# THE PRODUCTION AND THE ACQUISITION OF SUBJECT AND OBJECT RELATIVE CLAUSES IN ITALIAN: A COMPARATIVE EXPERIMENTAL STUDY<sup>\*</sup>

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#### 1. Introduction

The present study investigates the production and the acquisition of subject and object restrictive relative clauses (SRCs and ORCs) in Italian. The elicited production of a group of school-age Italian speaking children is compared to the elicited production of a group of Italian speaking adults. The comparison between child production and adult production gives the chance to throw light on the peculiar properties of the acquisition of RCs and to define the variation area between the two systems: what in the child production is consistent with the target language and what is not.

The theoretical background is the well-known Principles & Parameter model elaborated by Chomsky (1981). According to this approach, the child acquires the particular grammar of the language he/she is exposed to through the experience and the innate linguistic principles (UG) which drive him/her in the L1 acquisition.

The idea I defend in this paper and the data seem to confirm, is that early grammar is a UG-constrained system: at every stage in the acquisition it is consistent with UG principles.

With this idea in mind, the proposal to be developed in the present work assumes that early relative clauses are derived exactly as in the adult grammar, that is by the movement of the DP relative head (see section 11).

As I mentioned before, this paper focuses on the production and the acquisition of Italian subject and object restrictive RCs introduced by the complementizer *che*, an element that is equivalent to English *that* and that can be used to introduce both relative and subordinate clauses.

<sup>&</sup>lt;sup>\*</sup>The facts discussed in this paper constitute the core of my MA thesis (Utzeri 2007, submitted) and were presented at the "Connecticut-Nanzan-Siena Joint Workshop on Linguistic Theory and Language Acquisition," held at the University of Nanzan in February 2007. I would like to thank Prof. Adriana Belletti and Prof. Luigi Rizzi for giving me the chance to participate to that workshop. In addition, I would like to express my gratitude to everyone who made this fruitful event possible.

The standard strategy to form RCs in Italian consists in the extraction of the constituent we want to relativize and in its movement from the embedded position to the highest node of the syntactic tree, the CP node.

Intuitively, SRCs and ORCs differ from one another in the position from which the constituent has moved. Actually, SRCs are derived by movement from the embedded subject position, as in (1), while ORCs are the result of a movement from the embedded object position, as in (2):

- Il ragazzo<sub>i</sub> [ che t<sub>i</sub> ha invitato Maria] The guy<sub>i</sub> [ that t<sub>i</sub> has invited Mary]
- (2) Il ragazzo<sub>i</sub> [ che Maria ha invitato t<sub>i</sub>] The guy<sub>i</sub> [ that Mary has invited t<sub>i</sub>]

Note that in both cases the moved element leaves behind in its original position a trace. The question which arises is: Which is exactly the element that moves? Of course, there is more than one plausible answer to this question.

I will consider here the main theories that animate the discussion on the syntax of relatives, which is an issue that continues to be at the centre of the debate among researchers. What the analysis of relatives containing a gap have in common is the presence of an element that raises.<sup>1</sup> There are different hypotheses on the nature of this element.

A proposal which has found large support is the idea that takes the movement in RCs to be a movement of a relative operator<sup>2</sup> (Cinque 1978, 1981-1982; Chomsky 1986, 1995). In particular, it moves from its original embedded position to the Spec/CP position, where it is coindexed with the relative head.

The SRC in (3) and the ORC in (4) are derived according to this theory:

<sup>&</sup>lt;sup>1</sup> For this reason this kind of analysis is called "a raising."

 $<sup>^{2}</sup>$  In the case of that-relatives the operator is assumed to be empty. On the contrary, it is visible in relatives introduced by a relative pronoun, as in (i):

<sup>(</sup>i)  $[_{DP} II \ [_{NP} ragazzo_i \ [_{CP} al quale_i C \ [_{IP} Maria ha dato un libro t_i ].$  $[_{DP} The [_{NP} guy_i \ [_{CP} to whom_i C \ [_{IP} Mary has given a book t_i ].$ 



(4)  $\begin{bmatrix} DP & II \end{bmatrix} \begin{bmatrix} NP & ragazzo_i \end{bmatrix} \begin{bmatrix} CP & OP_i & che \end{bmatrix} \begin{bmatrix} IP & Maria & ha & invitato & t_i \end{bmatrix} \begin{bmatrix} DP & The \end{bmatrix} \begin{bmatrix} NP & guy_i \end{bmatrix} \begin{bmatrix} CP & OP_i & that \end{bmatrix} \begin{bmatrix} IP & Mary & has & invited & t_i \end{bmatrix}$ 



According to other analyses (Vergnaud 1985; Kayne 1994; Bianchi 1995; Guasti & Shlonsky 1995) the element which raises from within the embedded clause to the CP left periphery area is the head of the relative itself, as the trees in (5) and (6) show:



(6)  $[_{DP} II \quad [_{CP} [_{NP} ragazzo_i] che \quad [_{IP} Maria ha invitato [t_i]]] \\ [_{DP} The \quad [_{CP} [_{NP} guy_i] \quad that \quad [_{IP} Mary has invited \quad [t_i]]]$ 



Within the family of the raising approaches to relative clauses, the most familiar is probably Vergnaud (1985) *Head-Raising Analysis*, according to which the relative head (ragazzo (guy) in (5) and (6))) is moved from the  $\theta$ -position to Spec/CP.<sup>3</sup>

In this paper, I will adopt the basic insight of the raising analysis (Vergnaud 1985; Kayne 1994; Bianchi 1995; Guasti & Shlonsky 1995), slightly modifying the portion of the NP

<sup>&</sup>lt;sup>3</sup> Within this theoretical framework, Bianchi's (1999) proposal emerges for analysing the raised head as a DP instead of a NP, by assuming the occurrence of a relative DP phonetically not realized.

which raises. In particular, the analysis I will propose is based on the combination of the raising approach (Vergnaud 1985; Kayne 1994; Bianchi 1995; Guasti & Shlonsky 1995) and other theoretical assumptions (Belletti 2005). The syntactic derivation for restrictive RCs I adopt is presented and described in detail in section 11.<sup>4</sup>

# 2. The Experimental Study

# 2.1. Aim of the Research

The main aim of this study is to assess the ability of Italian-speaking children to produce subject and object restrictive relative clauses.

In order to do that, a group of Italian-speaking children and a control group of adults were tested in two structured elicitation tasks. Children and adults participated to a Preference Task and a Picture Description Task both testing the production of subject and object RCs.

The starting point of this work is Novogrodsky & Friedmann's (2006)<sup>5</sup> experimental study on the production of SRCs and ORCs in a group of SLI Hebrew-speaking children, aged 9;3-14;6, and one of typically developing children, aged 7;6-11;0. The results of both tasks indicated that the SLI children have a deficit in the production of ORCs, while the children in the control group produce both subject and object RCs without difficulty. These facts lead N&F to interpret the avoidance of ORCs as a sign of a linguistic deficit.

In this study I extended to Italian the same elicited production experimental paradigm used by N&F (2006).

On the basis of their findings, I expected both Italian children and adults to show no difficulty in the production of SRCs and ORCs as well.

But, as we will see, the results do show the opposite: both children and adults avoid object relativization. Quite surprisingly, children produced more ORCs than adults.

However, both groups have no problem to form RCs on the subject. Indeed, SRCs are used also when not targeted (see section 3 for the results).

Before describing the participants, I would like the reader to notice that the present experimental study is based on two different types of comparison. The former looks inside the same language, comparing Italian child production and Italian adult production. The latter analyses the differences among the early production of different languages, representing an

<sup>&</sup>lt;sup>4</sup> The syntax of relative clauses constitutes an extremely intriguing domain. Anyway, in this paper the question concerning the debate among different theoretical approaches to relative clauses formation goes beyond the scope of this study. In this paper I will present the analysis I adopt, without describing in detail all the other approaches.

<sup>&</sup>lt;sup>5</sup> Hence so forth, for simplicity, N&F (2006).

original way to the comparative crosslinguistic research and offering the possibility to assess the role of UG in L1 acquisition.

In particular, as we will see, the comparison between child production and adult production is a fruitful tool in order to define the variation area between early grammar and adult language.

#### 2.2. Participants

In this study the participants were 41 Italian-speaking children attending the primary school (aged 6-11). All the children interviewed are included in the experimental group, with the exception of a 6-year child who was excluded because she did not produce any relevant sentences, probably because of her shyness.

The control group was composed by 30 Italian-speaking adults (age 15-73). Since all the adults produced the same pattern of restrictive relatives, it was not necessary to further divide the control group into subgroups. It's important to say that the participants in the control group belonged to a very different socio-economic background. In particular, the level of education widely varied from a subject to another one.

Last, but not least, the participants came from different geographical areas of Italy. That means they spoke different varieties of Italian.<sup>6</sup>

#### 2.3. Procedure and Materials

Each of the participants was tested in a quiet room. No time limit was imposed during testing, and no response-contingent feedback was given by the experimenter. All the responses of the participants were recorded in a digital tape and then transcribed from the recording.

Subject and object restrictive RCs were elicited using two tasks: a Preference Task and a Picture Description Task.

The material used for the Picture Description Task was originally designed and used by Novogrodsky & Friedmann (2006).

# 2.3.1. Preference Task

In the preference task the experimenter presented two options and asked the participants to choose which one they preferred. There were 12 questions per participant, 6 eliciting SRCs and 6 eliciting ORCs.

<sup>&</sup>lt;sup>6</sup> I would like to point out that, since the control participants spoke different varieties of Italian, I take the experimental results to be representative of the (elicited) production of Italian adult speakers in general. Furthermore, the adult subjects all produced the same pattern of relative clauses.

The questions eliciting SRCs described two children (two boys for a male participant, two girls for a female participant) performing two different actions, as shown in Figure 2.



Figure 1.

Elicitation of a subject relative:

Ci sono due bambine. Una bambina sta leggendo una storia, l' altra bambina sta ascoltando una storia. Quale bambina preferiresti essere? Inizia con "( Preferirei essere) la bambina che...

'There are two children. One child is reading a story, the other child is listening to a story. Which child would you rather be? Start with "( I would rather be) the child that...'

Target answer SRC:IIbambinoche sta leggendo una storiaThe childthat is reading a story

The questions eliciting ORCs described two children who are the themes of the same action performed by different figures, as shown in Figure 2.



Figure 2.

Elicitation of an object relative:

Ci sono due bambine. La mamma sta baciando una bambina, il nonno sta baciando un' altra bambina. Quale bambina preferiresti essere? Inizia con "( Preferirei essere) la bambina che...

'There are two children. The mother is kissing one child, the grandfather is kissing another child. Which child would you rather be? Start with "( I would rather be) the child that...'

Target answer ORC:La bambina che la mamma sta baciandoThe childthat the mother is kissing

# **2.3.2. Picture Description Task**

In the picture description task the experimenter presented picture pairs and described them using simple sentences. Then the participant was asked about one of the figures and its role in each of the pictures, as shown in Figure 3.

Elicitation procedure: Ci sono un gatto e un cane. In un' immagine il gatto sta mordendo il cane, nell' altra immagine il cane sta mordendo il gatto. Che gatto è questo (indicando il gatto in un' immagine)? Inizia con "Questo è il gatto che...". E adesso, che gatto è questo (indicando il gatto nell' altra immagine).



'There are a cat and a dog. In one picture the cat is biting the dog, in the other picture the dog is biting the cat. Which cat is this (pointing to the cat in one picture)? Start with "This is the cat that..."And now, which cat is this (pointing to the girl in the other picture)?'
Target answer SRC: Questo è il gatto che sta mordendo il cane This is the cat that is biting the dog
Target answer ORC: Questo è il gatto che il cane sta mordendo This is the cat that the dog is biting

There were 13 picture pairs that elicited 13 SRCs and 13 ORCs. The order of the subject and object relatives was randomized between the pictures.

Responses were analyzed for total number on target (subject relative for a subject relative for an object relative target).

Recall that in standard Italian the only one strategy to form subject and object RCs is leaving a gap, as we have seen in section 1.

Anyway, I also counted the ORCs with a resumptive pronoun and the ORCs with a resumptive DP as target responses. Actually, although resumption is not allowed as a relativization strategy in standard Italian, it is crosslinguistically attested in child production (Pérez-Leroux, 1995). Furthermore, as we will see in section ..., ORCs with resumptive pronouns and ORCs with resumptive DPs are observable in other adult languages.

# 3. Results

First of all, what we can observe from the experimental data is that both children and adults avoided producing ORCs. The figures 5. and 6. respectively show adults' and children's production of ORCs respectively.



Figure 4. Adults' production of ORCs



Figure 5. Children's production of ORCs

Anyway, a significant difference was observed between child production and adult production. Indeed, while children produced 22% of the elicited ORCs (144/649), adults produced less than 1% of the elicited ORCs (3/440).

Unlike ORCs, both children and adults had no problem to form RCs on the subject. The results indicate that the number of SRCs produced is higher than the number of elicited SRCs in both groups on both tasks. As a matter of fact, in most of the cases SRCs were produced instead of ORCs.





Figure 6. SRCs and ORCs produced by adults

Figure 7. SRCs and ORCs produced by children

In other words, what the data show is that both children and adult tended to turn ORCs into SRCs. In section 5., the relativization strategies adopted by each group will be analyzed in detail.

Generally, SRCs were produced not only when targeted, but also when ORCs were targeted. In contrast, ORCs were seldom used when targeted (less than 1% in adults' production, 21% in children's production) and hardly ever used when SRCs were targeted (adults:0%; children: 1%).

In addition, a small percentage (9%) of children's ORCs were actually indirect object relative clauses (IORCs), produced instead of SRCs (0,5%) and ORCs (1,5%).



Figure 8. Adults' response types



Figure 9. Children's response types

## 4. Data Analysis

Surprisingly enough, adults produced only 3 ORCs out of 440 elicited. Two of them show a resumptive pronoun ((7) and (8)), while the other one contains a gap (9). For simplicity, the three ORCs produced by the control group are reported below:

(7)	lo gnomo che lo copre il principe the gnome that him wraps up the prince	(Marco)
	'the gnome that the prince wraps him up'	
(8)	il gatto che lo morde il cane the cat that him bites the dog	(Alessio)
	'the cat that the dog bites him'	
(9)	la bambina che il nonno sta ascoltando the child that the granddad is listening	(Marilena)

'the child that the granddad is listening to'

Although resumptive pronouns are not considered normative in standard Italian, they are widely attested in spontaneous adult speech. The fact that only two ORCs with resumptive pronouns ((7) and (8)) were found in adult elicited production could be due to speakers' tendency to normativize their speech under experimental conditions.<sup>7</sup> Except for these three ORCs, adults produced only SRCs. Certainly, such a surprising result needs further survey. Intuitively, Italian adult speakers probably master and use ORCs. Although I do not have the data in order to state that adults produce ORCs in other experimental conditions, the fact is that in this particular situation they were observed to avoid object relativization.

Consider, now, the child production of ORCs. We can classify them according to the presence of a resumptive element. Thus, we have ORCs with gap vs. resumptive ORCs.

(10) is an example of ORC containing a gap, which is the only one relativization strategy admitted in standard Italian:

ORC with a gap:

(10)	il bambino	che il nonno bacia	(S., IV)
	the child	that the granddad kisses	

What emerges from this first analysis is a slight preference for resumptive ORCs, as shown in figure 10. If we look at the nature of resumptive elements, a further bipartition can be made between ORCs with resumptive pronouns vs. ORCs with resumptive DPs (see figure 11).

<sup>&</sup>lt;sup>7</sup> Guasti & Shlonsky (1995) make the same hypothesis to account for the different data between spontaneous vs. elicited production in French.





Figure 10. ORCs with a gap vs. resumptive ORCs



Most of the child resumptive ORCs show a resumptive pronoun, as in (11), while the others are characterized by the occurrence of a resumptive DP, as in (12):<sup>8</sup>

ORC with a resumptive pronoun:

(11) la bambina che la mamma <u>la</u> copre (M.,II) the child that the mother her wraps up

'The child that the mother wraps her up'

ORC with a resumptive DP:

(12) la bambina che il nonno bacia <u>la bambina</u> (G.,I) the child that the granddad kisses the child

Before concluding this section, it is worth analysing the distribution of post-V subjects in ORCs. As a matter of fact, both ORCs with gaps and ORCs with resumptive pronouns were classified according to the occurrence position of the subject within the relative clause.

Thus, we obtain two other bipartitions, as shown in figures 12. and 13.



31%

Figure 12. Standard ORCs: pre-V vs. post-V subjects

Figure 13. ORCs with a resumptive pronoun: pre-V vs. post-V subjects

To be clear, the example in (13) shows a ORC with a gap and a post-V subject, while in (14) is given an example of ORC with a resumptive pronoun and post-V subject:

<sup>&</sup>lt;sup>8</sup> Resumptive relatives are not allowed in standard Italian. Anyway, there is a relevant difference between ORCs with resumptive pronouns and ORCs with resumptive DPs: the former is frequently used at a substandard level by both educated and uneducated people, while the latter is never attested at any level in Italian.

ORC with gap and a post-V subject					
(13) la bambina che bacia il nonno					
the child that $pro_j$	kisses the granddad <sub>j</sub>				
ORC with a resumptive pror	noun and a post-V subject				
(14) il bambino che	lo copre il suo babbo	(A.,II)			
the child that <i>pro<sub>j</sub></i>	him wraps up his father <sub>j</sub>				

From this last analysis two interesting observations must be made.

First, the percentage of post-V subject used in ORCs with gap (37%) is similar to that of post-V subject in ORCs with a resumptive pronoun (31%). From here we conclude that the use of post-V subject does not depend on the presence/absence of a resumptive pronoun.

Second, as figures 12. and 13. show, the number of ORCs with preverbal subject is definitely higher than the number of ORCs with postverbal subject in both cases.

The conclusion is that children find ORCs with preverbal subjects easier than ORCs with postverbal subjects. This result must not be surprising. Indeed, the same observation was found in other studies on the acquisition of RCs (Guasti & Cardinaletti 2003). In section 7., we will see how De Vincenzi's (1991) theory can elegantly account for this finding.

Before concluding this section, it is worth recalling that Italian RCs with an embedded NP in the postverbal position can be ambiguous between an object and a subject reading. Actually, the Italian RC in (20), repeated in (22), can be interpreted as a subject RC (15a) or as an object RC (15b) with the embedded subject in the postverbal position:

(15) il bambino che pettina il re the child that combs the king (V., II)

- (15a) The child who is combing the king
- (15b) The child who the king is combing

It's quite interesting to notice that children sometimes produced ambiguous RCs, as in (16), followed by another RC disambiguated by the (preverbal) position of the embedded NP, as in (17).<sup>9</sup>

- (16) la bambina che bacia il nonno the child that kisses the granddad
- (17) la bambina che il nonno bacia la bambina (Gn.,II) the child that the granddad kisses the child

<sup>&</sup>lt;sup>9</sup> Notice that besides the position of the embedded NP, the RC in (24) is disambiguated also by the presence of a resumptive DP.

This observation strongly suggests that children 'know' that the RCs like (15) are ambiguous between (15a) and (15b).

#### 5. A Comparison between the Two Tasks

tasks

Comparing the results obtained in the picture description task with the results found in the preference task, two interesting observations emerge.

First, what we found was that most of the children ORCs were produced in response to the preference task (104 out of 144, 72%) and only few of them were given in response to the picture description task (40 out of 144, 28%).



ORCs in both tasks

It is worth noticing that, unlike ORCs, the comparison shows no significant difference between tasks in the production of SRCs.

The second interesting observation concerns the occurrence of post-verbal subjects. The data clearly indicate that post-V subjects were used only in the preference task (except for 1 case).

Description task					
ORCs with gap					
15					
preV subj postV subj					
14 1					

Preference task				
ORCs with gap				
42				
preVsubj	postV subj			
22	20			

Table 1. Standard ORCs with pre-V and post-V subjects in the PDT

In table 1. and table 2. we can see the distribution of post-V subjects in ORCs with gaps in the description task and in the preference task.

Likewise, table 3. and table 4. show the distribution of post-V subjects in ORCs with resumptive pronouns in each task.

Table 2. Standard ORCs with pre-V and post-V subjects in the PT

Description task					
ORCs with resumptive					
pronouns					
19					
preV subj postV subj					
19 <b>0</b>					

Preference task				
ORCs with resumptive				
pronouns				
49				
preV subj postV subj				
27 <b>22</b>				

Table 3. ORCs with a resumptive pronoun with pre-V and post-V subjects in the PDT

Table 4. ORCs with a resumptive pronoun with pre-V and post-V subjects in the PT

What this analysis allows to conclude is that post-V subjects are used only in the preference task (except for one case).

Both these observations, namely, the fact that most of ORCs were produced in the preference task, on the one hand, and the fact that post-V subjects were used only in the preference task, on the other, strongly suggest that there must be a deep difference in the nature of the two tasks.

According to me this result can be due to the fact that the participant in the preference task is led to identify him/herself with the painted child.<sup>10</sup>

In a few words, I suggest that the different results obtained in the two tasks can be accounted for by the higher level of involvement required in the preference task. In contrast, the picture description task is a more formal task where the participant is just asked to describe a situation that does not involve him/her.<sup>11</sup>

I would like to show some examples (18-20) from the corpus which clearly indicate that the participant is identifying him/herself with the painted child.

(18)	il bambino che <i>mi</i> pettina il re	(A., II)
	the child that me combs the king	
	'the child that the king combs me'	

(19) il bambino che *m*'asciuga l' ippopotamo (G., II) the child that me wipes the hippo

'the child that the hippo wipes me'

<sup>&</sup>lt;sup>10</sup> Notice that, in play context, the tendency to speak at the first person is very common in children when they have to choose which character to be between two (or more) options.

<sup>&</sup>lt;sup>11</sup> It's quite interesting to note that passives are used more frequently in the description task by both children and adults. The same result is found in child Hebrew by N&F (2006).

(20) il bambino che la nonna *mi* copre the child that the grandma me wraps up 'the child that the grandma wraps me up' (G., I)

The ORCs in (18)-(20) show a mismatch concerning the feature of number: the DP (the child) is at the 3rd person, while the object clitic is at the 1st person.<sup>12</sup>

Before concluding this section, I would like to focus on the fact that children used postverbal subjects only in the preference task. A plausible explanation to this finding could be that the participant, identifying himself/herself with the painted child, makes his/her choice according to the character that is performing the action on him/her. To give an example, looking at the options given in figure 2., the participant will choose the child in the picture above if she likes her mother to kiss her; in the case she prefers her grandfather to kiss her she will choose the other option.

In brief, the occurrence of postverbal subjects in the preference task can be interpreted as the sign that the child is focusing his/her attention on the subject of the action, rather than on the object.<sup>13</sup>

#### 6. Relativization Strategies

As we have seen in section 3., the data clearly indicated that both groups avoided to form ORCs replacing them with SRCs.<sup>14</sup> The figures 16. and 17. show that when ORCs were targeted, both children and adults used SRCs in most of the cases (respectively 80% and 99% of cases).

This section focuses on the strategies that children and adults used to turn ORCs into SRCs.

<sup>&</sup>lt;sup>12</sup> Note that the participant has to start with 'the child that' (third person), but then continues the sentence using the first person.

<sup>&</sup>lt;sup>13</sup> The subject is here treated as the relevant focus of new information. I would like to point out that this interpretation of postverbal subjects is in line with the hypothesis of (at least) a Focus position in the right periphery dedicated to postverbal subjects (Belletti 2004).

<sup>&</sup>lt;sup>14</sup> "[...] Subjects are generally more accessible to relativization, it is not unreasonable that some languages might require that non-Subjects be presented as Subjects in order for relativization to take place [...] (Keenan & Comrie 1979).



99% 100% 80% 60% 40% 20% 0% target type OR ■ SR ■ OR

when OR is targeted (in percentage)



It's interesting to note that the types of strategies used by children and adults were the same. Anyway, a significant difference was found in the distribution of the different strategies, as we can observe by comparing figure 18. and figure 19.



Figure 18. Relativization strategies used by adults (where ORC is targeted)



Figure 19. Relativization strategies used by children (where ORC is targeted)

What emerges from the data was that the most common strategy to turn ORCs into SRCs was the passivization of the targeted structure in both groups.

The example in (21) shows how the subjects transformed an ORC (21a) into a SRC (21b) by passivizing the verb:

(21) a. Target

il bambino che la mamma copre the child that the mother wraps up

b. Production il bambino che è coperto dalla mamma the child that is wrapped up by the mother

Comparing the two figures above, a crucial difference between child production and adult production came out with respect to the use of passive. Actually, while adults systematically produced SRCs with passives where ORCs were targeted (93%), children used passives as well as other strategies (36%).

In other words, while in adult production the use of passive is absolutely the prominent strategy to turn ORCs into SRCs, in child production it still remains the favourite strategy but there are other strategies that are often used by children as well.

The second children's favourite strategy to relativize the subject instead of the object was the causative construction (farsi+V=to make oneself+V).

As the graphics above clearly indicate, causative constructions were given in response instead of ORCs in 23% of cases in children's corpus and in 3% of cases in adults' corpus.

To give an example, (22b) was produced instead of (22a):

(22) a. Target

Il bambino che il re pettina the child that the king combs

b. ProductionIl bambino che si fa pettinare dal rethe child that himself makes comb by the king

'The child that makes himself comb by the king'

Another strategy that children seemed to like in order to avoid ORCs was the use of 'receive+DP'. More clearly, ORCs were transformed into SRCs by substantivizing the embedded verb which appeared in the relative clause as a DP preceded by the verb 'receive', as in the example in (23),<sup>15</sup> where the subject produced the SRC in (23b) instead of the targeted ORC in (23a):

(23) a. Target

il bambino che la mamma bacia the child that the mother kisses

<sup>&</sup>lt;sup>15</sup> It is worth noting that not every verb is suitable to be transformed into a DP in Italian. Anyway, children seemed not to care about that. In their corpus I found some DPs that do not exist in Italian lexicon, as in (ii) or that are not used in everyday language, as in (iii):

(ii)	Il	bambino	che	riceve	*il pettino	(instead of	'pettinata')	(N.,I)
	The	child	that	receives	*DP	(instead of '	combing')	

(iii) Il bambino che riceve (?) il trasportamento (G.,II) The child that receives (?) the transportation

Note that in Italian the substantivized form of the verb 'pettinare' (to comb) is the feminine DP 'pettinata'('combing'). As we can see in (ii), the little child incorrectly used the suffix (-o) instead of the proper morphological suffix (-ata) to derive the DP. It's important to point out that the suffix (-o) is properly used to derive some other Italian DPs. A good example is represented by the verb 'camminare' ( to walk), which has two nominalized forms –o and –ata: 'cammin-o' (way) and 'cammin-ata' (walk) are both correct Italian DPs (slightly different in meaning).

b. Productionil bambino che riceve un bacio dalla mammathe child that receives a kiss by the mother

The 'receive+DP' strategy was quite frequent in child production (10%), while in adult production it rarely occurred (2%).

Finally, another device the subjects were observed to resort to, was the change of the target verb.<sup>16</sup> As a matter of fact, they changed verb quite often, especially the children (7%), in order to form the relative on the subject instead of on the object. An example is given in (24); (24b) was produced instead of (24a):

(24) a. TargetIl bambino che il nonno ascolta the child that the granddad listens

b. ProductionIl bambino che legge al nonnothe child that read to the granddad

#### 7. Why are SRCs Easier Than ORCs? Minimal Chain Principle (De Vincenzi 1991)

Children's and adult's production of RCs has been extensively studied. These studies have established that SRCs are easier to process than ORCs. In line with the results of previous crosslinguistic studies on RCs acquisition, the present research shows that Italian children find SRCs easier than ORCs. This observation is correctly predicted by De Vincenzi's (1991) theory of Minimal Chain Principle.

This theory explains why SRCs are easier than ORCs in terms of economy principles of gap prediction that drive the analysis of filler-gap dependencies (De Vincenzi 1991).

As we can easily see in (25), the trace of the relative pronoun in a SRC is adjacent to the pronoun, while in an ORC it is separated at least by the embedded subject and an embedded verb, as shown in (26). Since shorter dependencies are computationally less demanding than longer dependencies and parsing strategies are driven by principles of economy (Guasti et al. 2005), the result is that SRCs are easier than ORCs because the filler gap distance in the former is shorter than in the latter.

# (25) $[_{DP} II \ bambino_i] [_{CP} che [_{IP} [_{DP}t_i] pettina il re]]]$ (SRC) $[_{DP} The child_i \ ] [_{CP} that [_{IP} [_{DP}t_i] combs the king]]]$

<sup>&</sup>lt;sup>16</sup> Even though the subjects were asked to use the experimenter's words, they often changed verb, especially the little children.

The Production and the Acquisition of Subject and Object Relative Clauses in Italian (I. Utzeri)

(26)  $[_{DP}II \text{ bambino}_i] [_{CP}che [_{IP}il re pettina [_{DP}t_i]]]$  (ORC)  $[_{DP}The child_i] [_{CP} that [_{IP} the king combs [_{DP}t_i]]]$ 

Besides the fact just mentioned, De Vincenzi's conjecture correctly makes another prediction, namely, the fact that, in pro-drop languages, ORCs with a preverbal subject are easier than ORCs with a postverbal subject.

It is worth recalling that the data concerning the production of ORCs with a gap indicated that children use pre-V subject (36/57) more frequently than post-V subject (21/57). The same finding came out from the data on the production of ORCs with a resumptive pronoun: children seemed to find ORCs with pre-V subject (47/68) easier than those with post-V subject (21/68).

In terms of filler-gap dependencies, MCP correctly predicts that ORCs with preverbal subjects are easier to process than ORCs with postverbal subject. Indeed, while the former involve only one chain, the latter involve two chains.

(27) [<sub>DP</sub>II bambinoi] [<sub>CP</sub>che [<sub>IP</sub> la nonna sta coprendo [ t<sub>i</sub> ]]] (ORC with a pre-V subject) [<sub>DP</sub>The child<sub>i</sub>] [<sub>CP</sub> that [<sub>IP</sub> the grandma is wrapping [ t<sub>i</sub> ]]]

 $\rightarrow$  1 gap (the moved DP) = 1 chain

(28) [DP II bambino<sub>i</sub>] [CPche[IP pro<sub>k</sub> sta coprendo la nonna<sub>k</sub>[t<sub>i</sub>]]] (ORC with a post-V subject) [DP II bambino<sub>i</sub>] [CPche[IP pro<sub>k</sub> sta coprendo la nonna<sub>k</sub>[t<sub>i</sub>]]]

→ 1 gap (the moved DP)+ 1 gap (*pro* (Rizzi 1986)) = 2 dependencies

Note that in the structure in (28), we also have a filler-gap dependency between the embedded  $DP_k$  and an empty expletive pronoun in the embedded subject position (Rizzi 1986).

#### 8. Some Aspects of ORCs Acquisition in Italian

Since Italian-speaking children's production of SRCs does not show any discrepancies with respect to adult's production, in this section our attention will focus on the production of ORCs.

As it often emerges from the studies on language acquisition, early production shows some discrepancies with respect to the target language. In the case of ORCs acquisition, a specification is needed.

Indeed, in this case the adult production does not match with the target language. In other words, Italian speaking adults are expected to produce ORCs but, on the contrary, adults production is characterized by the (almost) absence of ORCs.

This observation is relevant at least for two reasons. First, it recalls Chomsky's dichotomy competence vs. performance: the fact that adults, under certain conditions, do not produce ORCs does not mean that they do not master these structures, but rather it indicates that in that definite context they prefer to use other strategies (as much adequate as ORCs).

Second, it brings into light the (in)adequacy of using the term target-consistent within the comparative analysis: how can we define the ORCs the children produced coherent or not coherent with the adult (elicited) production, if in the latter ORCs are practically absent?

It seems to me that the distinction between competence vs. performance is particularly relevant here: ORCs are *targeted* in the adult language but they are not *found* in the adult (elicited) production.

Quite surprisingly, what comes out from the elicited production data I collected is that, paradoxically, children produced more ORCs than adults and, in general, they produced *more* than adults.<sup>17</sup> Let me explain what this *more* is.

Besides ORCs with gap, that are expected in standard Italian, Italian children have been observed to produce ORCs containing a resumptive pronoun as well as a resumptive DP. Unlike languages like Hebrew, Yddish and Irish, standard Italian does not allow the use of the resumption strategy to form ORCs.

Anyway, a distinction between the two kinds of resumptives must be made. Indeed, while ORCs with resumptive pronouns are (marginally) admitted at substandard level (colloquial spoken language), ORCs with resumptive DP are not used by Italian adult speakers at any level.

The need to keep separate ORCs with resumptive pronouns from ORCs with resumptive DPs reflects the different status they hold in adult Italian: the former are largely used by educated and uneducated people at substandard colloquial/informal level, while the latter are never attested at any level.

The state of affairs we have just seen directly lead us to the issue concerning how children acquire language. I will try to better explain this crucial point.

As far the acquisition of ORCs with resumptive pronouns is concerned, since they are widely attested in adult colloquial spoken language, one could say that these structures are probably present in the linguistic input the child is exposed to. But what about ORCs with resumptive DPs? Since adults do not produce ORCs with resumptive DPs, how can Italian children use them, if they have never heard such structures before? Thus, we come to the well-known problem about the poverty of the stimulus.

<sup>&</sup>lt;sup>17</sup> From the viewpoint of this work, it is not problematic at all to explain how children can produce *more* than adults. Indeed, we assume that children are equipped from birth with UG Principles which drive them in the L1 acquisition.

One could reply that double relatives are an invention, or a mistake that Italian children use to make. There are at least two observations which can be considered as evidences that ORCs with resumptive DPs are not a random mistake, but rather a grammatically driven "invention" (Rizzi & DeGraff 1999).

#### 8.1. Early Non-target ORCs are UG Consistent

As just mentioned, there are at least two facts that clearly show the grammatical nature of the discrepancies between child and adult production.

The first observation is that double relatives are found not only in child Italian, as the current study and Guasti & Cardinaletti's (2003) work report, but also in child French (Guasti, Dubugnon, Hasan-Shlonsky & Schneitter 1996; Guasti & Cardinaletti 2003; Labelle 1990; Ferreiro, Othenin-Girard, Chipman & Sinclair 1976), child English (McDaniel, Mckee & Bernsten 1998; P. de Villiers 1988) and child Spanish (Ferreiro, Othenin-Girard, Chipman & Sinclair 1976). In section 9. a crosslinguistic analysis provides a strong evidence in support of considering resumption as an option available in early grammars. In this vein, it is conceivable to suppose that children temporarily adopt ultimately simplification strategies that help the processing load of their "immature" production system.<sup>18</sup>

The second fact is that ORCs with resumptive DP are observable in other adult languages, like Lakhota, Hindi, Korean, Bambara. This fact strongly suggests that target-inconsistencies in development result from the exploration of the grammatical space defined by UG (Rizzi 2007).

#### 9. Relativization Strategies in Early Systems: A Coherent Picture

The crosslinguistic comparison of ORCs in acquisition that this section is devoted to is based on some elicited production data gathered in different languages.<sup>19</sup>

<sup>&</sup>lt;sup>18</sup> The fact that ORCs with resumptive pronouns/DPs involve more material to be pronounced do not collide with my hypothesis that the use of resumption is a genuine grammatical option. Indeed, some other cases have been observed in which children pronounce more material than needed (see Thornton 1995; van Kampen 1997; Gutierrez 2004.).

<sup>&</sup>lt;sup>19</sup> In detail, I will consider here the results reported in Utzeri (2007) and Guasti & Cardinaletti (2003) based on Italian data; in Guasti, Dubugnon, Hasan-Shlonsky & Schneitter (1996), Guasti & Cardinaletti (2003), Labelle (1990), Ferreiro, Othenin-Girard, Chipman and Sinclair (1976) based on French data; in McDaniel, Mckee and Bernsten (1998), P. de Villiers (1988) based on English data; in Ferreiro, Othenin-Girard, Chipman and Sinclair (1976) based on Spanish data.

It is important to point out that the aforementioned experimental studies all are based on elicited production data. Anyway, it is necessary to take into account that these works investigate different aspects of the acquisition of relative clauses (pied-piping (Guasti & Cardinaletti 2003), relative pronouns (Guasti & Shlonsky 1995), resumptive pronouns (Pérez-Leroux 1995)). That the reason why the data have been compared with the proper caution and have been taken into consideration only

By making a crosslinguistic comparison a coherent picture comes out of ORCs production in acquisition. Actually, children were observed to avoid object relativization crosslinguistically. In particular, the crosslinguistic data indicate that children often turned ORCs into SRCs. In other words, what we can state is that the tendency to produce SRCs instead of ORCs is not peculiar to Italian children. The same result is reported in Guasti & Cardinaletti (2003) based on French and Italian data, in Labelle (1990) based on French data, McDaniel, Mckee & Bernsten (1998) based on English data; Ferreiro, Othenin-Girard, Chipman & Sinclair (1976) based on French and Spanish data.<sup>20</sup>

The following examples (29)-(32) show that children crosslinguistically produced SRCs with passives ((29b), (30b), (31b), (32b)) instead of the targeted ORCs ((29a), (30a), (31a), (32a)).

- (29) Child Italian (Utzeri 2007)
  - a. (targeted) il bambino che la mamma pettinab. (produced) il bambino che viene pettinato dalla mamma
- (30) Child French (Guasti & Cardinaletti 2003)
  a. (targeted) le lion que le monsieur caresse
  b. (produced) le lion qui est caressé

# (31) Child Spanish (Ferreiro et al. 1976) a. (targeted) el conejo lavò al burro que el elefante habia pateado b. (produced) el conejo lavò al burro que fué pateado por el elefante

- (32) Child English (P. de Villiers 1988)
  - a. (targeted) the cat that the boy brushed
  - b. (produced) the cat that was brushed by the boy

From the data observed in (29)-(32) we can conclude that the tendency to turn ORCs into SRCs by passivizing the verb is attested in the early systems of different languages.

As for the production of ORCs, the comparative analysis brings into light a coherent picture: different language-speaking children were observed to produce the same pattern of ORCs. The three types of ORCs found in child Italian elicited production, namely, ORCs with gaps, ORCs with resumptive pronouns and ORCs with resumptive DPs, are attested in early

those that were pertinent for the aim of the current study. Anyway, even though the experimental methods were different, the results of these studies show similar trends.

<sup>&</sup>lt;sup>20</sup> In order to make the crosslinguistic picture as clear as possible, I report here the list of the age range of the participants in each experimental study:

Child French: Guasti & Cardinaletti (2003), 4;5-7;3; Labelle (1988, 1990), 3-6; Ferreiro et al. (1976), 4-7;

Child Spanish: Ferreiro et al. (1976), 4-7;

Child English: P. de Villiers (1988), 5-6;Pérez-Leroux (1995), 3;5-5;5.

grammar of French (Labelle,1988;1990; Ferreiro et al. 1976), Spanish (Ferreiro et al. 1976) and English (Pérez-Leroux 1995).

(33) Child Italian (Utzeri 2007)	
a. la bambina che il nonno sta baciando	(A., II)
the child that the granddad is kissing	
b. il bambino che il re <i>lo</i> sta pettinando	(M., II)
the child that the king <i>him</i> is combing	
c. la bambina che la mamma asciuga la bambina	(G., I)
the child that the mother wraps the baby (up)	(0., 1)
the china that the mother wraps the baby (up)	
(34) Child French (a. and b. (Labelle 1988;1990); c. (Ferreiro et al. 1976) <sup>21</sup> )	
a. C' est la balle qu'il dessine	(D, 3;6)
This is the ball that he draws	
	<u> </u>
b. la balle qu'il <i>l</i> 'attrappe	(LE, 3;8)
the ball that he <i>it</i> catches	
c. l'ours pousse <i>la souris</i> que la vache lave <i>la souris</i>	(Child, 5-7)
the bear pushes <i>the mouse</i> that the cow washes <i>the mouse</i>	(Child, 577)
(35) Child English (Pérez-Leroux 1995);	
a. the one that he lifted <i>it</i>	(Lia, 4;5)
b. <i>the one</i> that the mailman is holding <i>the baby</i>	(Kara, 4;11)
(36) Child Spanish (Ferreiro et al. 1976)	
a. el gato empuja <i>al perro</i> que el conejo lava <i>al perro</i>	(Child, 5-6)
the cat pushes <i>the dog</i> that the rubbit washes <i>the dog</i>	

In a nutshell, the crosslinguistic survey presented in this section gives a twofold contribution.

First, it shows that the tendency to relativize the subject instead of the object is not peculiar to Italian children. In particular, the crosslinguistic data indicate that children exposed to different languages resorted to the same kind of strategies in order to transform ORCs into SRCs (cf. typically, passivization).

Second, it indicates that children produce the same pattern of ORCs crosslinguistically. It is worth recalling that none of the languages considered here allows ORCs with resumptive DPs at the standard level.

<sup>&</sup>lt;sup>21</sup> Unfortunately, exact ages of the children were not provided in Ferreiro et al. (1976); in some cases, the year is indicated, whereas in others, just the age range (Pérez-Leroux 1995).

To conclude, it is worth noticing that the fact that ORCs with resumptive DPs are not admitted in the adult systems of the languages we analysed, on the one hand, and the fact that ORCs with resumptive DPs are found in the early grammar of different languages, on the other, strongly suggest that the use of resumptive DPs as a relativization strategy is a genuine grammatical option exploited in early grammars.

## 10. But Hebrew

Unlike Italian, French, Spanish and English-speaking children, Hebrew-speaking children were observed to produce both subject and object RCs without difficulty (N&F, 2006). Comparing Italian and Hebrew elicited production data, what emerges is a sharp difference with respect to the acquisition of relative clauses.<sup>22</sup> Indeed, unlike Italian-speaking children, Hebrew-speaking children were observed to form RCs on the object without problem.

It's very interesting to notice that Italian children's production is quite similar to Hebrew SLI-children's production rather than to Hebrew typically developing-children's production, discussed in N&F's (2006) article.<sup>23</sup>

For example, in the former, but not in the latter, SRCs with full passives are found, as in (37):

- \*ze ha-leican she-hu soxev ta-dubi questo il-clown che-egli trasporta <sub>ACC</sub>-l'orsetto questo è il clown che *lui* trasporta l' orsetto
- (2) \*ze ha-yeled she-ha-yeled roxec et ha-aba questo il-bambino che-il-bambino lava ACC il-babbo questo è *il bambino* che *il bambino* lava il babbo

In Hebrew resumptive pronouns are admitted to form ORCs but not SRCs, while resumptive DP are not allowed at all. Hence, both (1) and (2) are out in Hebrew.

In detail, N&F (2006) reported that in the picture task the SLI-group used resumptive pronouns in the embedded subject position, as in (1), in 6% of the responses and resumptive DPs, as in (2), in 5% of the responses. The control group produced 2% and 0% of the responses respectively.

<sup>&</sup>lt;sup>22</sup> Since the experimental paradigm I used is the same as in N&F (2006), Italian data and Hebrew data can be directly compared.

 $<sup>^{23}</sup>$  To be clear, I'm referring here to the production of ORCs. The same similarity is not found in the production of SRCs. Indeed, unlike Italian-speaking children, who were observed to produce only target-consistent SRCs (that is with gaps), Hebrew-speaking children with SLI use both resumptive pronouns and resumptive DPs to relativize the subject as well, as shown in (1) and (2):

(37) Ha-aba she-nitfas al-yedei ha-yeled the-father that-caught by the-boy 'the father that is caught by the boy' (Target: 'the father that the boy catches')

Regarding the use of passives, it is important to point out that the passive construction is rarely used in Hebrew (N&F 2006).<sup>24</sup> It is infrequent even in formal written texts, and is associated largely with academic or journalistic prose (Berman 1979), and school-age children use passives very rarely even in written texts compared to other languages (Jisa, Reilly, Verhoeven, Baruch & Rosado 2002).<sup>25</sup>

Another strategy that is used by both Italian children and Hebrew SLI children in order to turn ORCs into SRCs is the substantivization of the embedded verb which appears in the relative clause as a DP preceded by the verb 'receive', as in the example in (38) (see example in (23) for Italian).

(38) ha-yeled she-mekabel xibuk the-child that-receives a-hug'the child that receives a hug' (Target: the child that the mother hugs)

Regarding the production of ORCs with resumptive pronouns, which are grammatical in standard Hebrew, N&F (2006) found that both the SLI group and the control group produced approximately one third of the target ORCs with a resumptive pronoun, with no significant difference between the groups on the two tasks.

In (39) I report an example of ORCs with resumptive pronouns taken from N&F's corpus:

<sup>&</sup>lt;sup>24</sup> The data gathered by N&F (2006) confirm this fact: even though their study could theoretically elicit passives, the children in the control group did not use passives at all. As regards the SLI production, the SRCs with full passives occurred mainly in the picture description task (14%). In the preference task only 1% of full passives are produced, and 3% of adjectival passives (ex. "The painted child" instead of "the boy that the teacher paints").

<sup>&</sup>lt;sup>25</sup> Given this state of affairs, it is even more surprising that SLI children produced passives in a context where typically developing children did not. Hence, why did some children in the SLI group use passives? According to N&F, the fact that the SLI group used passives almost only in the more formal task, the picture description task, could be interpreted as a result of the formal teaching of passive in treatment sessions of SLI.

Furthermore, it is necessary to know that Hebrew has four morphological forms for passive. Three of the are ambiguous between verbal and adjectival passive; the fourth bears only the adjectival meaning (Horvath & Siloni 2005; Meltzer 2005). Most of the passives produced by the SLI group were ambiguous between adjectival and verbal passives, but some others, even in the full passive constructions, were of the adjectival-only type (N&F 2006, 18).

(39) ha-yeled she-ha-saba menashek oto the-child that-the-grandfather kisses him'The child that the grandfather kisses him'

If ORCs with resumptive pronouns are grammatical in Hebrew, ORCs with resumptive DPs are not. Anyway, SLI children produced ORCs as in (35):

(40)\*ha-yeled she-ha-saba menashek yeled exad

il-bambino che-il-nonno bacia un bambino

*\*il bambino* che il nonno bacia *un bambino* (Target: the child that the grandfather kisses)

In brief, unlike Italian speaking-children, Hebrew speaking-children showed no difficulty to process ORCs. Intriguingly, the relativization strategies used by Italian children to avoid ORCs are the same as those found in Hebrew SLI children's production.

Before concluding this section, I would like to point out two observations. First, the avoidance of ORCs we found in both Italian children's and adults' production is in contrast with Friedmann & Novogrodsky's hypothesis which considers this avoidance of ORCs as a sign of a linguistic deficit.

Second, we have seen that, while Hebrew children produced ORCs without difficulty and did not used passives at all, Italian children avoided object relativization and used passives strategically to relativize the subject instead of the object. Because of that, we could say that Hebrew and Italian are two "mirror languages" in this domain.

# **11. Theoretical Implications**

Given the pattern of ORCs produced by Italian children, what I propose here is a unitary syntactic mechanism which could account for all the three kinds of ORCs found in the corpus in the most natural way.

The analysis of relative clauses I propose here is the result of the integration of several ideas. The assumptions my proposal is based on are essentially the following:

- 1. A raising derivation of relative clauses (Kayne 1994, Bianchi 1999)
- 2. Copy+ deletion approach to movement
- 3. Belletti's (2005) idea of a "big DP"

Let's consider these three points in turn.

First of all, I will adopt here the assumption that relative clauses are derived by the movement of the relative head (Vergnaud 1985; Kayne 1994; Bianchi 1995; Guasti & Shlonsky 1995).

Unlike the traditional so-called a raising analysis, the idea adopted here is that the phrase which is extracted from the site of relativization is not the NP, but rather a whole DP. Consequently, it is necessary to assume a richer structure which could host a more complex syntactic movement. Hence, I will assume that ORCs with gap, ORCs with resumptive pronouns and ORCs with resumptive DP are derived exactly in the same way, namely by the raising of the whole relative head DP to Spec/CP and then to Spec/DP of the matrix clause.

Following Belletti's (2005) analysis, we adopt the idea of movement as a two-step operation, that is copy + deletion (point 2.). Given this framework, it is conceivable to suppose that the difference among the three types of child ORCs may be directly lead to the latter syntactic operation (deletion).

In a nutshell, the idea I present in this paper is that the difference in the derivation of ORCs with gap (41), ORCs with a resumptive pronoun (42) and ORCs with a resumptive DP (43) is due to a different degree of deletion. As we can see in the structures represented below, deletion is: complete in (41); partial in (42); absent in (43).

(41)  $[[_{DP} Il bambino]_i [_{CP} [_{DP} < il bambino>]_i che [_{IP} il babbo abbraccia [_{DP} < il bambino>]_i]]$  $<math>[[_{DP} The child]_i [_{CP} [_{DP} < the child>]_i that [_{IP} the father hugs [_{DP} < the child>]_i]]$ 



As for resumptive relatives, following Belletti (2005), a doubling derivation is adopted (point 3.). Actually, the "big DP" in (42) originates both the relativized DP and the resumptive pronoun: once DP<sub>2</sub> has moved to the left periphery it is deleted, while the clitic pronoun (DP<sub>1</sub>) remains stranded within the VP area and moves to the designated clitic position.

Put in these terms, resumptive relatives derivation seems to be very similar to Clitic Left Dislocation. As Belletti (2007) points out, movement and doubling are involved in both cases. For this reason, resumptive relatives can be amenable to a derivation closely parallel to the

doubling derivation of CLLD, modulo the different landing site of the relative head in the CP left periphery (Belletti 2007).<sup>26</sup>

(42)  $[[_{DP}II bambino]_i [_{CP}[_{DP} < il bambino>]_f che [_{IP} il babbo lo_k abbraccia [_{DP1} t_k [_{DP2} < il bambino>]_i ]]] [[_{DP} The child]_i [_{CP} [_{DP} < the child>]_i that [_{IP} the father him hugs [_{DP1} t_k [_{DP2} < the child>]_i ]]]$ 

'The child that the father hugs him'



Unlike (41) and (42), (43) does not involve deletion at all of the position where the DP is merged. Indeed, the relativized DP is phonetically realized in both the merge positions, namely, in its original position and in the relativized DP position ( we have assumed to be the highest Spec/DP).

<sup>&</sup>lt;sup>26</sup> In the case of CLLD, the dislocated phrase moves to a Topic position in the CP area (Rizzi 1997), passing through a clause-internal VP peripheral Topic position (Cecchetto 2000), while in the case of resumptive restrictive relatives, the relativized DP arises to the highest Spec/DP of the matrix clause, passing through the Spec/CP position.

(43)  $[[_{DP} La bambina] [_{CP} [_{DP} < la bambina>]_i che [_{IP} il nonno bacia [_{DP} < la bambina>]]]$  $<math>[[_{DP} The child] [_{CP} [_{DP} < the child>]_i that [_{IP} the granddad kisses [_{DP} < the child>]]]$ 



To sum up, the proposal I suggested in this section has to be considered as an attempt to bring the three types of ORCs back to the same syntactic mechanism, in order to account for the alternation of ORCs with gap, ORCs with resumptive pronouns and ORCs with a resumptive DP found in the child corpus in a most natural way.

#### 12. Concluding Remarks

To conclude, the results of the current elicitation experiment indicate that Italian children and adults generally avoided to relativize the object by turning ORCs into SRCs. The passivization of the embedded verb is the favourite strategy in both groups to transform ORCs into SRCs. Anyway, while children resorted also to other strategies to relativize the subject instead of the object (causative construction, 'receive+DP', change V.), adults sistematically used passives.

In line with data from previous elicited production studies, this research shows that children find SRCs easier to process than ORCs and that ORCs with preverbal subjects are easier than those with postverbal subjects. We have seen that De Vincenzi's (1991) theory of MCP correctly predicts these findings in terms of gap-filler dependencies.

By making a crosslinguistic comparison a coherent picture comes out of ORCs production in acquisition. Indeed, children exposed to different languages (Italian, English, French, Spanish) were observed to produce the same pattern of ORCs, namely ORCs with gaps, ORCs with resumptive pronouns, ORCs with resumptive DPs. This fact, together with the fact that target-inconsistent ORCs (resumptive relatives) produced by children are

observable in different adult languages (Bambara, Hindi, Korean, Lakhota), can be considered as a strong evidence in support of UG and its involvement in L1 acquisition.

In particular, the experimental results support the idea that children are exploring facilitating options in the grammatical space defined by UG. The fact that relativization strategies that children used but standard Italian does not allow are observable in other adult languages strongly suggests that they are not random mistakes but rather genuine grammatical options given by UG.

Last, but not least, it is important to recall that not all early systems behave like child Italian, child French, child English and child Spanish with respect to ORCs production. As we have seen, child Hebrew seems to contrast to the general finding that children avoid object relativization. From the comparison between child Italian and child Hebrew a picture emerges where Italian and Hebrew seem to be two 'mirror-languages' in this domain. Certainly, this last point needs further research.

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