

Lexical crosslinguistic influence in Basque-Spanish bilinguals' English (L3) writing

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ABSTRACT

The present research examines the effects of a number of factors on crosslinguistic influence (CLI) in Basque-Spanish bilinguals' third language (L3) writing. The main focus is on the levels of adapted and non-adapted loan words as illustrative of CLI. A quantitative analysis explores the impact of typology and proficiency in the target and the source-languages. Language proficiency was evaluated in 399 compositions, 133 written in each language (Basque, Spanish and English). The adapted and non-adapted loan words found in English compositions were classified according to their source-language, word category, word class and type/ token categories. The results pointed at language typology as the main predictor of the source-language of CLI. Additionally, a linear association was detected between the learners' degree of proficiency in the target language and the frequency of the CLI instances or adapted and non- adapted loan words. The overall results show that bilingual students use their entire linguistic repertoire to write in their third language (English).

Introduction

The Basque Autonomous Community (BAC) offers a unique learning context where Basque, Spanish and English coexist at all levels of education, from pre-primary to the university level. In this context, Spanish is the majority language. Yet, due to the institutional support, Basque is the preferred language of instruction (EUSTAT 2017). Globalization has had an important influence on language instruction and English is introduced in kindergarten. Thus, all students in the Basque Autonomous Community have at least three languages in their school curriculum.

According to the most recent sociolinguistic survey conducted by the Basque Government (2016), 33.9% of the population in the BAC is bilingual in Basque and Spanish and, of the Basque-speaking population, 50% have Basque as a first language, 13.2% are simultaneous bilinguals with both Basque and Spanish as first languages and 36.8% speak Basque as a second or additional language. Additionally, the fact that Basque is a non-Indo-European language, typologically distant from the Romance language it has contact with (ie Spanish) adds additional value to the study of crosslinguistic influence in third language writing (L3/FL).

Factors affecting crosslinguistic influence in third language writing

The main aim of this study was to analyse the circumstances under which CLI occurred in Basque-Spanish bilinguals' English (L3) writing. The study of CLI seeks to explain how prior linguistic knowledge influences the comprehension, production and development of a target language (De Angelis 2007). In this endeavour, a number of factors have been shown to affect CLI differently depending on the languages and participants involved. In this study, we analysed some of the factors that previous studies have suggested may explain both native and non-native language influence, namely, typology and proficiency in the target and the source-languages.

The existing literature on crosslinguistic influence agrees that all language knowledge in the mind interacts and affects the learning processes as well as the cognitive development of the learners (De Angelis 2007; Gabrys-Barker 2012; Jarvis and Pavlenko 2008; Neuser 2017; Otwinowska-Kasztelanic 2011; Rothman 2011, 2013; Westergaard et al. 2017). The more languages a speaker has at her or his disposal, the more complex the interactions among the languages are, and research shows that L3-Ln learners make regular use of all their previously acquired languages in the acquisition and production of their L3-Ln (eg Rothman 2011; Otwinowska-Kasztelanic 2011). Additionally, factors such as language typology and proficiency in the source and the target languages have shown to affect both the frequency of use and the source-language of CLI.

Language typology defines how relatively far or near languages are from each other based on their formal similarities and differences, and research shows that this is a key factor in native (ie L1→L3) and non-native CLI (ie L2s→L3) (eg Cenoz , ; De Angelis 2005; Ecke 2001; Fouser 2001; Orcasitas-Vicandi 2018, 2019). Indeed, there is a wide agreement among researchers that CLI is more likely to occur between languages that are typologically closer to each other than between languages that are typologically distant (eg Rothman 2010, 2011, 2013; Westergaard et al. 2017; Williams and Hammarberg 1998). In the example below, typological distance is reflected as follows:

- (1) Ibonek ikatza nahi zuela erabaki zuen
[Ibon+ergative+coal+the+want+aux past+that+decide+aux past]
- (2) Ibon decidió que quería carbón
[Ibon decided that he wanted coal]
- (3) Ibon decided he wanted coal

These examples involve the three languages of this study: (1) Basque, a non-Indo-European language, (2) Spanish, an Indo-European Romance language and (3) English, an Indo-European Germanic language. As we can observe, Spanish and English are relatively closer than Basque and English or Basque and Spanish. Consequently, in this study, CLI was expected to occur more often from Spanish (L1/L2) than from Basque (L1/L2).

In CLI literature, the proficiency factor is discussed in relation to proficiency in the target and the source languages. Low proficiency in the target language has generally been associated with a greater crosslinguistic influence (Navés, Miralpeix, and Celaya 2005; Williams and Hammarberg 1998) whereas learners at higher levels of L3 (TL) are reported to produce fewer instances of CLI due to their better command of the L3. Nonetheless, this does not mean the CLI does not occur at more advanced stages of acquisition as some studies have reported CLI both in initial stages of L3 acquisition and also at higher proficiency levels (Angelovska and Hahn 2012).

With respect to proficiency in the source languages, we have very little understanding of how it affects CLI. Several studies have reported that high proficiency in the source-languages leads to greater CLI from those languages (Lindqvist 2010; Ringbom 1987, 2001). Yet, evidence has also been found that CLI in the L3 does not exclusively occur in cases where proficiency in the source-language is high (De Angelis and Selinker 2001). Thus, how proficient learners need to be before their prior language knowledge begins to affect the production of a target language remains to be determined.

Finally, the semantic weight of words can also affect CLI. In this way, CLI instances have been analysed in several studies in relation to content (nouns, verbs, adjectives and adverbs) and function words (prepositions, pronouns, conjunctions and articles). Research has found that content and function words from the L1 and the non-native languages are not equally relied upon during the production process. According to Paradis (2009), L1 function words are known implicitly and stored in the procedural memory, while content words are subserved by declarative memory. Following

Paradis, Bardel and Falk (2012) argued that this could explain how content words are often transferred from both the L1 and the L2 into L3 (declarative memory), while function words are mainly transferred from the L2 (declarative memory) and not from the L1 (procedural memory) in the case of trilingual speakers. Yet, mixed results have been found by L3 researchers and, while some studies indicate that function words are mainly transferred from the L2 and not from the L1 (eg Ringbom 1987; Vildomec 1963), others indicate that function words are also transferred from L3 learners' first languages (eg Cenoz 2001; De Angelis 2005). In this way, we can suggest that more research is needed to determine the relative frequency with which trilinguals transfer content and function words from the L1 and their L2 into their L3.

The present study

In the light of the findings reported by research on crosslinguistic influence in L3 acquisition, we summed our interests in three research questions:

Research Question 1: Are there more instances of crosslinguistic transfer from Spanish (typologically more similar) or Basque (typologically less similar) in the English composition writing of L3-English trilinguals?

Research Question 2: Are there any differences in the frequency or in the source-language of content and function CLI words in the English composition writing of L3-English trilinguals?

Research Question 3: How does proficiency in the target and the source-languages affect the frequency of use of CLI instances in the English composition writing of L3-English trilinguals?

We expected to find more instances of CLI from Spanish than from Basque due to the typological distance between the three pairs of languages, especially when English proficiency was low. Additionally, we also expected to find more instances of content word transfer from L1, but more instances of function word transfer from L2.

Methods

Participants

This study includes 133 bilingual learners of English from two schools of the Basque Autonomous Community, Spain. Over half of the students were female ($n = 68$) and 65 were male. Participants were from the fourth grade of secondary education and their mean age was 15.31 years old. All participants had Basque and/or Spanish as their L1, attended a school with Basque as the language of instruction, and studied Spanish and English as school subjects. According to the questionnaire, 38.4% of the participants had Spanish as their mother tongue ($N = 51$), 30.8% had Basque ($N = 41$) (ie they were consecutive bilinguals) and 30.8% indicated that both Spanish and Basque were their mother tongues ($N = 41$) (ie they were simultaneous bilinguals) (Genesee, Paradis, and Crago 2004).

All participants received approximately the same number of years of schooling in each language, and the exclusion criteria included the following cases: (1) students exempted from Basque subject at school, (2) students who had not completed the three writing tasks and (3) students who had not completed the linguistic questionnaire.

In order to know participants' attitudes and perceptions towards multilingualism and the mixing of their languages, the following information was gathered in the linguistic questionnaire.

As shown in Table 1, while the majority of students considered that speaking Basque did not help them learn English, they did consider that Spanish helped them. Additionally, participants mostly considered that being bilingual was beneficial for language learning, either because they transferred the grammar, the lexicon or due to their previous experience in learning languages. Consequently, participants showed an overall positive attitude towards multilingualism.

However, participants were not as positive about the mixing of languages. Although most of the participants considered that all languages had things in common and that it was natural for bilingual

Table 1. Attitudes towards multilingualism (%).

	1	2	3	4	5
Speaking Basque helps to learn English	2.3	5.3	34.6	32.3	24.1
Speaking Spanish helps to learn English	4.5	30.1	31.6	21.1	12.0
Being bilingual helps to learn new languages	9.8	35.3	37.6	13.5	3.8
Bilingual people can better learn other languages because they can transfer the grammar of the other languages they know	4.5	39.1	39.8	11.3	4.5
Bilingual people can better learn other languages because they can transfer the lexicon from the other languages they know	3.0	33.8	47.4	14.3	1.5
Bilingual people can better learn other languages because they have more experience as language learners	7.5	35.3	47.4	9.8	0

Note: 1: strongly agree; 2: agree; 3: neither agree nor disagree; 4: disagree; 5: strongly disagree.

people to mix their languages, they mostly considered that bilingual people should strive to maintain separation between their languages, using them one by one and avoiding mixing them in formal contexts such as the classroom. Moreover, most participants agree with the statement that Spanish contaminated Basque language, showing an overall negative attitude (Table 2).

Data collection and analysis

Data collection was conducted in two schools of the Basque Autonomous Community, Spain. In a first stage, the 133 participants completed a background questionnaire designed to obtain demographic, academic and linguistic data. In a second stage, the 133 participants wrote one composition in each language (Basque, Spanish and English). Three pictures that included people and animals doing different actions were used for the composition writing, a different picture for each language. Participants were asked to look at the given picture and to describe or tell a story about the people and actions they observed. Oral and written guidelines were provided at the beginning of the task, and participants were given an hour to complete the exercise. Participants wrote English compositions first, followed by Spanish and Basque compositions, and no remarkable effects of practice were found. All participants had the same picture for each language and the compositions were scheduled at least six weeks apart. In total, 399 compositions were gathered.

In order to investigate the impact of language typology in CLI, we categorized three possible sources of influence (Basque, Spanish and Ambiguous). The Ambiguous category referred to a source that reflected the influence of more than one language, for instance, '*alform*' (1). In this case, '*alform*' may be based on the Spanish word '*alfombra*' or on the Basque word '*alfonbra*', which means 'carpet'. Additionally, we specified 48 original subcategories in which CLI could be expected. These categories were designed as follows:

First, we divided the CLI instances into the type of CLI they reflected (adapted and non-adapted) loan words. Then, we divided these CLI instances into word categories (content and function words), and sub-divided each category into the word class they were based on. Specifically, we classified nouns, verbs, adjectives and adverbs as *content words* and prepositions, pronouns, conjunctions and articles as *function words*. Each instance was later counted for the total number of times it occurred (tokens) and the variety of distinct manners (types) it was present in the composition. In this way, CLI instances were classified considering the following information: type of lexical CLI (eg

Table 2. Attitudes towards the mixing of the languages (%).

	1	2	3	4	5
All languages have things in common	3.0	33.8	27.1	22.6	13.5
It is natural for bilingual people to mix languages	8.3	33.1	33.8	19.5	5.3
Bilingual people should strive to use only one language on each occasion	4.5	27.1	43.6	18.8	6
It is fine to mix languages in informal contexts, but not in formal contexts	16.5	30.8	26.3	17.3	9
In class, we should keep Basque, Spanish and English separate	6.0	29.3	53.4	3.8	7.5
Basque is contaminated by Spanish	15.8	46.6	18.8	9.0	9.8

Note: 1: strongly agree; 2: agree; 3: neither agree nor disagree; 4: disagree; 5: strongly disagree.

adapted and non-adapted loan words), origin (eg Basque), word category (eg content word), word class (eg noun) and type or token (eg type). The results of the quantitative analysis were later processed using the program SPSS Statistics.

In order to explore the type of CLI transferred by participants, we defined two types of lexical CLI: adapted (A) and non-adapted loan words (NA). According to Ringbom (1986), non-adapted loan words (NA) or 'complete language shifts' were words with no modifications from the source to the target language. In contrast, adapted loan words (A) or 'hybrids, blends and relexifications' were morphologically or phonologically modified items. In this sense, the students that produced adapted loan words analysed the possibilities offered by the linguistic context of their English sentences and adapted morphemes from the source languages to create L3-like words or adapted loans. In the ways they adapted this morphological knowledge to fit the requirements of the target language, students showed 'conscious awareness of the morphemic structure of words and the ability to manipulate that structure' (Carlisle 1995, 194), or morphological awareness. In this study, we sought to find whether participants transferred these two types of CLI instances differently and if so, how this would be.

Two examples of these categories are as follows:

Ex: '*sarrera*' (1)

[CLI instance: Non-adapted loan word; Origin: Basque; Word category: Content word; Word class: Noun; Type-Token: Type]

(*sarrera* is based on the Basque word *sarrera*, which means 'entrance')

Ex: '*alquiled*' (2)

[CLI instance: Adapted loan word; Origin: Spanish; Word category: Content word; Word class: Verb; Type/Token: Token]

(*alquiled* is based on the Spanish word *alquilar*, which means 'to rent')

Following the findings of previous studies on assessment in writing, we evaluated language proficiency in the three languages using the revised rubric proposed by Polio (2013) as it appears in Connor-Linton and Polio (2014) (Appendix I). This rubric is based in the ESL Profile developed by Jacobs et al. (1981) which is one of the scales most widely used to assess second language writing. For that purpose, the 399 compositions were transcribed literally in Word documents, and three evaluators analysed them. From these evaluations, we got the mean scores of proficiency. Raters were trained in the use of the rubric and followed the indications provided by the book of the original Jacobs scale (ie Jacobs et al., 1981). The inter-rater reliability was calculated for the three languages considering the 399 compositions, and it varied from 0.74 to 0.81. To be precise, the English compositions scored at 0.74, Spanish compositions scored at 0.76 and English compositions scored at 0.81.

The essays were evaluated in order to obtain scores in content (max = 20), organization (max = 20), language use (max = 20), vocabulary (max = 20) and mechanics (max = 20). The scores were based on a number of descriptors for each of the dimensions, and no specific score was designed for each descriptors (see Appendix I). The proficiency scores obtained for each of the languages and proficiency levels were used to answer research question 3. Table 3 shows the scores.

Table 3. Proficiency scores (max = 100).

	English		Basque		Spanish	
	M	SD	M	SD	M	SD
Low proficiency	34.76	5.67	45.63	7.78	58.93	7.35
Intermediate proficiency	46.89	3.15	56.87	2.30	69.73	2.11
High proficiency	58.87	5.26	67.45	6.67	79.51	4.99

Results

In general, Spanish compositions were the longest and the most correct, followed by English and Basque compositions. The reason why Basque compositions appeared to be shorter than Spanish and English compositions was related to the fact that Basque is an agglutinative language that can convey more meaning in less words. Additionally, the fact that the number of errors in Basque compositions almost doubled the number of errors in Spanish compositions was related to the variety of Basque chosen for the evaluation. In this way, *euskera batua* (or the ‘unified Basque’) was chosen as the standard variety to be evaluated. This variety is based on the central dialects of Basque, and it is used for education and official documents. Nevertheless, dialectical differences are present, and the variety used in the territory where the study was conducted was other (Table 4).

While correcting the English compositions, we realized that CLI was used differently depending on the student. In this sense, some participants used CLI recurrently while others avoided it. In order to explore the use of CLI, we analysed the frequency with which students produced it and categorized different groups of use.

As shown in Table 5, three groups were identified. The first group accounted for 36.1% of the students ($n = 48$) and did not produce any CLI instance. The second group accounted for 42.9% of the students ($n = 57$) and produced 1 or 2 instances. And the third group accounted for 21.1% of the students ($n = 28$) and produced 3 or more CLI instances.

These results indicated that the majority of the students (63.9%) used Basque and Spanish in their English (L3) writing at some point. The fact that the majority of the students that produced CLI produced few instances (between 1 and 2) shows that CLI was not a common strategy. Nonetheless, these results also indicate that the 21.1% of students ($n = 28$) produced more than three instances in their writings, and thus, we say that CLI was used as a resource when writing in L3.

In order to answer research question 1, we conducted a descriptive analysis that showed that language typology had a main effect on the selection of the source-language of CLI. As Table 6 shows, Spanish was the predominant source-language for CLI, followed by Ambiguous and then instances that had Basque as the source-language. These results point towards language typology as a determinant factor to explain both native (ie L1→L3) and non-native (ie L2→L3) CLI in third language (L3) writing.

To answer our second question, we use analysis of repeated mean differences and square eta (η^2) as a measure of the effect size of these differences. We found that CLI occurred more frequently in adapted loan words (A) than in non-adapted loan words (NA), $F = 17.22$, $p < .001$, $\eta^2 = 0.15$ and that it was more frequent in content words (C) than in function (F) words, $F = 91.09$, $p < .001$, $\eta^2 = 0.48$. In total, we found 110 types and 134 tokens of adapted loan words, and 60 types and 65 tokens of non-adapted loan words. CLI instances occur almost exclusively in content words, and three word-classes showed to be especially suitable: nouns, verbs and adjectives. Additionally, the

Table 4. Average number of words, errors and error per word ratio (Err/W) in Spanish, Basque and English compositions.

	1 M (SD)	2 M (SD)	3 M (SD)
Spanish compositions	218.14 (48.03)	18.35 (9.00)	0.084 (0.046)
Basque compositions	175.76 (42.58)	29.99 (12.51)	0.171 (0.139)
English compositions	204.66 (50.65)	40.58 (16.60)	0.198 (0.097)

Note: 1: average number of words; 2: average number of errors; 3: errors per word ratio.

Table 5. Differences in the use of CLI.

	0 instances	1–2 instances	3 or more instances
No. students	48	57	28
Percentage of the sample	36.1	42.9	21.1

Table 6. Distribution of CLI according to the source-language (SL).

	Spanish								Basque								Ambiguous											
	NA				A				NA				A				NA				A							
	C		F		C		F		C		F		C		F		C		F		C		F					
T	1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2
	48	52	5	5	89	110	0	0	5	6	0	0	4	4	0	0	2	2	0	0	17	20	0	0	2	2	0	0

Note: NA: non-adapted loan words; A: adapted loan words; C: content words; F: function words; 1: types; 2: tokens; T: total.

Table 7. Linear regression analysis for CLI tokens (dependent variable) and proficiency level in English, Spanish and Basque.

	<i>B</i>	SE	β	<i>t</i>	<i>p</i>	CI 95% B	
						IL	SL
Constant	3.006	1.234		2.435	.017	0.556	5.456
Basque	-0.002	0.019	-0.015	-0.123	.902	-0.041	0.036
Spanish	0.011	0.021	0.061	0.504	.616	-0.031	0.052
English	-0.041	0.015	-0.298	-2.643	.010	-0.072	-0.010

only crosslinguistic instances we found for function words appeared to be Spanish non-adapted loan words produced by two Spanish L1 students.

In order to answer research question 3, we ran a multiple linear regression analysis to determine whether language proficiency in English/Spanish/Basque was a significant predictor of the number of instances of CLI in English. Several steps were taken to check that the data were well adjusted to the assumptions of the model. To avoid multicollinearity problems, variables with intercorrelations higher than 0.80 were excluded from the analysis. To study the presence of outliers in the dependent variable and in the combination of independent variables, studentised residuals (values greater than 2 and less than -2) and leverage distances (greater than 0.5) were used, respectively. To evaluate influential cases, Cook's distances (greater than 1) and differences in the studentised residuals were used (values greater than 2 and less than -2). Furthermore, the Durbin and Watson test was applied to examine the independence of the residuals (value of 2 for completely independent). Finally, a multiple linear regression analysis was conducted, considered the *F* value, R^2 , beta coefficients (β) and 95% confidence intervals (CI) and *T* values to evaluate the contribution of these variables. Moreover, the means and standard deviations of residuals were examined to ensure the accuracy of the model (expected value 0).

Table 7 shows the results of the regression analysis. For the variables that form part of the model, the table includes the corresponding non-standardized regression coefficients (*B*), standard error (SE), standardized regression coefficients (β), *T* statistic (*t*) together the associated probability (*p*) and 95% CI of B (IL, inferior limit; SL, superior limit).

In summary, R^2 coefficient indicated that only 5.1% of the variability in the criterion variable was explained by the regression model. The only explicative variable was the English level. From these analyses, it follows that the number of CLI facts could be predicted using the following equation:

$$\text{CLITokens} = 3 - 0.041 * \text{English Proficiency}$$

Discussion and conclusion

The main goal of this research study was to gain a greater understanding of the circumstances under which CLI occurred in Basque-Spanish bilinguals' English (L3) writing and the effect of a number of factors on it. First, the quantitative analysis showed that students used Basque and Spanish adapted loan words statistically more often than non-adapted loan words. To be precise, we identified that adapted loan words doubled the number of non-adapted loan words: 134 adapted instances versus 65 non-adapted instances both counted as tokens. Even though oral and written data were not compared in this study and thus, we cannot reach to any conclusion, we consider that the modality of the data analysed in our study could have triggered the use of adapted loan words over the use of non-adapted loan words as writing allows the learner to pause and correct while speech uses the most immediate resources. In this sense, we suggest that this type of crosslinguistic influence (ie adapted loan words) may be more likely to occur in written language than in oral language due to the specific possibilities offered by the two modalities.

Additionally, in the present study, CLI occurred almost exclusively in content words (see Table 6). These results are in agreement with the results reported by Cenoz (2001) and Pinto and Carvalhosa (2012) who found CLI to be more frequent in content than in function words. However,

these results contradict the findings of some other studies that found CLI to occur more frequently in function words (eg Poulisse and Bongaerts 1994), or the findings of other studies that found CLI to occurred similarly in both word categories (eg Navés, Miralpeix, and Celaya 2005). As Navés, Miralpeix, and Celaya (2005) explained, there might be several reasons to obtain different results. Among others, the modality of the corpus analysed (written versus oral), the characteristics of the participants (eg their age), the language analysed (L2/L3) or the criteria used in the studies to classify content and function words may be mentioned. Indeed, it is difficult to determine in which word category CLI is more likely to happen as both categories have properties that make them potentially more and less likely to be transferred. In this sense, we suggest that in the present study CLI occurred more frequently in content words because they are an open class (which means that they are not limited), and students transferred them at some point in their compositions in order to fill the communicative need required by the writing task. Additionally, we also suggest that CLI did not occur in function words because, as they contain less meaning weigh, students could convey their message without using them (ie they did not need to transfer them).

With respect to the factors affecting CLI, we found that typology was a determinant factor to explain both native and non-native CLI in L3. This finding was expected and is in line with the results of studies that demonstrated that crosslinguistic influence in multilinguals includes all languages belonging to their linguistic repertoire (see De Angelis 2007) and also with studies that indicated typology is the most deterministic variable in the selection of the source-language of CLI (eg Orcasitas-Vicandi 2018, 2019; Rothman 2010, 2011). These results reflect how students perceived a great difficulty of transferring from a highly inflected language (Basque), but they could also be reflecting a communicative strategy used by Basque-Spanish bilinguals' when speaking in Basque. As Cenoz (2001) argued, another possible explanation for Spanish being the main source-language of CLI in Basque-Spanish bilingual speakers could be that

when speaking in Basque, Basque-Spanish bilinguals tend to borrow more content words than function words from Spanish (...). Thus, the influence of linguistic distance could be direct when learners are aware of linguistic distance or indirect when learners are applying a communicative strategy used when speaking Basque to a third language. (17)

That is to say, students could be using Spanish directly due to their awareness of the linguistic distance between the languages they know, or they could be applying the same communicative strategy they use when talking in Basque to their third language (English). Namely, that of borrowing Spanish words to English as they borrow Spanish words to Basque. This application of a communicative strategy from Basque to English could indeed be a possible explanation for the extensive use of Spanish content words in English (L3) writing.

Likewise, our results indicated that proficiency in the target language is a primary factor on the levels of CLI. In this study, less proficient learners of English (L3) used CLI more often than intermediate or high proficient English learners. Additionally, as the regression analysis showed, language proficiency in the source-languages was not a main factor in crosslinguistic influence. We consider this finding related to the fact that all learners in the class had Basque, Spanish or both as their L1 and began to study Basque, at the latest, at the age of 3 years old (ie they were either consecutive or simultaneous early bilinguals). Taking this into consideration, we suggest that the comparative levels of proficiency in the source-languages may be better investigated where these proficiency levels are considerably different. For instance, in the case of immigrant students whose proficiency in their L1/L2 is measured according to the date of arrival (see Guion et al. 2000).

On the whole, this study confirms the complexity of the study of crosslinguistic influence in L3 acquisition and its relationship to a number of factors. Identifying and categorising CLI and the factors affecting it remains a big challenge. So far, our results confirm previous studies on the effect of typology and proficiency in the target language, and shed some light on the transferability of certain types of CLI (adapted and non-adapted loans) and words (content and function words).

Even though these results were obtained in a specific situation and cannot be generalised, it is our hope that they are useful to inform educational practices. The outcomes of the present study lead us to argue that more flexible syllabi could offer the opportunity to actively recognize the associations that students make between the languages they know. A better awareness of these associations could help students (and teachers) make more conscious, appropriate and effective connections among the languages in the class and benefit from them in the acquisition of the L3. To progress in this regard, 'translanguaging' pedagogies seem to be an excellent option (see Leonet, Cenoz, and Gorter 2017).

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