Differences in the Written Production of Young Spanish and German Learners: Evidence from Lexical Errors in a Composition*

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Abstract

This study investigates quantitative and qualitative differences in the production of lexical errors in the English written performance by young Spanish and German learners of English. The essays produced by the subjects were analysed and lexical errors identified, classified, and quantified. A t-test was performed on the data. Results revealed that Spanish learners commit significantly fewer lexical errors than their German counterparts, t = 2.94 at a significance level p <.01. Despite quantitative differences, both language groups obtained similar results regarding the lexical error types. Our findings suggest that lexical transfer is an important lexical error source in German, as well as in Spanish informants.

1 Introduction: Transfer

Discussions about the distinction between intralingual (developmental) and interlingual (transfer[1]) errors have been recurrent throughout the years in the literature of error analysis and of second language acquisition in general. These discussions reflect the controversy surrounding the notion of "language transfer". Research in favour and against the influence of the mother tongue in the process of second language acquisition abounds in the literature. Evidence provided by some language-specific errors speaks for the relevant role of the learner's L1 in the L2 acquisition process. However, the pervasiveness of other certain types of errors common to

learners of different linguistic backgrounds serves as one of the most significant counterarguments against the importance of transfer. Odlin's contribution to the field (1989/1996) offers a valuable and detailed review of the controversies about transfer. Celaya (1992) also provides a very informative and recommendable summary of the comings and goings of research trends along the 20th century in the field of transfer in English as a Second Language (ESL).

Cognate recognition and the "false friend" phenomenon serve to account for the role of transfer and L1 influence in lexical semantics. Factors like contrastive relationships between L1 and L2 lexis, the perceived and real linguistic distance between target and source language (*psychotypology*) (see Kellerman 1983, 1984; Ringbom 1983), the specific L1 encoding of experienced events, or cross-linguistic lexical processing also evidence the different acquisition rate in L2 lexical progression relative to the different source languages (Kolers 1963; Viberg 1993; Kempe 1996; Odlin 1989/1996; Singleton 1996; Altenberg and Granger 2002). This cross-linguistic L2 lexical development is the object of study of the discipline of contrastive semantics, which, admitting the intervening role of L1 in the target language lexical acquisition process, sets to describe, juxtapose and compare the lexical systems of both L1 and L2, and thus, spot the differences between them. Several SLA studies have noticed that vocabulary is the most permeable area of language as L1 influence is concerned (see, for instance, Kellerman 1984; Ringbom 1987; Bouvy 2000). The last aim of contrastive semantics is to improve second language vocabulary learning by exploiting the pedagogical power of lexical similarities and differences (see Yu 1996).

L1 Differences

Current research offers varying results concerning the acquisition similarities between learners with different mother tongues, and even between first and second language acquirers (see for example Hu et al. 1982; Stauble 1983; Yu 1996; VanParys et al. 1997). Several studies have revealed that some aspects of the target language and some stages of target language learning are common not only to learners from different language backgrounds, but also to children acquiring that (target) language as their mother tongue. All authors, even those most critical with transfer, e.g. Dulay, Burt, Krashen (cf. Odlin 1989/1996, 21), also Dušková (1969) acknowledge the role, although minimal, of the L1 in the acquisition of the different subsystems (phonology, morphology, lexis, syntax and discourse) of the second language.

Studies addressing the issue of second language acquisition are frequent in the literature. Nonetheless, these tend to analyse data gathered from learners of English with a common language background, basically. Research carried out with target

languages other than English is still quite rare (cf. LoCoco 1975; Rogers 1984; Lafford et al. 2003). Spanish or German are very often the native language of the learners (see for instance, Yanguas and Gil Cano 1983; Barrios 1995; Barrera Vidal 1996; Moya Guijarro 2003 for Spanish learners of English, and Sonnenstuhl, et al. 1999 for German learners, just to mention some recent studies). These experiments reveal that, in fact, some aspects of language learning are common to all learners, first and second, German and Spanish natives, meanwhile other aspects are language-specific.

Empirical studies have shown transfer to be a recurrent cause of learners' errors (see, for example, Taylor 1975; Dagut and Laufer 1982; Hinds and Tomiyana 1984). The mother tongue of the learners is made responsible for a great proportion of performance errors in the first stages of second language acquisition, above all. Nevertheless, an increased proficiency involves a development of overgeneralization strategies in detriment of transfer (see Taylor 1975 and Fernández Dobao 2001). It seems that learners rely on prior learning, i.e. their existing linguistic knowledge to facilitate new learning.

The learners' mother tongue serves as the linguistic scaffolding upon which they develop their L2 competence. This claim finds vehement support in Dagut and Laufer (1982), who even question the existence of developmental or intralingual errors at all, i.e. errors generating from target language influence. For these authors interlanguage errors can be explained by contrastive comparison between target and source structures, and recourse to the mother tongue is the commonest and most plausible strategy to account for those errors. The point in this and the other experiments reported in this section is to establish the degree of influence of L1 in L2 acquisition and to find out how similar are first and second language acquisition processes for learners with different L1s. Heretofore, research about transfer and/or developmental errors has concentrated on grammar and syntactic acquisition. Most of these studies go back to the decades of the 70s and early 80s.

In the same vein, the present study intends to compare the written production of Spanish and German learners of English concerning their production of lexical errors. Although several studies have tackled the lexical acquisition processes in English of learners from different language backgrounds (see Kolers 1963; Hu et al. 1982; Yu 1996; VanParys et al. 1997; Celaya and Torras 2001), the present research claims novelty, since it specifically deals with lexical errors produced by young low-level learners in a formal acquisition environment. Determining the lexical error types found in the production of the two language groups analysed can help researchers and teachers to learn more about the lexical processes and strategies in L2 acquisition and to improve English vocabulary instruction in the German and Spanish school contexts, respectively.

	Spanish	**German**
No. of participants	71	38
*Mean score cloze**	41,45%	41,47%
*Mean score reading**	18,12%	25,56%

* Percentage of right responses.

Table 1: Subjects and scores of the level tests.

The present study has been designed to explore and answer the following research questions:

1. Is there any significant quantitative difference in the lexical errors produced by German and Spanish learners?

2. Is there any qualitative difference, i.e. of lexical error types in the lexical errors produced by Spanish and German learners?

2 Method

2.1 Subjects

A total of 109 subjects participated in the study, 71 of them were Spanish-speaking 4th graders from a primary school in Logroño, La Rioja, Spain, henceforth Spanish group. The other 38 participants were German-speaking 4th graders from a primary school in Bremen, Germany, henceforth German group. All were 10 year old beginner learners of English. The analysis of a cloze procedure and reading comprehension test yielded very similar results for both language groups regarding their linguistic competence in EFL, as can be seen in table 1. In light of these results both mother tongue groups were ascribed to the same proficiency level in English.

Intact classes rather than volunteers were chosen for the study, thus three classes from the Spanish school and two from the German one make up the subject sample. Some participants reported that a language other than Spanish or German, respectively, was also used at home, but since these subjects also claimed Spanish or German to be their dominant language, they were not excluded from the study. Data collection took place in Logroño and Bremen in spring 2004.[2]

2.2 Materials

The instruments used for the investigation were the written compositions produced by the subjects of the study. A broad subject-base theme was chosen, so that content was the least constrained by thematical and knowledge limitations. The learners had to write a letter to an English prospect host-family, where they introduced themselves and talked about their family, their school, their home town, their hobbies and interests and any other aspect of their life and liking they might have deemed interesting for the receiving family to know. This theme was also selected, because it did not impose any constraints on the type of language, vocabulary and grammatical structures expected, and it left free way to the learners to use their imagination and employ a wide range and variety of words and structures. Subjects had 30 minutes to complete the task and no limitation was imposed on them as regards their writing but for the topic in the instructions. Nonetheless, the free character of the task allowed students to deploy as much linguistic knowledge in English as possible.

With this topic, it was guaranteed that subjects would have something to write about, and differences in the resulting essays as regards content and length due to different subject knowledge were ruled out. The resulting essays are variable in length, content, linguistic structures, and lexical items, but all respond to the instructions. Instructions were given in the mother tongue of the participants: Spanish and German. Controlling time and topic the resulting products are comparable (see Celaya and Torras 2001)

2.3 Procedures and Analysis

Compositions were read twice and lexical errors spotted. To identify lexical errors, a working definition of the object of study, i.e. the lexical error, is basic and necessary. The definition of "lexical error" fundaments on and derives from the notion of lexical competence, that is, of what it means knowing a word. With this consideration in mind, here a lexical error is defined as the deviation from the lexical norm as it appears in dictionaries and grammars. Here, the lexical norm is established by the monolingual dictionary of English *Collins Cobuild*. Every independent meaningful unit is regarded as a lexical item. Considering this, lexical errors were here strictly counted and all lexical deviations, slight and small as they may have been, were registered as lexical errors.

Being the lexical errors already identified, registered, and quantified, a linguistic description (analysis) was attempted at that would reveal the basic underlying nature of those lexical errors. Two main structural patterns were distinguished: spelling errors, e.g *mather*, *verday*, *sarperner*; and errors in word choice derived from mother

tongue influence/interference, e.g. *coleg*, *alums*, *whale asesin*. Spelling errors can be defined, basically, as errors in the form of the lexical item, giving rise either to some non-existent word, e.g. *smooll*, *tenniss*, *ticher*; or either to an existent word but with a different meaning to the one intended,[3] e.g. *hose* for *house*, *parrots* for *carrots*. These are usually caused by the problems learners have with the English encoding system. As a result of the disagreement in English between pronunciation and orthography learners violate the conventions of the orthographic system (Celaya and Torras 2001).

Errors in word choice, on the other hand, consist in using a wrong word instead of another correct one. The resulting error is an already existing word in the target language, e.g. *fathers* for *parents*, usually a literal translation, or in the mother tongue, e.g. *arroz* for *rice*, a *complete language shift* (see Ringbom 1983), or either an easily recognisable word in the L1, i.e. an anglified word, e.g. *lentigues* for *lentils*. These lexical errors are mainly due to influence of the mother tongue to which the majority of them can be traced back. Thus, lexical errors were classified taking into account these two main tendencies.[4]

Mean comparisons were calculated by a two-tailed t-test to find out whether there were significant differences between both language groups. There was no previous empirical evidence for differences in these means (production of lexical errors per composition). Consequently, null hypothesis of no difference between group means was adopted here.

3 Results

The first research question asked whether there was any significant difference in the lexical errors produced by Spanish and German young EFL learners. Analysis of the data revealed that, in fact, there was a significant difference between language groups in the production of lexical errors. Spanish learners produced significantly fewer lexical errors than their German peers when performing the same task under similar circumstances. As can be observed in table 2, at a significance level set at $p < .01$ for the two-tailed t-test, a t value of 2.94 yields a clear result that allows for the null hypothesis to be rejected. The lexical error production per composition was significantly higher for German participants. Furthermore, German compositions are less than half so long as Spanish ones, this implies that German compositions have a higher lexical error density, i.e. they contain a higher proportion of lexical errors than the essays of the Spanish learners. This result is confirmed by the mean number of words between every lexical error that amounts to 5.76 in German subjects, quantity that triplicates in their Spanish peers: 16.42. A summary of these

	Spanish	German
Mean	9	12.6
t	2.94*	

* significant at p <.01.

Table 2: Lexical errors in compositions.

results is offered in table 3.

As regards the second research question alluding to qualitative differences in the lexical error production of Spanish and German subjects, results show that there is no such difference. The lexical error types produced by members of both language groups are the same. German as well as Spanish learners commit more spelling than word choice errors with very similar percentages in both language groups. Meanwhile Spanish participants produce up to 72.93% spelling errors contrasting with the 27.07% of errors in the word choice, their German counterparts accumulate 67.43% of spelling errors. Tallies and percentages of the lexical error types are collected in table 4.

Therefore, the answer to the second research question must be negative. Although there are some slight percentage differences in the lexical error types produced by the language groups, results reveal no qualitative difference, i.e. German and Spanish participants commit the same type of lexical errors in very similar proportions. However, in view of these results it cannot be determined exactly to what extent transfer is responsible for those lexical errors, although semantic interference clearly exists.

4 Discussion

This study revealed that Spanish learners committed significantly fewer lexical errors than German learners on the written composition task, as evidenced by the analysis of lexical errors. At first sight, this result may seem surprising, since less lexical errors would be expected from German than Spanish natives taking into ac-

	Spanish	German
*Mean length of composition**	147.85	72.68
Mean no. of words between lexical error	16.42	5.76

* Measured in words.

Table 3: Means comparison words and lexical errors.

	Spanish	**German**
Spelling errors	466/ 72.93%	323/ 67.43%
Word Choice errors	173/ 27.07%	156/ 32.56%

Table 4: Lexical error types.

count the greater semantic similarity between English and German than between English and Spanish, above all as their basic vocabulary is concerned.

The (perceived) lexical similarity between English and German (in italics the German word), e.g. fish/*Fisch*, apple/*Apfel*, brother/*Bruder*, provided German learners with an impetus to transfer their native language lexical knowledge (see Yu 1996). As the two languages are actually semantically genuinely related, this transfer strategy would be expected to produce few lexical errors. However, learners did not bear in mind the slight spelling differences between the two encoding systems, differences that are not reflected in the pronunciation of the lexical items, and that are to be made responsible for a great proportion of lexical spelling errors, such as *Fisch* for fish, *Englisch* for English, *Stadion* for stadium, *handboll* for handball, *jihrs* for years or *Eisskating* for ice-skating.

By contrast, Spanish subjects are much more conservative in their transfer behaviour. Being aware of the big distance between their native language and English as regards lexical forms and spelling conventions, Spanish participants did not use transfer strategy so often as did their German peers. Nevertheless, they also committed frequent spelling errors, although in this case occasioned by the impossibility to cope with the "difficult" spelling of some English words, e.g. *scool* for school, *biutiful* for beautiful, *bahtroom* for bathroom, or *wardrowey* for wardrobe.

Two possible explanations can be brandished to account for the massive presence of lexical errors in German essays, basically. First, during the first year of instruction in English, subjects received oral input exclusively and were encouraged to speak not to write in English. This emphasis of the oral skills is also present in the English teaching approach in the school in Logroño, La Rioja, but it is not so acute. Spanish learners had by the time of data collection already wrote sentences in English, whereas German participants had written hardly anything but for isolated words in the foreign language.

Second, and very much linked to the first explanation, German learners tend to write the English words as these are pronounced. Spelling lexical errors resulting from this communication strategy can be explained by "L1 influence due to transfer of L1 coding rules" (Celaya and Torras 2001: 9). Faced with the problem of writing a word in English, which written form they have not yet acquired, it is not implausible to suppose that German learners part from the hypothesis that, as

in their mother tongue, in English pronunciation and spelling go hand in hand, and use the only available knowledge they have, i.e. German encoding conventions. The application of this hypothesis causes spelling errors like *neim* for "name", *keik* for "cake", *nein* for "nine", *frends* for "friends", or *brader* for "brother". Spanish informants also transfer the Spanish spelling conventions to write words as they are pronounced, e.g. *braun* for "brown", *spik* for "speak", *laik* for "like", or *biutiful* for "beautiful" (see Celaya and Torras 2001 for similar results). Nonetheless, Spanish spelling errors display more instances of compliance with English spelling rules, but present omissions, additions, or substitutions of graphemes such as in *scool* for "school", *swiming* for "swimming", *teniss* for "tennis", *sanwich* for "sandwich", or *afternoom* for "afternoon". This type of spelling error points to a weaker influence of L1 and a stronger problem with the English graphological norms.

It is not striking, then, that German learners commit significantly more lexical errors than their Spanish counterparts, since they are less familiar with the written form and spelling norms of English words. Furthermore, the close semantic relatedness between target and source language allow German learners for more transfer opportunities that result in spelling errors (cf. VanParys et al. 1997). Although the Spanish subjects made fewer lexical errors than did the Germans, further study will show that German students would know how to pronounce the words they cannot spell, which would probably not be true for the Spanish students (see Hu et al. 1982). This result runs parallel with those of Wode (1976, 1984) and Pfaff (1984) (cited in Celaya 1992:85-86). These authors reached the conclusion that transfer will only take place in those areas where L1 and L2 are structurally similar.

The second research question asked whether there are any qualitative differences in the production of lexical errors between German and Spanish subjects. A qualitative analysis of the data showed the production of lexical error type to be quite similar for learners of both language groups. The tendency observed equally in German as in Spanish learners was for lexical spelling errors to appear in an overwhelming greater proportion over word choice errors. Moreover, even the proportions found in both language groups for the different lexical error types are very similar. These results reveal that German and Spanish learners apply similar learning and communication strategies, resort to the same lexical problem-solving mechanisms, and undergo the same or comparable processes in the acquisition of English vocabulary.

Our findings indicate that spelling errors tend to be more frequent in the production of young EFL learners at the early stages of acquisition irrespective of their mother tongue than word choice errors. The former appear when the learner has partially acquired the new word, and does not yet master its spelling. On the contrary, word choice errors originate from a lack of lexical knowledge. The learner does not know the appropriate words in English to represent what he/she wants to say.

Generally, therefore, word choice errors manifest as complete language shift, relexification or literal translation, mainly (borrowing, coinage and claque, respectively in Celaya and Torras' (2001) and James' (1998) terminology). The learner solves his/her lexical problem by directly inserting the L1 word (Spanish or German in this case), by tailoring an L1 word to the English orthographic or phonetic systems, so that it looks English, or by translating the L1 word into an English correspondent, but not always equivalent.

In the light of the evidence offered by the results, it cannot be established to what degree lexical errors are due to mother tongue transfer or to the very lexical characteristics of the L2 (see Barrio 1995). However, a nearer examination of the lexical errors encountered and consideration of Dagut and Laufer's claim (1982; see also Hinds and Tomiyana1984) that the last cause of all or most errors can be clearly traced back to mother tongue influence lead to the conclusion that lack of correspondence between L1 and L2 phonographemic conventions, e.g. consonant clusters, disagreement between spelling and pronunciation, non-existence of certain sounds (e.g. /æ/) is for both language groups the original cause of their lexical errors.

Pedagogical Implications

For a better pedagogical exploitation and development, contrastive and comparative linguistics should be synthesised in second language instruction (Barrera Vidal 1996). The benefit of cognates by means of positive transfer is obvious and quantitatively important in many second language vocabulary learning situations like the ones at stake. Besides, this pedagogical approach should base on a conscious comparison between target and source systems. Making the learners aware of the similarities and differences between their native language and the L2 will improve their learning and performance in the second language by enabling a quicker and more effective lexical progress, boosting the learners' confidence in learning a foreign language and increasing their motivation (Yu 1996; Moya Guijarro 2003).

5 Conclusion

Spanish learners proved to perform significantly better than their German peers concerning their lexical error production. Nevertheless, there was no noteworthy difference in the type of lexical errors committed by each language group. Considering that, especially for German subjects, this was the first time they were asked to write a text in English, it can be assumed that they have resorted to L1 transfer in order to fulfil the task. Results suggest that transfer is to be made responsible for the great

majority of lexical errors in German and Spanish subjects. However, the small sample size and the restricted lexical errors categories considered in the present study make it difficult to extrapolate the results to a larger population out of the German and Spanish primary school contexts.

Future research should scrutinise further the types of lexical errors and vocabulary learning strategies in order to learn more about the similarities and differences in the lexical acquisition process of English by German and Spanish learners. A longitudinal study of German learners would help discern the actual role of transfer in their English vocabulary learning acquisition process.

Notes

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1. Here, and henceforth the term "transfer" is used to describe barely the influence of the mother tongue, either positive or negative. The term "transfer", and not other, has been chosen because it is the most widely used, terminological controversies about "transfer" are here avoided.
2. These data are part of the data collected for the research project BFF 2003–04009–C02–02 funded by the Spanish Ministry of Science and Technology.
3. These are not considered word choice errors, because the learner does not know the meaning of the error word, which is the result of a lack of knowledge concerning the spelling of the target word not of a confusion of two known words.
4. Celaya and Torras (2001), basing on James (1998) devise a classification of interlingual lexical errors that include the same types as considered here. However, they distinguish four groups: misspellings, borrowing, coinage and calque. Their first type can be equated with the category spelling errors of the present study whereas the other three are here subsumed under the heading word choice errors. Calque designates an L2 word resulting from literal translation, borrowing is the insertion of an L1 words without any attempt at adapting it to the target language, and finally coinage gives rise to adapted L1 words so that they sound or look like English. All are considered transfer errors.

References

Altenberg, B. and S. Granger. 2002. "Recent Trends in Cross-Linguistic Lexical Studies". *Lexis in Contrast*. Eds. B. Altenberg and S. Granger. Amsterdam/ Philadelphia: John

Benjamins. 3–48.

Barrera Vidal, A. 1996. "Vocablos 'transparentes'. Sobre la posible aportación de la lengua materna (L1) al aprendizaje del vocabulario español como L2". *La enseñanza del lexico español como lengua extranjera*. Ed. C. Segoviano. Madrid: Iberoamericana. 43–58.

Barrio, J. 1995. "Case Study: The Effects of Instructional Variable on the Semantic Transfer of Spanish on Spoken English Vocabulary". *FAPIE* 3:17–28.

Bouvy, C. 2000. "Towards the construction of a theory of cross-linguistic transfer". *English in Europe. The Acquisition of a Third Language*. Eds. J. Cenoz and U. Jessner. Clevedon: Multilingual Matters. 143–156.

Celaya, M.L. 1992. *Transfer in English as a Foreign Language: A Study on Tenses*. Barcelona: PPU.

Celaya, M.L. and Torras, M.R. 2001. "L1 influence and EFL vocabulary: do children rely more on L1 than adult learners?". Actas del XXV Congreso AEDEAN. December 13-15, University of Granada. 1–14.

Collins Cobuild English Dictionary. 1995. London: Harper Collins Publishers.

Dagut, M.B. and B. Laufer. 1982. "How 'intralingual' are intralingual errors?" *IRAL: Error Analysis, Contrastive Linguistics, and Second Language Learning*. Eds. G. Nickel and D. Nehls (special issue). 19–41.

Dušková, L. 1969. "On sources of errors in foreign language learning". *International Review of Applied Linguistics* 7 (1):11–36.

Fernández Dobao, A. 2001. "Communication strategies in the IL of Galician students of English: the influence of learner- and task-related factors". *Atlantis* 23: 41–62.

James, C. 1998. *Errors in language Learning and Use*. London and New York: Longman.

Hinds, J. and M. Tomiyana. 1984. "Transfer Versus Developmental Errors in Second Language Acquisition". *Paper presented at the Annual Meeting of the Teachers of English to Speakers of Other Languages*, 18th, Houston, TX, March 6–11. 2–31.

Hu, Z.-Li, D. Brown, and L. B. Brown. 1982. "Some Linguistic Differences in the Written English of Chinese and Australian Students". *Language Learning and Communication* 1.1:39–49.

Kellerman, E. 1983. "Now you see it, now you don't". *Language Transfer in Language* textitLearning. Eds. S. Gass, and L. Selinker. Rowley, Mass.: Newbury House. 112–134.

_____. 1984. "The empirical evidence for the influence of L1 on interlanguage". *Interlanguage*. Eds. A. Davies, C. Criper, and A.P.R. Howatt. Edinburgh: Edinburgh U.P. 98–122.

Kempe, V. and B. MacWhinney. 1996. "The Crosslinguistic Assessment of Foreign Language Vocabulary Learning". *Applied Psycholinguistics* 17: 149–183.

Kolers, P.A.1963. "Interlingual Word Associations". *Journal of Verbal Learning and Verbal Behaviour* 2: 291–300.

Lafford, B., J. Collentine and A. Karp. 2003. "The Acquisition of Lexical Meaning by Second Language Learners: An Analysis of General Research Trends with Evidence from Spanish". *Studies in Spanish Second Language Acquisition: the State of the Science*. Eds. B. Lafford and R. Salaberry. Washington D.C.: Georgetown U.P. 130–159.

LoCoco, V. 1975. "An Analysis of Spanish and German Learners' Errors" *Working Papers in Bilingualism* 7: 96–124.

Moya Guijarro, A.J. 2003. "La adquisición/ aprendizaje de la pronunciación, del vocabulario y de las estructuras interrogativas en lengua inglesa. Un estudio por edades. *Didáctica* 15: 161–177.

Odlin, T. 1989. *Language Transfer*. Cambridge: Cambridge U.P. (2nd edition, 1996).

Ringbom, H. 1983. "Borrowing and Lexical Transfer". *Applied Linguistics* 4: 207–212.

_____. 1987. *The Role of the First Language in Foreign Language Learning*. Clevedon: Multilingual Matters.

Singleton, D. 1996. "Cross-Lexical Consultation: Out of the Horse's Mouth". *Revista Canaria de Estudios Ingleses* 32-33: 9–18.

Sonnenstuhl, I., S. Eisenbeiss, and H. Clahsen. 1999. "Morphological Priming in the German Mental Lexicon". *Cognition* 72.3: 203–236.

Stauble, A. 1983. "A Comparison of a Spanish-English and a Japanese-English Second language Continuum: Negation and Verb Morphology". *Pidginization and Creolization as Language Acquisition*. Ed. R. Andersen. Rowly, Mass.: Newbury House. 323–353.

Taylor, B. 1975. "The Use of Overgeneralization and Transfer Learning Strategies by Elementary and Intermediate Students of ESL". *Language Learning* 25.1:73-107.

VanParys, J., C. Zimmer, X. Li, and P. Kelly. 1997. "Some Salient and Persistent Difficulties Encountered by Chinese and Francophone Students in the Learning of English Vocabulary". *ITL Review of Applied Linguistics* 115–116: 137164.

Viberg, Å. 1993. "Crosslinguistic Perspectives on Lexical Organization and Lexical Progression". *Progression et Regression in Language*. Eds. K. Hyltenstam and Å. Viberg. Cambridge: Cambridge U.P. 340–385.

Yanguas, A. and C. Gil Cano. 1983. "Errores gramaticales producidos por transferencia lingüística en la adquisición de una segunda lengua: Consideraciones teóricas sobre una ilustración contrastiva español-inglés". *AESLA*: 157–177.

Yu, L. 1996. "The Role of L1 in the Acquisition of Motion Verbs in English by Chinese and Japanese Learners". *The Canadian Modern Language Review* 53.1: 191–218.