

## **Phonetic and Syntactic Transfer Effects in the English Interlanguage of Basque/Spanish Bilinguals**

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### **Abstract**

The present study examines transfer errors at the levels of phonetics and syntax in the interlanguage of 10 fourteen-year-old Basque/Spanish bilinguals who have been learning English for 7 years in a formal school context in the Basque Country. Analyses showed that learners display L1 effects in the acquisition of both English phonetics and syntax, even though phonetic transfer errors (replacement of novel phonemes by L1 sounds, spirantisation and lack of aspiration in stop sounds, closure of fricative sounds) were far more frequent than syntactic ones (use of null subjects, null objects and null determiners). It is suggested that negative transfer would be minimised if certain educational measures were adopted, such as the enhancement of teachers'/learners' linguistic awareness towards interlanguage processes, the inclusion of contrastive linguistics and language acquisition topics in teacher training programmes, and learners' participation in courses where the target language is used in a more natural, communicative way.

**Keywords:** transfer, interlanguage, syntax, phonetics, contrastive analysis

### **Resumen**

El presente trabajo examina errores de transferencia a nivel fonético y sintáctico en la interlengua inglesa de 10 hablantes bilingües euskera-castellano de 14 años de edad que han aprendido inglés durante 7 años en contexto formal en el País Vasco. Los análisis demostraron que los aprendices tienen efectos de su L1 en la adquisición de la fonética y la sintaxis del inglés, aunque los errores de transferencia a nivel fonético (sustitución de fonemas consonánticos nuevos por sonidos de la L1, espirantización y ausencia de aspiración en las oclusivas y oclusión de las fricativas) son más frecuentes que los sintácticos (uso de sujetos nulos, objetos nulos y determinantes nulos). Sugerimos que la transferencia negativa podría ser minimizada si se adoptaran ciertas medidas educativas, como la mejora de la conciencia lingüística tanto en el profesor como en el alumno hacia los procesos de interlengua, la inclusión de la lingüística contrastiva y de temas relacionados con la adquisición de lenguas en los programas de formación del profesorado, así como la participación del aprendiz en programas en los que la lengua meta se usa de una manera más comunicativa y natural.

**Palabras clave:** transferencia, interlengua, sintaxis, fonética, análisis contrastivo

## **1. Introduction**

The importance of errors in the second language (L2) learning process was first acknowledged by Stephen P. Corder, who pointed out that the study of errors “provides us with a picture of the linguistic development of a learner and may give us indications as to the learning process” (Corder, 1974: 125). In fact, errors reflect gaps in a learner’s knowledge, as they occur because the learner does not know what is correct (Ellis, 1997).

The study of errors can be of great interest not only for language acquisition researchers but also for teachers. It is useful for teachers because it allows them to know what errors learners make and to discover the possible implications for teaching. Similarly, researchers can benefit from error analysis because it can give an answer to the question why learners make such errors, as errors can have different sources. Some errors seem to be universal, occurring in the speech of all L2 learners, irrespective of their first language (L1), as a consequence of the development of the new linguistic system. These are called intralingual or developmental errors. Other errors reflect L1 influence. These are known as interlingual or transfer errors and may vary depending on the learners’ L1 linguistic system.

In this article we will focus on a variety of transfer errors at the levels of phonetics and syntax in the interlanguage of English learners in a formal context. In this respect, in the same vein as Ioup (1984), this article is of special interest since it presents data from the same subjects on these two language dimensions taken jointly. More specifically, we have examined oral data from Basque/Spanish bilingual learners of L3 English at schools in the Basque Country. These learners have two L1s, since they all learned Basque and Spanish simultaneously. Therefore, in this article we will use the term L3 to refer to the first foreign language learned at school: English is the third language the subjects in this study speak. A detailed analysis of these students’ oral production shows that learners display a greater range of L1 effects at the phonetic than at the syntactic level.

This article is organised as follows. Section 2 gives background information on the issue of transfer in SLA with special attention to one of the structural factors constraining transfer, namely, language level.<sup>1</sup> In Section 3 we present the methodology of the study. Results are shown and discussed in Section 4, while in Section 5 some pedagogical considerations are examined.

## **2. Transfer**

### ***2.1. Terminological issues***

One of the most widely discussed issues in L2 acquisition research is that of transfer. According to Odlin (1989: 27) transfer is “the influence resulting from similarities and differences between the target language and any other language that has been previously, and perhaps imperfectly, acquired”.

Transfer has been studied within two theories of L2 learning. According to behaviourist accounts (Lado, 1957), the L1 facilitates learning where native and target language structures are the same (positive transfer) whilst it results in errors where they are different (negative transfer). In this approach, the terms “transfer” for both positive

and negative influence, and “interference” for negative influence have been favoured. From a cognitive account, such as that of Kellerman (1986), transfer is seen as a cognitive process in which different factors intervene: (i) structural (language level, linguistic distance, psychotypology, among others) and (ii) non-structural (context, teaching methodology, among others). Within this approach, researchers such as Sharwood-Smith and Kellerman (1986) prefer the term “cross-linguistic influence” arguing that it is theory-neutral and can be used to include “such phenomena as “transfer”, “interference”, “avoidance”, “borrowing” and L2-related aspects of language loss and thus permitting discussion of the similarities and differences between the phenomena” (Sharwood-Smith and Kellerman, 1986: 1).

However, as Ellis (1994) notices, the term “transfer” has persisted, even though its definition has now been considerably broadened to include most of the cross-linguistic phenomena that authors such as Kellerman and Sharwood-Smith consider in need of attention. Along these lines, recent contributions to the study of transfer (Brown and Gullberg, 2008; Jarvis and Pavlenko, 2008; Luk and Shirai, 2009) insist on the idea that “cross-linguistic influence” is a complex process that cannot be explained only in linguistic terms but requires a psycholinguistic basis, since additional factors such as cognitive, developmental or learning factors and language use have been found to affect transfer (Ellis, 1994; Odlin and Jarvis, 2004, among others). This cognitive view of transfer in language acquisition would even enable the possibility of emerging linguistic systems influencing established ones (Brown and Gullberg, 2008). However, there is an acknowledgement that “recent advances in cognitive approaches to language acquisition research have brought back to prominence the idea of L1 influence in the processing and learning of L2 structures” (Luk and Shirai, 2009: 740). In different linguistic domains, learning a native language implies learning how to ignore unimportant distinctions (see Kuhl, 2000 for phonology, or McDonough, Choi and Mandler, 2003 for semantics). However, these distinctions may become vital in the L2. In other words, this *dislearning* process does become crucial to understand how the L1 acts as a filter through which the L2 structures are processed.

## ***2.2 Transfer in L3 acquisition***

As Bouvy (2000: 143) points out “for some 40 years, research into Second Language Acquisition has focused on mother-tongue influence”. This interest also applies to the newer field of Third Language Acquisition. However, as Cenoz (2001: 8) claims:

the study of cross-linguistic influence in L3 is potentially more complex than the study of cross-linguistic influence in L2 acquisition because it implicates all the processes associated with L2 acquisition as well as unique and potentially more complex relationships that can take place among the languages known or being acquired by the learner.

In fact, approaches to L3 acquisition have revolved around the idea that transfer can take place from both or either one of the previously acquired languages, and thus, have focused on identifying the factors that promote or inhibit this transfer. Among these factors, Cenoz (2001) refers to: (i) psychotypology or perception of the linguistic distance among the languages (Bild and Swain, 1989), (ii) proficiency level in any of the languages involved (Ringbom, 1987), (iii) age (Cenoz, 2001), (iv) context (Dewaele, 2001), (v) foreign language effect (De Angelis and Selinker, 2001) and (vi) recency (Hammarberg, 2001). More recently, Rothman and Cabrelli (2010) claim that language level is another factor which may intervene in the selection of the source language. Whereas at the level of lexis, transfer tends to occur from either one of the

two other existing systems (Cenoz, Hufeisen and Jessner, 2001), at the syntactic level, the empirical evidence is not so conclusive (Bardel and Falk, 2007; Flynn, Foley and Vinnitskaya, 2004).

Nevertheless, our aim is not to investigate whether negative transfer occurs from either one of the two other existing systems (Basque or Spanish) in L3 English, since in many cases transfer effects may be the result of the influence from both languages. The main aim of this investigation is to focus on very specific transfer errors, both at the levels of phonetics and syntax, which haven't been treated in detail in the teaching-oriented literature. However, these features have been profusely investigated in L2 acquisition studies. Even though this field of study has not widely focused on the pedagogical implications of its findings, this article intends to provide a deeper pedagogical appraisal of acquisitional outcomes.

### *2.3 Transfer constrained by structural factors: Language level*

As mentioned above, transfer is a complex process which is constrained by multiple factors. One such factor is the structural factor where different language levels have been found to play different roles in transfer (Ellis, 1994). In what follows we make special reference to two of these language levels, namely, the phonetic and syntactic levels. Even though these two levels are traditional areas of research on transfer, in recent years the investigation of syntactic transfer has increased both in number and depth (Alonso, 2002; Collins, 2002; Jarvis, 2002; Jarvis and Odlin, 2000). More specifically, we will cover transfer effects which have been well-documented in the L2/L3 English acquisition literature (White, 2003; Park, 2004; Ionin et al., 2004; Hawkins et al., 2006; Jaensch, 2008, among others). As Ellis (1994) points out, there are some grounds for claiming that transfer is more conspicuous at the levels of phonology, lexis and discourse than at the level of grammar, possibly because learners have a more developed metalinguistic awareness of grammar. Nevertheless, more recent studies have concluded that transfer at the syntactic level is more pervasive than previously thought (Luk and Shirai, 2009).

To our knowledge, just one experimental study has assessed the validity of the claim that interference errors are more salient at the phonological level than at the syntactic level of non-native speech. Ioup (1984) tested this hypothesis in an experiment that was undertaken to discern whether native listeners of English use both syntactic and phonological information to distinguish one non-native variety of English from another. In that study, native listeners were able to identify speakers' native language background on the basis of their accents but they couldn't do so using only syntactic evidence, which suggests that L1 transfer errors are not a major feature of interlanguage syntax.

Following Ioup (1984), we will concentrate on both dimensions so as to contribute to the scarcity of this type of studies. The choice of the following phonetic and syntactic aspects from the interlanguage of Basque-Spanish bilinguals lies in the fact that these phenomena are quite salient and well-discussed in previous literature (White, 2003; Park, 2004; Ionin et al., 2004; Hawkins et al., 2006; Jaensch, 2008, among others) as well as being typically presented as the language dimensions where transfer occurs most and least frequently, respectively. In addition, as language teachers are usually more aware of lexical transfer phenomena, they are not so concerned with certain errors at the levels of phonetics and syntax, most of the times because the particular errors that this article will deal with are not usually discussed in the teaching literature or in foreign language textbooks and classrooms. In this sense, our study can help teachers

understand the source of difficulty in acquiring these aspects of language (see Collentine, 2010; Rothman, 2010 and Van Patten, 2010 for the same idea with respect to syntactic aspects).

### **2.3.1. Phonetic transfer**

At the phonetic level we will examine some aspects of Basque/Spanish-English interphonology reported in literature on both contrastive linguistics and L2 acquisition which are attributable to L1 transfer effects: (i) replacement of novel phonemes by L1 sounds, (ii) lack of aspiration in stop sounds, (iii) spirantisation of stop sounds, and (iv) closure of fricative sounds. These interphonology phenomena have been chosen either because in some cases they are perceived as heavy accented speech or on some other occasions they are likely to cause misunderstandings in communication.

**(i) Replacement of novel phonemes by L1 sounds.** The replacement of sounds which are new to the L2 learner by L1 phones is constantly reported in literature on speech acquisition. Weinreich (1953) referred to the L1 and L2 sounds which are perceived to be alike by the L2 learner as “diaphones”. Subsequent models have coined other terms to refer to the perceptual assimilation of an L2 sound to an L1 phonetic category such as “interlingual identification” (Flege, 1991), “equivalence classification” (Flege, 1992) and “sound assimilation” (Best, 1995). This phenomenon at the level of perception prevents the creation of a new phonetic category in the L2 and leads to foreign accent at the level of production. Two clear examples of this phenomenon in Basque/Spanish-English interphonology are English /ɹ/ (*red*) vs. Basque/Spanish /r/, r/ (*pero* “but” and *perro* “dog” respectively) and English /h/ (*hot*) vs. Spanish/Basque /x/ (*jota* “jei”). In fact, some studies on the acquisition of English by Basque/Spanish speakers have previously shown that these English learners do establish the aforementioned sound-to-sound connections (García Lecumberri, 1999). With regard to the former, English /ɹ/ is a voiced alveolar approximant, “often with retroflexion” (Hualde, 2005: 181), in which articulators do not approximate considerably enough as to make up a clear consonant. However, Basque/Spanish rhotics are neither retroflex nor approximant, but voiced alveolars where the tip of the tongue either weakly hits with a single contact (flap /r/) or flutters with several rapid contacts (trill /r/) against the alveolar ridge. As for the /h/ and /x/ sounds, while English /h/ is a glotal fricative consonant acoustically realised as a weak aspiration, Basque/Spanish /x/ is a velar fricative consonant which displays a strong friction. It is worth mentioning that, although these substitutions may not imply intelligibility problems to native speakers of English, they are surely regarded as features of strongly foreign-accented English.

**(ii) Lack of aspiration in stop sounds.** Difficulties with the production of English aspirated plosives have been widely attested in numerous experimental studies conducted with English learners whose L1s only possess unaspirated plosives, such as French (Watson, 1991), Spanish (Flege, 1991), Catalan (Aliaga and Mora, 2008) or Basque (García Lecumberri, 1999). In English, whereas voiced plosives (/b, d, g,/) are never aspirated, voiceless stops (/p, t, k/) in onset position in stressed syllables (as in *pot* or *appear*) are released with an air explosion acoustically similar to English /h/ which is accompanied by a delay in voicing for the following vowel (Roach, 1983). Research has shown that lack of aspiration, that is to say, Voice Onset Time (V.O.T.) values which are shorter than those produced by English natives, is clearly perceived as one of the striking factors to determine English-native listeners’ evaluation of foreign accent (Flege, 1991). Moreover, if this phonetic cue is missing in English interlanguage,

intelligibility problems may arise, as listeners may have difficulty with distinguishing whether the voiceless (e.g.: *coat*) or the voiced (e.g.: *goat*) plosive is rendered by the L2 speaker, because, since English voiced plosives (/b, d, g,/) are realized as voiceless unaspirated in utterance-initial positions, “the opposition between word-initial /p t k/ and /b d g/ in English is thus one of aspiration, rather than voice (unlike Spanish)” (Hualde, 2005: 149).

**(iii) Spirantisation of stop sounds.** English stops are never spirantised whereas this is very often the case with voiced stops in Basque and Spanish. Both Spanish and Basque share a very productive phonetic rule whereby /b/, /d/ and /g/ stops are turned into fricative allophones ([β, ð, ɣ]) in most phonetic contexts (between vowels, word-finally, before consonants, after consonants other than /n/ in the case of /b/ and /g/, and after consonants other than /l/ and /n/ in the case of /d/) (Michelena, 1960; Anderson and Centeno, 2007). It is worth mentioning, however, that more fine-grained phonetic studies indicate that, more particularly in spontaneous and informal speech, these sounds get reduced as much as becoming approximants in the pertaining contexts (Martínez Celadrán, 2004; Machuca, 1997). No matter whether fricative or approximant, the fact is that these sounds stop being realized as stops. What is interesting to us is the fact that experimental research indicates that Spanish learners of English tend to produce English stops according to the phonetic patterns of this type of phonemes in their L1 (Beltrán, 2003), which in the case of voiced stops involves the transfer of spirantisation (Zampini, 1996), an interlanguage feature which may lead to listeners’ misunderstanding (e.g.: *day* understood as *they*).

**(iv) Closure of fricative sounds.** Some English fricative sounds, namely /ð/ and /v/, may be realised as stop consonants (/d/ and /b/ respectively) in the English interlanguage of Basque/Spanish speakers. Although neither /ð/ nor /v/ exist as phonemes in Spanish and Basque, there are two sounds in these languages which closely resemble English /ð/ and /v/ consonants. We are referring to the fricative allophones of Spanish and Basque /d/ and /b/ phonemes, that is, to [ð] and [β]<sup>2</sup> (Anderson and Centeno, 2007). English /ð/ differs from Basque/Spanish [ð] only in that it may be realised with a slightly stronger friction<sup>3</sup> and there is the possibility for this fricative consonant to be pronounced with a more noticeable friction. However, the Spanish fricative allophone [ð] is never realized with a strong friction and, as proven by Machuca (1997), very often in colloquial speech this sound turns into an approximant sound, whereas /v/ and [β] are also distinguished as regards place of articulation (labiodental vs. bilabial). Thus, English /ð/ and /v/ phonemes may be identified with Basque/Spanish /d/ and /b/ phonemes by Basque/Spanish learners of English, and produced according to the phonetic patterns of these sounds in their L1s. In the case of /v/ and /b/, orthography may further facilitate this interlingual identification, as orthographical <v> in Spanish is always phonetically realised as the phoneme /b/ and its allophones in their respective contexts. As for Basque, although <v> does not exist in orthography, it is vital to note that all loans from Spanish containing <v> are orthographically transcribed with a <b> in Basque (e.g.: Spanish *verde* “green”, *valor* “courage” vs. Basque *berdea* “green”, *balorea* “courage”). To sum up, the identification of English fricatives /ð/ and /v/ with Basque/Spanish voiced stops /d/ and /b/ would therefore imply that these English sounds may be realised as stops in English interlanguage in those contexts in which Basque/Spanish stops maintain their manner of articulation, that is, after a pause and after /n/ for the three stops, and after /l/ for /d/. In fact, some L2 acquisition empirical evidence suggests that Spanish, Basque and Catalan

speakers do not clearly distinguish between English /d/ and /ð/ and they usually mispronounce these two sounds (e.g.: *they do* as [dɛi ˈðu]) (García Lecumberri, 1999).

### 2.3.2 Syntactic transfer

In this section we present the different syntactic features which we have investigated in the present study: (i) use of null subjects, (ii) existence of null objects and (iii) production of null determiners. The relevance of these morpho-syntactic features is attested by the wide L1 and L2/L3 acquisition literature discussing them, as will be seen below. More importantly, these morpho-syntactic features bear directly with the aims of our article since in L2 English these features have been explained in terms of L1 influence in previous studies (White, 2003; Park, 2004).

**(i) Use of null subjects.** Research carried out on the acquisition of overt subjects in L2 English seems to suggest that the incidence of null subjects is very low, unless the L1 is pro-drop, that is, a language that allows subjects not to be overtly realised (White, 2003). The distinction between pro-drop languages such as Spanish or Basque and a non-pro-drop language such as English is illustrated in (1-3):

- (1) Spanish: *Comieron chocolate.*  
eat-3pl PAST chocolate  
'They ate chocolate'
- (2) Basque: *Txokolatea jan zuten.*<sup>4</sup>  
chocolate eat 3pl-3sg PAST  
'They ate chocolate'
- (3) English: \**Ate chocolate* vs. *They ate chocolate*

In this respect, White (1985) showed that French-speaking and Spanish-speaking learners of English behaved differently with respect to null subjects in English. In grammaticality-judgement tasks, Spanish speakers were significantly more likely to accept null subjects in English than French speakers were. This differential behaviour based on properties of the L1 (Spanish but not French being a null subject language) supports transfer from the L1.

**(ii) Existence of null objects.** The presence of null objects varies in the three languages under investigation. As mentioned above besides allowing null subjects, Basque also allows null objects as shown in (4). Spanish, on the other hand, allows them only with indefinite or arbitrary Noun Phrases but not with definite Noun Phrases, as shown in (5). Finally English doesn't allow them either with definite nor indefinite NP antecedents, as shown in (6):

- (4) Basque: a. *Mikelek liburua irakurri du.*  
Michael book a read aux-3sg.3sg  
'Michael has read a book.'
- b. *Mikelek Ø irakurri du.*  
Michael read aux-3sg.3sg  
'Michael has read it.'
- (5) Spanish: a. *Miguel ha leído un libro.*  
Michael aux-3sg read a book  
'Michael has read a book.'
- b. \**Miguel ha leído Ø.*

Michael has read  
'Michael has read it.'

- (6) English: a. *Michael has read a book.*  
b. \**Michael has read Ø.*

Studies on the existence of null objects in L2 English are few and most of them have been carried out with Chinese or Korean as L1s (Park, 2004). These languages allow null objects, whereas English doesn't. Park (2004) observed that Korean learners of L2 English showed L1 transfer effects, resulting in the production of structures with null objects.

**(iii) Production of null determiners.** Unlike in the syntactic features previously described where the learners' L1s differ from the L3, in the case of the determiner system, Basque, Spanish and English are alike in that they all have overt determiners. This can be observed in examples (7-9):

- (7) Basque: a. *Liburua daukat.*  
book-the have-3sg-1sg  
'I have the book.'  
b. *Liburu bat daukat.*  
book a have-3sg-1sg  
'I have a book.'
- (8) Spanish: a. *Tengo el libro.*  
have-1sg the book  
'I have the book.'  
b. *Tengo un libro.*  
have-1sg a book  
'I have a book.'
- (9) English: a. *I have the book.*  
b. *I have a book.*

Studies which have investigated article choice among L2 learners (Murphy, 1997; Parodi, Schwartz and Clahsen, 1997; Ionin, Ko and Wexler, 2004; Hawkins et al., 2006 among others) have generally compared the production of overt determiners by learners with [+article] and [-article] L1s. An article-less language is Japanese, as shown below in (10):

- (10) Japanese: *Soosya-wa gooru-rain-o mezasite rasuto-supaa-to-o kaketa.*  
Ø runner-TOP Ø goal-line-ACC aiming-at Ø last-spurt-ACC do-PAST  
'The runner made a last spurt for the finish line.'  
(Wakabayashi, 1998; cited by Jaensch, 2008)

Results from these investigations have shown that generally speakers of article-less L1s (such as Korean, Chinese or Japanese) omit English articles in obligatory contexts to a greater extent than speakers whose L1s do have articles (such as Spanish). Regarding the acquisition of determiners by L3 learners, studies investigating L3 English articles are quite few and have mainly focused on article-less L1s (Leung, 2001; Jaensch, 2008). In this sense, the present article comes to fill the existing gap dealing with the acquisition of the L3 English article system by bilingual adolescents whose L1s, Basque and Spanish, have articles (see also Gutiérrez Mangado and Martínez Adrián, 2009).



However, as the data set in (7-9) shows, even if both Basque and Spanish have overt articles, there are some differences between the article system in Basque when compared to Spanish and English. To start with, Basque being a head final language, both the definite and the indefinite determiners follow the noun, as can be seen in (7a) and (7b), while in Spanish and English, both being head-initial languages, determiners precede the noun they modify. On the other hand, the definite article in Basque differs from both Spanish and English definite articles in that in Basque it is a bound suffix which is attached to the noun it modifies.

Despite these differences, however, and in line with previous studies on article choice (Murphy, 1997; Parodi et al., 1997, among others), we expect a low number of article omissions in the production of Basque/Spanish bilinguals learning English due to positive transfer since all three languages have definite and indefinite determiners.

### **3. Method**

#### ***3.1. Sample***

The participants are 10 fourteen-year-old Basque/Spanish balanced bilingual learners of L3 English. They are middle-class students coming from the same school in the Basque Country. They all live in the same town and share a very similar sociolinguistic and socioeconomic status. These teenagers come from either Basque-speaking or Spanish-speaking families. Although Spanish is the majority language in the Basque Autonomous Community, Basque is the language which is used for everyday communication in the area where these learners live and also the language of instruction at school. In other words, participants live in an additive bilingual context that enables both the maintenance (in the case of Basque-speaking families) and the acquisition (in the case of Spanish-speaking families) of the minority language, which results in balanced bilingualism (Cenoz, 2009). Thus, all participants are proficient in both Basque and Spanish, and English is taught as a foreign language at school.

The learners started learning English at the age of 8 and have been learning English for 7 years. The type of teaching method used was the communicative method and the input they received strictly came from formal instruction at school, as subjects attending private English lessons outside school and/or going abroad were eliminated from our sample. They were instructed in British English by non-native speakers.

The context in which the subjects are immersed has been defined as additive trilingualism (Cenoz and Valencia, 1994). Basque, the language of instruction, is the minority language, which is nowadays increasingly used and valued in the community. Spanish is the majority language and English is taught as a foreign language and it is not used in everyday-communication. Table 1 displays the details of the subjects in this study:

**Table 1.** The subjects

Course	Age at first exposure	Age at testing	Years of exposure	Hours of exposure per week	Hours of exposure
Secondary Education grade 3 ( <i>n=10; 6 males and 4 females</i> )	8	14	7	3	792

### 3.2. Instrument

Students were asked to narrate the well-known story “Frog, where are you?” (Bernan and Slobin, 1994) with visual support provided by a series of vignettes. All their oral production was orthographically transcribed and codified in CHILDES format (McWhinney, 2000) for the syntactic analysis by two syntacticians, native speakers of Spanish, highly competent in Basque and English, and experienced in English language teaching. Besides, a narrow phonetic transcription of the sounds under study was carried out by two expert phoneticians, native speakers of Spanish, highly competent in Basque and English, and experienced in English language teaching as well as pronunciation assessment. As the ultimate aim of language acquisition is interpersonal communication, an auditory analysis was chosen instead of an acoustic one since it includes the listener’s role in that interaction.

For the phonetic analysis, first, the number of contexts in which the phonetic phenomena under investigation may potentially occur were quantified. Secondly, from all the potentially target structures the two investigators independently quantified how many of them conformed to the expected result and how many mistakes were made by the learners. The same methodology was used for the syntactic analysis: first the investigators quantified the instances of obligatory use of overt subjects, objects and determiners in the target language. With respect to the presence of overt/null subjects, we took into account that omission of subjects was licit in coordinated structures, and therefore, the presence of null subjects in coordinated constructions didn’t count as an error<sup>5</sup>. Regarding determiners, the narratives were first analysed for the suppliance of articles in singular and count noun contexts, since these provide obligatory contexts for articles. Mass nouns and plurals were eliminated from the main analysis as were singular count nouns, which do not require an article (e.g.: *he went to bed*). Self-corrections and exact repetitions of the experimenter’s utterances were also excluded. Productions of other determiners in place of articles have also been omitted from the analysis. Obligatory contexts for indefinite articles were considered those where a new character was introduced for the first time. Subsequent mentioning of previously introduced characters were considered obligatory contexts for definite articles. Secondly, the investigators independently quantified the instances in which the learners’ production was non-target-like.

The reliability of the evaluations was looked into by performing correlation analyses between the two evaluators. These analyses yielded a 100% agreement in the case of the syntactic assessment. As for the phonetic evaluation, high correlation indexes were found (replacement of novel phonemes:  $r = .988$ ; lack of aspiration:  $r$

=.929; spirantisation of stops:  $r = .977$ ; closure of fricative sounds:  $r = .944$ ), highly significant in all cases ( $p < .0001$ ), indicating that both judges detected phonetic transfer phenomena very much alike.

#### 4 Results and Discussion

In this section, we present and discuss the results of the analyses conducted. First, we will deal with transfer errors at the level of phonetics. Second, syntactic errors will be examined. The type of analysis carried out has been that of quantifying the number of contexts in which the analysed phonetic and syntactic features may potentially occur (see the denominators offered in proportions displayed in Tables 2 and 3), followed by a quantification of the times in which the suggested interlingual mistakes actually occurred in the learners' productions (see the numerators offered in fractions appearing in Tables 2 and 3). The tables also display the mean scores (in percentages) of the two judges' evaluations. Additionally, we also offer the standard deviations (see figures between parentheses) so as to have a better idea of individual variability in the group.

##### 4.1 Phonetic transfer errors

With regard to the phonetic evaluation, four different phenomena were examined: replacement of novel phonemes by L1 sounds, lack of aspiration in stop sounds, spirantisation of stop sounds, and closure of fricative sounds. As shown in Table 2, global results indicated that the transfer phenomena examined were quite frequent in the learners' interlanguage systems, since 70.46% of the times learners showed the above-mentioned influence of the L1.

**Table 2:** Phonetic Transfer Errors

<b>Replacement of novel phonemes</b>	/ɹ/	/h/	Both
	283/409 <b>69.20%</b> (22.79%)	126,5/132 <b>95.83%</b> (10.87%)	409,5/541 <b>75.69%</b> (17.36%)
<b>Lack of aspiration in stop sounds</b>	145,5/151 <b>96.36%</b> (11.70%)		
<b>Spirantisation of stop sounds</b>	481/809 <b>59.47%</b> (11.80%)		
<b>Closure of fricative sounds</b>	/ð/	/v/	Both
	396,5/520 <b>76.26%</b> (11.78%)	0/12 <b>0.00%</b> (0.00%)	396,5/532 <b>74.53%</b> (11.03%)
<b>Total</b>	1432,5/2033 <b>70.46%</b> (7.15%)		

A very similar percentage (75.69%) was found when the replacement of the **novel** phonemes /ɹ/ and /h/ was considered jointly. English /h/ was overwhelmingly pronounced (95.83%) with a softer or stronger L1 “jota” sound (e.g.: *he /xi/*). Results

suggest that the substitution of English /ɹ/ by the L1 flap /r/ (e.g.: *appear* /a'piar/) or trill /r/ (e.g.: *run* /ran/ ), though important, was less frequent (69.20%). It should be pointed out, however, that this percentage could have been higher, as all orthographical <r> symbols were considered potential cases of transfer (409 in total), even though it is known that some of these <r> letters are not pronounced in non-rhotic accents of English (Wells, 1982). In fact, on some occasions students' productions were non-rhotic (e.g.: *reindeer* /'reindɪa/).

As for the analysis of aspiration of English voiceless stops ([p<sup>h</sup>, t<sup>h</sup>, k<sup>h</sup>]), in most cases (96.36%), these English consonants were pronounced as unaspirated stops (e.g.: *pet* [pet], *take* [teik], *call* [kol]). Let us say, however, that on those scarce occasions in which aspiration was detected in the learners' interlanguage, it was noted that it was not as strongly realised as in L1 English. In other words, learners did not achieve as long V.O.T. values as in L1 English.

As regards the analysis of English voiced stops (/b, d, g/), results indicated that these English consonants became spirantized in the students' interlanguage on more than half of their occurrence (59.47%). In intervocalic positions they became voiced fricatives [β, ð, ɣ] (e.g.: *the boy, the dog, they go*), many times even approximants, and in word-final positions they were most times realised as voiceless fricatives [f, θ, x] (e.g.: *bed, frog*). Learners were clearly transferring the phonetic properties of their L1 voiced stops and, thus, producing fricative or approximant sounds in the pertaining contexts.

With respect to the learners' realisation of the interdental /ð/ and labiodental /v/ fricatives as stops ([d] and [b]), let us remember first that only the cases in which these two sounds occurred at initial positions (e.g.: *then, van*) were considered, since when these English consonants occurred word-finally they were always devoiced ([θ] and [f]) (e.g.: *with, love*) but still maintained their manner of articulation in the learners' productions. As for the interdental /ð/, results indicated that this sound was pronounced as a stop ([d]) much more frequently (76.26%) than as a fricative, probably because of the high percentage of phonetic contexts (after a pause, /n/ or /l/) which potentially triggered the closure of this fricative consonant in the learners' interlanguage (e.g.: *the, in the*). In the remaining cases, nonetheless, English /ð/ was realised with a slighter friction, presenting a quality similar to that of the fricative allophone ([ð]) of the Basque/Spanish /d/ phoneme. With regard to the analysis of the labiodental /v/, surprisingly, no cases of closure ([b]) were found. This finding can be accounted for by the fact that this English sound never occurred in utterance-initial or after -/n/ positions in the learners' productions, contexts which would have favoured the closure of this fricative consonant in Basque/Spanish-English interphonology. However, this does not mean that English /v/ was pronounced correctly, as no student produced a labiodental fricative when /v/ was rendered. Yet, they all altered the place of articulation of this consonant by producing a bilabial fricative ([β]) instead (e.g. *river* ['riβer]), a Basque-Spanish sound whose friction is much softer than in English /v/.

The phonetic data analysed here lead us to conclude that the influence exerted by L1 phonology over the L2 sound system is extremely strong. Our learners' phonetic system in English, at least as far as the consonantal phenomena examined are concerned, is very much affected by L1 sound patterns. Additionally, the standard deviation figures are consistently very low, which indicates that the behaviour of the learner group is very homogeneous and individual learners have little chance to escape

the influence of their first language sound systems when performing in the L3, at least as regards the phenomena examined in this study.

This finding clearly confirms the idea that the strategy of transfer is particularly productive in the area of phonology (Ellis, 1994; Leather and James, 1991). It is also in line with previous L2 speech acquisition research (Zampini, 1996; García Lecumberri, 1999; Beltrán, 2003; Aliaga and Mora, 2008) and corroborates the existence of diaphones (Weinreich, 1953) between languages as well as the idea that L2 sounds are very commonly identified with (Flege, 1991, 1992) or assimilated to (Best, 1995) L1 phones in such a way that L1 sound systems are overwhelmingly transferred into L2 speech. In other words, native language phonetic categories clearly act as a kind of filter or “sieve” to perceive and produce target language sounds (Kuhl, 1993).

#### ***4.2 Syntactic transfer errors***

Regarding syntactic transfer, three different features have been examined: null subjects, null objects and null determiners. In Table 3 we present the proportions of null elements for those contexts in which an overt element should occur. We also offer the means and the standard deviations between parentheses.

**Table 3:** Syntactic Transfer Errors

<b>Null subjects</b>	14/267 <b>5.24%</b> (3.94)		
<b>Null Objects</b>	11/91 <b>12.09%</b> (11.53)		
<b>Null Determiners</b>	Definite	Indefinite	Both
	91/391 <b>23.27%</b> (28.41)	20/67 <b>29.85%</b> (27.12)	111/458 <b>24.23%</b> (27.15)
<b>Total</b>	136/816 <b>16.67%</b> (15.67)		

As Table 3 shows, a relatively low percentage (16.67%) of syntactic errors was found, which seems to suggest that the incidence of the L1s is not so relevant at the syntactic level. Regarding null subjects, the results showed that the learners produced some structures with this feature (5.24%) as illustrated in (11-12).

- (11) \*CHI: eh the # the boy is eh *igo nola da*.  
 \*INV: climb.  
 \*CHI: climb to the rock and he take a # *adar bat edo bezala*.  
 \*INV: horn.  
 \*CHI: horn and and it isn't horn  $\emptyset$  is a a reindeer.  
 \*CHI: and the reindeer don't look and it is eh running.
- (12) \*CHI: # in the morning eh *esnatu da nola da esnatu*.  
 \*INV: wake up.  
 \*CHI: in the morning  $\emptyset$  wake up eh # wake up # and box ##.  
 \*CHI: eh *eta ez dago ez dago*.  
 \*INV: and the frog isn't.  
 \*CHI: and the frog isn't and the frog isn't box in the box.

The relatively low rate of subject omission suggests a low incidence of the L1s in this specific area. The learners' interlanguage grammars still show L1 transfer effects as previously documented in White (1985) or García Mayo (2003) but they are quite marginal in this respect. This result could be explained by the fact that English teachers are normally more aware of this error and they try to correct it explicitly providing examples in both the L1s and the L2 and pointing out to their students the differences existing among these languages.

With respect to null objects, the analysis of the data reveals a higher presence of null objects (12.09%) when compared to null subjects. Some examples are presented in (13-14):

- (13) \*CHI: and eh # in the morning the boy # get up.  
 \*CHI: and the boy he doesn't look the frog.

- \*CHI: he's eh finding but he don't he doesn't find Ø.
- \*CHI: # he went eh he looked in the window.

- (14) \*CHI: eh the boy eh *subir*  
 \*INV: climb .  
 \*CHI: eh y *piedra*.  
 \*INV: stone.  
 \*CHI: eh the boy saw Ø but *chillar*.  
 \*INV: shout.  
 \*CHI: but shout.

However, the statistical analyses carried out in order to test whether learners omitted the object to a higher degree than the subject revealed that there was no statistically significant difference between the production of null subjects and objects ( $X^2=1.60$ ;  $p= 0.206$ ).

The infrequent use of null objects suggests that the effect of Basque (which allows null objects to a much greater extent than Spanish) does not have a big impact on the learners' interlanguage when acquiring explicit objects, disconfirming prior studies carried out with L1 Chinese or Korean, languages that allow null objects in the same way as Basque (Park, 2004).

Finally, turning to the production of null definite and indefinite determiners (see Table 3), results showed that the omission of both types of determiners is relatively high (24.23%). Examples are given in (15-16):

- (15) \*CHI: in a hole and the dog is eh jumping eh # *coger*.  
 \*INV: catch.  
 \*CHI: is catching the # the *erleen ezto*.  
 \*INV: beehive.  
 \*CHI: the beehive and eh # and the beehive is.  
 \*CHI: eh *ez naiz gogoratzen nola zen erori*.  
 \*CHI: eh the boy eh is # looking in # Ø hole in the tree hole.
- (16) \*CHI: and # the dog is ## *behera debajo*.  
 \*INV: under.  
 \*CHI: under the the rock rock.  
 \*CHI: # eh haber ### Ø boy is in the in the rock.  
 \*CHI: and Ø dog ## *escondido*.  
 \*INV: hidden.  
 \*CHI: hidden

This result is surprising since previous studies on article choice (Murphy, 1997; Parodi et al., 1997) have shown that learners whose L1s have articles don't omit them or do so to a much lower extent. If we compare the percentage of null determiners with that of null subjects and objects we find that determiners are omitted to a larger extent (23.27% for definite determiners and 29.85% for indefinite determiners) than the subjects and objects taken together. Although at present we cannot fully determine the exact nature of this type of omission, several hypotheses can be entertained as to the origin of the high percentage of null determiners in the learners' interlanguage. On the one hand, Basque, Spanish and English are similar with respect to the Article Choice Parameter, that is, the three languages use articles to mark definiteness. As for the possibility of the existence of bare nominals, Basque does not allow them, that is, an

overt determiner is always required in Basque (Laka, 1993; Artiagoitia, 1997, 2002; Etxeberria, 2006, 2010). In contrast, English allows bare nominals with count plurals and mass nouns in both argument and predicate positions, whereas Spanish does not license the use of bare nouns in preverbal positions but admits them in object position with an existential reading. In the present study, the contexts analysed in the narratives were singular and count nouns that need an overt determiner in the three languages involved in the study. In this respect, we should not expect article omissions in the learners' English productions, as also Basque and Spanish need an overt determiner in these contexts.

On the other hand, as pointed out above, Basque is a head final language where determiners are placed after the noun they modify. Thus, it could be argued that the different nature of the article system in Basque may be playing a role in such a way as to diminish the effect of positive transfer. However, this possibility of negative transfer coming from Basque is inconsistent with other studies (Jarvis, 2002) in which learners avoid omissions in the target language even if the mother tongue has post-nominal bound article morphemes. Along with the morphosyntactic realization of the determiner in Basque, we should take into account the semantics of the Basque definite article *-a*. The fact that the bound article morpheme (*-a*) is used not only in all the environments where a definite article is required, but also in generic and indefinite noun phrases (Laka, 1996; Etxeberria, 2010), could also play a role in the production of null articles in L3 English and thus, making Basque-Spanish bilingual learners of L3 English behave in the same way as learners with [-article] L1s (Basoa, 2010). Thus, Basque remains as a possible source of negative influence in the acquisition of L3 English articles. On the basis of the contexts analysed in the present study (singular and count noun contexts, which require the presence of an overt article in both English and Spanish), as well as on the basis of the evidence provided by several studies on the acquisition of L2 English articles by L1 Spanish speakers (García Mayo, 2009; Ionin, Zubizarreta and Maldonado, 2008), the possibility of negative influence from Spanish has to be discarded<sup>6</sup>.

Another possibility which could be entertained refers to the existing evidence coming from the acquisition of the L1. Bearing in mind that L1 children omit articles (especially in the early stages of learning) and taking into account that the learners have received little exposure to L3 English, we could argue that the learners behave like L1 children and seem to be in a stage of acquisition similar to that of L1 children. It is worth mentioning at this point Singleton's (1995) equation of 1 year of natural exposure to 18 years of formal school instruction. As Gallardo del Puerto, García Lecumberri and Cenoz (2006) point out, if we keep in mind Singleton's (1989) calculations, a student's six-year period would correspond to approximately four months of natural acquisition.

To sum up, experimental results show that there is a lower rate of syntactic transfer errors than of phonetic ones in the English interlanguage of Basque/Spanish bilinguals, supporting previous claims made by Ellis (1994). Besides, standard deviation figures are considerably high, particularly in the case of null determiners, which indicates that individual learners behave differently with regard to the syntactic influence of their first language/s when performing in the L3.

## **5. Pedagogical considerations**

The overall analysis carried out both at the phonetic and syntactic level shows that there are some very specific L1 effects in the English interlanguage of Basque/Spanish bilinguals. Therefore, these results seem to indicate that after seven years of exposure



the type of errors investigated in this study are still quite pervasive in the learners' interlanguage. Following the trend observed in natural language environments that 'the earlier the better', the early introduction of English became very popular in the Basque Country in the 1990s. However, studies conducted in the Basque Autonomous Community on the age factor do not confirm that the early introduction of English with very limited exposure in institutional settings is the most efficient way to learn English (see Cenoz, 2009 for a compilation of these studies). The findings observed in the present study confirm current research on the early introduction of English as L3 in institutional settings (Muñoz, 1999; Celaya et al., 2001; García Mayo et al., 2006).

In the last decade, other ventures have taken place in the Basque Autonomous Community so as to enhance general competence in English, such as the use of English as the medium of instruction (see García Gurrutxaga et al., 2011 for the *English through Content* projects in Primary and Secondary state schools). As García Mayo (2003) concludes, when one considers the overall picture emerging from the above studies on the age factor, it seems clear that the early introduction of the English language in classroom settings will not lead to appropriate results if instructional hours are not used effectively and there is no increase in the number of hours of exposure. Studies focusing on Content and Language Integrated Learning (CLIL) methodologies have concluded that this type of acquisition results in improved proficiency in English language skills and appears to ease students' transition into the academic mainstream (Snow and Brinton, 1988; Kasper, 1997; Lasagabaster and Ruiz de Zarobe, 2010; Pica, 2002; Ruiz de Zarobe and Jiménez Catalán, 2009; Ruiz de Zarobe, Sierra and Gallardo del Puerto, 2011).

In this respect, even though L1 effects are much clearer at the level of phonetics, the errors we have observed at both language levels could be minimized by participation in a CLIL programme. Previous studies have shown that learners benefit from participating in a CLIL programme at the phonetic level, as CLIL learners' pronunciation is perceived to be more intelligible and less irritating than that of non-CLIL students (Gallardo del Puerto, Gómez Lacabex and García Lecumberri, 2009). Similar results have been reported for syntax where it has been shown that there is a higher tendency to avoid null subjects, null objects (Martínez Adrián and Gutiérrez Mangado, 2009) and null determiners in those learners who were enrolled in a CLIL programme (Gutiérrez Mangado and Martínez Adrián, 2009). In addition, researchers are nowadays pointing out 'that CLIL programmes should incorporate not only a focus on meaning but also a focus on form, as available evidence seems to indicate that little focus on form is found in teachers' input addressed to their learners' (Lasagabaster and Ruiz de Zarobe, 2010: 286). So, CLIL with a focus-on-form seems to be an appropriate formula to acquire a foreign language in a more effective way.

A second pedagogical implication involves teacher training. On the phonetic side, it is necessary to make teachers aware of the importance of focusing on the improvement of learners' L2 pronunciation in their lessons. Foreign language teacher-focused research has revealed that, when compared to the teaching of other language skills, instructors do not sufficiently value the formal instruction of pronunciation, in particular (Quijada, 1997). This fact can be accounted for, among other reasons, by the widespread belief that one has to be an expert in phonetics in order to deal with pronunciation issues in the L2 classroom. However, as Poch Olivé (1992) points out, the teaching of phonetics does not require a greater degree of specialization than, for instance, syntax or lexis, but just the knowledge of some basic concepts. Therefore, teacher training on how to deal with the teaching of pronunciation in the L2 classroom is fully recommendable as it will contribute to higher levels of phonetic awareness in

foreign language teachers (Goldsworthy, 1998; García Lecumberri, 2001). This training would hopefully enable the teacher to tackle phonetic correction in the classroom more comfortably. Additionally, it would facilitate learners' phonetic awareness which, as has been shown (Benson and García Mayo, 2008), would eventually lead to pronunciation improvement.

The same pedagogical implication applies to the syntactic area. Trainees in teacher training courses are not usually instructed in contrastive analysis and, for this reason, they don't exploit the areas of influence in their lessons. As seen in previous sections, the fact that English has explicit subjects is quite recursive in the lessons. However, the impossibility of null objects in English is not usually made explicit by teachers in Basque schools, perhaps because this is a much more specialised topic dealing with linguistic theory and is not part of the teaching curriculum. Hence, we advocate the integration of subjects such as Second Language Acquisition in the Diploma in Language Teaching Curriculum in the Spanish context which could enable language teaching students to acquire relevant notions concerning linguistic phenomena and familiarise them not only with linguistic theory but also with contrastive linguistics and transfer. In this way, potential teachers will have knowledge of problematic areas in the interlanguage and will be able to correct those errors that may stem from L1 influence. As also pointed out by Rothman (2010: 53), "a language teacher who is more aware of the linguistic structures of the language he/she is teaching and key issues in the general understanding of adult language acquisition will make a more effective, empathetic teacher". Similarly, Van Patten (2010: 36) concludes that "with an understanding of the linguistics and psycholinguistics of acquisition, teachers can have a more informed reason underlying their instructional efforts and decisions".

A third pedagogical implication, particularly for the case of the acquisition of L2 pronunciation, is the need for a better quality of the phonetic input which learners are exposed to. As Cenoz (2003) pointed out, in formal instructional learning environments where the L2 is not present or has a social role in the surrounding community, such as the case of English in the Basque Country, foreign language teachers are not usually native in the language that they teach but share their students' first language(s). This very often means that these teachers' L2 speech may be affected, though to different extents, by L1 phonology. It is essential to realise that in formal learning settings teachers are usually the main source of students' phonetic input in the L2. So, an individual learner's exposure to the L2 may be very much distorted by his/her peers' and teachers' pronunciation of the foreign language, a fact which would further reinforce and favour the influence of the L1 sound system on the acquisition of L2 pronunciation.

What follows from this discussion is a call for an increase in the English native input received by students, not so much as a way to achieve native-like pronunciation but rather as a means to improve students' accent intelligibility. Even if, following Levis's (2005) terms, the "principle of nativeness" is a highly controversial issue in language teaching nowadays, and the "principle of intelligibility" prevails in the new scenario of English as an international language (Jenkins, 2000; Seidlhofer, 2007), we do believe that an increase in native sources will ultimately result in a more intelligible accent. Information and Communication Technology (ICT) may play a facilitating role in achieving this goal. The Internet is an exceedingly productive source of aural input in English. The Web is full of sites containing aural and visual documents in different varieties of English. Besides, the development of Internet-based real-time technological applications (e.g.: audio-chat, video-chat) have definitely facilitated the exposure to synchronous interaction (Wang, 2004). A great potential is envisaged for L2 learning in

general, and for the learning of L2 pronunciation in particular, as online communication technologies may contribute to increase L2 learners' chances to engage in conversation with native (and non-native) speakers of English. This engagement would give learners the possibility of using the L2 for real communicative purposes and creating an online social community with other speakers of English, all of which is in line with social constructivist, cohort-oriented approaches to language learning (Chapelle, 2003). These approaches emphasize the idea that language knowledge is built up incidentally when learners interact and construct social practices (Block, 2003).

Finally, in addition to an increase in the exposure to L2 aural sources of quality, teachers are encouraged to include specific exercises to improve both the phonetic and syntactic skills of their learners. A rough look at the foreign language books used in primary and secondary schools in the Basque Country is enough to notice the scarcity of exercises addressed at working out phonological skills, so it can be presumably deduced that teachers' emphasis on the teaching of L2 phonological abilities is not optimal, or at least it would depend on individual teachers' degree of interest in this particular aspect of language. However, pre-test/post-test experimental research on the effect of phonetic treatment on L2 pronunciation proficiency has shown that explicit instructional techniques do result in greater phonological development (Cenoz and García Lecumberri, 1999; Benson and García Mayo, 2008).

Similarly, the syntactic transfer errors produced by the learners would decrease if they were made explicit in class, as *communicative-focus-on-form* methodologies propose (Doughty and Williams, 1998). Students need negative evidence in the form of grammatical explanations or corrective feedback (Spada, 1997), not only in traditional lessons but also in classes where English is the medium of instruction (Lasagabaster and Ruiz de Zarobe, 2010). Taking into account the lower rate of null subjects produced by the participants in the present study, we suggest that object and determiner omissions should also be made explicit in class by means of positive and negative feedback. These are errors which English teachers in Basque schools do not usually refer to in their lessons.

To sum up, in view of the results obtained in this experiment we suggest that negative L1 transfer effects would be minimised if the learners' linguistic awareness were enhanced. A necessary prerequisite to accomplish this aim would be, first of all, to increase teachers' awareness of both phonetic and syntactic features such as the ones shown in this article. Teacher training programmes including phonetics and syntax and language acquisition topics would adequately serve this purpose. As for the learners, we suggest that their foreign language proficiency would improve and the negative influence of their L1s would decrease by participation in teaching programmes where the target language is used in a more natural communicative context.

## Notes

<sup>1</sup> Following Kellerman's (1986) terminology, "language level" refers to the different linguistic areas such as phonology, morphology, syntax and semantics. This notion has more recently been labelled as 'Area of Language Knowledge' (Jarvis and Pavlenko, 2008).

<sup>2</sup> See previous section for the spirantisation rule of stops.

<sup>3</sup> Although it is true that friction may not be present in English /ð/ (e.g.: *in the, tell'em*),

<sup>4</sup> Basque is an SOV ergative-absolutive language. The auxiliary verb agrees in number with the subject and object.

<sup>5</sup> We did not take into account the fact that null subjects are also licit in diary reports, as the “Frog Story” is a narration.

<sup>6</sup> However, L3 English learners with L1/L2 Spanish at lower proficiency levels are predicted to overuse ‘the’ in indefinite plural contexts due to L1/L2 Spanish negative transfer effects. As stated by a number of researchers (García Mayo, 2008; Ionin and Montrul, 2009; Snape, García Mayo and Gürel, 2009, among others), Spanish, unlike English, uses definite plurals for a “kind” or generic interpretation as in (17) (Snape, García Mayo and Gürel, 2009:2):

(17) *Los leopardos son fáciles de domesticar.*

However, bare nominals cannot mark generic reference in preverbal position with a plural noun, as illustrated in (18):

(18) \**Leopardos son fáciles de domesticar.*

The possibility of negative influence from Spanish will be a matter of study in our future research.

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