

**Luigi Rizzi- Acq2**

**The Acquisition of Syntax as Parameter setting: Early subject omission.**

**0. Background: The Principles and Parameters Framework**

Principles and Parameters framework (Chomsky 1981):

UNIVERSAL GRAMMAR (UG): a system of principles and parameters.

PARTICULAR GRAMMAR: UG with a particular set of parametric values.

THE ACQUISITION OF SYNTAX: parameter setting.

**0.1. An illustrative case: The head complement parameter.**

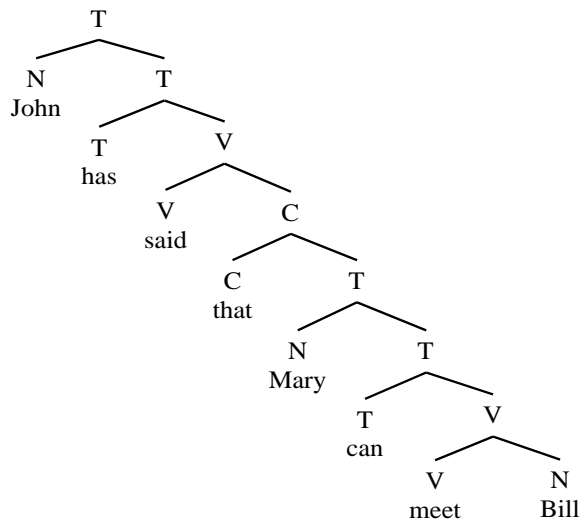
(1) John has said [ that Mary can meet Bill ]

(2) John-wa [Mary-ga Bill-ni a - eru- to ] itte-aru

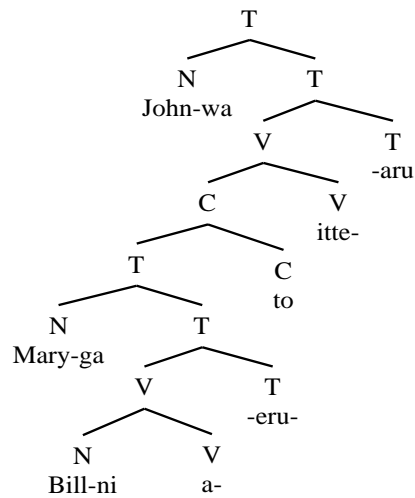
‘John-Top [Mary-Nom Bill-Dat meet-can- that ] said-has

(3) Head-complement parameter: The head precedes/follows the complement

(1)



(2)



NB: Most languages are either consistently head-initial (Prepositional, VO, Aux V, C initial, ... or consistently head final (Postpositional, OV, V Aux, C final, but a minority of languages can be mixed (German, Dutch). The universal tendency to harmony was originally observed by Greenberg (1963).

### 0.1. An illustrative case: the Null Subject Parameter

- (6) a Io parlo italiano                      a' \_\_\_ parlo italiano  
b Eu vorbesc italiana.                    b' \_\_\_ vorbesc italiana.  
c Je parle l'italien                        c' \* \_\_\_ parle l'italien  
d I speak Italian                         d' \* \_\_\_ speak Italian
- (7) a \_\_\_ piove  
b \_\_\_ plouă.  
c Il pleut  
d It is raining
- (8) a Gianni ha telefonato                a' \_\_\_ ha telefonato Gianni  
b Ion a telefonat.                         b' \_\_\_ a telefonat Ion  
c Jean a téléphoné                        c'\* \_\_\_ a téléphoné Jean  
d John telephoned                         d'\* \_\_\_ telephoned John
- (9) a Chi credi che \_\_\_ verrà?  
b Cine crezi că \_\_\_ va veni?  
c \* Qui crois-tu que \_\_\_ viendra?  
d \* Who do you think that \_\_\_ will come ?
- (10) It.: parl-o, parl-i, parl-a, parl-iamo, parl-ate, parl-ano  
Rum.: vorb-esc, vorb-ești, vorb-ește, vorb-im, vorb-iți, vorb-esc  
Fr.: /parl/, /parl-õ/, /parl-é/  
Ing.: speak, speak-s

(11) The Null Subject Parameter : is pro licensed by Agr? {yes, no}

In the early days of the parametric approach, a systematic attempt was made to reduce this pattern to a single irreducible difference, the fixation of the NSParameter interacting with the general structure of Universal Grammar.

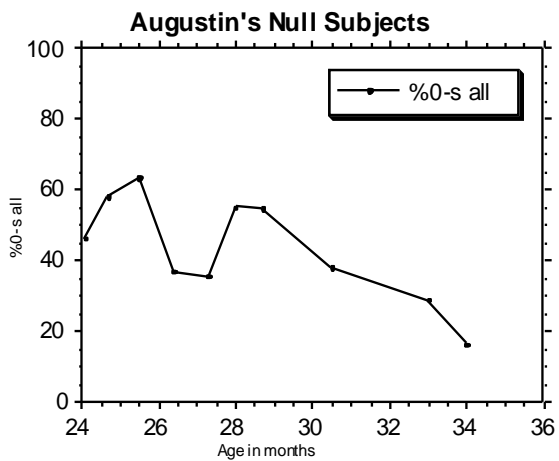
### 1. Subject omission in the early phases of the acquisition of a non-NSL

- (21) English (Brown 1973)  
a \_\_\_ was a green one                    (Eve, 1;10)  
b \_\_\_ falled in the briefcase (Eve 1;10)
- (22) French (Hamann, Rizzi, Frauenfelder 1996)  
\_\_\_ a tout tout tout mangé            (Augustin 2,0)  
' \_\_\_ has all all all eaten'
- (23) Danish (Hamann & Plunkett 1997)  
\_\_\_er ikke synd                            (Jens 2,1)  
' \_\_\_ is not a pity'

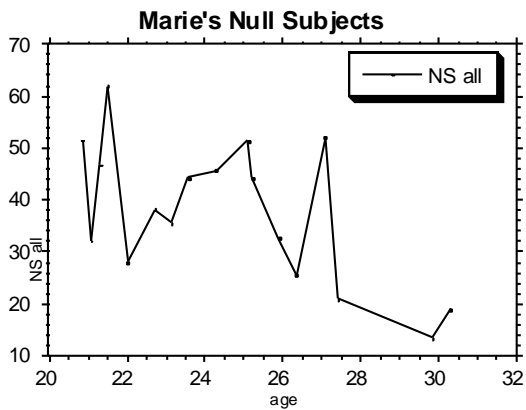
(24) Hamann, Rizzi & Frauenfelder (1995): Early Null Subjects in French (Augustin)

Age	V utt	NS	%
2;0;2	49	23	46.9
2;0;23	23	14	60.8
2;1;15	15	7	46.6
2;2;13	44	16	36.3
2;3;10	33	10	30.3
2;4;1	53	29	54.7
2;4;22	46	22	47.8
2;6;16	100	37	37.0
2;9;2	141	35	24.8
2;9;30	133	19	14.2

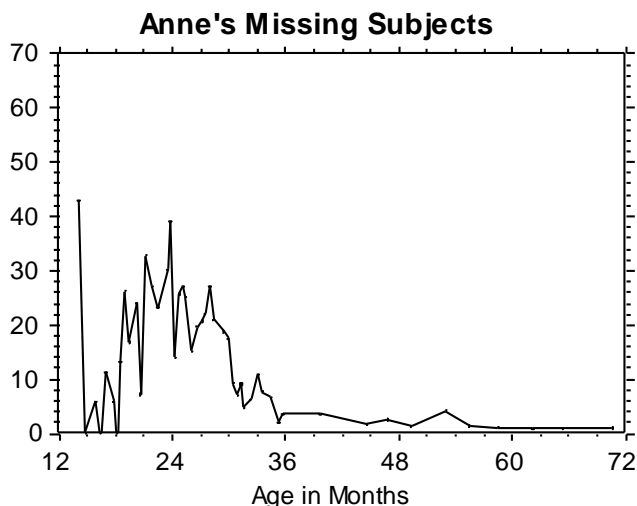
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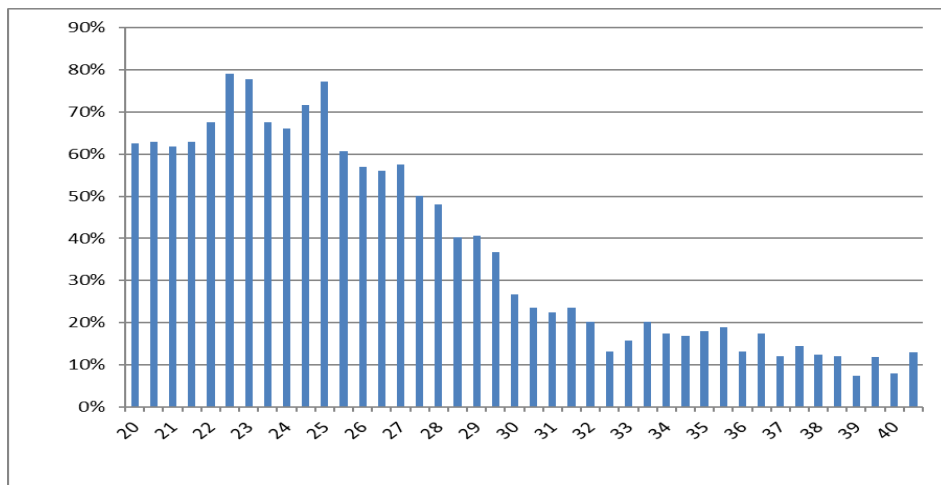


(27)



(Danish, data from Hamann & Plunkett 1998)

(28)



De Lisser, Durrleman, Shlonsky, Rizzi (2016) The acquisition of Jamaican Creole : The null subject phenomenon, in *Language Acquisition* : Six Jamaican Creole monolingual children, located at the most basilectal end of the continuum, were recorded for a period of over one year. 60 minutes recordings were done every 10 days for the first five months and every 15 days thereafter.

- (a) \_\_\_ iit aiskriim (COL 1;11)  
(1sg) eat ice-cream  
'(I) ate ice-cream.'

(b) \_\_\_ jraiv i tu (RJU 2;01)  
(2sg) drive 3sg too  
'(You) drove it also.'

(c) \_\_\_ fit mi fingga (SHU 2;03)  
(3sg) fit 1sg finger  
'(It) fits my finger.'

### 3. Mis-setting of the Null Subject Parameter?

(29) Subject omission is selective: Subject / Object asymmetry (Bloom 1990)

	Adam (2;3-2;7)	Eve (1;6-1;10)	Sarah (2;3-2;7)	Total
Subjects	57%	61%	43%	55%
Objects	8%	7%	15%	9%

(31) Hyams (1986):

- I. Early Null Subject is a grammatical phenomenon.
- II. It results from the mis-setting of the Null Subject Parameter

### 4. How early are parameters fixed?

#### 4.1. Head-complement

(32) When the child starts to produce syntactically relevant expressions (at least two words), s/he conforms to the headedness parameter: children acquiring French, English, etc. typically produce VO structures: children acquiring Japanese, Korean etc. typically produce OV structures. (as in work by B. Lust, Mazuka, etc.).




Could it be that the child simply reproduces what she hears?

Franck, Millotte, Posada, Rizzi (2013), Applied Psycholinguistics, argue that the child at 19 months already has abstract knowledge of headedness properties. Children acquiring French heard sentences with invented verbs, sometimes in the DP V DP order, sometimes in the DP DP V order:

- (33)
- a. Le lion poune le cheval  
'The lion pounes the horse'
  
  - b. L'âne le chien dase  
'The donkey the dog dases'

Children were simultaneously shown two videos, one with a transitive action and one with an intransitive or reflexive action.

(34)

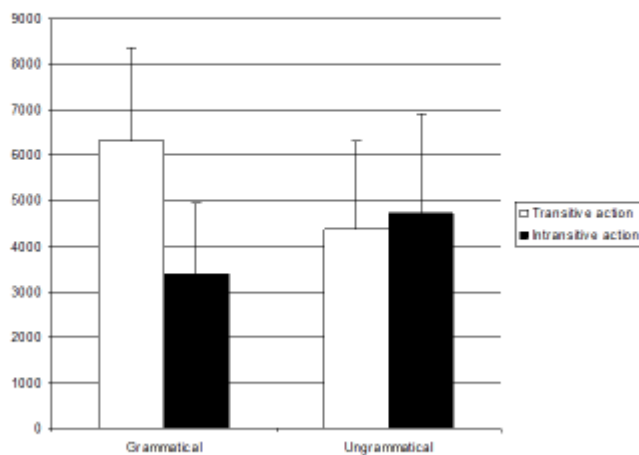
Condition	Audio sentence	Video 1 Transitive action	Video 2 Intransitive action
NVN	Le lion pousse le cheval  <i>The lion is pushing the horse</i>		
NNV	L'âne le chien dase  <i>The donkey the dog is dasing</i>		

When they heard (33)a, children looked significantly more at the transitive video, whereas when they heard (33)b. they looked at both videos, without a definite preference.

(35)

## Results

J. Franck, S. Millotte, A. Posada, L. Rizzi (2009) Abstract knowledge of word order by 19 months: An eye-tracking study.



This suggests that they interpreted a. as a transitive sentence, in spite of the fact that they had never heard that verb, while they didn't assign any interpretation to b. This shows that the child at 19 months already has abstract knowledge that her language is VO, not OV, and uses that knowledge to interpret novel verbs.

This kind of evidence argues against item-based approaches (also called constructivist approaches: Tomasello 2000, etc), according to which at this age the child only memorizes individual items and their syntactic frames, without any abstract grammatical generalization.

(36) Gavarró; Anna, Leela; Maya, Rizzi; Luigi & Franck; Julie (2015). Knowledge of the OV parameter setting at 19 months: Evidence from Hindi-Urdu. *Lingua*, 154, 27-34:  
Children acquiring Hindi-Urdu looked more at the transitive video when they heard a sentence with order DP DP V (the grammatical transitive order in the language), then when they heard an ungrammatical sequence.

#### 4.2. V to T

- (37)a Michel dort  
,Michel sleeps‘
- b Michel dort pas  
,Michel sleeps not‘
- c Michel dormir  
,Michel sleep-INF
- d Michel pas dormir  
,Michel not sleep-INF’

(38) V to T movement in Child French (3 children, 1;8 - 2;3), Pierce (1992)

	+FIN	-FIN
V-pas	185	2
pas-V	11	77

- (39) Stromswald (1990): children acquiring English never try to raise V to T, i.e., we find
- a I don't eat / I not eat
- b \*I eat not

### 4.3. T to C

(40)a Thorsten Ball haben (Andreas, 2;1)  
'Thorsten ball have'

b Ich hab tein Bürste  
,I have a small brush'

c Eine Fase hab ich  
,A vase have I'

(41) T to C movement in Child German (1 child, 2;1), Poeppel & Wexler (1993)

	+FIN	-FIN
V-2	197	6
V final	11	37

### 4.4. Parameters connected to cliticisation

(42) Clitic positions:            \_\_\_V+I            Il le voit

(43) Non-clitic positions:

a. V (adv) ___	*Il dit (toujours) le	Il dit (toujours) ça
b. P___	*Il parle de le	Il parle de ça
c. LD	*Le, je le connais	Ca, c'est beau
d. RD	*Je le connais, le	C'est beau, ça
e. Isolation	Qu'as tu vu? *le	ça

(44) Hamann, Rizzi & Frauenfelder (1995): Augustin (2;0-2;9) 281 occurrences of unambiguous clitic forms (*je, tu il, on ils, ce, me, te, se, le, les, y, en*) all in clitic position (42); 129 occurrences of *ça* in all contexts of (42).

(45) Two parameters are plausibly involved in clitic constructions

- The very existence of clitics in the language (English vs Romance)
- The clitic host: the inflected verb in Romance, any lexical category in Celtic, etc.

(46) Hamann, Rizzi, Frauenfelder (1996): in the period (2;0;2 – 2;4;33), Augustin produces only 2 complement clitics and 74 subject clitics. Subject clitics appear to be productive from the early files; object clitics are still rare at 2;6;16 (2 object clitics vs 25 subject clitics) and seem fully productive only around 2;9.