

## THE INFLUENCE OF BILINGUALISM ON MULTILINGUAL ACQUISITION: SOME DATA FROM THE BASQUE COUNTRY

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### 1. Introduction

Multilingual acquisition considered as “*the acquisition of languages other than the first or second*” is becoming a common process in the European context. In fact, the increasing links among European and world countries as the result of historical, political, economic and technological development have produced the need to use languages of wider communication, mainly English, which are not always the language or languages of one’s own community. Within this context, the revitalization and use of autoctonous minority and regional languages in the public domain also contributes to the development of individual multilingualism in European regions such as Catalonia, Galicia, Frisia, the Basque Country, Brittany, Wales or Ireland. Social phenomena such as immigration also contribute to the development of minority communities who need to acquire more than two languages.

Multilingualism and multilingual acquisition are often considered as simple variations of bilingualism and second language acquisition and “*second language acquisition*” (SLA) tends to be used as a cover term to refer to “any language other than the first” without taking into consideration the number of other non-native languages known by the learner (Sharwood Smith, 1994: 7). In fact, multilingual acquisition is more complex than second language acquisition because it implicates all the factors and processes associated with second language acquisition as well as unique and potentially more complex factors and effects associated with the interactions that can take place among the multiple languages being learned, and the processes and effects of learning them. There is also more diversity and complexity in multilingual acquisition as compared to second language acquisition if we consider other factors such as the age when the different languages are acquired, the environment in which each of the languages is acquired, or the typological distance among the languages involved. The diversity and complexity of multilingual acquisition produce situations which are unique in language acquisition and they justify the need to conduct research in order to identify the specific characteristics of multilingual acquisition.

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It is generally thought that bilingualism exerts a positive influence on third language acquisition and most research studies in this area prove this influence (Cenoz & Valencia, 1994; Thomas, 1988; Lasagabaster, 1997) but specific research on the processes involved in multilingual acquisition is still preliminary (Cenoz & Genesee, forthcoming).

One area of research in multilingual acquisition is the analysis of cross-linguistic influence, that is the effect of L1, L2 (L3 or Lx), on the acquisition of an additional language. Although research in the area of cross-linguistic transfer in multilingual acquisition is still preliminary, the results of some research studies indicate that cross-linguistic influence can be affected by the linguistic distance among the languages involved (Bild & Swain, 1989). There is evidence for cross-linguistic transfer in multilingual acquisition when the languages involved are similar with respect to phonetics, vocabulary and syntax (Möhle, 1989; Singleton, 1987). For example, learners of French and English who have already acquired a non-Indo-European first language tend to transfer vocabulary and structures from other Indo-European languages they know rather than from their first language (Ahukanna, Lund & Gentile, 1981; Bartelt, 1989; Ringbom, 1987; Singh & Carroll, 1979). It has also been suggested that transfer is more likely from the first language than from later-learned languages (Ringbom, 1987). Cross-linguistic influence has also been found in the case of oral language skills acquired in informal settings (Williams & Hammarberg, 1997). The results of the studies on cross-linguistic influence in multilingual acquisition indicate that typological distance and L1 can be important factors that influence multilingual acquisition but more research comparing typologically unrelated languages is needed in order to confirm these preliminary findings.

This paper reports the results of a research project on cross-linguistic influence in multilingual acquisition conducted in a Basque school where English is taught as a third language to native speakers of Basque and Spanish. Specifically it aims at answering the following research questions i) Are there any differences in oral production in English when the results obtained by subjects with different first languages (Basque, Basque and Spanish or Spanish) are compared?; ii) Are oral production scores in English different at different ages? iii) Is cross-linguistic influence affected by L1 or by typological distance? iv) Is cross-linguistic influence affected by age?

## 2. Method

### 2.1. Sample

Participants were 90 elementary and secondary school students in a Basque school where Basque is the language of instruction. All the students were also exposed to Spanish, the majority language at the community level, and also study Spanish as a school subject. English is taught as a third language and it is nowadays introduced when children are in kindergarten at the age of four. In previous years English was introduced at a later age in the third (7-8 years old) or the sixth grade (11-12 years old) of elementary school. All the participants in this study were in their fourth year of English but instruction in English had started at different ages as it can be seen in the following table:

	Age	Male	female	Years of english
Grade 2	7.35	16	14	4
Grade 6	11.3	13	17	4
Secondary	14.2	14	16	4

Some students use Basque at home and others Spanish, or Basque and Spanish, but Basque is the main language of communication at school and the language of instruction for all subjects except Spanish and English language arts. Basque is the first language for 44% of the students, Spanish is the first language for 23% of the students and the rest of the students (32%) have both Basque and Spanish as their first languages.

### 2.2. Instruments

All the students were asked to tell the wordless picture story 'Frog, where are you?' (Mercer Mayer, 1969) in English. This story consists of 24 pictures and it has been used in a large number of contexts with different languages both with children and adults (Berman & Slobin, 1994). Several corpora of oral productions based on this story are also part of the Childes project data base (MacWhinney, 1991).

Participants also completed a background questionnaire which included questions on the knowledge and use of Basque in their social networks. The stories were told individually to a native speaker of English and the questionnaires were completed in groups in one of the class sessions. All the frog stories were audio and videotaped and independently scored by two evaluators who used scales ranging from 1 to 10 for pronunciation, vocabulary, grammar,

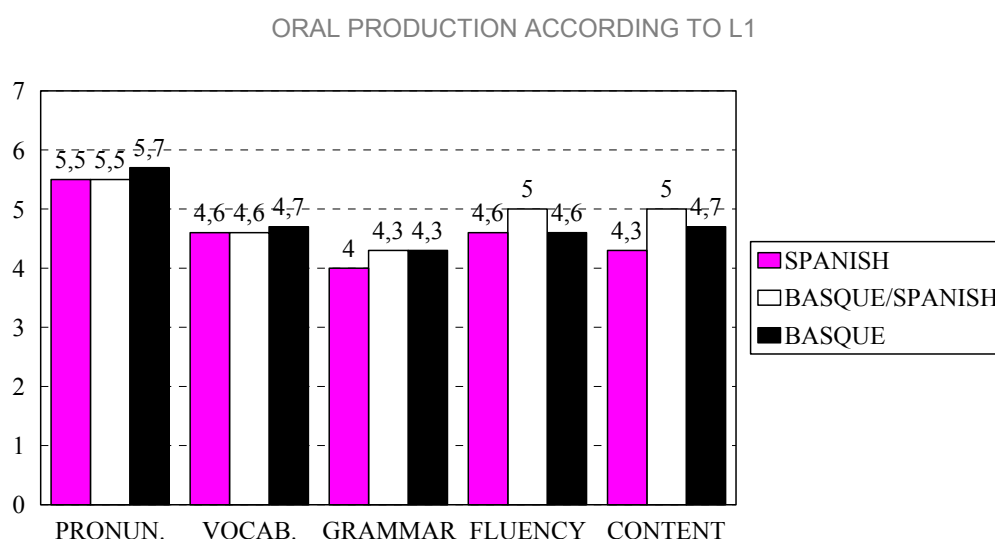
fluency and content. The frog stories were also transcribed according to the CHAT conventions and analyzed using the CLAN program. Further statistical analyses were carried out using the SPSS statistical program.

### 3. Results

In order to answer the first two research questions several Oneway analyses of variance were carried out and the results are presented in figures 1 to 4. Data on the influence of L1 and age on oral production are given in tables 2 and 3.

In order to compare the results of oral production in English obtained by subjects with different first languages two Oneway analyses of variance were carried out (figure 1 and 2). In the first analysis the means obtained in the five scales of oral production by subjects grouped according to their L1 are presented. In figure 2 the number of words (tokens) and the number of different words (types) produced by the three groups are given.

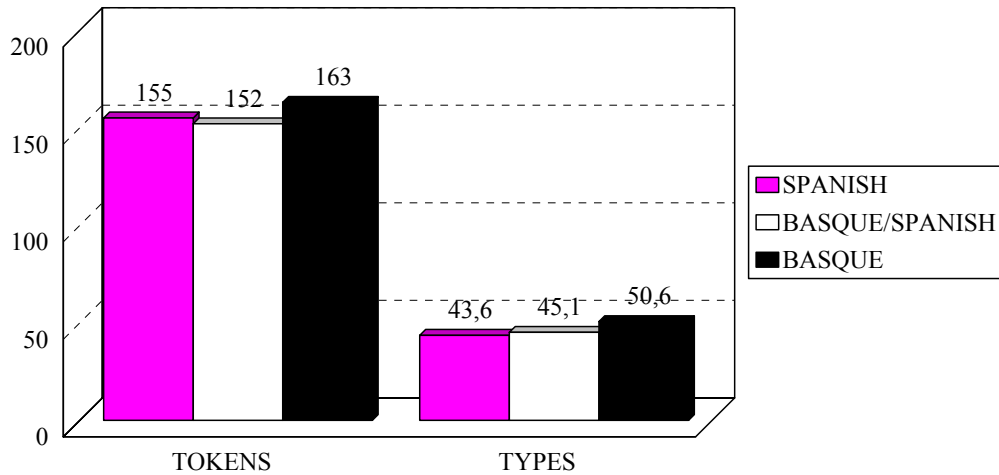
FIGURE 1



The results of the Oneway analyses indicate that there are no significant differences when the means obtained for pronunciation ( $F=.346$ ;  $S=.70$ ), vocabulary ( $F=.038$ ;  $S=.96$ ), grammar ( $F=.29$ ;  $S=.74$ ), fluency ( $F=.39$ ;  $S=.67$ ) and content ( $F=.86$ ;  $S=.42$ ) are compared. In fact, the three groups classified according to the subjects' first language (Basque, Spanish or both) do not obtain significant differences in oral production.

FIGURE 2

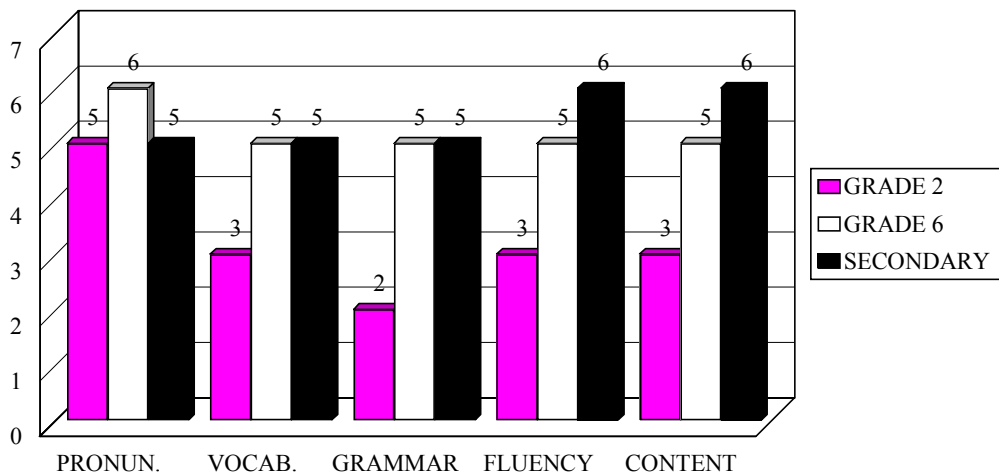
TYPE/TOKEN ACCORDING TO L1



The results of the Oneway analyses indicate that there are no significant differences for the number of tokens ( $F=.30$ ;  $S=.73$ ) and types ( $F=1.05$ ;  $S=.35$ ) when the three groups classified according to their first language are compared.

FIGURE 3

ORAL PRODUCTION AT DIFFERENT AGES

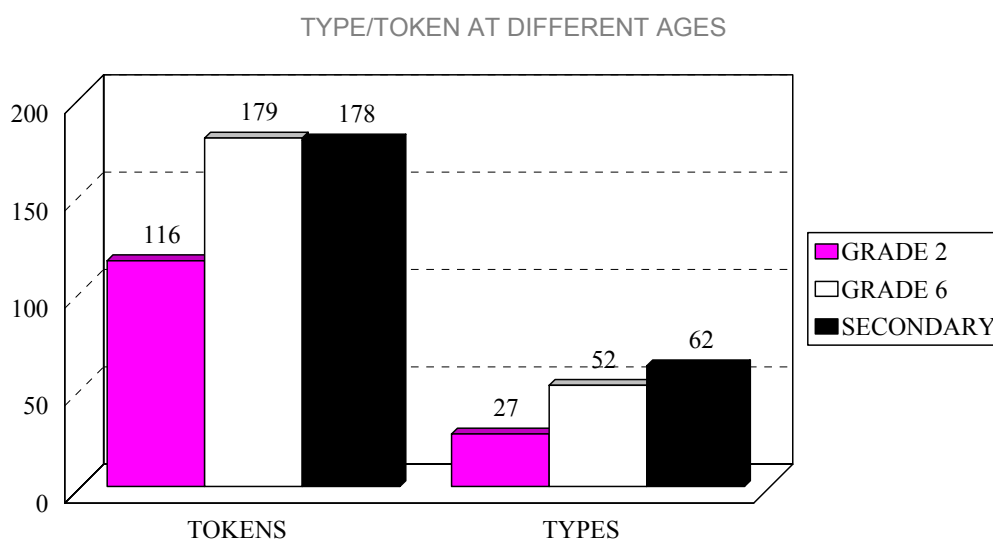


In order to answer our second research question the subjects were grouped according to their grade and the means corresponding to the five scales used to evaluate oral production (figure 3) and the number of words and different words (figure 4) were compared.

The oneway analyses indicate that the differences between the means are significant for pronunciation ( $F=8.20$ ,  $S=.00$ ), vocabulary ( $F=27.47$ ,  $S=.00$ ), grammar, ( $F=52.35$ ,  $S=.00$ ),

fluency ( $F=41.54$ ,  $S=.00$ ) and content ( $F=61.84$ ,  $S=.00$ ). It can be observed that the lowest scores correspond to grade 2. Secondary school students obtained higher scores in fluency and content and grade 6 students in pronunciation but the mean differences between these two groups are not significant.

FIGURE 4



The results of the Oneway analyses indicate that there are significant differences when the mean number of tokens ( $F=13.09$ ,  $S=.00$ ) and types ( $F=51.43$ ,  $S=.00$ ) corresponding to the three age groups are compared. Once again the lowest scores correspond to grade 2 and the differences between grade 6 and secondary school students are not significant.

In order to know if students were influenced by their mother tongue and by typological distance when telling the story in English all the cases of cross-linguistic influence were classified according to the subject's mother tongue. The data in table 2 reflect the number of subjects who transfer from Spanish, Basque and Spanish/ Basque.

TABLE 2							
L1	N	Transfer from Spanish		Transfer from Basque and Spanish		Transfer from Basque	
		N	%	N	%	N	%
Spanish	21	7	0.33	5	0.24	2	0.09
Basque & Spanish	29	9	0.31	6	0.20	1	0.03
Basque	40	16	0.40	9	0.22	3	0.07

It can be observed that the highest percentages correspond to transfer from Spanish or from Basque/Spanish, independently of the subjects' mother tongue. All the groups present fewer cases of transfer from Basque. Some examples of transfer according to the subjects' L1 are the following:

*L1 Spanish*

1. Boy is **poniendose** jacket (24) (Spanish)
2. the dog find a **hori...** the dog find **este** (85) (Basque and Spanish)
3. Mikel is the jacket **ipini** and the dog is... (22) (Basque)

*L1 Basque and Spanish*

4. the frog **salta de** house (12) (Spanish)
5. dog this a **ventana** and...../.....and dog this a water **gainean** (19) (Spanish and Basque)
6. in a top **zuloa** (38) (Basque)

*L1 Basque*

7. and the frog se había ido a casa (23) (Spanish)
- 8.the boys sleep y and frog..... the next day the boys esnatu (51) (Spanish and Basque)
9. nola esaten da ura? (14) (Basque)

In order to answer our last research question we compared the number of subjects who transfer from Spanish, Basque and Spanish/Basque once students had been grouped according to the grade they were enrolled at school.

TABLE 3							
SCHOOL GRADE	N	Transfer from Spanish		Transfer from Basque and Spanish		Transfer from Basque	
		N	%	N	%	N	%
Grade 2	30	5	0.38	5	0.38	3	0.23
Grade 6	30	14	0.63	6	0.27	2	0.09

Secondary	30	13	0.56	9	0.39	1	0.04
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It can be observed that although the highest percentages correspond to transfer from Spanish or from Basque/Spanish, Grade 2 subjects also present a high proportion of transfer from Basque. Some examples of transfer according to the subjects' age are the following:

*Grade 2*

10. ...y the dog is look the frog (5) (Spanish)
11. and look **que** not is **basoa** ..... **le dice** listen dog (17) (Basque and Spanish)
12. and frog **taza baten tazatik** (13) (Basque)

*Grade 6*

13. ...he is of the **su** house (33) (Spanish)
14. Erik see **ez dagoela** the frog .....the reindeer jump **a** the floor (46) (Basque and panish)
- 15 the boy is **entzun** the frog (50) (Basque)

*Secondary*

16. and the bees **seguir** the dog (69) (Spanish)
17. and she **aurkitu** .....the frog **se queda en el bosque** (78) (Basque and Spanish)
18. they hear frogs' **sonua** (86) (Basque)

#### 4. Discussion

The results of this study indicate that there are no differences in oral proficiency in the third language when the oral production scores of subjects with Basque, Basque/Spanish or Spanish as a L1 are compared. Therefore, native speakers of Basque, a typologically distant language, do not present disadvantages in oral production in English and they obtain similar results to native speakers of Spanish. It is important to point out that all the subjects in our sample can be considered bilingual, independently of their L1, because they are competent in Basque, the language of instruction, and in Spanish, the majority language in the Basque Country. Previous studies in which the results of monolinguals (Spanish) and bilinguals (Basque, Spanish) in the acquisition of English as a L3 have been compared confirmed the advantages of bilingualism in third language acquisition (Cenoz & Valencia, 1994; Lasagabaster, 1997). The present findings indicate that there are no differences in oral production in English among bilingual learners (Basque-Spanish) with different first languages (Basque, Spanish, Basque/Spanish).

The analysis of cross-linguistic influence also indicates that native speakers of Basque and Spanish borrow more lexical terms from Spanish than from Basque, independently of their L1. These results support previous findings (Ahukanna, Lund & Gentile, 1981; Bartelt,

1989; Ringbom, 1987; Singh & Carroll, 1979) because transfer from a Indo-European language (Spanish) is preferred to transfer from a non-Indo-European language. They also prove that the effect of first language is less potent than typological similarity between the languages.

The results of this study indicate that children who have received the same amount of instruction in English at different ages present different results. The youngest group (grade 2) obtained the lowest scores in oral production but the other two groups obtained similar results. Even though more research is needed in this area, these results can be attributed to the different stages of cognitive development. Younger learners also present differences when compared to the other two groups because they borrow a higher proportion of terms from Basque than the rest of the learners. Younger learners seem to be less aware of typological distance than older learners.

This study confirms previous studies on typological distance in multilingual acquisition and it proves that lexical cross-linguistic influence can be affected by age. Nevertheless, more studies of multilingual acquisition involving Indo-European and non-Indo-European languages are necessary in order to get more data on cross-linguistic influence at different stages of the acquisition process or cross-linguistic influence in other areas such as phonetics, syntax or pragmatics.

### References

- Ahukanna, J.G.W, N.J. Lund, J.R. Gentile (1981), "Inter- and intra-lingual interference effects in learning a third language", *Modern Language Journal* 65, 281-87.
- Bartelt, G. (1989), "The interaction of multilingual constraints", in H.W. Dechert, M. Raupach (eds.), *Interlingual Processes*, Tübingen, Gunter Narr, 151-77.
- Berman, R.A., D.I. Slobin (1994), *Relating Events in Narrative: A Crosslinguistic Developmental Study*, Hillsdale, NJ, Erlbaum.
- Bild, E.R., M. Swain (1989), "Minority language students in a French Immersion programme: their French proficiency", *Journal of Multilingual and Multicultural Development* 10, 255-74.
- Cenoz, J., F. Genesee (forthcoming), "Psycholinguistic perspectives on multilingualism and multilingual education", in J. Cenoz, F. Genesee (eds.), *Beyond Bilingualism: Multilingualism and Multilingual Education*.
- Cenoz, J., J.F. Valencia (1994), "Additive trilingualism: evidence from the Basque Country", *Applied Psycholinguistics* 15, 195-207.
- Lasagabaster, D. (1997), *Creatividad y conciencia metalingüística: incidencia en el aprendizaje del inglés como L3*, Ph.D. thesis, UPV/EHU.

- MacWhinney, B. (1991), *The CHILDES Project: Tools for Analyzing Talk*, Hillsdale, NJ, Lawrence Erlbaum.
- Mayer, M. (1969), *Frog, where are you?*, New York, the Dial Press.
- Möhle, D. (1989), "Multilingual Interacion in foreign language production", in H.W. Dechert, M. Raupach (eds.), *Interlingual Processes*, Tübingen, Gunter Narr, 179-94.
- Ringbom, H. (1987), *The Role of the First Language in Foreign Language Learning*, Clevedon, Multilingual Matters.
- Sharwood Smith, M. (1994), *Second Language Learning: Theoretical Foundations*, London, Longman.
- Singh, R., S. Carroll (1979), "L1, L2 and L3", *Indian Journal of Applied Linguistics* 5, 51-63.
- Singleton, D. (1987), "Mother and other tongue influence on learner French", *Studies in Second Language Acquisition* 9, 327-46.
- Thomas, J. (1988), "The role played by metalinguistic awareness in second and third language learning", *Journal of Multilingual and Multicultural Development* 9, 235-46.
- Williams, S., B. Hammarberg (1997), *L1 and L2 influence in L3 production*, Stockholm University, Centre for Research on Bilingualism.