

Clitic-Climbing in Child Spanish and the Theory of Parameters

Miguel Rodríguez Mondoñedo¹, William Snyder¹, and Koji Sugisaki²

¹University of Connecticut and ²Mie University

1. Introduction

One of the parametric differences that have been of central interest in the comparative syntax of Romance languages is the possibility of *clitic-climbing*. As illustrated in (1), Spanish permits the pronoun *lo* ‘it’ to appear as a clitic either (i) on the infinitival verb by which it is selected or (ii) on the matrix verb. The latter option is known as the phenomenon of clitic-climbing. French, in contrast, does not allow this option, as exemplified in (2).

(1) Spanish:

- | | | | |
|---------------------|--------------|---------|---------------------|
| a. non-climbing: | Quiero | ver+lo. | |
| | want-1Sg | see+MSg | ‘I want to see it.’ |
| b. clitic-climbing: | Lo quiero | ver. | |
| | MSg want-1sg | see | |

(2) French:

- | | | | |
|---------------------|---------|------------|---------------------|
| a. non-climbing: | Je veux | le voir. | |
| | I want | MSg see | ‘I want to see it.’ |
| b. clitic-climbing: | * Je le | veux voir. | |
| | I MSg | want see | |

In this study, we show that Spanish-learning children use clitic-climbing from the earliest stages, and that they never go through a period in which they avoid clitic-climbing by relying solely on non-climbing forms. Our results provide support for Kayne’s (1989) parametric proposal that the possibility of clitic-climbing is closely tied to the null-subject parameter, which acquisition studies have independently shown to be set very early (e.g. Bloom 1990, Hyams 2001, Wexler 1998).

2. Kayne’s (1989) Parametric Proposal

Given the intriguing contrast between Spanish and French illustrated above, a number of syntactic studies have addressed the issue of what parameter is responsible for this difference between these closely-related languages.

Kayne (1989) proposed that the cross-linguistic variation in clitic-climbing is tightly connected to another notable difference between Spanish and French: the possibility of null-subjects. Spanish permits null subjects by taking the positive value of the null-subject parameter, as shown in (3). In contrast, French takes the negative setting and disallows null

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- (7) a. See window.
b. Want more apple. (Hyams 1986:63)

The seminal work by Hyams (1986) proposed a grammar-based parametric account for this phenomenon. Based on the observation that the availability of null-subject sentences is a distinctive property of adult Italian and Spanish, Hyams suggested that subject omission in the child's speech follows from the early non-adult-like setting of the null-subject parameter.

Yet, this parametric account of null subjects ran up against a number of empirical challenges (see e.g. Bloom 1990 and Valian 1991). A compelling argument against this analysis came from the distribution of null subjects in child language. As summarized in Hyams (2001:36), various studies have shown that in a number of non-null-subject languages, there is a strong contingency between the omission of subjects and the expression of finiteness on the verb: In these languages, the use of null subjects is largely contingent on the use of non-finite main verbs. Since finite clauses permit null subjects in adult Italian and Spanish, this observation is directly at odds with the parametric account.

In light of these findings, Wexler (1996, 1998) argues that the majority of early null-subjects are PRO licensed by matrix infinitives, and hence that the null-subject parameter is not mis-set by children. More generally, he proposed the hypothesis of *Very Early Parameter-Setting* (VEPS):

- (8) *Very Early Parameter-Setting* (Wexler 1998:25):

Basic parameters are set correctly at the earliest observable stages, that is, at least from the time that the child enters the two-word stage, around 18 months of age.

According to Wexler (1998:29), 'basic parameters' include at least the following:

- (9) a. Word order, e.g. VO versus OV (e.g. Swedish versus German)
b. V to I or not (e.g. French versus English)
c. V2 or not (e.g. German versus French or English)
d. Null subject or not (e.g. Italian versus English or French)

4. Prediction for the Acquisition of Spanish

Under Kayne's (1989) parametric system, the availability of clitic-climbing follows from the positive setting of the null-subject parameter. As for child language, Wexler (1996, 1998) argues that the null-subject parameter is set correctly from the earliest observable stages. If both of these claims are correct, then the essential prerequisite for clitic-climbing is available to children from very early and hence we make the following prediction.

- (10) Prediction for Acquisition:
a. Spanish-learning children will begin to use clitic-climbing as soon as they acquire other relevant knowledge (specifically, clitics and infinitival complements).

- b. In other words, they will never go through a stage in which the non-climbing option (as in (1a)) is consistently chosen over clitic-climbing (as in (1b)).

5. Transcript Analysis

In order to evaluate the acquisitional prediction in (10), we selected five longitudinal corpora for Spanish from the CHILDES database (MacWhinney 2000), which provide a total sample of more than 23,000 lines of child speech. The corpora we analyzed are summarized in (11).

(11) Corpora Analyzed

<i>Child</i>	<i>Age</i>	<i># of child utterances</i>	<i>Collected by</i>
Juan	2;8 – 4;8	2,520	Linanza
Koki	1;7– 2;11	4,303	Montes (Montes 1987, 1992)
María	2;0 – 3;10	7,706	Ornat (López Ornat 1994)
Eduard	1;4 – 3;10	1,560	Serra
Emilio	2;5 – 4;6	7,129	Vila

The results are summarized in (12). We take the age of acquisition for a construction to be “the age of first clear use, followed soon after by additional uses” (Stromswold 1996, Snyder & Stromswold 1997). One child (Eduard) produced only clitic-climbing forms by the end of his corpus. The remaining four children showed uses of both non-climbing and clitic-climbing forms. Among these four, two children (Koki and Emilio) produced the non-climbing option first, and the other two children (Juan and María) produced the clitic-climbing form first. The former type of children is potentially problematic for the prediction in (10), which maintains that Spanish-learning children should never acquire the non-climbing option significantly earlier than clitic-climbing.

In order to determine whether the observed age differences between the acquisition of the non-climbing form and the acquisition of clitic-climbing is statistically significant in the development of these two children, we counted the number of clear uses of non-climbing forms before the first clear use of clitic-climbing. We next calculated the relative frequency of the two constructions in the child’s own speech, starting with the transcript after the first clear use of clitic-climbing, and continuing through the end of the corpus. We then used a Binomial Test to obtain the probability of sampling the observed number of tokens of the non-climbing construction simply by chance, before the first use of the clitic-climbing construction, under the null hypothesis that both became available concurrently and had the same relative probability of use as in later transcripts (Stromswold 1996, Snyder & Stromswold 1997).

The results of the statistical analysis have shown that the age-discrepancy did not reach significance ($p > .10$ by Binomial Test). Thus, our results have borne out the prediction in (10): We found no child who acquired non-climbing form significantly earlier than clitic-climbing.

(12) Acquisitional Findings:

<i>Child</i>	<i>Ages of First Clear Use</i>		<i>p =</i>
	<i>non-climbing</i>	<i>clitic-climbing</i>	
Koki	1;7	2;1	$p > .10$
Emilio	2;5	2;8	$p > .10$
Juan	3;9	2;8	N/A
María	2;1	2;0	N/A
Eduard	Not attested	3;10	

6. Conclusion

Even though the results are still preliminary, in that the number of children investigated is relatively small, our findings provide acquisitional support for Kayne's (1989) parametric proposal that the possibility of clitic-climbing follows directly from the positive setting of the null-subject parameter. The findings also support Wexler's (1996, 1998) claim that this constitutes one of the early-set parameters. A broader implication of this study is that the time course of child language acquisition provides an important testing ground for parametric proposals (Snyder 2001, Snyder & Stromwold 1997, Sugisaki 2003).

Appendix: First Clear Uses

- (13) Koki
- a. non-climbing (1;7):
no puede cerrar+lo
not can close+it-3pMSg-CL 'I cannot close it.'
- b. clitic-climbing (2;1):
me voy a hacer popó
1pSg-CL go to make poo poo 'I'm going to make poo poo.'
- (14) Emilio
- a. non-climbing (2;5):
voy a poner+la aquí
go to put+3pFSg-CL here 'I'm going to put it here.'
- b. clitic-climbing (2;8):
hoy no me puedo levantar
today not 1pSg-CL can stand up 'I cannot stand up today.'
- (15) Juan
- a. clitic-climbing (2;8):
te tiene que bajar
1pSg-CL has to put down 'He has to put you down.'
- b. non-climbing (3;9):
todos a coger+la
everybody to catch+3pFSg-CL 'Everybody go to catch it.'

- (16) María
- a. clitic-climbing (2;0):
 me vas a comprar unos?
 1pSg go to buy ones ‘Are you going to buy me some ones?’
- b. non-climbing (2;1)
 vamos a guardar+los
 go to lock+3pMPI-CL ‘Let’s lock them.’
- (17) Eduardo
- a. clitic-climbing (3;10):
 la voy a poner
 3pFSg go to put ‘I’m going to put it.’
- b. non-climbing: not attested

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