# A QUALITATIVE ANALYSIS OF THE INTERLANGUAGE FOUND IN COMPULSORY SECONDARY EDUCATION STUDENTS IN THE CANARY ISLANDS 

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#### Abstract

This article describes a research project carried out in the Canary Islands in order to analyse the interlanguage found in compulsory secondary education students. The theoretical model was taken from L. Selinker's concept of interlanguage. An analysis of fossilizations, permeability and regression was carried out under the scope of cross-linguistic transfer and taking the communication strategies into consideration.


Key words: applied linguistics, second language acquisition, interlanguage, communication strategies

## Resumen

El artículo describe un trabajo de investigación realizado en las Islas Canarias con alumnos de inglés de Educación Secundaria Obligatoria con el fin de comprobar su interlengua. El modelo seguido se identifica con el de L. Selinker y llevó consigo un análisis cualitativo de los procesos de fosilización, permeabilidad y regresión. Asimismo, se analizó la interlengua desde la perspectiva de la transferencia lingüística y teniendo en cuenta las estrategias comunicativas.
Palabras clave: lingǘstica aplicada, adquisición de segundas lenguas, interlengua, estrategias comunicativas.

## 1. INTRODUCTION

The study of learner language has provided a good base for teaching strategies. It is true that the more one knows about learning the more one should be able to influence teaching. However, learner language as an area that highlights language learning strategies can be associated more clearly with theoretical or experimental fields. In a broader sense, it is part of the cognitive science. That is to say, it is part of the general research into the working of the human mind. It must be said that second language research has been principally associated with psychological and linguistic concerns, but it also has its place in sociology and discourse analysis.

Second language learning and use takes place in a social context. The social behaviour of second language users can also be considered an area of investigation within the broader framework of the social sciences. In the Canarian context -where the learning of a second language is considered crucial to the development of the islands' economy- second language research becomes a necessity in our university.

Some researchers (Spada and Lightbown, 1993) think that, ideally, second language research should be done without paying attention to the concerns of teachers. However, we feel that we should offer pedagogical solutions not only to teachers but also to education authorities. In this respect, our Faculty of Education has a working agreement with the Canarian Institute of Evaluation (ICEC) that has proved to be very important in the development of these studies within our community.

These Second Language (SL) studies must also be seen as part of the applied linguistics field and therefore to have an applied, practical aim of facilitating guided language learning. On the other hand, as there is no unified theory of Second Language Acquisition (SLA) we agree with H.D. Brown (2000) that we have to contribute with empirical research that can help the development of the sciences involved in investigating the teaching/learning process. As R. Ellis $(1986 ; 1997)$ has pointed out on several occasions, language users and language learners do not process their knowledge of language in the same way under in all circumstances. Their performance varies as a product of the stylistic norm they are drawing on, which in turn depends on whether they are participating in planned and unplanned discourse. Their performance also depends on the social conditions of their learning. With this kind of research, we want to contribute to the construction of a linguistic and task corpus than will permit future young researchers in the Canary Islands to

## 2. THEORECTICAL BACKGROUND AND PROPOSALS

The research project we describe in this article implies the interlanguage (IL) model (see Selinker 1972, 1992). If we consider interlanguage within a continuum between the first language system (the learner's initial knowledge) and the second language system (the learner's target) at any given point the learner's is said to speak an interlanguage. Selinker argues that this interlanguage is permeable (because the rules that constitute the learner's knowledge is open to evolution); dynamic (because it is changing constantly) and systematic (because it is based on coherent rules which learners construct and select in predictable ways). Selinker also claims that interlanguage depends on five central processes that are part of the "latent psychological structure" (see Cook, 1993):

1) Language transfer, in which the learner projects features of the L1 on the L2.
2) Overgeneralization, in which the learner tries to use the $L 2$ rules in ways it is not allowed.
3) Transfer of training, when teaching strategies create language rules that are not part of L2.
4) Strategies of L2 learning, such as when learners "simplify" English.
5) Communication strategies as for example when learners omit communicatively redundant grammatical items.

Using this framework our research project attempted to:

1. Describe the interlanguage used by Secondary students in the Canary Islands.
2. Describe the interlanguage specifications through the analysis of fossilizations, regressions and permeability.

With the data and its analysis the principal objective was to identify the possible teaching strategies that facilitate interlanguage growth, as knowledge of them will be useful for secondary teachers and for teacher education in the Canary Islands.

## 3. THE CONTEXT

The Institute of Evaluation in the Canary Islands (ICEC) is a Canarian institution that is part of the local Department of Education. Its aims are to evaluate the standard of education in the Canaries and to propose recommendations to the local government. In the field of language teaching and learning it has evaluated the teaching of English at primary and compulsory secondary education level (see Peñate et al, 1998 and Peñate and Bazo, 1999). The Secondary Education project (called ELESO) involved the teaching of English, Mathematics and Spanish. The English part consisted of a test that measured student performance in the four skills paying special attention to the content described in the Canary Islands syllabus design for secondary education.

The project had four phases:
a) Establishing a group of researchers to guide the production and piloting of the tests.
b) Piloting tests in 3 secondary schools on the island of Tenerife (covering three different type of schools, urban, suburban and rural).
c) Training examiners to carry out the tests on the students selected from the total population in the two Canarian provinces.
d) Analysing the results and the writing of the final report.

The project we describe in his article saw its beginning because it was considered as a natural follow-up to the carried out for primary schools under the direction of Peñate Cabrera and secondly because it paved the way for giving both universities in the Canaries the opportunity of directing an ICEC project. To date, the first three phases of the project have been finished and the data that has been gathered is now undergoing analysis.

One of the tasks in the test was to produce a written text. When the amount of data contained in the written tasks in Primary, Secondary and the advanced level tests was considered the researchers involved decided to create a joint project be-
tween the universities of Las Palmas and La Laguna to study the interlanguage of Canarian children and adolescents. It was decided that the university of Las Palmas would be in charge of Primary and advanced level and La Laguna would be responsible for compulsory secondary education students.

## 4. METHODOLOGY

From the point of view of the research methodology in the field of the acquisition of foreign languages, the interlanguage hypothesis means the description of the learner's grammar. The theoretical model includes the abstraction and idealization of the learner's grammar because that is the only way that the psycholinguistic procedures that rule the acquisition of a second language can be established (see Adjemian and Liceras 1984).

If it is accepted that the interlanguage grammar differs from the grammar of the native language (L1) and the target language (L2) the following methodology can be put forward:

1) The specific features of the IL(s), specially those which differentiate them from natural languages must be established
2) The interactions between these features and the universal properties shared by $\mathrm{IL}(\mathrm{s})$ and the natural languages must be studied
3) An attempt to explain the reason for the differences between IL(s)and natural languages must be made.

This methodology allows for the development of a theory of competence (in the Chomskian sense) that determines the specificity of the grammar of that independent linguistic system. The concept of interlanguage specificity gave rise to a discussion at the beginning of the interlanguage studies because some authors considered that the difference between $\operatorname{IL}(s)$ and natural languages was quantitative rather than qualitative. Nevertheless, in accordance with Adjemian and Liceras (1984) it is clear that that there are three main processes that must be analysed in order to explain any learner's grammar:

1) Fossilization: linguistic phenomenon that causes that features of the L1 grammar are maintained in the learner's interlanguage. This is an unconscious and persistent process.
2) Regression: linguistic phenomenon that shows that the learners cease to know aspects of the target language they seemed to master.
3) Permeability: process that allows that rules from L1 are used in L2. It also facilitates overgeneralizations of the same rules.

The three processes were analysed under the scope of cross-linguistic influence or transfer and which were present in the in the texts written by secondary students.

Adjemian (1976) developed a paradigm to analyse interlanguage data adopting the Chomskian linguistic theory. He took the classic dichotomy competence/ performance to propose that the analysis of the IL has to have as its main objective the construction of the model of the ideal speaker's linguistic knowledge. The most adequate data for this kind of study come from the grammatical intuitions produced by learners. Adjemian (1976) agrees with many other IL experts in that if the IL has the same status as a natural language, it must show the principles of its linguistic system. In that sense, any interlanguage research project has to be rigorous in its methodology, reliable in its interpretation and verifiable in its conclusions. E. Tarone (1988) establishes the steps to be followed in this project:
a) To establish the informants' profile.
b) To establish the type of study (longitudinal or transversal).
c) To design the task in relation to the aims of the study.
d) To analyse the data.
e) To describe the learner's interlanguage.

Our informant's profile was taken from the ELESO project, that is, compulsory secondary education students attending three kinds of secondary schools (urban, suburban and rural) from the seven Canary Islands. It was a transversal study, that is, we wanted to characterize the interlanguage of the students studied when they finish compulsory education. The task was a written text in the form of a narrative. The analysis concerned fossilization, regression and permeability and the narratives were analysed qualitatively. The communication strategies used by the students were also taken into account.

Due course, a description of the interlanguage will be proposed as well as possible teaching strategies to facilitate its development towards the target language. The findings of the research intend to be not incidental. It is hoped that they will typify all other secondary students that learn in similar conditions within the Canary Islands context. That is why it has been decided to include a quantitative paradigm that can determine common ground among the various findings as a second phase of the project.

## 5. POPULATION

Any scientific research in the social sciences is undertaken to answer some specific questions or hypotheses concerning the behaviour of humans or social systems. Of course, it is not necessary to use scientific methods to answer questions. One might rely on intuition or educated opinion concerning how the social world operates. In fact, common sense beliefs about behaviour are often correct. Unfortunately, as has been shown through the scientific study of behaviour, human judgement is not always accurate. As P. Spector (1981) points out scientific methods are not infallible but they are designed to minimize the biases that affect subjective opinion.

The selection of the population sample was one of the most important aspects in any research project that hoped to minimize subjective opinion. In this
case，where the intention was to typify the interlanguage used by secondary stu－ dents，care had to be taken for the establishing of a sample that represented the total number of secondary students in the Canary Islands．This was because in statistics when referring to population，the statistician speaks about a group of people（real or hypothetical）from which the investigation results are to be drawn（see Woods， Fletcher and Hughes，1986）．

In the research project we are describing，it is secondary students that were studying in the Canary Islands during the academic year 2000－2001 who form the population．

The first problem we encountered was to solve the calculation of the number of students that conformed that population．The local Department of Education was asked to provide the number of students，which came to a total of 24.720 （13．050 in the province of Las Palmas de Gran Canaria and 11．670，in Santa Cruz de Tenerife）．When the size of the population was known，the theoretical amount needed so that our research could generate significant data was calculated（Neuber， 1980）．The formula used to calculate the size of finite populations was taken from García Ferrando（1985）and is as follows：

$$
\mathrm{n}=\frac{\mathrm{z}^{2} \cdot \mathrm{~N} \cdot \mathrm{p} \cdot \mathrm{q}}{\mathrm{~N} \cdot \mathrm{E}^{2}+\mathrm{z}^{2} \cdot \mathrm{p} \cdot \mathrm{q}}
$$

Where $\mathbf{n}$ is the size of the sample； N is the size of the population； $\mathrm{z}^{2}$ equals the level of reliability $[z=2(95.5 \%)]$ ； E refers to wanted error； p refers to the phenomenon probability and q ，to the supplementary probability．

Hence，bearing in mind that we work with an error $\mathrm{E}=0,05$ at a significance level of $0,05(95 \%$ that corresponds to 2 sigma $z=2)$ and that in the least favour－ able scenario $\mathrm{p}=0,5$ and $\mathrm{q}=0,5$ ，this formula indicates the theoretical size of the sample：

$$
\begin{aligned}
& \mathrm{Z}=2 ; \mathrm{E}=0,05 ; \mathrm{N}=24 \cdot 720 ; \mathrm{p}=0,5 ; \mathrm{q}=0,5 \\
& \mathrm{~N}=\frac{4 \cdot 24 \cdot 720 \cdot 0,5 \cdot 0,5}{24 \cdot 720(0,05)^{2}+4 \cdot 0,5 \cdot 0,5}=394
\end{aligned}
$$

This means that in order to have significant results，the size of the sample had to contain 394 written texts（narratives）： 208 from the province of Las Palmas de Gran Canaria and 186 from Santa Cruz de Tenerife．

## 6．FINDINGS

The narratives used to carry out the analysis of the interlanguage used by compulsory secondary education students were taken from the ELESO test．The

ELESO test was piloted during the academic year 1999-2000 in three secondary schools in Tenerife.

The narratives written by the students provided enough information as to prepare research questions, which could help in defining interlanguage and the three processes to be analysed in greater depth (that is, fossilization, regression and permeability).

The initial questions came from an analysis of cross-linguistic influence or language transfer observed in the narratives. The term 'transfer', as used in the 1970s, refers to the influence of the mother tongue on the learner's performance in the development of a given target language. This is a more limited use of the term than is common in general psychology since it refers only to the effects of transferring elements of one linguistic system to another. The direction of transfer is usually understood to be from the mother tongue to the L2. In actual fact, the direction of transfer may be reverse; that is, the term may also be used in studies of language loss where a previously learned language (e.g. the L1) is changing under the influence of new language learning. The meaning does, however, cover the influence of any other tongue known to the learner of that target language. For example, in the piloted narratives a learner of English who was a bilingual French/Spanish speaker was found. The learner produced this text:

The kiss is only a kiss: in the school, in the park, in the street and at home. I think that this people are ambiguity in the meaning parole kiss.

Transfer is an important element in fossilization and, looking at the piloted narratives, it has become obvious that positive transfer must be looked for as it involves a communication strategy, which will be discussed later on. It has been discovered that in spite of the existence of false friends in the texts fossilization of cognates is very common. Three categories were found worth analysing for the whole sample:
a. category "oso/ous"

Examples found: curious, famous, delicious, nervous, furious
b. category "ción/tion

Examples found: information, operation, composition
c. category "dad/ty"

Examples found: electricity, university, variety, society
Negative transfer was also abundant and these were the interlinguistic features that were analysed more deeply throughout the sample:
a. Postposition of the adjective.
b. Deviated syntactic order.
c. Deviated use of the article.
d. Deviated use of the prepositions.
e. Spelling according to pronunciation.

These fossilization and permeability processes can be observed clearly in the following narrative:

If punishment to the boy or oll children that kiss a other boy or children is af if apply brakes to love. The love is a tree. We are help grow, no body can steal a water or sun a plant because this plant death.

In this research project the more recent term cross-linguistic influence was favoured, but the old term transfer (either positive or negative) is also valuable. Cross-linguistic influence covers all kinds of external linguistic influences including situations where learners fight shy of making connections between different languages they know because they feel such links to be unlikely. This other form of cross-linguistic influence is where the learner actually avoids carrying over, say, some sound, word or grammatical pattern from the other language because the target language is perceived to be different. In such cases, similarities between systems are not expected. The learner might not expect that borrowing a particular plural ending (like -'-es') from the mother tongue will result in a perfectly acceptable form in the target language. Avoidance of transfer is hardly transfer, but in can be considered as a form of cross-linguistic influence. It should be noticed that cross-linguistic influence does not refer directly to languages influencing one another in the outside world: it refers to what happens in a language user's mind.

Another field that was taken into account concerned strategies. Ellis (1997) states that the learner has two types of L2 knowledge: declarative and procedural. Declarative knowledge consists of the internalisation and memorization of rules and chunks of language. Procedural knowledge consists of the strategies and procedures used by the learner to process L2 data for acquisition and for use.

When talking about second language acquisition reference is principally made to declarative knowledge. Interlanguage, though, shows both types of knowledge. When an L2 learner attempts to produce the target language, his or her interlanguage shows declarative knowledge insofar as linguistic production is concerned but it also shows learning and communication strategies (mainly of simplification and/or reduction type).

As anyone who has tried to communicate in an L2 knows, learners frequently experience problems in saying what they want to say because of their inadequate knowledge. In order to overcome these problems they resort to various kinds of communication strategies. In the analysed narratives a common communication strategy was found: when learners do not know a word in the target language they either 'borrow' it from the L1:

I'm clean the animals because they are my, I go to the avenie with my animals and I go the veterinario.

## Or they paraphrase:

My sister takes my animals to the doctor of the animals.
There has been a number of attempts to construct psycholinguistic models to account for the use of communication strategies. To date, it is Faerch and Casper's model (1984) —which establishes a model of speech production that involves a planning and an execution phase- and which provides positive insights. Dörnyei (1995), on the other hand, offers a reasonable taxonomy of communication strategies. These are called upon when learners experience some kind of problem with an initial plan and develop an entirely different one by means of a reduction strategy or an achievement strategy (such as L1 borrowing).

After analysing the narratives Dörnyei's taxonomy was adapted and the following communication strategies in the whole of the sample were examined:
a. Code-switching (borrowing): using an L1 or L3 word in the target language. Examples: The meaning of the parole kiss.
b. Foreignizing: using an L1 word adjusting it to L2.

Examples: "controlate" "solutionate".
c. Word coinage: creating a nonexisting L2 word based on a supposed rule.

Example: "cabration" (for goat).
d. Approximation: using an alternative word which expresses the meaning of the lexical item as closely as possible.
Example using "fish" for "cod".
e. Topic avoidance: avoiding topic areas or concepts that pose language difficulties.

## 7. CONCLUSIONS

The qualitative analysis of the interlanguage found in compulsory secondary education students in the Canary Islands reveals the importance of cross-linguistic influence. In Selinker's model, language transfer is not a question of automatic transferring of habits. Our research gives evidence that the idea of complex mental organization, and of a mind that is highly selective in what it registers is correct. The narratives analysed prove that overgenarlisation of rules and principles is very common and the presence of systematic errors correlates with other studies of the interlanguage of written performance.

The presence of a high amount of fossilizations and permeability may have to do with the excessive use of Spanish in the class, due to the amount of time teachers of English in the Canaries spend explaining grammar.

The strategies analysed confirm the presence of the "internal strategies" suggested by Corder's built-in syllabus. Selinker named them simplification and made not clear why internal strategies like simplification were not central processes or why transfer and overgeneralisation are not also called learning strategies. To clarify this aspect, further research must be carried out.

## WORKS CITED

Adjemian, C. "On the Nature of Interlanguage Systems." Language Learning 26 (1976): 297-320.
Adjemian, C. and J.M. Liceras. "Universal Grammar, the Intake Component and L1: Accounting for Adult Acquisition of Relative Clauses." Universals of Second Language Acquisition. Ed. F. Bell Eckman and L.D. Nelson. Newbury House, 1984. 101-18

Brown, H.D. Principles o Language Learning and Teaching. London: Longman, 2000.
Cook, V. Linguistics and Second Language Acquisition. London: Macmillan, 1993.
Dörnyei, Z. "On the Teachability of Communication Strategies." TESOL Quarterly 29 (1995): 55-84
Ellis, R. Understanding Second Language Acquisition. Oxford: Oxford UP, 1986.

- Second Language Acquisition. Oxford: Oxford UP, 1997.

FaErch, C.G. Kasper. "Two Ways of Defining Communication Strategies." Language Learning 34 (1984): 45-63.

García Ferrando M. Introducción a la estadística en sociología. Madrid: Alianza Universidad, 1985.
Neuber, K.A. Needs Assessment: A Model for Community Planning. Albany: SAGE, 1980.
Peñate, M. et al. La enseñanza del inglés en la Educación Primaria. Servicio de Publicaciones del ICEC. 1998.

Peñate, M. and P. Bazo. "Ajustes en la interacción e ínput comprensible en el aula de inglés." Lenguaje y Textos. 11-12 (1999): 27-39.

Selinker, L. "Interlanguage." IRAL 10 (1972): 209-31.

- Rediscovering Interlanguage. London: Longman, 1992.

Spada, N. and P. Lightbown. How Languages Are Learned. Oxford: Oxford UP, 1993.
Spector, P. Research Designs. Albany: Sage University Paper, 23. 1981.
Tarone, E. Variation in Interlanguage. Cambridge: Cambridge UP, 1988.
Woods, A., P. Fletcher and A. Hughes. Statistics in Language Studies. Cambridge: Cambridge UP, 1986.

