# Exploring the negative interference in written productions by Spanish learners of Modern Greek with the use of Learner Corpora

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*Περίληψη*

*Στο πλαίσιο της έρευνας αυτής εξετάζονται τα είδη των λαθών που εμφανίζονται στο Σώμα Κειμένων Ισπανόφωνων Μαθητών της νέας ελληνικής ως δεύτερης/ξένης γλώσσας. Δίνεται έμφαση στα επαναλαμβανόμενα λάθη που οφείλονται σε αρνητική παρεμβολή της ισπανικής γλώσσας στην ελληνική και κατανέμονται σε όλα τα γλωσσικά επίπεδα. Το θεωρητικό πλαίσιο που υιοθετείται είναι σύμφωνο με τις αρχές ανάλυσης της διαγλώσσας για τη μελέτη και την ερμηνεία των λαθών, ενώ όσον αφορά τη μεθοδολογία, ακολουθούνται οι πρακτικές της υπολογιστικής ανάλυσης λαθών. Τα λάθη υπόκεινται σε ταξινόμηση με βάση συγκεκριμένα κριτήρια, με τελικό στόχο τη διδακτική αξιοποίησή τους.*

*Λέξεις-κλειδιά: μαθητικά σώματα κειμένων, αρνητική παρεμβολή, υπολογιστική ανάλυση λαθών, διδασκαλία της ελληνικής ως δεύτερης/ξένης γλώσσας*

## 1    Introduction

Linguistic interference is one of the linguistic phenomena that interest researchers who study second/foreign language acquisition. It seems to be a significant source of errors for all learners of a second/foreign language (L2). Brown (2006: 232) states that the early stages of learning an L2 are more vulnerable to interlingual transfer from the first language (L1) because the only linguistic system upon which a learner can draw is the L1.

It is divided to negative interference/transfer, and positive interference/facilitating (Gass and Selinker 1983) which is reinforced by the Common Underlying Proficiency Hypothesis of Cummins (1991), who believed that if a learner has already learned a language, then they are readily equipped to learn a second.

While we may not always claim that an error is a result of transfer from the native language, many such errors are detectable in learners' speech. For instance, Spanish learners of Modern Greek (MG) may say *\*έχω πείνα* (= 'I am hungry', lit. 'I have hunger') instead of using the verb *πεινάω*, *\*έχω είκοσι χρόνια* (= 'I am twenty years old', lit. 'I have twenty years') instead of the phrase *είμαι είκοσι χρονών* (lit. 'I am twenty years$_{GEN}$') and so forth. This kind of error is attributable to negative interference.

The notion of interference correlates with other studies which clearly show that the nature of L2 errors is systematic and not just random errors selected from the myriad of possible L1-to-L2 mismatch constructs made available by Universal Grammar; but rather, such errors indeed tend to be strategically derived by the speaker's L1 language parameter settings (Galasso 2002: 16).

Apart from purely linguistic factors (cross-linguistic influence), L2 acquisition (SLS) depends on various factors, such as age, psychological and personality factors, styles and strategies, sociocultural factors, and communicative competence (Saville-

Troike 2006, a.o.). In addition, learners' language awareness and psychotypology[1], as well as the efficacy of the teaching procedure, play a significant role during the SLA.

The first theory connected with the phenomenon of linguistic interference is the Contrastive Analysis Hypothesis (Fries 1945, Lado 1957), in the framework of which, by comparing L1 with L2, possible errors that lie on the different structures of the two languages can be predicted. A decade later, the classification and interpretation of errors are based on a new contrastive approach, Error Analysis (Corder 1967), which is later reinforced by the Interlanguage Theory (Selinker 1969). Finally, regarding the interaction among languages, the term cross-linguistic influence is introduced (Sharwood Smith 1983, Odlin 1989). The theoretical framework adopted by the present research is congruent with the principles of the interlanguage analysis on the study and interpretation of errors (Dulay and Burt 1973, Cook 1996).

Although there is a worldwide interest in the study of the Greek language, it was not until recently that Greek learner corpora were designed and created. The first learner corpus of Greek as an L2 has been compiled by Tzimokas (2010). It consists of around 65,000 words and 291 texts produced by adults with different mother tongues. However, the error annotation schema is complicated and inflexible for both groups of users, teachers of Greek as a second/foreign language, and researchers. Also, although the data range is quite elaborative, the architecture and design do not promote interpretability with other formats and platforms.

The second learner corpus for Greek as an L2 is the Greek Learner Corpus (GLC) which is assembled from written productions of learners in the first and secondary education levels. It consists of 33,500 words and 500 texts, and currently, it is in the process of being expanded.[2] The texts collected are produced by 7-to-12-year-old learners of Greek with a variety of mother tongues, the most common of which are Albanian, Slavic languages, Georgian, Arabic, Hindi & Urdu. Furthermore, all the texts generated by the learners belong to the same genre, namely narration, and are part of a placement test for the classification of learners into proficiency levels (Tantos and Papadopoulou 2012, Tantos et al. 2013, 2015). In contrast to Tzimokas' corpus, the annotation schema of GLC is less complicated and more user-friendly.[3]


## 2    The research

In Spain and Latin America, there is a considerable number of Greek language learners as in Greece many Greek learners of Spanish. However, despite the two-way interest between the two languages, to our knowledge, there are few linguistic studies to examine them in comparison, the most significant of which are Alexopoulou (2005, 2010), Lozano (2006, 2008, 2018), Leontaridi et al. (2010), Andria, Miralpeix and Celaya (2012), Andria (2014). Unlike most of the above studies which focus on specific linguistic phenomena, the current research project is interested in exploring the errors which appear in written productions by Spanish learners of Modern Greek in all linguistic levels.

More specifically, dusting the first stage, the analysis focuses on the errors made due to the cross-linguistic influence of Spanish (L1) to Greek (L2). This will offer the opportunity for learners to reassess their work and for teachers to re-schedule the

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[1] See Kellerman 1979.

[2] For more information on the current project: http://lal2a.lit.auth.gr/

[3] For a more detailed description see 2.2.

syllabus or prioritize certain areas to meet learners' needs and improve efficiency based on empirical data.

We hypothesize that a big part of the difficulties that Spanish learners face when learning Greek lie on the negative interference of L1 with L2 due to the mismatch between the structures of the two languages, distributed in different linguistic levels.

As mentioned above, cross-linguistic influence is a multifactorial phenomenon where several factors interact (Odlin 2005). However, at this stage, the research will be limited to the study of the language, while the metadata available will be coded and analyzed later.

Our research questions are a) Which categories are more problematic during MG language learning by Spanish learners? b) Which of them seem to be affected by the interference and to what extent?

This study forms part of Post-Doctoral research titled "*The construction of a corpus of Spanish learners of Greek as a second/foreign language*", conducted in the Department of Aegean Studies of the University of the Aegean (Greece).

## 2.1 The Corpus

A dynamic monolingual learner corpus (Spanish Learners' Greek Corpus, henceforth SLGC) has been constructed for the aim of this research. The corpus consists of 66,000 words of written productions by Spanish candidates in the Greek language certification exams organized by the 'Center for the Greek language'[4] in various exam centers in Spain and Latin America, and by 'The School of Modern Greek Language'[5] in the Aristotle University of Thessaloniki.

Each candidate was asked to write two texts, one formal and one informal. The topics are related to everyday communication issues. As regards the level, it ranges from A1 to C2 according to the classification of CEFR (2001).[6]

For each learner, SLGC contains the precise background information (e.g. proficiency level, length of exposure, learning environment, motivation, etc.), which is essential to conduct L2 research concerning not only interlanguage grammars but also cross-linguistic effects, residence abroad effects, (re)sources used in composition writing, etc.

## 2.2 Methodology

SLGC is being processed with the use of relevant tools (see Dagneaux et al. 1996, Granger 1998; 2008, Meunier 1998, Díaz-Negrillo and Fernández-Domínguez 2006), computational error analysis practices are followed, while tools are drawn from corpus and computational linguistics.

The computational processing and quality analysis of the learner corpus, according to the theoretical framework adopted, extracts the learners' repeated errors due to negative transfer of L1 to L2. The detected errors are categorized according to certain criteria in order to be didactically used.

More specifically, the steps followed during the coding process are a) compilation and digitalization/transcription of texts (the learners' hand-written productions were digitalized into .txt files), b) categorization according to level, exam

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[4] https://greeklanguage.gr/en/

[5] https://smg.web.auth.gr/

[6] https://www.coe.int/en/web/common-european-framework-reference-languages/home

center, and genre, c) processing of the annotation schema and manual annotation of errors, and d) statistical analysis.

For the annotation, we use the free software UAM Corpus Tool[7] (O'Donnell, 2008), which allows manual annotation of multiple texts using the same annotation schema, based on the error taxonomy created (it can easily be modified in case new tags need to be used). Each text is annotated at multiple levels (e.g., NP, Clause, Sentence, whole document), instances across levels are searched, and comparative statistics across subsets are made. Finally, all annotation is stored in XML files so that our annotations can be shared with other applications in the future. "Stand-off" XML is used so that the annotation files do not contain the text, just pointers to the text, which allows for multiple overlapping analyses of the same text.

The annotation schema follows the error taxonomy created to fulfil the needs of our research. It is based on the taxonomy created by Tantos et al. (2013, 2015) for the annotation of the Greek Learner Corpus (GLC). The major categories are visualized in figure 1:

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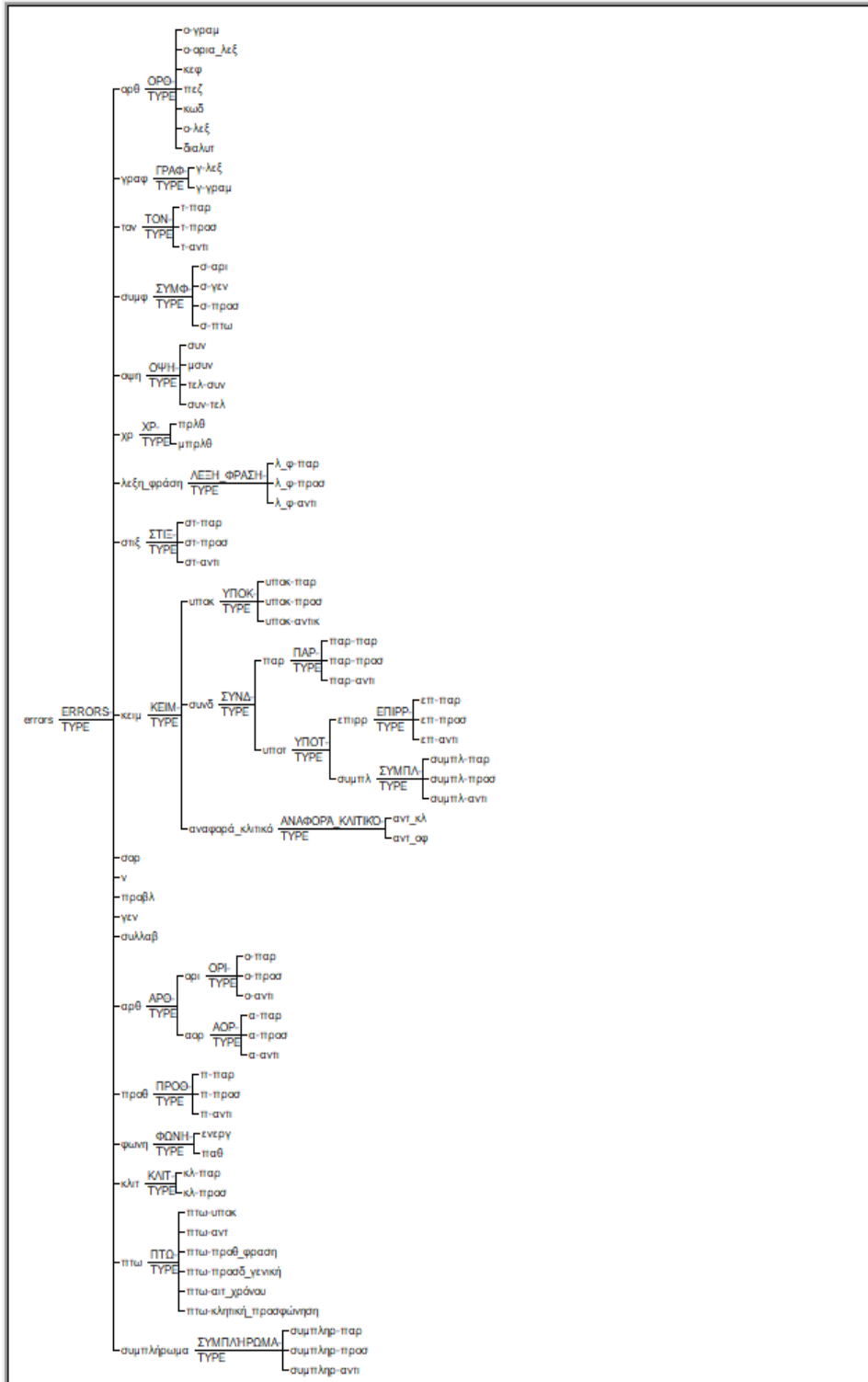[7] http://www.corpustool.com/

**Figure 1 | The annotation schema**

For each file, the UAM tool provides information about the length of the text as well as the text complexity which will be useful during future analysis (Table 1).

```
File:        Malaga A2/Malaga_A2_5_a.txt
Length:
 - Words in text:              86
 - Sentences in text:           8
Text Complexity:
 - Av. Word Length:          4.06
 - Av. Sentence Length:      10.7
```

**Table 1 | File information**

Also, for each text file, a table of detailed features are provided, giving a full picture of the errors. For example, in Table 2, the annotated errors of a candidate's (Malaga_A2_5) written production in the exam center of Malaga are listed.

| | textfile | lang | id | features |
|---|---|---|---|---|
| 1 | textfile | lang | id | features |
| 2 | Malaga A2/Malaga_A2_5_a.txt | Greek | 1 | errors;σορ |
| 3 | Malaga A2/Malaga_A2_5_a.txt | Greek | 3 | errors;τον;τ-παρ |
| 4 | Malaga A2/Malaga_A2_5_a.txt | Greek | 4 | errors;τον;τ-παρ |
| 5 | Malaga A2/Malaga_A2_5_a.txt | Greek | 9 | errors;πτω;πτω-αντ |
| 6 | Malaga A2/Malaga_A2_5_a.txt | Greek | 7 | errors;γραφ;γ-λεξ |
| 7 | Malaga A2/Malaga_A2_5_a.txt | Greek | 10 | errors;τον;τ-παρ |
| 8 | Malaga A2/Malaga_A2_5_a.txt | Greek | 11 | errors;ορθ;ο-γραμ |
| 9 | Malaga A2/Malaga_A2_5_a.txt | Greek | 13 | errors;αρθ;ορι;ο-παρ |
| 10 | Malaga A2/Malaga_A2_5_a.txt | Greek | 14 | errors;τον;τ-παρ |
| 11 | Malaga A2/Malaga_A2_5_a.txt | Greek | 15 | errors;τον;τ-παρ |
| 12 | Malaga A2/Malaga_A2_5_a.txt | Greek | 16 | errors;ορθ;πεζ |
| 13 | Malaga A2/Malaga_A2_5_a.txt | Greek | 22 | errors;τον;τ-παρ |
| 14 | Malaga A2/Malaga_A2_5_a.txt | Greek | 24 | errors;τον;τ-παρ |
| 15 | Malaga A2/Malaga_A2_5_a.txt | Greek | 27 | errors;ορθ;ο-γραμ |
| 16 | Malaga A2/Malaga_A2_5_a.txt | Greek | 28 | errors;οψη;μσυν |
| 17 | Malaga A2/Malaga_A2_5_a.txt | Greek | 29 | errors;λεξη_φράση;λ_φ-αντι |
| 18 | Malaga A2/Malaga_A2_5_a.txt | Greek | 30 | errors;τον;τ-παρ |
| 19 | Malaga A2/Malaga_A2_5_a.txt | Greek | 32 | errors;ορθ;ο-λεξ |
| 20 | Malaga A2/Malaga_A2_5_a.txt | Greek | 35 | errors;ορθ;ο-γραμ |
| 21 | Malaga A2/Malaga_A2_5_a.txt | Greek | 37 | errors;γραφ;γ-λεξ |
| 22 | Malaga A2/Malaga_A2_5_a.txt | Greek | 38 | errors;ορθ;ο-λεξ |
| 23 | Malaga A2/Malaga_A2_5_a.txt | Greek | 39 | errors;στιξ;στ-προσ |
| 24 | Malaga A2/Malaga_A2_5_a.txt | Greek | 40 | errors;τον;τ-παρ |
| 25 | Malaga A2/Malaga_A2_5_a.txt | Greek | 41 | errors;τον;τ-παρ |
| 26 | Malaga A2/Malaga_A2_5_a.txt | Greek | 43 | errors;ορθ;ο-λεξ |
| 27 | Malaga A2/Malaga_A2_5_a.txt | Greek | 44 | errors;τον;τ-παρ |
| 28 | Malaga A2/Malaga_A2_5_a.txt | Greek | 45 | errors;τον;τ-παρ |
| 29 | Malaga A2/Malaga_A2_5_a.txt | Greek | 47 | errors;ορθ;ο-γραμ |
| 30 | Malaga A2/Malaga_A2_5_a.txt | Greek | 48 | errors;ορθ;ο-ορια_λεξ |
| 31 | Malaga A2/Malaga_A2_5_a.txt | Greek | 49 | errors;τον;τ-παρ |
| 32 | Malaga A2/Malaga_A2_5_a.txt | Greek | 51 | errors;τον;τ-παρ |
| 33 | Malaga A2/Malaga_A2_5_a.txt | Greek | 52 | errors;τον;τ-παρ |
| 34 | Malaga A2/Malaga_A2_5_a.txt | Greek | 53 | errors;τον;τ-παρ |
| 35 | Malaga A2/Malaga_A2_5_a.txt | Greek | 54 | errors;συμφ;σ-γεν |
| 36 | Malaga A2/Malaga_A2_5_a.txt | Greek | 55 | errors;ορθ;ο-λεξ |
| 37 | Malaga A2/Malaga_A2_5_a.txt | Greek | 56 | errors;τον;τ-παρ |

**Table 2 | Error features**

In figure 2 some examples of the annotation environment of UAM are given. The underlining marks annotated words and phrases. The use of more than one-line marks multiple annotations. Clicking on one of them, the annotation of the selected item is shown in the field under the text.
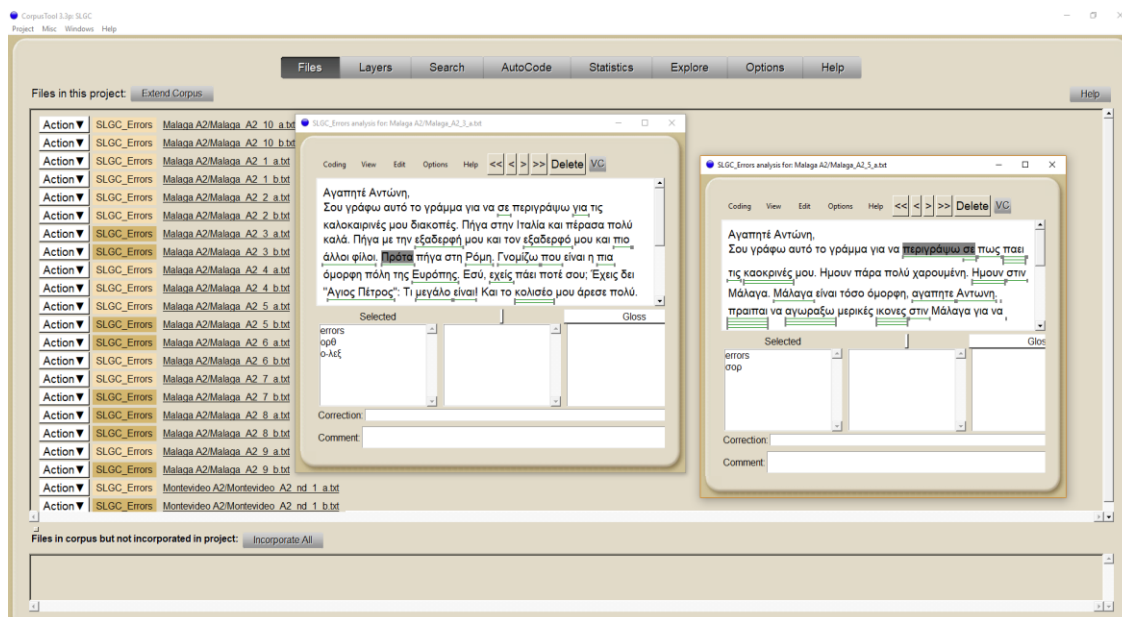
**Figure 2 | Examples of annotation with UAM**

## 3    Preliminary results

For this presentation, 62 texts of the corpus have been annotated and 1.862 errors have been detected. The A1 and A2 levels of the exam centers in Barcelona, Buenos Aires, Malaga, Montevideo, and Oviedo have been analyzed (see table 3). The two levels are examined together because in the present sample the limits between them are vague.

| Exam center / Level | Barcelona | Buenos Aires | Malaga | Montevideo | Oviedo | Total |
|---|---|---|---|---|---|---|
| A1-A2 | 20 | 12 | 20 | 2 | 8 | **62** |

**Table 3 | Number of written productions per exam center**

In the above data, the classification of the errors is in line with the taxonomy visualized in the annotation schema (Figure 1). Based on that, some general conclusions will be drawn about the kind of errors Spanish learners make, observing the general trends shown in Figure 3.
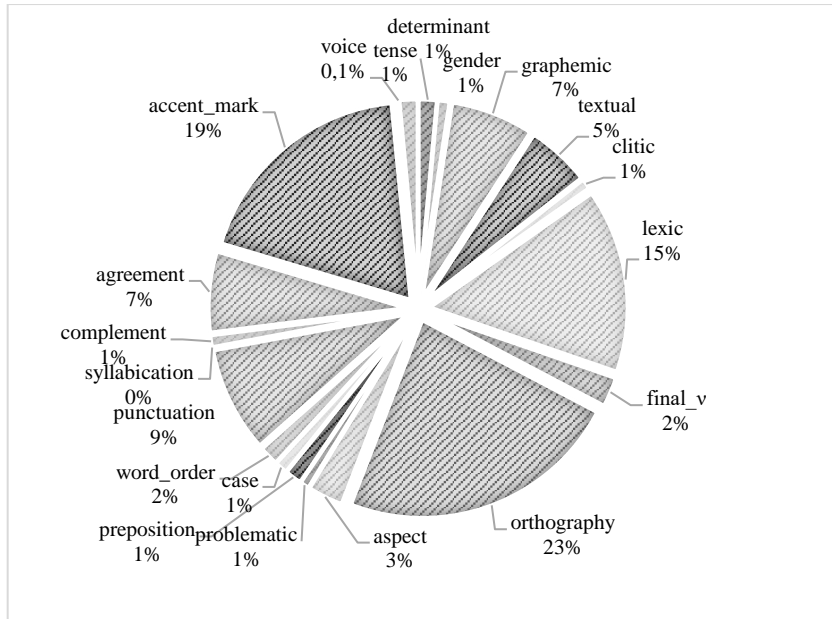
**Figure 3 | Percentage of errors per domain**

Figure 3 shows that most errors occur in the orthography and accentuation, followed by the vocabulary, punctuation, agreement and text organization. More specifically:

a) 30% of errors occur in orthography[8] (Fig. 4): a) Orthographical (23%): *σιγνομη* ('sorry'), *πρέπη* ('must'), *διαβατείριο* ('passport'), b) graphemic (7%): *χρισταλινα* ('crystal clear'), *φτιχισμένος* ('happy'), *καταράχτας* ('waterfalls'). 63,5% appear in the root morpheme, while 26,1% in the grammatical morpheme. Both phonological skills in the early stages of L2 learning, as well as the unawareness or ineffective application of spelling rules to more advanced texts, seem to influence learners' spelling performance. Based on the results, it is clear that, apart from the graphical-phonetic correspondence, the students face difficulties in the phonemic-morphological correspondence.



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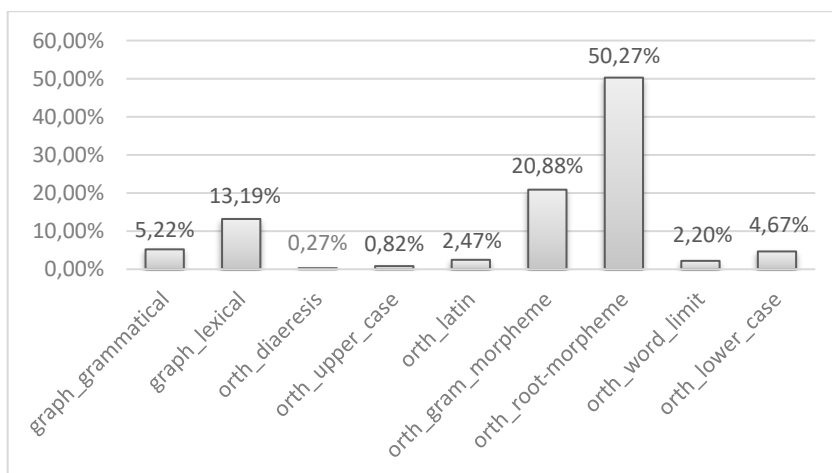
[8] For practical reasons, orthography contains here both orthographical and graphemic errors. Orthographical are the errors with a correct phonological representation, where only spelling errors are detected. Graphemic are mistakes in the form of the word where there is no proper phonological representation.

**Figure 4 | Orthographical and graphemic errors**

b) Both Greek and Spanish language use an accent mark (´). However, although in Greek the accent is obligatory in all non-monosyllabic words, in Spanish, the main purpose of writing an accent mark is to indicate that this particular word is supposed to be stressed somewhere other than the syllable where it would be stressed naturally if it followed the rules. As a result, Spanish learners of Greek add, omit, or substitute it, influenced by the rules of their L1: e.g. *σκεφτόμαι, μάθήμες, ήραρχει, ταξιδι*. We assume that the high percentage of its omission (69,76%, see Fig. 5) is due to the fact that in Spanish the accent normally is not marked, e.g. *una manzana* (/'una man'θana/) 'an apple'.
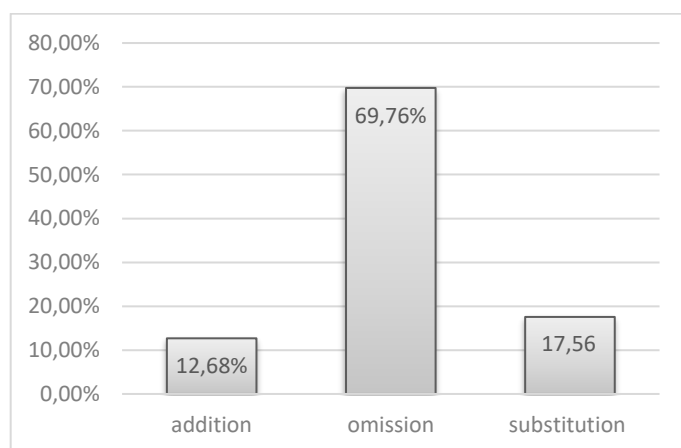


**Figure 5 | Accent mark: Error performance**

c) 15% of the errors are performed due to the incorrect use of the vocabulary (Fig. 6). The errors are related to the selection of the appropriate word (substitution of form and/or meaning), as well as the addition or omission of words. Difficulties in the [+/-learned] register, polysemous words, idiomatic expressions, lexical collocations, inaccurate use of the verbs *πηγαίνω vs. έρχομαι* (ir/venir, 'to go/to come') and *πηγαίνω vs. φέρνω* (llevar/traer, 'to take/to bring'), *είμαι* vs. *πηγαίνω* (estar/ir, 'to be'/'to go'), and the use of nonexistent forms are noticed. For example, in (1) there is a clear confusion in the use of the verb *είμαι* which here corresponds to the Spanish 'estar', and not to 'ser', while in (2) and (3) the structures with the verb *ir* ('to go') and the question pronoun *que* ('what'), respectively, are transferred to Greek:

|  | **Error** |  |  | **Target** |  |
|---|---|---|---|---|---|
| (1) | *\*είμαι* | *πολύ* | *ενδιαφέρουσα* | *ενδιαφέρομαι* | *πολύ* |
|  | be.1SG.PRS | very | interesting-NOM.SG.F | be.interested.1SG.PRS | much |
|  | 'estoy muy interesada' 'I am very interested' |  |  |  |  |
| (2) | *\*με* | *πάει* | *καλά* | *με* | *βολεύει* |
|  | me.ACC.CL | go.3SG.PRS | well | me.ACC.CL | suit.3SG.PRS |
|  | 'me va bien' 'it suits me' |  |  |  |  |

(3)  *τι        σου        φαίνεται;        πώς        σου     φαίνεται;

*what       you.GEN.CL   seem.3SG.PRS    how        you.    seem.3SG.PRS
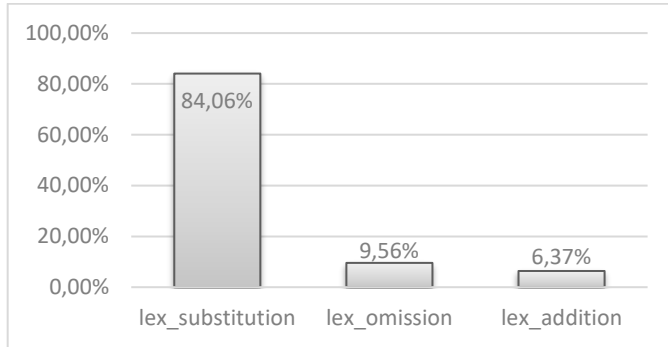                                                    GEN.CL

'¿qué te parece?'
'what do you think?'



**Figure 6 | Vocabulary and expressions: Error performance**

d) Although there are few differences between the two languages, 9% of errors occur in punctuation (Fig. 7). In many of the texts, non-systematic use of the comma and hyphen is found. Other punctuation marks are also quite problematic, e.g. phrases at the start of letters, like "*Dear John*", are followed by a colon, and not a comma like in Greek: "*Querido Juan: ¿Cómo estás?"*, and confusion regarding the Greek question mark (;), which is used as a colon.
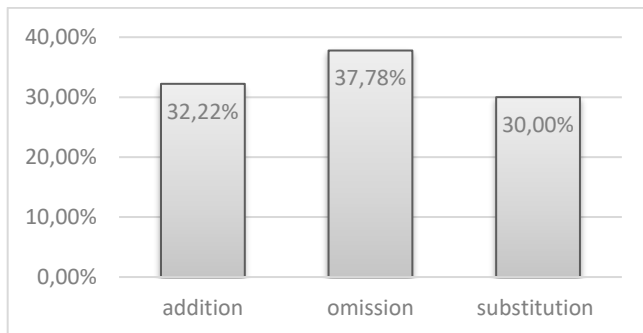


**Figure 7 | Punctuation: Error performance**

e) 7% of the errors of the present sub-corpus (A1-A2 level) are related to the agreement in gender>number>person>case (see errors in gender, number and case agreement in examples 4-5). Figure 8 illustrates the percentage of different types of agreement:

|  | **Error** |  |  | **Target** |  |  |
|---|---|---|---|---|---|---|
| (4) | *μέσα | στα | νύχτα | μέσα | στη | νύχτα |
|  | inside | at: | night. | inside | at: | night. |
|  |  | DEF.ACC.PL.N | ACC.SG.F |  | DEF.ACC.SG.F | ACC.SG.F |
|  | 'en la noche' |  |  |  |  |  |
|  | 'in the night' |  |  |  |  |  |
| (5) | *από | ενας | φιλους | από | έναν | φίλο |
|  | of | INDEF. | friend. | of | INDEF. | friend. |
|  |  | NOM.SG.M | ACC.PL.M |  | ACC.SG.M | ACC.SG.M |
|  | 'de un amigo' |  |  |  |  |  |
|  | 'of a friend' |  |  |  |  |  |

Except for many other reasons, this difficulty is attributed to interference, e.g. unlike in Greek, in Spanish, the possessive pronouns agree in gender and number with the object of property, not the possessor: *οι φίλοι μου* 'mis amigos' ('my friends'):

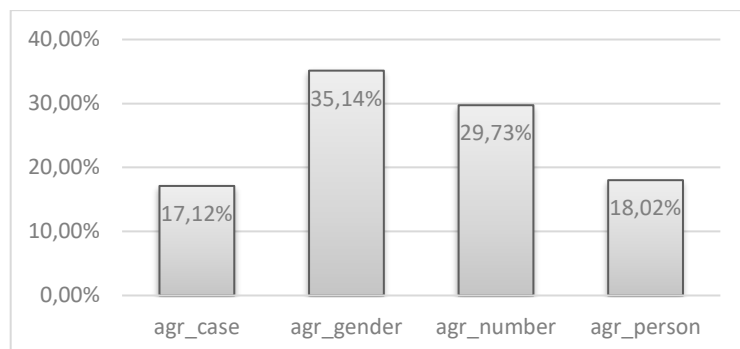| (6a) | GR | *οι* | *φίλοι* | *μου* |
|---|---|---|---|---|
|  |  | DEF.NOM.PL.M | friend.NOM.PL.M | my.GEN.SG |
|  |  | 'my friends' |  |  |
| (6b) | SP | *mis* | *amigos* |  |
|  |  | my.PL.M. | friend.PL.M |  |
|  |  | 'my friends' |  |  |



**Figure 8 | Agreement: Error performance**

f) Particularly problematic (5% of the present sample, Fig. 3), although expected at these levels, as the use of complex structure is limited, is the speech organization in many written productions. Figure 9 visualizes the non-systematic structure and inaccurate use of indicators that characterize textual cohesion, the overuse of overt subjects, the addition of coordinate and substitution of subordinate conjunction, as well as errors in the selection of clitics, e.g.:

|   | **Error** | | | | **Target** | | | |
|---|---|---|---|---|---|---|---|---|
| (7a) | *θέλω | να | βλέπω | σου | θέλω | να | σε | δω |
| | want.1 SG.PRS | to | see1SG.SBJ V.IMPFV | you.S G.CL | want.1S G.PRS | to | you.S G.CL | see1SG.SBJ V.PFV |

'quiero verte'

'I want to see you'

(7b) <u>Γιατί</u> εγώ προτιμώ ένα ξενοδοχείο <u>γιατί</u> θέλω ένα άνετο κρεβάτι <u>και</u> ένα καθαρό μπάνιο με ζεστό νερό <u>και</u> ένα καλό πρωινό με καφέ, πορτοκαλάδα, ψωμί <u>και</u> βούτιρο.

'<u>Porque</u> yo prefiero un hotel <u>porque</u> quiero una cama cómoda <u>y</u> un baño limpio con agua caliente <u>y</u> un buen desayuno con café, jugo de naranja, pan <u>y</u> mantequilla.'

'<u>Because</u> I prefer a hotel <u>because</u> I want a comfortable bed <u>and</u> a clean bathroom with hot water <u>and</u> a good breakfast with coffee, orange juice, bread <u>and</u> butter.'
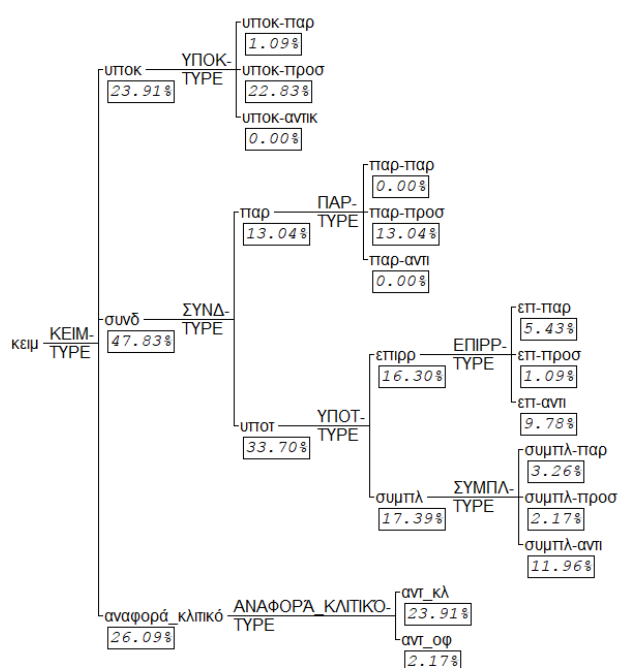


**Figure 9 | Analysis of textual errors in UAM**

## 4   Conclusions

In L2 research relatively little use has been made of corpora, particularly in formal approaches to second language acquisition (SLA), and many SLA researchers are still reticent about using corpus data. However, given the increasing interest in L2 Greek acquisition research, SLGC is a valuable tool for corpus-driven studies as a source of naturalistic data for researchers, by providing information on Spanish learners'

interlanguage. This will lead to the improvement in the curriculum design of teaching Greek as L2.

According to Corder (1981), the learner's native language is facilitative, and errors are not a sign of inhibition but the evidence of the student's learning strategies. Considering that teachers can control the input but not the intake, we strongly believe that SLGC will give them evidence of how language is learned, and help them detect, or even predict, the strategies employed and the areas that need to be reinforced for the teaching/learning procedure to become more effective.

Besides, the observation of the data will help teachers choose the adequate teaching method and material, syllabus designers, and textbook writers, to focus on the specific difficulties due to negative transfer from L1 to L2, so as to be promptly and purposefully faced.

Moreover, the elaboration of the results may be useful for auto-learning and self-evaluation, promoting learners' autonomy and raising their language awareness.

Of course, in this research there are limitations. Although the sample size is much bigger compared to the sample of previous Greek studies in the research area, more data are needed. However, the biggest setback is easy and/or free access to adequate data. Also, a bigger team consisted of more annotators, IT specialists, and other experts in the area are needed.

Our future research includes the analysis of learners' interlanguage taking into consideration different variables, the detection of more error types, and the expansion of the learner corpus to other languages.

**References**

Alexopoulou, Angeliki. 2005. "Contribución al Estudio de los Errores Morfosintácticos en la Interlengua Escrita de Aprendientes de Español de Origen Griego". PhD diss., Universidad Nacional y Kapodistríaca de Atenas.

Alexopoulou, Angeliki. 2010. "Errores Intralinguales e Interlinguales en la Interlengua Escrita de Aprendientes Griegos de e/le." In *Nuevos Caminos del Hispanismo. Actas del XVI Congreso de la Asociación Internacional de Hispanistas* (Paris, 9-13 July 2007)*,* edited by Pierre Civil and Françoise Crémoux. Madrid: Hiberoamericana.

Andria, Maria. 2014. "Crosslinguistic Influence in the Acquisition of Greek as a Foreign Language by Spanish/Catalan L1 Learners: The Role of Proficiency and Stays Abroad." PhD diss., Universitat de Barcelona.

Andria, Maria, Miralpeix, Immaculada, and M. Luz Celaya. 2012. "Diaglossiki Epidrasi kata tin Ekmathisi tis Ellinikis os Ksenis Glossas apo Ispanophonous Mathites." In *Selected Papers from the 10th ICGL*, edited by Zoe Gavriilidou, Angeliki Efthymiou, Evangelia Thomadaki, and Penelope Kambakis-Vougiouklis, 654-662. Komotini, Greece: Democritus University of Thrace.

Brown, H. Douglas. 2006. *Principles of Language Learning and Teaching*. NJ: Prentice Hall Regents.

Cook, Vivian. 1996. *Second Language Learning and Language Teaching*. London: Arnold.

Corder, S. Pit. 1967. "The Significance of Learners' Errors." *IRAL* 5:161-70.

Corder, S. Pit. 1981. *Error Analysis and Interlanguage*. Oxford: Oxford University Press.

Cummins, Jim. 1991. "Interdependence of First- and Second-language Proficiency in Bilingual Children." In *Language Processing in Bilingual Children*, edited by Ellen Bialystok, 70-89. Cambridge: Cambridge University Press.

Dagneaux, Estelle, Denness, Sharon, Granger, Sylviane and Fanny Meunier. 1996. *Error Tagging Manual Version 1.1*. Louvain-la-Neuve: Centre for English Corpus Linguistics, Université Catholique de Louvain.

Díaz-Negrillo, Ana, and J. Fernández-Domínguez. 2006. "Error Tagging Systems for Learner Corpora." *Revista Española de Lingüística Aplicada (RESLA)* 19:83-102.

Dulay, Heidi, and Marina Burt. 1973. "Should we Teach Children Syntax?" *Language Learning* 23/2:245-258.

Fries, Charles C. 1945. *Teaching and Learning English as a Foreign Language*. Ann Arbor: University of Michigan Press.

Galasso, Joseph. 2002. *Analyzing English Grammar: An Introduction to Feature Theory*. Northridge: California State University.

Gass, Suzan M., and Larry Selinker. 1983. *Language Transfer in Language Learning*. Rowley, MA: Newbury House.

Granger, Sylviane. 2008. Learner corpora. In *Corpus linguistics. An International Handbook, 1,* edited by Anke Lüdeling and Merja Kytö, 259–275. Berlin and New York: Mouton de Gruyter.

Kellerman, Eric. 1979. "Transfer and Non-transfer: Where we are now." *Studies in Second Language Acquisition* 2:37-57.

Lado, Robert. 1957. *Linguistics Across Cultures*. Ann Arbor: The University of Michigan Press.

Leontaridi Eleni, Peramos Soler Natividad and Marina Ruiz Morales. 2010. "I Glossiki Ikanotita ton Ellinon Ipopsifion stis Eksetasis Glossomathias DELE tou Ispanikou Kratous. Analisi kai Sistimatopiisi Lathon stin Paragogi Graptou Logou. Didaktikes Protaseis", In *Ekselikseis stin Erevna tis Glossikis Ekmathisis kai Didaskalias: Selected papers* (Proceedings of the 14th International Conference of Greek Applied Linguistics Association (GALA)), edited by Angeliki Psaltou-Joycey and Marina Mattheoudakis, 91-106. Thessaloniki: GALA.

Lozano, Cristobal. 2006. "The Development of the Syntax-information Structure Interface: Greek learners of Spanish." In *The Acquisition of Syntax in Romance Languages*, edited by Torrens Vicenç and Linda Escobar, 371-399. Amsterdam: John Benjamins.

Lozano, Cristobal. 2008. *The Acquisition of Syntax and Discourse: Pronominals and Word Order in English and Greek Learners of Spanish*. Saarbrücken: VDM Verlag.

Lozano, Cristobal. 2018. "The Development of Anaphora Resolution at the Syntax-discourse Interface: Pronominal Subjects in Greek Learners of Spanish." *Journal of Psycholinguistic Research* 47/2:411-430.

Meunier, Fanny. 1998. "Computer Tools for Learner Corpora." In *Learner English on Computer*, edited by Sylviane Granger, 19-37. London and New York: Longman.

Odlin, Terence. 1989. *Language Transfer: Cross-linguistic Influence in Language Learning*. Cambridge, UK: Cambridge University Press.

Odlin, Terence. 2005. "Crosslinguistic Influence and Conceptual Transfer: What Are the Concepts?" *Annual Review of Applied Linguistics* 25:3-25.

O'Donnell, Michael. 2008. "The UAM CorpusTool: Software for Corpus Annotation and Exploration". In *Applied Linguistics Now: Understanding Language and*

*Mind/La Lingüística Aplicada Hoy: Comprendiendo el Lenguaje y la Mente*, edited by Carmen M. Bretones Callejas et al., 1433-1447. Almería: Universidad de Almería.

Papadopoulou, Despina, and Alexandros Tantos 2014. "H Didaktiki Aksiopiisi ton Somaton Keimenon Mathiton stin Elliniki os Defteri/Kseni glossa." In *Meletes Afieromenes stin Omotimi Kathigitria Anna Anastassiadis-Symeonidis*, edited by Zoe Gavriilidou, and Anti Revithiadou, 246-257. Greece, Kavala: Saita.

Saville-Troike, Muriel. 2006. "Social Contexts of Second Language Acquisition." In *Introducing Second Language Acquisition*, 99-132. Cambridge, UK: Cambridge University Press.

Selinker, Larry. 1969. "Interlanguage". *IRAL* 3:114-132.

Sharwood Smith, Michael. 1983. "Cross-linguistic Aspects of Second Language Acquisition." *Applied Linguistics* 4/3:192-199.

Tantos, Alexandros, Papadopoulou, Despina, Alexandri, Katerina, Dosi, Ifigenia, Fotiadou, Georgia, Pouliou, Katerina, and Paraskevi Savvidou. 2013. "Greek Learner Corpus: Design and implementation." Paper presented at the 21st International Symposium on Theoretical and Applied Linguistics, Thessaloniki: Aristotle University of Thessaloniki, 5-7 April 2013.

Tantos, Alexandros, Alexandri, Katerina, Dosi, Ifigenia, Pouliou, Katerina, Savvidou, Paraskevi and Georgia Fotiadou. 2015. "Analisi Lathon sto Elliniko Soma Keimenon Mathiton (ESKEIMATH): Prota Evrimata." *Meletes gia tin Elliniki Glossa* 35:719-732. Thessaloniki: Institute of Modern Greek Studies.

Tantos, Alexandros, and Despina Papadopoulou. 2012. "Stand-off Annotation for Learner Corpora: Compiling Greek Learner Corpus (GLC)". Paper presented at the 4th International Conference on Corpus Linguistics (CILC2012), Jaén, Spain, 22–24 March 2012.

Tzimokas, Dimitris. 2010. "Ilektroniko Soma Keimenon Ekmathisis tis Neas Ellinikis os Defteris Glossas: Pros ena Erevnitiko kai Didaktiko Ergaleio." *Meletes gia tin Elliniki Glossa* 30:602-616. Thessaloniki: Institute of Modern Greek Studies.