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

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  
   b Eu vorbesc italiana.  
   c Je parle l’italien  
   d I speak Italian

 a’ ___ parlo italiano  
 b’ ___ vorbesc italiana.  
 c’ * ___ parle l’italien  
 d’ * ___ speak Italian

(7) a ___ piove  
   b ___ plouă.  
   c Il pleut  
   d It is raining

 a’ ___ ha telefonato Gianni  
 b’ ___ a telefonat Ion  
 c’* ___ a téléphoné Jean  
 d’* ___ telephoned John

(8) 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-este, vorb-im, vorb-îți, vorb-esc  
     Fr.: /parl/, /parl-o/, /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’

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

(25)

(26)
De Lisser, Durrelman, 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) ___ jrai v 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)

<table>
<thead>
<tr>
<th></th>
<th>Adam (2;3-2;7)</th>
<th>Eve (1;6-1;10)</th>
<th>Sarah (2;3-2;7)</th>
<th>Total</th>
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</thead>
<tbody>
<tr>
<td>Subjects</td>
<td>57%</td>
<td>61%</td>
<td>43%</td>
<td>55%</td>
</tr>
<tr>
<td>Objects</td>
<td>8%</td>
<td>7%</td>
<td>15%</td>
<td>9%</td>
</tr>
</tbody>
</table>

(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.
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.

### Results

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 dein Bürse  
‘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)

<table>
<thead>
<tr>
<th></th>
<th>FIN</th>
<th>-FIN</th>
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<tbody>
<tr>
<td>V-2</td>
<td>197</td>
<td>6</td>
</tr>
<tr>
<td>V final</td>
<td>11</td>
<td>37</td>
</tr>
</tbody>
</table>

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?  *Je 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.