AGE OF LEARNING AND ORAL PRODUCTION IN THE THIRD LANGUAGE

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ABSTRACT

This article explores the relationship between the age of introduction and the acquisition of oral skills in English as a third language in a bilingual programme in the Basque Country. Participants were 90 students who had Basque and/or Spanish as their first language and Basque as the language of instruction and had started learning English at different ages: in kindergarten, in the third year of primary school and in the sixth year of primary school. The results indicate that the youngest group had more difficulties to tell the story than the two other groups and that the oldest group had more problems at the phonetic level. These results are discussed as related to age, cognitive maturity and instructional style.

1. INTRODUCTION

Learning English as a third language is very common in the European context as it can be seen in the situations identified by Cenoz and Jessner (2000: viii-ix). The study reported in this article refers to two of these situations: learning English as a third language by native speakers of minority authochthonous languages who are also proficient in the majority language or by native speakers of a majority language who learn a minority authochthonous language at school. These situations are common in bilingual communities such as the Basque Country, Brittany, Catalonia, Sardinia, Friesland and Vaasa and imply the presence of at least three languages in the educational system: the minority language, the majority language and one or two foreign languages.

The acquisition of a third language within bilingual education presents great diversity regarding the intensity of instruction, the use of the third language as a subject or as a language of instruction, the typology of the languages involved, the degree to which the third language is present at the community level and the
age of introduction of the third language. Taking into account some of these factors, Ytsma (2001) proposes a typology of trilingual education which includes 46 types. If we take into account the intensity of instruction and the role of English in the curriculum we can state that the most common situation in bilingual schools is to learn English as a school subject for a few hours a week, usually between 2 and 5 although some trilingual schools also have a third language as a language of instruction (see Baetens Beardsmore, 1993; Hoffmann, 1998; Cenoz, 1998). When comparing situations in which English is learned as a third language, different degrees of typological distance can be observed; for example Frisian, Dutch and English are typologically closer than Basque, Spanish and English. On the other hand, as Hoffmann (2000) points out ‘the position of English as a medium in national life varies from country to country’ (Hoffmann 2000:8) and the presence of English is stronger in Scandinavia, Belgium and the Netherlands than in southern European countries.

The acquisition of the third language is a complex process that can be affected by the cognitive, affective and educational factors that have been identified as influential in second language acquisition: age, intelligence, motivation, learning strategies, etc (Cenoz, 2000). Moreover, the acquisition of a third language presents some common characteristics with second language acquisition but it also presents differences because learners are more experienced in third than in second language acquisition and also because, as it has been pointed out, bilingual and multilingual individuals present a different type of competence as compared to monolinguals (Grosjean, 1992; Cook, 1995; Jessner, 1999; Cenoz, Hufeisen and Jessner, 2001).

The influence of age on second language acquisition is a controversial area which has received much attention in the last years (Singleton & Lengyel, 1995; Harley & Wang, 1997; Birdsong, 1999; Singleton, 2001). The study of the relationship between age and third language acquisition is an extremely interesting area for different reasons: i) it can contribute to the theoretical debate on the age question in second language acquisition; ii) it can also contribute to the area of third language acquisition and trilingualism and iii) it has implications for language planning particularly nowadays that the foreign language is introduced from an early age in several European immersion programmes but there is not enough research to confirm the possible advantages of the early introduction of the foreign language.

Studies in naturalistic settings indicate that older learners present advantages in the first stages of second language acquisition but that these advantages disappear in the long run (Snow & Hoefnagel-H’hle, 1977; see also Harley & Wang, 1997; Singleton, 2001 for a review). The most well known explanation for the advan-
tages presented by younger learners in second language acquisition in natural environments is the critical age hypothesis proposed by Lenneberg (1967). According to this hypothesis, language acquisition capability declines drastically after puberty and therefore, older learners present more difficulties to acquire a second language.

Nevertheless, most studies on the effect of age on second language acquisition in formal settings indicate that older learners make more progress or that there are no differences between early and late starters when both groups have been mixed for some time (Burstall et al., 1974; Oller & Nagato, 1974; Ekstrand, 1976). Those findings do not necessarily confirm the advantages of older students and as Singleton (1995) suggests they can be due to the 'blurring effect resulting from mixing beginners and non-beginners in the same classes' (Singleton 1995, 2). Muñoz (2000) provides stronger evidence to confirm the advantages of older learners in a study in which the different groups are not mixed and the number of hours of instruction is controlled. Nevertheless, the advantages presented by older learners in this and other studies may also be linked to the fact that research studies in this area are usually conducted after limited exposure and may not give early starters enough time to show their advantages.

This study presented here is based on some data from a project that explores the relationship between the age of introduction of the L3 and the linguistic development in this third language in a bilingual education programme in the Basque Country. This programme has Basque as the language of instruction and serves both as a total immersion programme for students whose first language is Spanish and a first language maintenance programme for students whose first language is Basque (Cenoz, 1998). English is taught as a third language to all the students and in the school where the project is being conducted it is nowadays introduced when children are in the second year of kindergarten (4 years old). Traditionally, the English language was introduced in grade 6 (11 years old) and when the Spanish Educational Reform was implemented in 1993 foreign languages were introduced in the third grade when children are 8 years old (Cenoz & Lindsay, 1994). Therefore, this school provides the possibility of comparing groups of learners who have started their English classes at three different ages within the same bilingual programme and school curriculum. When English is introduced in kindergarten the teacher only uses English in the classroom and all the activities are oral. The methodology used is based on story-telling, songs and other oral activities and requires the children's active participation by means of collective dramatization and playing. Oral skills and communicative competence are also the main focus when English is introduced at the age of 8 but a more traditional approach is used with older learners.
This study aims at analysing oral production in English as a third language by students who are in the fourth year of English but started learning English at different ages.

2. METHOD

2.1. Sample

Participants were 90 elementary and secondary students (47.7% male; 52.2% female) in a Basque school in the province of Gipuzkoa. Students use Basque and/or Spanish at home but Basque is the main language of communication at school and the language of instruction for all subjects except Spanish and English. Basque was the first language for 44% of the students, Spanish was the first language for 23% of the students and the rest of the students (32%) had both Basque and Spanish as their first languages. All the students were also exposed to Spanish, the majority language at the community level, and also study Spanish as a school subject.

All the participants in this study were in their fourth year of English but instruction in English had started at different ages in kindergarten (4 years old), in grade 3 (8 years old), and in grade 6 (11 years old) as it can be seen in the following table. It can also be observed that the youngest group had fewer hours of English than the two older groups.

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<th>Table 1. Characteristics of the sample</th>
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<td>GRADE 2</td>
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<td>Mean Age</td>
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All the participants in this research study come from the same geographical area and similar social backgrounds. The subjects included in this research study were selected on the condition that they did not receive instruction or were not exposed to English outside school (private classes, academies, summer courses, etc).

2.2. Instruments and procedure

All the participants filled in a battery of English oral and written tests and a background questionnaire. This study focuses on oral production and specifically on story telling.
All the students were asked to tell the wordless picture story ‘Frog, where are you?’ (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, 2000). This story was used for the three age groups.

Students were also asked to retell a story that had been used in their classes. These stories were specific for each age group: ‘The Doctor’ for the youngest group, ‘The Wolf and the seven little kids’ for grade 6 and the film ‘Sleepless in Seattle’ for secondary school students. The stories were recorded, transcribed and analysed in order to examine different aspects of oral production. First, the number of tokens, types, utterances and words per utterance produced by the three age groups when re-telling the two stories were compared. Then, an overall evaluation of the oral was carried out by using five bands with a minimum score of 1 and a maximum score of 10. These bands are based on widely used English language tests (Cambridge First Certificate, FSI, Oxford Oral Examination) and measure different aspects related to the following five dimensions of oral production: pronunciation (accuracy and communicative effect), vocabulary (range, accuracy and registered), grammar (accuracy, complexity and communicative effect), fluency (range, continuity and speech) and content (relevance and range). The oral productions were independently evaluated by two judges who had been training in using these bands. The mean scores of these evaluations were used for the analyses.

3. RESULTS

The results of the oral production tests presented here include the number of tokens, types, utterances and words per utterance corresponding to the two stories and the overall evaluation of the students’ oral production.

3.1. Frog story

The results included in figure 1 correspond to analyses of variance to compare the number of tokens, types, utterances and words per utterance in the three age groups.

The results of the One-way analyses indicate that there are significant differences when the mean number of tokens ($F=13.09, p<.01$) and types ($F=51.43, p<.01$) corresponding to the three age groups are compared. The lowest scores correspond to grade 2 and the differences between grade 6 and secondary school stu-
students are not significant. When the number of utterances is considered, no overall significant differences were observed but the results indicate that there are significant differences in the number of words per utterance used by the different groups (F=43.62, p<.01).

The Scheffe procedure was carried out in order to know the specific differences between the two groups who had received the same number of hours of instruction. It is interesting to observe that there were no significant differences in the number of tokens and types produced by these groups. Grade 6 students produced a significantly higher number of utterances than secondary school students (p<.01) and secondary school students produced a higher number of words per utterances (p<.01). This indicates that older students produce fewer utterances but that these utterances are longer.

3.2. Second Story

The results of the analyses of variance corresponding to the stories used in class with the three age groups are presented in figure 2.

The overall results indicate that there are significant differences in the four measurements: tokens (F=29.73, p<.01), types (F=43.13, p<.01), utterances (F=17.59, p<.01) and words per utterance (F=29.71, p<.00). The lowest results correspond to the youngest group (grade 2) in the case of tokens, types and words per utterance.
When the differences between the two older groups, who received the same amount of instruction are compared we can observe that there are no significant differences when different word types are considered. Students in grade 6 produce a significantly higher number of tokens (p<.01) and utterances (p<.01) than secondary school students but the latter obtain a significantly higher mean number of words per utterance (p<.05).

3.3. Overall evaluation

The results of the One way analysis corresponding to the overall evaluation of the students' production is presented in figure 3.

The One way analyses indicate that the differences between the means are significant for pronunciation (F=8.20, p<.01), vocabulary (F=27.47, p<.01), grammar, (F=52.35, p<.01), fluency (F=41.54, p<.01) and content (F=61.84, p<.01). It can be observed that the lowest scores correspond to grade 2 for vocabulary, grammar, fluency and content and to grade 2 and secondary school students for pronunciation.

When the two groups who had the same hours of instruction are compared we can observe that grade 6 students obtain higher scores than secondary school students in pronunciation (p<.01) but secondary school students obtain higher results than grade 6 students in fluency (p<.05) and content (p<.01).
4. DISCUSSION

The results indicate that the youngest group had more difficulties to tell the two stories than the two older groups. Younger students (mean age=7.3) produced a significantly lower number of tokens and types in the two stories and their utterances are shorter than those produced by the older groups. Younger students also present lower scores in vocabulary, grammar, content and fluency but their pronunciation score is the same as the one for the secondary school students.

The differences between the two older groups are not as important. Secondary school students (mean age=14.3) produce longer utterances and the evaluation of their overall production indicates that their scores are higher for fluency and content but grade 6 students (mean age=11.3) obtained a higher grade in pronunciation and produced longer stories in the case of the story they already know.

Even though these results indicate that the youngest students obtain the lowest scores they do not necessarily provide evidence against the critical age hypothesis. The results of grade 6 students, who are also learning English before the so-called ‘critical age’, compare very well to those of older students. The differences in the results seem to be related to the following factors:

i. Grade 2 students (the youngest group) received fewer hours of instruction in the third language than the other two groups. Even though results of Canadian immersion indicate that time is not a sufficient predictor of second language proficiency (Harley, 1986; Genesee, 1987) time is an extremely important factor when the total number of hours of instruction is relatively low.
ii. The differences observed here can also be due to differences in cognitive maturity, and particularly in analytical ability, which can explain the higher syntactic development of the secondary school learners as well as their higher scores in content. It is important to take into account the age when the data were collected and the fact that there is a four year difference between the youngest group and the middle one but the oldest group is three years older than the middle one. The relative cognitive maturity of the three groups could explain the lower results of the youngest group.

iii. The differences observed can also be related to the type of input and instructional style. The more traditional approach used in secondary school can explain the use of longer utterances by the oldest group and the oral-based approach used in primary school can explain the students' results in pronunciation. The effect of the type of input has also been found in previous comparisons of early and late immersion (Harley, 1986; Harley & Hart, 1997).

Even though the results presented here do not provide definite evidence to confirm of reject the critical age hypothesis they provide information about the linguistic development of learners who started English as a third language at different ages within bilingual education. The results indicate that the early introduction of English as a third language is one possible formula to develop communicative competence in English but not necessarily the most effective one.

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73