

EFFECTS OF CROSS-LINGUISTIC INFLUENCES ON SECOND LANGUAGE ACQUISITION: A CORPUS-BASED STUDY OF SEMANTIC TRANSFER IN WRITTEN PRODUCTION

María del Mar Ramón Torrijos
Universidad de Castilla- La Mancha

Abstract: *This article concentrates on the impact that cross-linguistic influences have on second language acquisition. It investigates the importance of the learner's native language (L1) in written production of a second language (L2), particularly the use of L1 linguistic rules by Spanish speakers when they are writing in the target language (L2). This exploratory research focuses on the production errors made by students relative to specific subsystems such as semantic and syntactic areas. Errors are studied with respect to the differences between Spanish and English through a contrastive analysis between both languages in problematic linguistic areas. In this article only semantic errors will be considered as a first approximation to the study of transfer in written production. The results indicate that transfer is a reality and an important determinant in the process of second language acquisition. Teachers in an EFL context should be able to identify this phenomenon in order to prevent the errors which may arise from it.*

Key words: *language transfer, cross-linguistic influence, second language acquisition (SLA), English as a foreign language (EFL).*

1. INTRODUCTION

This study considers the importance that cross-linguistic influences have on second language acquisition, trying to analyze how negative transfer affects the process of writing on a second language. In this research emphasis is on written production by Spanish learners of English as a foreign language (EFL). Of secondary interest is the consideration of cross-linguistic influences in a context of learning Spanish as a foreign language and its relation with respect to English as a foreign language (EFL) context.

The present study is only a part of a more comprehensive research that has explored the production errors made by students relative to specific subsystems such as semantic and syntactic areas. In this article only semantic transfer will be dealt with as a first approach to the study of transfer in written production. Through an awareness of the effects of the native language influence, teachers will be able to become aware of the reality of transfer in second language acquisition. Accordingly, English teachers will be able to be more effective when considering the differences between the native and target language and consequently prevent the errors that may arise from those differences. What is missing in this research is a better understanding of the interactions of other factors involved in results, not only linguistic but also cultural, social and personal factors that interact with transfer: proficiency levels in L2, literary skills in L1, social factors, individual variations; for that reason observations are only presented as a first approach to the study of transfer in written production.

2. LITERATURE REVIEW ON CROSS-LINGUISTIC INFLUENCE RESEARCH

Language transfer has been an important topic in applied linguistics, second language acquisition and language teaching for at least a century. Within the past half century, however, its importance in second language learning has been reevaluated several times.

In the 1950s, it was often considered the most important factor in theories centered around second language learning and second language teaching. In the 1960s, its importance decreased as learners' errors were seen not as evidence of language transfer but rather of the 'creative construction process'. The errors analyses of the 1960s and 1970s showed that some types of errors were common in the emerging second language of speakers of any native language. From that, researchers found common patterns between second language acquisition and child native acquisition. The important similarities between first and second language acquisition did much to bring the notion of transfer into disrepute and some researchers denied the existence of language transfer in favour of universalist explanations.

In recent years, however, a more balanced perspective has been used. The empirical research in the 1970s and 1980s has led to new and more persuasive evidence for the importance of transfer in all subsystems. A rather large number of studies comparing phonology, morphology, grammar and discourse of learners with different native languages indicate acquisition differences attributable to cross-linguistic influence (e.g., Schachter and Rutherford, 1979; Ringbom, 1987). And with the growth of transfer research, researchers have conducted interesting studies in this field exploring new approaches to it. Master (1987) and Mesthrie and Dunne (1990) have compared how learners with two or three native language behave regarding to language structure that can be found in one native language but not in other, whereas Murphy (2003) and Wei (2003) have given interesting ideas of how transfer interacts with linguistic as well as cultural, social and personal factors in second language learning and use.

It can be stated that the empirical research done in the last decades has led to new manifestations of transfer in all the linguistic subsystems. Accordingly, the samples of evidence for transfer have been rising, and the empirical support for the importance of cross-linguistic influences on all linguistic subsystems is nowadays extremely firm.

3. FUNDAMENTAL ISSUES IN THE STUDY OF TRANSFER

3.1. Definition

Different terms and phrases have been used by researchers to refer to the phenomenon of cross-linguistic influence¹: language mixing (Selinker, 1972; Kellerman, 1983), linguistic interference (Schachter and Rutherford, 1979; Ringbom, 1987), language transfer (Lado, 1957; Selinker, 1972; Kellerman, 1983; Odlin, 1989), the role of the mother tongue and native language influence (Master, 1987; Mesthrie and Dunne, 1990; Jarvis, 2000).

In the research presented by Weinreich (1963) the term interference is used to cover any case of transfer. Nevertheless, his survey of bilingualism shows that the effects of cross-linguistic influences are not monolithic but instead vary considerably according to the social context of the language contact situation. These effects can often be distinguished through the use of the terms borrowing transfer and substratum transfer (Thomason and Kaufman, 1988).

¹ In this study, the terms cross-linguistic influence and language transfer will be used undifferentiated, as they are the most frequently used in recent second language research. For a more detailed discussion on how different terms referring to cross-linguistic influence have been used in literature see Romaine (1995:51-55).

Borrowing transfer refers to the influence a second language has on a previously acquired language (which is typically one's native language). It normally begins with the arrival of strong cultural influences from speakers of another language. Words associated with the government, the legal system, the educational system, technology and commercial products of the dominant majority are the first to make their way into the minority language, but massive lexical borrowing may also supplant much of the vocabulary of everyday living.

Substratum transfer is the type of the cross-linguistic influence investigated in most studies of second language acquisition; such transfer involves the influence of the native language on the acquisition of a target language, the second language. A working definition of transfer is the one offered by Odlin (1989: 27): "Transfer is the influence resulting from the similarities and differences between the target language and any other language that has been previously (and perhaps imperfectly) acquired." Since the focus of this exploratory study is on native language influence, the term transfer will serve as an abbreviation for substratum transfer.

Apart from this, it is important to make another distinction between positive and negative transfer. Positive transfer can be observed when we realize that much of the influences of the native language can be very helpful, especially when the differences between two languages are relatively few. For example, the number of cognates Spanish-English as *público* and *public* is probably greater than the number of Arabic-English cognates. Accordingly, native speakers of Spanish have a tremendous advantage over native speakers of Arabic in the acquisition of English vocabulary.

3.2. Transfer and the Contrastive Studies

Within the last few decades, the importance of language transfer in second language learning has been reevaluated several times. Challenges to assumptions about the importance of transfer did not have much impact on the history of language teaching until the late 1970. The challenges that arose in that period were largely in reaction to the claim made by Lado (1957) and Fries (1952) that stated that the existence of cross-linguistic differences in second language acquisition could be determined through contrastive analysis. This assumption faced serious challenges by the 1980s and the validity of many contrastive analyses seemed questionable: empirical research was beginning to show that learning difficulties do not always arise from cross-linguistics differences and that difficulties which arise are not always predicted by contrastive analysis.

For that reason, the value of contrastive analysis hypothesis (C.A.), has been in an intense debate for the last decades, and from that, two clearly differentiated versions have emerged: C.A. *a priori*, which is also called the predictive or strong version, and C.A. *a posteriori*, which is sometimes called the explanatory or weak version.

According to Schachter (1979), C.A. *a priori* is said to be a point by point analysis of the phonological, morphological, syntactic, or other subsystems of two languages. Given two theoretically compatible linguistic descriptions of one of these subsystems of Language A and Language B, investigators can analyze them and discover the similarities and differences between them. Consequently, predictions can be made about what will be the points of difficulty for a speaker of Language A, for example, who is attempting to learn Language B, on the assumption that similarities will be easier to learn and differences harder. C. A. *a priori* concedes that the prediction of areas of difficulty will not account for all the learning problems that occur in the classroom. There will also be problems caused by such variables as previous teaching and motivation.

The proponents of C.A. *a posteriori* take a different methodological approach. Assuming that speakers of Language A are found by the process of error analysis to make recurring errors in a particular construction in their attempts to learn language B, the investigators make an analysis

of the construction in Language A, in order to discover why the errors occur. C. A. a posteriori is said to be a subcomponent of the field of error analysis. Those who propose an error analysis approach to the study of second language acquisition point out that both, linguists and teachers have paid too much attention to predicting what the learners will do, and have not paid enough attention to the study of what the learner actually does (Gass, 2004). They stress the claim that many language learning errors do not result from native language interference but rather from the strategies employed by the learner in the acquisition of the target language.

In the numerous articles which present arguments against the a priori version, there are two objections that occur repeatedly. The first is that C.A. a priori sometimes predicts difficulties that do not occur, especially in the syntactic subcomponent of a language, resulting in a waste of time of the classroom. And it is argued that if wrong predictions are made using the C.A a priori hypothesis, the hypothesis itself must be wrong. The second claim is that C.A. a priori provides a shortcut to the long and arduous job of doing contrastive analysis. C.A. a posteriori allows the investigator to focus energy and attention on just those areas that are proven by error analysis to be the difficult ones.

According to these claims, in this study the C.A. a posteriori version will be used. There is sufficient evidence at this point to indicate that error analysis is a useful tool in the study of second language acquisition. In addition, error analysis will be considered an important factor because it will only reveal the difficulties the learner has, due to the fact that difficulties in the target language will show up as errors in production.

4. THE SIGNIFICANCE OF LEARNERS' ERRORS

Further questioning of the worth of contrastive analysis has come from classifications of learners' errors in studies that become known generically as error analyses (Richards, 1971). At this point, we must make a distinction between those errors which are the product of chance circumstances –memory lapses, physical states such as tiredness...– that do not reflect a defect in the knowledge of language –errors of performance or mistakes– and those who reveal the underlying knowledge of the language to date –errors of competence or errors–. However, the problem of determining what is a learner's mistake or what is a learner's error is one of some difficulty.

Learners' errors provide evidence of the system of the language that the learner is using (i.e. what they have learned at a particular point). Accordingly, they are significant in three ways. Firstly, to the teacher in that errors can tell how far towards the goal the learners have progressed and consequently, what remains for them to learn. It is a way the learners have of testing their hypotheses about the nature of the language they are learning. Secondly, they are indispensable to the learners themselves, because we can regard the making of errors as a device the learners use in order to learn. And thirdly, they provide evidence to the researcher of how language is learned or acquired, what strategies or procedures the learners are employing in their discovery of the language.

One of the major challenges for error analysis is deciding what category to assign a particular error to. Some errors seem to arise not because of language transfer but from other sources or processes. According to Selinker (1972), there exist five distinct psycholinguistic processes which are central to second language learning: language transfer, transfer of training, strategies of second language communication, strategies of second language learning and overgeneralization of the target language linguistic material.

But before taking into consideration those five processes, we have to mention the notion of fossilization (Lakshmanan, 2006). Fossilizable linguistic phenomena are linguistic items, rules and subsystems which speakers of a particular native language (NL) tend to keep in their interlanguage (IL), that is, the particular version that speakers make in relation to a particular target language (TL). Selinker (1972: 211) defines IL as “a separate linguistic system based on observable output which results from a learner’s attempted production of a target language norm.”

The most interesting phenomena in interlanguage performance are those items, rules and subsystems which are fossilizable in terms of the five processes listed above.

If it can be experimentally demonstrated that fossilizable items, rules, and subsystems which occur in interlanguage performance are a result of the native language, we are dealing with the process of language transfer. If these fossilizable items, rules and subsystems are a result of identifiable items, rules and subsystems in training procedures, then we are dealing with the process known as the transfer of training. If they are a result of an identifiable approach by the learner to communicate with native speakers of the target language, then we are dealing with strategies of second language communication. And if they are a result of a clear overgeneralization of the target language rules, then we are dealing with the overgeneralization of the target language linguistic material.

Combinations of these processes produce what we might define as fossilized interlanguage competence. We will see examples of this fossilized competence in learners in the Data analysis section.

5. DATA COLLECTION PROCEDURES

The data was collected from two different groups of learners with different backgrounds. The first group was composed of 60 Spanish adults (about 45 years old) studying first year at the Department of Humanities of the University of Castilla-La Mancha and the second group was composed of 50 American adults of the same age that attended a course in Spanish also at the Department of Humanities of the University of Castilla-La Mancha. The Spanish students are beginners with low oral and written skills in English. They are not especially motivated to learn English. This is a compulsory subject in their studies and in most cases this is the only reason why they take the subject. The English-speaking students have a pre-intermediate level of Spanish and they feel really motivated to learn Spanish.

Both groups were given a test with personal and educational questions in order to know their background, their feelings towards learning English and Spanish and the strategies used by them when studying a foreign language. Secondly both groups were asked to write a composition in English and Spanish about the topic ‘What I did on my last vacation’ in 25 minutes time. In the third activity Spanish and American students were required to translate from their native language into the target language a text about the same topic used in the written composition. This is considered a useful activity in order to check if the same errors made by the learners in the compositions appear again. Finally, the fourth activity consisted of a vocabulary test in which learners of both groups have to guess the meaning of certain English and Spanish words that they were not supposed to know. The reason for using this test was to obtain useful information about the vocabulary acquisition process in L2 and to get to know the possible relationship that the Spanish and the American learners establish between the Spanish and English vocabulary.

Apart from these four written activities, other elements such as written compositions done during the course, vocabulary tests, and interviews with learners to gain some extra-information about the students' background were also used in this study.

6. DATA ANALYSIS:

6.1. Semantic Transfer. General considerations

Using the theoretical background briefly presented above, semantic errors made by both groups in the compositions, translations and vocabulary tests, were extracted, analyzed and classified with respect to the following criteria: errors due to language transfer, errors due to a transfer of training, errors due to strategies of second language learning, errors due to strategies of second language communication and errors due to overgeneralization of the target language linguistic rules. For reasons of space restrictions, only the most significant errors will be discussed. Errors were studied relative to the differences between Spanish and English through a contrastive analysis between both languages in problematic semantic areas. Occasionally, however, the relationship between some kind of errors and these categories is difficult to establish as can be seen in the following sections.

In addition, the importance that native language transfer has with respect to the total amount of errors and the possible consequences of that will be presented. The information received from the two different groups of learners will also be compared: Do they make the same kinds of errors? Is native language transfer a clear phenomenon in both groups? Is semantic transfer equally evident in semantic mistakes made by both groups? Is there any significant quantitative or qualitative difference, i.e. of semantic error types, in the semantic errors produced by Spanish and American learners?

6.2. Similarities and dissimilarities in word forms

According to many language teachers and linguists similarities and dissimilarities in word forms, along with similarities and dissimilarities in word meanings are extremely relevant to how quickly a particular foreign language may be learned by speakers of another language (Odlin, 1989:77). Support for this position comes from examples documented in the data.

The Spanish students were given a test in which they had to guess the meaning of certain English words that they were not supposed to know. Students did especially well with the words on test items that had spelling identical or at least similar to those found in Spanish forms. However, the learners did not answer or answered incorrectly to those words that they were not supposed to know and whose spellings were not similar to any word in their native language. For example,

<u>English words</u>	<u>Students's answers</u>
Public	Público
Telephone	Teléfono
Important	Importante
I Idea	Idea
Electricity	Electricidad
Insect	Insecto
Emergency	Emergencia
Law
Dizzy
Land
Scream

Dealing with similar cognates, the effects of positive transfer may possibly be experimented, as can be seen in the previous examples. Positive transfer may explain the fact that the students guess correctly the meaning of English cognates. Accordingly, positive transfer can facilitate the process of acquisition of a second language.

The benefits of recognizing cognates may not be the only advantage that Spanish speakers have in learning English, a language that shares common lexicon with native language. According to Odlin (1989: 78) another likely advantage is that Spanish speakers will have more time to focus on unknown vocabulary, which is especially useful in reading comprehension².

Despite the advantages of a large lexicon common to the two languages there are nevertheless *pitfalls* in the form of *false friends* as can be seen from the vocabulary test results.

<u>English</u>	<u>Spanish</u>
actually,	*actualmente
sympathy	* simpatía
library	* librería
argument	*argumento

The forms of English *actually* and Spanish *actualmente* seem to be as reliable signals of a cognate relation as the forms of *important* and *importante*. While the latter pair is a true instance of a cognate relation, the former is not. *Actually* means *de hecho* not *actualmente* as Spanish students may think in their first approach to this word. The pair *actually* and *actualmente* and the pair *sympathy* and *simpatía* are pitfalls not only for the Spanish learners but also for the American students, who also made errors with these words in the vocabulary test. This kind of error in both groups shows evidence of negative transfer due to native language influence.

However, the American learners responded much better on the vocabulary test, probably due to their higher level in their L2, Spanish, if compared with the level that the Spanish students have in L2, English, although they did make similar errors with pairs of 'false friends.'

<u>Spanish</u>	<u>English</u>
decepción	*deception
carpeta	*carpet
emocionante	*emotional

According to Odlin (1989), even with these problems found with respect to lexical similarities, there can be little doubt that learners will find one language easier to learn if it shows many lexical similarities with their native language.

² As Odlin (1989:78) explains, the positive effects of lexical similarity between native and target language are so great as to reduce considerable the time needed to become literate in the target language. In other words, the more similar that cognates are in relation to meaning, the less time learners will spend understanding them, being able to devote more time to the understanding of new information.

6.3. Similarities and dissimilarities in word meanings

Apart from similarities and dissimilarities in word forms, some problems arise with respect to similarities and dissimilarities in word meanings.

The Spanish learners showed problems with the correct use of some English verbs when they were asked to translate in English a given text from Spanish as can be seen in the following sentences extracted from the data: *I make my homework, I see T.V. in the afternoon, I make my bed, I looked the sea this summer.

These problems may come from the fact that verbs such as do and make share with the correspondent verb in Spanish *hacer* only a little scope in its semantic field. As a result, when the Spanish learners wanted to translate into English the Spanish verb *hacer* which has a broader semantic field than do and make students produced error. In fact, the Spanish students did not know the verb that they needed to use in English, and they chose another word that was as similar to the semantic field of the English word they needed. From this view, these errors can be attached to negative transfer due to native language influence, if the problem arises from the fact that there is a partial semantic identity of cognates.

Secondly, these errors may be considered as overgeneralizations of the target language semantic rule, that is, the use of a semantic rule that go beyond the normal domain of that rule. For example, if the learner writes I do my bed, they are probably overgeneralizing the use of do to all the processes of realizing things.

Probably most of these processes described above interact in order to account for these errors, but to get to know the different weigh of each of them, that is, negative transfer and overgeneralizations, remains difficult. Accordingly, we may consider these errors as 'errors due to interaction of processes.'

On the other hand, some semantic differences between languages do not always lead to significant learning difficulties. For example two verbs in Spanish correspond to different sense of the English verb to know, *conocer* and *saber*. Stockwell, Bowen and Martin showed in their research in 1965 that Spanish speakers learning English seem to have little difficulty in associating two lexical senses with one form; thus, the difference between Spanish and English is not itself enough to allow for accurate predictions of difficulty. This fact can be seen in the right use of the verb know by the Spanish students, that it is documented in the data: I know Mathematics, I know his brother, I don't know France.

As for the American students, they showed problems with the Spanish verbs *conocer* and *saber*, and *ser* and *estar*. As the English verbs to know and to be have a broader semantic scope than *conocer* and *saber*, and *ser* and *estar*, when the American learners wanted to translate into Spanish the English verbs they produced error. As with the use of the English verbs make and do on the part of Spanish students, these errors can be attached to both, negative transfer due to native language influence and overgeneralizations of the target language semantic rule. Accordingly, they may also be categorized as 'errors due to interaction of processes',

*Yo soy enfermo, yo soy en Madrid, ¿Sabes su hermana?, Yo no sabía París.

6.4. Lexicon and Morphology

The lexicon³ contains not only information about the meanings of words but also morphological and syntactic information showed through bound morphemes such as prefixes, suffixes, plural morpheme, and other forms that are meaningful incapable of standing alone. In the test results we can see examples of negative transfer affecting these morphemes as in these sentences:

*There are bigs houses in the city

* I have two browns dogs

In these examples transfer of bound morphemes (pluralization rules in one language being used in another) can be found. In fact, these sentences reflect a number agreement rule in Spanish whereby adjectives must agree in number with the nouns they modify. This rule is transferred into English by the Spanish learners so a native language influence can be seen in these examples.

On the other hand, it is true that the use of the bound morpheme represented by –s in English nouns frequently signals pluralization, but examples like these can be found in the data from Spanish students.

foot, *foots
man, *mans,
woman, *womans.

In these examples the Spanish students make use of the linguistic rule of pluralization in English taking it beyond the normal domain of this rule. Thus, these errors can be seen as over-generalizations of the English linguistic rule of pluralization⁴.

7. DISCUSSION

The initial research questions were concerned with the importance that a learner's native language has in written production in L2, particularly how Spanish students use L1 linguistic rules in specific linguistic subsystems relative to the English as a foreign language (EFL) context. Another secondary question concerned the study of crosslinguistic influences in a different learning context, this time with American students learning Spanish as a second language. To answer these interrogations, the study focused on difficulties that students have in writing their second language, difficulties that were shown as errors in production.

From the data obtained from the Spanish students, 150 compositions, 80 translations and 60 vocabulary tests were analyzed. A total amount of 1.690 errors were extracted; 10% of semantic errors could be documented. From the data offered by the American students, 80 compositions, 55 translations and 48 vocabulary tests were analyzed and a total amount of 467 errors were extracted. In the data obtained from American students 5% of semantic errors could be found.

According to the data collected from the Spanish students with respect to the semantic errors, the more generalized errors were errors with respect to similarities and dissimilarities in word meanings (41%). This error which is represented through a wrong use of some English verbs such

³ Odlin (1989:71-84) discusses semantic transfer through both, the study of cross-linguistic differences evident in propositional semantics (related to the study of meaning in statements) and the study of cross-linguistic differences found in lexical semantics (related to the study of meaning in words). Following Odlin's research on semantic transfer (1989) we include the section 'Lexicon and morphology' in this study of semantic transfers since transfer of bound morphemes –which are meaningful forms– can be documented in the data (cursive is mine).

⁴ According to Odlin (1989:82), some occurrences of lexical transfer are generally cases of both morphological and semantic transfer.

as do, make, see... can be due to various processes such as negative transfer or overgeneralization, but to get to know the different weigh of each of them remains difficult. For that reason, these errors will be taken into account as of 'errors due to interaction of processes'.

Apart from similarities and dissimilarities in word meanings, analysis of the data revealed that lexical similarities (similarities in word forms) between Spanish and English (e.g. public and público) may ease the acquisition of vocabulary by the Spanish students, despite of the problems that they found with 'pitfalls' or 'false friends' words (e.g. actually and actualmente), possibly due to negative transfer (30 % of this kind of errors).

Instances of negative transfer with respect to plural morpheme in adjectives can also be found in the data (17 %) when adjectives appear in number agreement with the nouns they modify as it happens in Spanish (e.g. *My friends are fats).

In addition, overgeneralizations of the English plural rules in nouns were also found in the data (12%) such as in the use of the words *mans, *womans.

For the distribution of semantic errors made by Spanish students in different structures, see Figure 1.

The distribution of errors done by the Spanish learners with respect to different sources can be seen in the Figure 2 and from that it is possible to argue that negative transfer accounts well for the majority of these semantic errors (47% of negative transfer, and 41% of negative transfer and overgeneralization at different weight).

With respect to semantic errors made by the American students, it is important to take into account the low percentage of this kind of errors that appear in the data (only 5 %). The most relevant semantic errors made by this group of learners are errors with respect to 'pitfalls' or 'false friends' pair words. These errors can be attached to negative transfer due to native language influence. As it happened in the data obtained from the Spanish learners, the data from the American students also revealed that lexical similarities in two languages may ease the acquisition of vocabulary, despite of the problems that the American students also found with 'false friends' pair words.

Additionally American students also showed errors with respect to similarities and dissimilarities in word meanings. These errors based on a wrong use of the Spanish verbs ser and estar and conocer and saber, can be due to various processes such as negative transfer and overgeneralization so they can be considered as 'errors due to 'interaction of processes.'

**DISTRIBUTION OF SEMANTIC ERRORS IN DIFFERENT STRUCTURES.
DATA OBTAINED FROM THE SPANISH LEARNERS.**

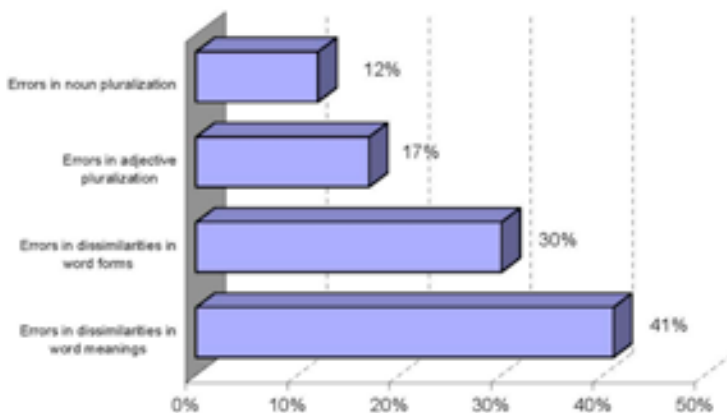


Figure 1

**DISTRIBUTION OF SEMANTIC ERRORS WITH RESPECT TO DIFFERENT SOURCES.
DATA OBTAINED FROM THE SPANISH LEARNERS.**

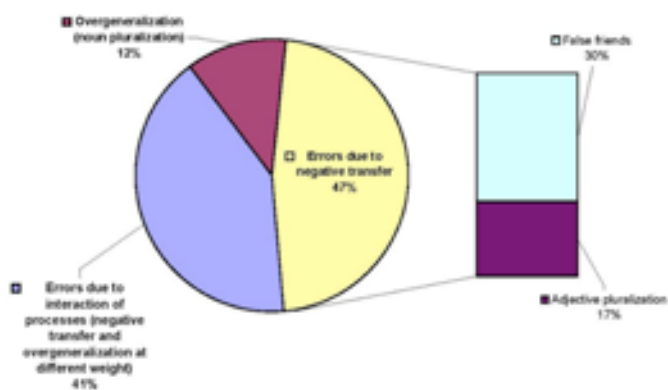


Figure 2

8. CONCLUSIONS AND SUGGESTIONS FOR FURTHER RESEARCH

The results from this study show that native language influence takes place in the target language writing of both native Spanish and American students. In fact, errors documented in the data collected contribute to show the importance of native language semantic structure in learning a second language process.

There can be little question that cross-linguistic influence directly impacts the process of acquisition of a second language. However, transfer is not the only factor affecting this process. Several factors—language mixing, proficiency levels in L2, literary skills in L1, social factors, individual variations— affect the process of second language learning but, most probably, to different degrees (Kellerman, 1983, Ringbom, 1987, Odlin, 1989, Gass and Schachter, 2004). In order to control these variables one plausible research project for the future could be the investigation of the writing of the same students in Spanish and in English in a longitudinal study to understand the relation between transfer and higher level of proficiency in L1 and L2, that is, the relation between transfer and developmental errors. But despite the problems evident in this study, the importance of transfer is palpable in light of the considerable number of errors made by the students that reflect the use of L1 linguistic rules.

Pedagogical implications of this study can be suggested. The most important is that teaching may become more effective through a consideration of differences between language and cultures in order to prevent the errors due to negative transfer. Also consideration of research showing similarities in errors made by learners of different backgrounds will help teachers to foresee what may be difficult or easy for learners learning the language they are teaching. It is hoped that this study can contribute to the recognition and better understanding of the problems and difficulties found by students when dealing with new vocabulary in the target language. Accordingly new didactic material could be created having into account their particular needs.

These findings suggest that transfer is a reality and an important determinant in second language acquisition, however, it is not the only determinant and the question remains as to just how language transfer interacts with linguistic as well as cultural, social and personal factors in second language learning and use.

9. BIBLIOGRAPHIC REFERENCES

- Agustín Llach, M., Fernández Fontecha A. & Moreno Espinosa, S. (2005). "Differences in the Written Production of Young Spanish and German Learners: Evidence from Lexical Errors in a Composition," *Barcelona Language and Literature Studies* 14, Barcelona: Edicions de la Universitat de Barcelona.
- Alonso Vázquez, M. C. (2005). "Transfer and Linguistic Context in the Learning Process of English Negative Structures." *Miscelánea: A Journal of English and American Studies*, 31: 25-42.
- D, H. and Burt. M. (1983). "Goofing: an indicator of children's second languages strategies" in S. Gass L. Selinker (eds.) *Language Transfer in Language Learning*. Rowley, Mass.: Newbury House.
- Fries, C. (1952). *The Structure of English*. New York: Harcourt, Brace and Company.
- Gass, S. and J. Schachter (2004). *Linguistic Perspectives on Second Language Acquisition*. London : Cambridge University Press.
- Gilsan, E. (1985). "The effects of word order on listening comprehension and pattern retention: an experiment in Spanish as a foreign language," *Language Learning* 35: 443-72.
- Gumperz, J. *Discourse Strategies*. (1982). Cambridge: Cambridge University Press.
- Hawkins, J. *Word Order Universals*. (1983). New York: Academic Press.

- James, C. (1988). *Errors in Language Learning and Use: Exploring Error Analysis*. London: Longman.
- Jarvis, S. & Odlin, T. (2000). "Morphological Type, Spatial Reference and Language Transfer", *Studies in Second Language Acquisition* 22-4: 535-56.
- Kellerman, E. (1983). "Now you see it, now you don't" in S. Gass L. Selinker (eds.) *Language Transfer in Language Learning*. Rowley, Mass.: Newbury House.
- Krashen, S. and S. Lee. (2004). "Competence in Foreign Writing Progress and Lacunae." *Literacy across Culture* 12-2:10-14.
- Lado, R. (1957). *Linguistics Across Cultures Ann*. Arbor: University of Michigan Press.
- Lakshmanan, U. (2006). "Child Second Language Acquisition and the Fossilization Puzzle", en Z. Han and T. Odlin (eds.) *Studies of Fossilization in Second Language Acquisition*, Clevedon, England: Multilingual Matters Ltd.
- Master, P. (1987). "Generic the in Scientific American", *English for Specific Purposes*, 6/3,165-186.
- Mesthrie, R. & Dunne, T. T. (1990). "Syntactic variation in language shift: the relative clause in South African Indian English." *Language Variation and Change* 2.
- Murphy, S. (2003). "Second Language Transfer during Third Language Acquisition", *TESOL and Applied Linguistics* 3-2: 1-21.
- Odlin, T. (1989). *Language Transfer: Cross-linguistic influence in language learning*. New York: Cambridge University Press.
- Peck, S. (1978). "Child-Child Discourse in Second Language Acquisition", en E. Hatch. (ed.) *Second Language Acquisition: A Book of Readings*, Rowley, Mass.: Newbury House.
- Richards, J. (1971). "A Noncontrastive Approach to Error Analysis", *English Language Teaching* 25: 204-219.
- Ringbom, H. (1987). *The Role of the First Language in Second Language Learning*. Clevedon: Multilingual Matters.
- Romaine, S. (1995). *Bilingualism* (2nd ed.). Oxford, UK.;Cambridge, Mass., USA: Blackwell
- Selinker, L. (1972). "Interlanguage." *International Review of Applied Linguistics* 3: 209-231.
- Swanson, H. L., L. Saenz, M., Gerber, y J., Leafstedt. (2004). "Literacy and Cognitive Functioning in Bilingual and Non-Bilingual Children at or not at Risk for Reading Disabilities", *Journal of Educational Psychology* 93: 3-18.
- Schachter, J. & W. Rutherford. (1979). "Discourse Function and Language Transfer." *Working Papers in Bilingualism* 19: 1-12.
- Thomason, S. and Kaufman, T. (1988). *Language Contact, Creolization and Genetic Linguistics*. Berkeley: University of California Press.
- Wei, L. (2003). "Syntactic binding, semantic binding and explanation of crossover effects." *Foreign Languages Research* 3: 73-78.
- Weinreich, U. (1963). *Languages in Contact: Findings and Problems*. The Hague: Mouton.