was wrong:
LITRA
(literal
translation)
and... and... and she tells him that eh... his weight is

## bad.

wrong:
LITRA
(literal
translation)
Number of words $=161$
7.1.4. Orthographic Transcription, task 2, Longitudinal Study 2002

Student A

T : Do you know how your parents met?
S: Eh... I don't remember but I think so in Coyhaique many many years ago eh... my mum had a supermarket and my... my father eh... eh... come to the supermarket and see met:
HOCO
my mother but I don't remember more details.
T : O.K. tell me about your last holidays.

S: I go to... to Viña del Mar, my sister, my brothers but only, not... not on my parents, sister and brothers.
T : When was that?
S: Eh... two... three, four in February.
T : And how long did you stay there for?
S: Two, no three weeks we stayed there.
T : What was the weather like?
S: Very good.
T : What things did you do there?
S: Eh... we go to the beach, to the discotheque, eh... I don't remember more... but that's it.

T: And what kind of food did you have there?
S: Eh... mariscos sea food:
LITRA
(borrowing)
and Italian food.
T: Did you cook?
S: Yes, yes.
T: Do you remember what you cooked?
S: Eh... cómo se llama esto? what do you call this:
LITRA
(borrowing)

## son como unos pastelitos con crema

they are like cakes with custard:
LITRA
(borrowing)
but I don't remember the name of...
T: And erm... what do you think of Viña del Mar, had you been there before?
S: Yes... I think is a very beautiful city and eh... I visit Viña del Mar every, every, every year.
T : And what do you like about the city?

S: The sea, the people, is a very eh... peacefully... peaceful: LIMO
place, and I like it so much. It's my... my favourite city of... of all.
T : Thank you very much.

$$
\text { Number of words = } 290
$$

## Student B

T: Do you know how your parents met?
S: Yes, yes eh... my mother eh... met my father because her sister was friend of my father, eh... then he... he, my father usually went to... to my mother's house eh... because she, he also knew my grandparents and was friend of them so then he began to
talk
court:
HOCO
my mother and they become boyfriend and girlfriend.
T : Do you remember where you went for your last holidays?
S: Yes.
T: Where did you go?
S: I went to La Serena.
T : And how did you like it?
S: Yes, I liked it.
T: What did you do there?
S: Eh... I went there with my brother and my mother, we went to the casino, the beach...

T: And erm... did you cook there?
S: No, no. I went out several times and my mother cooked all the time.
T: How long were you there for?
S: Fifteen days.
T: And do you usually go to La Serena on your holidays?
S: Yes, I usually go.
do:

## LITRA

T: And what do you particularly like about La Serena?
S: I like the outskirts of La Serena, I like Valle del Elqui, eh... Cochiguaz. The eh... the people is very relaxed there, they they don't usually work eh... in... at lunch time. They have a nap.

$$
\text { Number of words = } 221
$$

7.1.5. Orthographic Transcription, task 1, Longitudinal Study 2004

Student A

There was a time that a man... eh... with his wife, he was waiting for the train because they wanted to visit a cousin... the man suddenly saw a machine that shows the weight of a person... weighing scale: ANCO
he... eh... eh... that give us a... a... a ticket card:

## HOCO

where the future of us is impressed... printed:
LITRA
(literal
translation)
eh... then the man decided to... to stand up...
step on:
LITRA
(literal
translation)
to stand in the machine and he put a coin and wait for the... ticket as he were... no
using wearing:
LITRA
(literal
translation)
glasses he asked his wife eh... that read
to read
out:
LITRA
(literal
translation)
him the... the ticket. In the ticket was writing eh... "you are a very special man.. you have... courage... strength willpower: LITRA
(literal translation)
and perseverancy... perseverance:
LIMO
you are going to have a very brilliant future..." After that eh... his wife started to

## laugh

 sneered:HOCO
and... and... and say
LITRA
(literal
translation) told:
him that he was wrong and the results are wrong.
Total number of words $=142$

## Student B

There was a man who was going to visit a cousin with his wife and suddenly while she was waiting for the train, the man saw a machine to weigh... to weigh himself.
weighing
scale: ANCO
There was one of those machines that gives you a paper card: HOCO
which is the... which is the weight of the person who is in the machine and also tells the future of the person.

The man decided to weigh himself and he put a coin into the machine and wait until the paper came out. As he wasn't wearing sunglasses, glasses sorry, he asked her wife to read read out: LITRA
the paper and the paper said that "you are a special man, you have a lot of courage and strength willpower:

HOCO
and you are a perseverant persevering:
LITRA
(foreignizing)
person. You are also going to have a good future, a brilliant future." Afterwards he, the wife, turns the paper turned the card over: LITRA
(literal translation)
and he looked that, and he looked at it for a moment and he
laughed;
sneered:
HOCO
Oh! They also wrong the weight.
Total number of words $=167$
7.1.6. Orthographic Transcription, task 2, Longitudinal Study 2004

Student A

T: Could you tell me what your hobbies are?
S: My hobbies... eh... I use to read a lot... I have eh... love stories eh... that's my... that's my principal
main: LITRA
(literal
translation)
hobby.
T : Any hobby related to sports?

S: I have eh... I have eh... I love sports... but I don't have to eh... I don't have to practice eh... here in Santiago because I don't like Santiago.
T: What sports did you use to practice?
S: I used to practice volleyball... tennis but... no.
T: Now, could you tell me what outfit you need to play volleyball?
S: Outfit?
T: Yeap... the clothes that you have to wear.
S: Eh... eh...
T: Do you need a special outfit to play volleyball?
S: Eh... no. I only... I only wear... eh... pants... but... eh...

## Buzo <br> tracksuit:

LITRA
(borrowing)
and a t-shirt.
T : And what elements do you need to play volleyball?
S: What we need to play volleyball?
T: Yeap.
S: Eh... we have to be eh... a ball... eh... la malla. net:
LITRA
(borrowing)
T : And for tennis? Do you use the same things?
S: Eh... racket eh... a ball eh... una malla and that's it.
T: And erm... any other sports that you used to practice or that you like?
S: Not... eh... I also like to cook a lot.
T: Really?
S: Yes, really.
T : What things do you cook?
S: Especially Italian food.
T: Italian food?
S: Yes.
T: Do you prepare spaghetti?
S: Yes.

T: So what do you need to prepare spaghetti?
S : The ingredients?
T : Yes, the ingredients to make the spaghetti?
S : Harina ... flour:
LITRA
(borrowing)
salt... water I think... milk... eggs... but I'm not sure, probably.
T : So what do people do with these ingredients?
S: They mix all the ingredients and then he...
los amasan... knead:
LITRA
(borrowing)
and then he... los cortan...
cut:
LITRA
(borrowing)
I think eh... uslerear...
roll:
LITRA
(borrowing)
T: Do you cook any other thing?
S: I don't know, it could be cookies.
T : And what ingredients do you need to prepare cookies?
S: Eggs, milk, butter eh... sugar.
T: And what do you do with that?
S: Eh... I put... put it in a bowl and then I mix, eh... then I put it in a...
asadera baking tray:
LITRA
and then to the... al al... horno.
(borrowing)

LITRA

T : What about meat, do you ever eat meat?
S: Meat? Eh... not because I'm... I prefer the... the vegetables and fruits...
T : And what vegetables do you like?
S: Eh... vegetables... eh... carrot... eh... betarragas, beetroot:
LITRA
(borrowing)
el apio.
celery:
LITRA
(borrowing)
T: Do you cook any of those vegetables?
S: I use to... eh... boil them.
Total number of words $=244$

## Student B

T: I would like you to tell me about your hobbies.
S: My hobbies. Well, one of my favourite hobbies is to skiing, is going to the mountain and have breathe:

HOCO
lots of air
fresh air:
HOCO
in my spare time. Lately, I try to ski every time I can. Well, in winter.
T : When did you start skiing?
S: At the age of fifteen I started to ski and it is one of my favourite hobbies.
T : What other hobbies do you have?
S: What other hobby? Riding bicycle, riding bicycle, yes.
T : Do you wear anything special when you ride a bicycle?
S: Yes, I try to wear light clothes, comfortable clothes.
T: Any safety devices?
S: No, not any safety devices. At least to ride bicycles.
T: And erm..., could you also tell me about your favourite food?

S: My favourite food, Italian food, pasta. What else? Meat... I eat lots of meat and vegetables.

T : How do you like your meat?
S : Middle cooked medium:

## ANCO

and vegetables, I also like them.
T: What do you like about Italian food?
S: The sauces maybe.
T: Which sauces?
S : Those with cream and ham, ham. alfredo:

## ANCO

T: I would also like to know why you chose pedagogy?
S: First of all because my sister studied here and she taught me lots of things I could learn about the studies, and because I was interested in English, not in the pedagogy in itself but in English and in the middle of the studies I started to feel interested in... in the pedagogy in itself, about children, about how to to
make give:
LITRA
(literal
translation)
a class, how to prepare a class.
T : Any subjects that you particularly like?
S: Linguistics, yes.
T: Why?
$\mathrm{S}:$ Why? Because it talks is:
LITRA
(literal
translation)
about language in itself, it explains how a person can learn a language, which are the possibilities that a person have, has to learn a language.

T : And anything else about your subjects?
S: Anything? Any other subject that I feel interested in?
T: Yeap, or that you don't like.
S: I don't like spending too much time in history, I'm not interested in
history subjects.
British
studies:

## ANCO

And I think there should be more English in the first years.
T: Now, what do you think about the Chilean TV?
S: About the Chilean TV there are lots of different programmes but ones are more, most, more seen than others. I think there are variety if you have cable.

T: I mean open TV not cable.
S: Chilean TV only Chilean TV. Then I think there is a very little variety of programmes.
T : And what kind of programmes are those, that we can see, then?
S: Musical music:

LITRA
(litreral
translation)
programmes.
T : What is that little variety that you mention?
S : Little variety is musical programmes; there are always musical programmes

## o sea

 that is:LITRA
(borrowing)
programmes about people dancing or people singing, I think there is too much of them, they should be restricted. there should be fewer of them: LITRA
(literal
translation)
T : And what about these talk shows?
S: Talk shows. I think there are lots of them, too. Every channel has its talk show, I think.

T : And what do you think about those?
S: I sometimes watch them. Sometimes I do not watch them.
T: Why do you watch them or why don't you?

S: I watch them when I... when's there's someone interesting that I like, for example a singer or... I don't know an actress or an actor.
T: Yeap. And when is it that you don't watch them?
S: You don't watch them. When they get stupid. When they make... ask:

LITRA
(literal translation)
start make stupid, stupid, silly questions or jokes.
T: And the last thing María José, what's your opinion about Chilean politicians?
S: Politicians mmm... they never get to... to make do:
LITRA
(literal
translation)
what they promise, most of them, I think.
T: So, you don't like them.
S: No, it's not that I don't like them but I... most of I don't trust... I don't trust them, most of them. But I do try to vote, actually I do vote, and I'm interested to choose my favourite politician.
T: So you are voting for the next elections.
S: Yes, I'm voting, yes.
T: Have you decided about your candidate?
S: No, no because I think the publicity
propaganda:
LITRA
(literal
translation)
they make... I think it's horrible, they just appear with a suit and they... they do not tell nothing about what they do, or they are going to do.
T: And erm... have you found out ways to get informed about the important things the candidates are proposing?
S: No, I haven't waste my time, spend my time informing myself. No I haven't.
T: Apparently, you can log in a web page and get all the information about the candidates and their programmes.

S: Yes, you can, yes. But I think that is eh... is part of his role, to inform us about what they are going to do for us, because we are going to vote for them.
T : So, if you were one of the candidates, what would you do?
S: My publicity, I think I would, it would be totally different. I wouldn't dress myself up or undress dress down: LIMO
myself like some of the candidates. I would make a list with relevant points of my campaign. I think. But actual concrete:

## HOCO

things that I'm going to do.

### 7.2. Students' Marks

### 7.2.1. Cross-Sectional Study

Student 1 5,5
Student 2 6,2
Student 3 6,9
Student 4 5,9
7.2.2. Longitudinal Study 2002

Student A 6,0
Student B 6,0
7.2.3. Longitudinal Study 2004

Student A 5,1

Student B 5,0

### 7.3. Use of Embedded Strategies

### 7.3.1. Cross-Sectional Study, task 1

Student 1 No cases of embedding reported
Student 2 No cases of embedding reported
Student 3 No cases of embedding reported
Student 4 No cases of embedding reported
7.3.2. Cross-Sectional Study, task 2

Student 1
(1) "A hat ${ }^{1}$, a plastic hat"
swimming cap ${ }^{1}$ :
HOCO
swimming cap:
ANCO

Student 2
(1) "there are pants that are like brilliant ${ }^{1}$ and the water can't pass through them ${ }^{2 "}$
ski pants:
ANCO
LITRA ${ }^{\text {shiny }}$ fabric ${ }^{1}$ :
(foreignizing)
waterproof ${ }^{2}$ :
(2) "like the form" you want them". in shapes: ANCO

$$
\text { the } \quad s^{2}{ }^{1}:
$$

LITRA
(literal
translation)

Student 3
(1) "you make a kind of, uh... paste ${ }^{1}$, that's not the word, I don't remember but you have to put some flour and eggs" dough:

ANCO
dough ${ }^{1}$ :
LITRA
(foreignizing)

Student 4 No cases of embedding reported
7.3.3. Longitudinal Study, task 1, 2002

Student A No cases of embedding
Student B
(1) "a machine eh... that is used to high ${ }^{1}$ to... to measure your weight ${ }^{2 "}$
weighing scale:
ANCO
measure ${ }^{1}$ :
HOCO
weigh yourself ${ }^{2}$ :
LITRA

(literal<br>translation)

7.3.4. Longitudinal Study, task 2, 2002

Student A No cases of embedding reported
Student B No cases of embedding reported
7.3.5. Longitudinal Study, task 1, 2004

Student A No cases of embedding reported
Student B No cases of embedding reported
7.3.6. Longitudinal Study, task 2, 2004

Student A No cases of embedding reported
Student B No cases of embedding reported
7.4. Number of Properties Mentioned
7.4.1. Cross-Sectional Study, task 1

Student 1
(1) "this word is a person who is a son of your aunt" cousin: ANCO

No. ${ }^{11}$ of properties mentioned $=2$
(2) "she did" a joke" sneered:

ANCO
No. of properties mentioned $=2$
Total number of properties mentioned $=4$
Student 2
(1) "a machine to... that shows you your weight." weighing scale: ANCO

No. of properties mentioned $=2$
Total number of properties mentioned $=2$

Student 3
(1) "he made a joke"

ANCO
sneered:

No. of properties mentioned
$=2$
Total number of properties mentioned $=2$
Student 4

No ANCO CSs reported

Total number of properties mentioned in task $1=8$
7.4.2. Cross-Sectional Study, task 2

Student 1

[^6](1) "a special clothes eh... eh... which it is for swim and it is eh... one piece no bikini." swimming costume: ANCO

No. of properties mentioned $=4$
(2) "A hat ${ }^{1}$, a plastic hat"
swimming cap:
ANCO
No. of properties mentioned $=2$
Total number of properties mentioned $=6$

Student 2
(1) "those that I used to wear for school when I had gym classes,"
tracksuit pants:
ANCO
No. of properties mentioned $=2$
(2) "That is for the legs..." abductor machine:
ANCO
No. of properties mentioned $=1$
(3) "there are pants that are like brilliant ${ }^{1}$ and the water can't pass through ${ }^{2 \prime}$ ski
pants: ANCO
No. of properties mentioned $=3$
(4) "the water can't pass through them ${ }^{2 "}$ ANCO
(5) "special boots,"

ANCO

No. of properties mentioned $=1$
ski boots:

No. of properties mentioned $=1$
in shapes:
waterproof ${ }^{2}$ :

No. of properties mentione

No. of properties mentioned
ginput
er
(6) "like the form ${ }^{1}$ you want them." ANCO

No. of properties mentioned $=1$
Total number of properties mentioned $=9$

Student 3
(1) "you make a kind of, uh... paste ${ }^{1}$, that's not the word, I don't remember but you have to put some flour and eggs"
dough:
ANCO
No. of properties mentioned $=2$
(2) "you have to, I don't know, to use a special, uh... tool to make this, uh... paste I don't know the name for the tool" rolling pin: ANCO

No. of properties mentioned $=3$
(3) "it's pretty much the same kind of, type of paste, I don't know, it's not the word, but that you use for spaghetti..."
dough:
ANCO
No. of properties mentioned $=2$
Total number of properties mentioned $=7$

Student 4
(1) "those things that you put the camera on" tripod:

ANCO
No. of properties mentioned $=2$
(2) "I don't know how to say it you have to... to make the impressions keep on the negative." you have to fix the image: ANCO

No. of properties mentioned $=2$
(3) "it isn't a corkscrew but something like that, the other part of the corkscrew" film picker:
ANCO
No. of properties mentioned $=2$
(4) "kind of... in a kind of tin... it's a tin that... eh... has a... a hole in the middle" spiral:
ANCO
(5) "put all the negative around it,"
you have winded the film: ANCO

No. of properties mentioned $=1$
(6) "a special liquid."
solution:
ANCO
No. of properties mentioned $=2$
(7) "but they're special perros de ropa because they are made of iron and they are heavy"
film hanging clips:
ANCO
No. of properties mentioned $=3$
(8) "it's something similar to... to... eh... juice."
emulsion:
ANCO
No. of properties mentioned $=2$
(9) "have a... a time for being used..."
expire:
ANCO
No. of properties mentioned $=2$
(10) "it's for developing the picture and..."
developer:
ANCO
No. of properties mentioned $=1$
(11) "it's something that you can't take out... it's when you, when you... eh... have a photograph and... and the little... eh... transparent paper is... is going out... it's the same but you cannot take it out, because it's something... it's part of... of the photograph."
over-developed: ANCO
No. of properties mentioned $=5$
(12) "fixing liquid," fixer:

ANCO
No. of properties mentioned $=2$
Total number of properties mentioned $=26$
Total number of properties mentioned in task $2=48$

Student A
(1) "it is not his weight and..."
his weight was wrong:
ANCO
No. of properties mentioned $=2$
Student B
(1) "a machine eh... that is used to high ${ }^{1}$ to... to measure your weight ${ }^{2 "}$
weighing scale:
ANCO
No. of properties mentioned $=3$
(2) "to know his weight"

ANCO
weigh himself:
(3) "he didn't have a good sight"

No. of properties mentioned $=2$ ANCO he wasn't wearing his glasses:

No. of properties mentioned $=2$ Total number of properties mentioned task $1=9$
7.4.4. Longitudinal Study, task 2, 2002

Student A

No ANCO CSs reported

Student B

No ANCO CSs reported
7.4.5. Longitudinal Study, task 1, 2004

Student A
(1) "shows the weight of a person..." weighing scale: ANCO

No. of properties mentioned $=3$

Student B
(1) "a machine to weigh... to weigh himself." weighing scale: ANCO

No. of properties mentioned $=3$
Total number of properties mentioned task $2 \mathrm{I}=6$
7.4.6. Longitudinal Study, task 2, 2004

Student A

No ANCO CSs reported

Student B
(1) "Middle cooked"
medium:

ANCO
No. of properties mentioned $=2$
(2) "Those with cream and ham, ham."
alfredo:
ANCO
No. of properties mentioned $=2$
(3) "history subjects."

British studies:
ANCO
No. of properties mentioned = 2
Total number of properties mentioned task $2 \mathrm{I}=6$
7.5. Holistic Strategies

### 7.5.1. Cross-Sectional Study, task 1

## Student 1

| machine | intended | item | 'weighing | scale' |
| :--- | :--- | :--- | :--- | :--- |
| (superordinate) |  |  |  |  |
| money | intended | item | 'a | coin' |
| (superordinate) |  |  |  |  |

### 7.5.2. Cross-Sectional Study, task 2

## Student 1

| a hat <br> (superordinate) | intended item | ‘swimming | cap' |
| :---: | :---: | :---: | :---: |
| glasses | intended | item | 'goggles' |
| (superordinate) |  |  |  |
| Student 2 |  |  |  |
| pants | intended item | 'tracksuit | pants' |
| (superordinate) |  |  |  |
| glasses | intended | item | 'goggles' |
| (superordinate) |  |  |  |

There were no cases of subordinate concepts reported in either task 1 or task 2. The rest of the holistic (HOCO) strategies were realized by lexical items at the same hierarchical level of the intended target item.
7.5.3. Longitudinal Study, task 1, 2002
money
intended item 'coin'
(superordinate)

### 7.5.4. Longitudinal Study, task 2, 2002

There were no cases of subordinate concepts reported in either task 1 or task 2. The rest of the holistic (HOCO) strategies were realized by lexical items at the same hierarchical level of the intended target item.

### 7.5.5. Longitudinal Study, task 1, 2004

There were no cases of subordinate concepts reported in either task 1 or task 2. The rest of the holistic (HOCO) strategies were realized by lexical items at the same hierarchical level of the intended target item.
7.5.6. Longitudinal Study, task 2, 2004

There were no cases of subordinate concepts reported in either task 1 or task 2. The rest of the holistic (HOCO) strategies were realized by lexical items at the same hierarchical level of the intended target item.

### 7.6. Story and Pictures Used in task 1

### 7.6.1. Story

There once was a man who was going to visit a distant cousin with his wife. While they were waiting on the platform for their train the man saw a weighingscale. It was one of those apparatuses which give cards on which one's future is printed as well as one's weight. The man decided to weigh himself so he
stepped on the scale, put a coin in, and waited for the card to come out. Since he was not wearing his glasses he asked his wife to read the card out to him.

On the card was written, 'You are a special man, you have great courage, willpower and perseverance. You are to have a golden future'. After she had read this out, the man's wife turned the card over, looked at the back for a moment and sneered, ' Huh, and it's got you weight wrong too'.

### 7.6.2. Pictures




[^0]:    ${ }^{1}$ The use of conceptual strategies give rise to new encoding problems, and thus may have CSs embedded within them. For a detailed analysis on embedded strategies see Appendix 7.3.

[^1]:    ${ }^{2}$ Analytic
    ${ }^{2}$ Holistic

[^2]:    ${ }^{4}$ Morphological creativity
    ${ }^{5}$ Transfer
    ${ }^{6}$ Student

[^3]:    ${ }^{7}$ Calculations for this item were based on producing an average for all subjects involved in each task for a particular year (i.e., 2002 and 2004). These yearly averages were then weighted on a $50-50$ basis using the following formula: average (2002) * 0,5 + average (2004) * 0,5

[^4]:    ${ }^{8}$ Comments collected from the subjects immediately after they had performed the tasks, which makes the process of identifying strategies easier.

[^5]:    ${ }^{9}$ Teacher
    ${ }^{10}$ Student

[^6]:    ${ }^{11}$ Number

