

HOW DOES GRAMMAR EMERGE FOR CHILDREN SIMULTANEOUSLY ACQUIRING BASQUE AND SPANISH AS L1S?

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Introduction

Within the last decades there has been a debate about the grammatical system of children acquiring more than one language as their first languages. These bilingual children in the early stages of the process of acquisition tend to code-switch all the time. Therefore, two main hypotheses have arisen: the Differentiation Hypothesis (Meisel 1989, De Houwer 1995, Paradis & Genesee 1997, among others) and the Fusion Hypothesis (Leopold 1949, Volterra & Taeschner 1978, and others). The first one claims that these children have separate grammars for each of the languages they are acquiring. The second one supports the idea that a plurilingual child creates a unique grammatical system by combining the several first languages. I have studied the utterances produced by 3 year-old Basque-Spanish bilingual children who are simultaneously acquiring both languages, and I have carried out two analyses based on the typological differences between both languages. The basis of the first analysis is the postposition-preposition typological difference, whereas the second analysis highlights the difference between ergative and accusative languages. The data for the analyses have been taken from *talkbank* databank. These are transcriptions of the conversations held in school classes for a period of 4 months. The results reveal that children seem to have separate grammars for Basque and Spanish from the first stages of acquisition. In any event, this is a work in progress and I am currently analyzing more data in order to find more evidence that supports my conclusion.

1. Theoretical background

This study analyses the language uttered by bilingual children in the early stages of acquisition. Therefore, first of all it is necessary to define the type of bilingualism I am dealing with. The children in the study are 3 years old and they are in the process of simultaneously acquiring Basque and Spanish. Nowadays linguists agree that simultaneous acquisition of several languages must happen within the first five years of life. Thus, I am not dealing with the acquisition of a second language, nor with the successive acquisition of a first language. Gass & Selinker (2001: 5) define the acquisition of L2 as ‘the process of learning another language after the native language has been learned’. Therefore, I could not be dealing with the acquisi-

tion of a L2 unless the process of acquiring one of them had ended. Although these authors admit that the borders between different kinds of acquisition are somewhat arbitrary, they (2001: 100-101) delimit them like this: 0-5 years, simultaneous acquisition of L1s; 5-9 years, successive acquisition of L1; and after 9 years, acquisition of L2. Consequently, we are dealing with the simultaneous acquisition of two languages.

Once this remark has been done, and in order to understand the goal of this paper, I am going to present the different hypotheses originated as a result of the study of the early bilingualism. Children in the process of acquiring more than one language tend to produce utterances where they mix the different L1s. Consequently, one must wonder if the grammatical systems are being differentiated or not. In that respect, two main hypotheses have arisen:

- (i) On the one hand, the Differentiation Hypothesis (Meisel 1989, De Houwer 1995, Paradis & Genesee 1997, among others). These authors claim that these bilingual children have separate grammars for each of the languages they are acquiring.
- (ii) On the other hand, the Fusion Hypothesis (Leopold 1949, Volterra & Taeschner 1978, and others). The idea that a plurilingual child creates a unique grammatical system, by combining the several first languages. According to this hypothesis, the different grammatical systems will only be separated at a later stage.

The goal of this paper is to bring forward data which supports one or the other hypothesis. Lastly, we need to define Basque and Spanish in accordance with the typological universals.

For the present study I focus on two main typological differences between these two languages. First, while Spanish is a prepositional language, Basque has postpositions, both suffixal and free. The second typological difference that I analyze is that Basque is an ergative language and Spanish is an accusative language. So they have different ways of marking transitivity.

2. Goal and methodology

The object of investigation of this paper is to see how the universal language typologies are observed by Basque and Spanish L1 bilingual children. For that purpose, and taking into account the typological differences between Basque and Spanish described above, I look at utterances that present postpositions or/and prepositions, and at those utterances with a transitive structure. Depending on whether these typologies are constraining the sentences uttered by the children or not, I should be able to make predictions about the differentiation or fusion of their grammatical systems.

The data for the analysis have been taken from *talkbank* databank (March 2005). These are transcriptions of the conversations held in school classes for a period of four months. Each recording comprises a class approximate one hour long, where children carry out various activities, such as games, informal conversations, story-telling, and picture descriptions. All the children in class are Basque-Spanish bilinguals

and they are 3 years old. For the analyses I have taken into account all the interactions that happened in class, both child-to-child interactions and teacher-child interactions.

3. Analysis

3.1. First analysis: postpositions *vs.* prepositions

In the first part of this study, as I said, I analyze all the sentences that contain a postposition or/and a preposition. These are different tools to transmit the same semantic content. We can express direction, position, possession, goal, causality, etc. with a preposition in Spanish, but we must do it with a postposition in Basque, either a free morpheme or an oblique case marker. This way, if these young children have different deep structures for Basque and Spanish, then they should restrict the use of postpositions to Basque utterances and the use of prepositions to Spanish utterances. In the data, I found several pairs of sentences like those in (1) produced by the same child:^{1, 2}

- (1) a. ANA: Baina eman dau ipin-teko oinak.
 But give aux put-to feet
 'But she has given it to put your feet'.
 b. ANA: *Yo tengo un misil. Pero lo tengo para volar.*
 I have a missile. But it have.1sg to fly
 'I have a missile. But I have it to fly'.

In both (1a) and (1b) Ana is expressing the idea of goal: to put your feet and to fly. Nonetheless, she makes it through the use of an oblique case-marker in Basque *-teko*, while she is using the Spanish preposition *para* in the second sentence. This child necessarily has different tools to express the same idea, and what is more significant is that she is using them in the right linguistic context. All the examples that I found in the data agree with the typological differences of Basque and Spanish. The results of the analysis appear in 2:

(2)

	Postpositions / Case-markers	Prepositions	Typological constraints
Basque	15	0	100%
Spanish	0	6	100%

I found 15 postpositions, all of them in Basque utterances and none in sentences uttered in Spanish. I did not find any prepositions in Basque utterances, while I found 6 prepositions in Spanish utterances. It seems that typological constraints are being applied in 100% of the cases.

¹ The names of the children are the ones which appear in the databank. I have taken for granted that their parents or tutors have given permission for that, so I have used the same names.

² In the examples regular writing corresponds to Basque whereas Spanish phrases appear in italics.

Although these quantitative results seem to be conclusive to prove that speakers are constraining their utterances in different ways for Basque and Spanish, there are even further examples that make this hypothesis stronger. Let us look at an utterance in which children code-switch:

Let us look at 3:

- (3) TEACHER: Zer dauka amatxok hemen begietan?
 What have.3sg mum here eyes.the.in
 ‘What does mum have here in the eyes?’
 OTHERS: Betaurrekoak.
 ‘Glasses’.
 [...]
 IKER: Nik dekot *de bicicleta*.
 I have.1sg of bicycle
 ‘I have bicycle (glasses)’.

Here, the child has not only used a Spanish preposition instead of the Basque particle, but he has switched the whole phrase to Spanish within the Basque sentence and conversation. He could have said *de txirrindula* ‘bicycle’ in Basque, but he chose to say the Spanish word *bicicleta* instead.

The fact that children do not insert a Spanish preposition within a Basque utterance, but they are forced to change the language of the whole prepositional phrase, shows that they do not consider the possibility of a prepositional structure for Basque. On the contrary, as we have seen in (2), they do not have any problem inserting prepositions in Spanish utterances. So, as it happens with adults (Muysken 1995), these bilingual children only code-switch at a level of maximal projections.

This first analysis, then, is supporting the Differentiation Hypothesis, according to which children have two different grammatical systems.

3.2. Second analysis: ergative vs. accusative

The second analysis is going to prove if children make some kind of distinction between Basque and Spanish in transitive structures. Spanish is an accusative language (D’Introno 2001, Zagona 2002), where the subject of a transitive sentence is nominative and the direct object is accusative. These case marks have been mostly lost in the morphology of Spanish. Nowadays we can only find an accusative mark in direct object pronouns, as it happens in English, and also the personal *a* in animate direct objects. The Spanish verb, on the other hand, does not show any mark of transitivity. As for Basque, it is an ergative language, where the subject of a transitive sentence is ergative and the direct object is absolutive (Ortiz de Urbina 1989). Basque marks both constituents, with an ergative marker and with an absolutive marker for each case. Moreover, the verb shows a very rich morphology, with special marking for transitive structures. For this analysis, I looked at every transitive structure from the data. Then I looked at the way children marked the different elements of these structures. The results appear in (4):

(4)	Transitive utterances	Correctly marked	Typological constrains
Basque	20	17, 3?	100%
Spanish	9	9	100%

I found 20 transitive utterances in Basque and 9 in Spanish. All of them were correctly marked as for my analysis. So all of them were marked as expected, in the case of Basque with the ergative-absolutive marks, and in the case of Spanish with the nominative-accusative marks when there were any. Thus, again it seems that the speakers have different grammatical systems for each of the languages that they are acquiring. However, not all the utterances were completely correct. There were 3 problematic utterances. But, as I will show now, the mistakes that the children made do not have a relevant effect for the current analysis:

- (5) ARGÍÑE: Ni-k kolunpio-ak egingo *dot*.
 I-ERG swing-ABSpl will make aux.ABS3sg.ERG1sg
 'I will make swings'.

In (5) the morphology of the verb shows the transitivity of the sentence. In the auxiliary *dot* we find the morphemes of the ergative subject *-t* and of the absolutive object *d-*. The ungrammaticality of the sentence is due to the fact that although the object is plural, the verb refers to a singular object (if you look at the absolutive marks in the object *kolunpioak* and in the auxiliary *dot* you will see that).

In (6) another child commits exactly the same mistake:³

- (6) IRUNE: Jani, (ni-k) nahi *dut* artazi-ak.
 Jani, (I-ERG) want aux.ABS3sg.ERG1sg scissors.ABSpl
 'Jani, I want the scissors'.

Again, even when we have a plural object "scissors", the auxiliary alludes to a singular object. In these two examples, children are having problems with the number, but not, recognizing and expressing the transitivity of the structures. And, since that is precisely the theme of this analysis, these two mistakes do not say anything against the capacity of children to mark the ergative and absolutive cases.

A different kind of mistake is made in the utterance in 7:

- (7) ANA: Baina *hau* eroaten dau porkeria bat.
 But this bring aux.ABS3sg.ERG3sg trifle.ABS a
 'But this brings a trifle'.

In this example the subject of the transitive sentence *hau* does not have the mark for the ergative case, which is a *-k*. However, this is a common mistake that even adult people make. Basque is a subject-prodrop language, so the subject of the sentences is almost always implicit. Therefore, the verb is the element where most information about the sentence appears. As we have seen, it contains information

³ The auxiliaries are different in both examples —*dot* and *dut*— because they are different dialects.

about the subject and the object, and it also contains the tense, aspect, etc. If we look at the morphology of the auxiliary verb in (7), we do find the ergative mark from the subject.

So, (5), (6) and (7) do not contradict the fact that children are marking transitivity in Basque as it is expected. (5) and (6) because they present a plural marking error, and (7) because marked subjects are a problem even for adults, and because they are expressing the transitivity in the auxiliary.

Some examples that strengthen the belief that children are dealing with different grammatical systems are those in (8) and (9):

- | | |
|---|----------------------------------|
| (8) ANA: Es que da <i>una moto</i> eta... | (9) ANA: Da <i>motobomba</i> eh! |
| But is a motorbike and | Is fire engine eh |
| ‘But it is a motorbike and...’ | ‘It is a fire engine eh!’ |

The speaker in (8) and (9) begins the utterances in Basque, and then she switches to Spanish. All the examples of code-switch between the subject phrase and the VP that I found, occur when the verb is intransitive. This is the only case when Basque subject does not require ergative marking. That is, in an utterance with a transitive verb in Basque, we never find a Spanish subject. This proves that speakers do not deal with the possibility of a Spanish DP with an ergative marker.

Again, the results of the second analysis are against the Fusion Hypothesis. Children do not seem to constrain Basque and Spanish utterances in the same way, but rather it seems quite clear that they have different constraints for each language.

4. Conclusion

To conclude, it is difficult to think that the utterances that I analyzed have been randomly produced, or that they are the product of a fusion of grammars. Two typologically different languages —Basque and Spanish— have been chosen for the analysis. Nevertheless, 100% of the data show that the utterances are being constrained by either the Basque grammar or the Spanish grammar in each case. This supports the Differentiation Hypothesis.

Furthermore, this study makes an important prediction: that parameters are already fixed in the first years of life. If children notice typological differences in the early acquisition, it is very probable that all the parameters are fixed at this point.

The study has also its weak points. The source of data has only enabled me to deal with production data. The presence of the children would have given me the option to attend to gestures, phonetics, and even to make some tests to reveal the speakers competence.

In any event, as I said at the beginning, this is a work in progress. I am currently analyzing more data, in order to find more evidence that supports my conclusion.

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