

**OMISSION VERSUS RANDOM SELECTION OF *ESSERE*.**

**Comparing a Deaf Subject Italian Data  
elicited through Logogenia with acquisition data**

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**1. Introduction**

The analysis of the role of the linguistic information available in the input for triggering the process of language acquisition is a central issue within Logogenia<sup>1</sup>, which empirically investigates this aspect of the process by analysing the comprehension and production of the oral language<sup>2</sup> by non signing profoundly deaf people.

The role of the input in language acquisition is currently under debate: on the one hand, as suggested by Lightfoot (1999), a given structure - although present in the input - may not become a trigger for syntactic development if its frequency in the linguistic environment does not reach a specific threshold. On the other hand, studies on home sign systems presented in Goldin Meadow (2003) suggest the possible emergence of linguistic behaviour even in the absence of linguistic input.

In this work copular Italian data from a non signing prelingually deaf subject will be compared to data on the production of the Copula *Essere* in normal developing children. Both corpora include non target-like productions and were generated in crucially different situations as for the quality and the quantity of the input received. In normal acquisition conditions, the input is generally considered "poor" (in the sense of Chomsky 1980's Arguments from the Poverty of the Stimulus) but it is obviously sufficient for triggering the process of language acquisition. On the other hand, in cases of deafness the available linguistic input is limited in quantity and altered in quality and might not allow the acquisition of the oral language.

In order to check whether both these conditions can trigger the process of language acquisition, the Child Italian corpus and the deaf subject corpus

<sup>1</sup> See Radelli (2000) and Radelli (1999).

<sup>2</sup> In this work we will always refer to the oral language as opposed to the sign language, abstracting away from the actual modality, written or oral, of data production. In fact, all the deaf person data considered here were elicited in the written modality.

will be analysed and compared in search for regular and predictable patterns as well as for the operativity of UG constraints.

Regular and predictable patterns have indeed emerged from child language data and UG constraints appear to be fully operative from the earlier stages of language development.<sup>3</sup>

The very same tools adopted in the literature for detecting UG constrained patterns will be applied here to the acquisition corpus and to the deaf subject Italian corpus. If similar patterns will emerge from the two corpora, both kinds of input will be considered sufficient to trigger the process of language acquisition. On the other hand, if regular and predictable patterns will only emerge from the acquisition data but not from the deaf subject Italian data, it will be possible to conclude that the input available in cases of deafness might not always qualify as an appropriate trigger of the process of language acquisition.

### ***1.1. Data collection***

The deaf subject Italian data were compiled from a prelingually deaf adult, who has never had access to the sign language.<sup>4</sup> A corpus of written production was elicited through Logogenia, which aims at studying the deaf people production in the oral language from a Generative Grammar perspective.<sup>5</sup> Both production and comprehension data were included in the analysis.

The child language data were collected from three monolingual normal hearing children, their ages ranging from 1 year and 7 months to 3 years and 3 months.<sup>6</sup> Spontaneous production data were considered.

## **2. The general picture**

<sup>3</sup> See Rizzi (2004).

<sup>4</sup> A non-signer allows one to compile first language Italian data. Italian is the only language to which Gabriele has ever been exposed to. Since the subject was an adult, it was possible to elicit data in the written form. The use of the written modality is indeed crucial for bypassing comprehension problems due to difficulties in lip reading and to difficulties in understanding the oral language both by the deaf subject and by the experimenter.

<sup>5</sup> Logogenia has identified a method especially designed to trigger deaf children acquisition of the spoken (non signed) language by exposing them to a specific and selected syntactic input presented in the written form. As for linguistic analysis, Logogenia's data offer an extremely fine grained and precise picture of the actual syntactic competence of the deaf person they are elicited from.

<sup>6</sup> Data collected from the CHILDES database, November 2002.

In Gabriele's corpus, perfectly grammatical sentences such as (1) can co-occur with syntactically unpredictable word sequences such as (2).<sup>7</sup>

(1) Io sono più vecchio. [I BE<sub>1st sing</sub> more old<sub>masc. sing</sub>]

(2) C'È SONO QUESTO È NOME SONO IN BARBIERE.  
[There is BE<sub>1st sing</sub> this is name BE<sub>1st sing</sub> in barber's shop]

Sentences like (1) and sequences like (2) are almost equally frequent in Gabriele's corpus.

A very similar pattern emerges when considering word order data. In Gabriele's corpus, both sequences that respect Italian word order constraints and sequences that violate them are detected.

In cases like those reported under (3), randomly selected functional elements can freely intervene in between words, in positions that are not syntactically legitimate.<sup>8</sup>

- (3) a. Diana che vuole è tagliare il capelli è corti sì o no?  
[Diana that WANT<sub>3rd sing</sub> BE<sub>3rd sing</sub> CUT<sub>inf.</sub> theHair<sub>plur</sub> BE<sub>3rd sing</sub>  
short yes or no ]
- b. ieri, io ho visto sono la partita  
[yesterday, I HAVE<sub>1st sing</sub> SEE<sub>past.part.</sub> BE<sub>1st sing</sub> the match]
- c. no, non è la maglia sono marrone da Elena.  
[no, not BE<sub>3rd sing</sub> the shirt BE<sub>1st sing</sub> brown from Elena]

In other cases, as shown in (4), it seems impossible to detect the operativity of word order constraints in Gabriele's production.

- (4) a. sì, ma proprio è quello sono verra anche sono verro  
[yes, but really BE<sub>3rd sing</sub> that BE<sub>1st sing</sub> COME<sub>fut. 3rd sing</sub> also BE<sub>1st sing</sub>  
COME<sub>fut. 1st sing</sub>]
- b. ma sono abbastanza è correre sono città anche in treno.  
[but BE<sub>1st sing</sub> enough BE<sub>3rd sing</sub> RUN<sub>inf.</sub> BE<sub>1st sing</sub> city also in train]
- c. sono ferrovia per treno a parte XXX.<sup>9</sup>  
[BE<sub>1st sing</sub> rail station for train to LEAVE<sub>3rd sing</sub> XXX]

<sup>7</sup> The use of capitals reproduces Gabriele's spontaneous use of it in his handwriting.

<sup>8</sup> Randomly selected functional elements are marked in the text by underlined style.

<sup>9</sup> Every reference to places and locations is cancelled and replaced with XXX.

The sequences reported under (5) indicate that syntactically legitimate sequences can only emerge in the data by means of arbitrary selection. Syntactically legitimate sequences must be isolated in larger units of Gabriele's production which cannot be syntactically analysed as a whole.<sup>10</sup>

- (5) a. È VICINO SONO XXX  
[it's close]
- b. C'È SONO QUESTO È NOME SONO IN BARBIERE  
[this is name]
- c. SI, SONO ARRIVA A XXX CHE FERMARSI SONO  
TROPPO GENTE È MEGLIO COME IN CAMMINARE SONO  
XXX  
[Yes, BE<sub>Aux</sub>1st sing. ARRIVE<sub>3rd sing. pres.</sub>]
- d. SÌ, COME SONO IN PAPÀ HA DETTO SONO SENTE  
PARLARE INSIEME.  
[HAVE<sub>Aux. 3rd sing.</sub> SAID<sub>Past. Part.</sub>]

Gabriele's data, when considered as a whole unit, seem then very unpredictable and contradictory.

This absence of predictable and regular patterns is not expected in normal conditions and in fact never emerges from acquisition data.

Strong regularities emerge from normal acquisition data, which appear to be predictable within the theory. Relevant studies have shown that children never violate word order constraints. Child language data can always be syntactically analysed, even when they are not consistent with the target adult language. In fact, children's early production indicates that they have correctly set all the relevant parameters of their language at the onset of the two word stage.<sup>11</sup> Many relevant studies on the syntax of child language thus indicate that a Full (Syntactic) Competence emerges from the very earlier stages of language acquisition.<sup>12</sup>

On the other hand, if all features of Gabriele's data are taken into account, it seems possible to suggest, in his case, absence of syntactic competence. A Null (Syntactic) Competence Hypothesis is not unexpected within Logogenia. Cases of Null Syntactic Competence has in fact been empirically observed and theoretically predicted as a possible consequence of the limited access to relevant linguistic input caused by deafness.

<sup>10</sup> Syntactically legitimate sequences are marked in the text by underlined style.

<sup>11</sup> This observation has been formally defined by Wexler as Very Early Parameter Setting (VEPS). See, amongst others, Wexler (1998).

<sup>12</sup> See Guasti (2002) for a detailed survey of the relevant studies.

### 3. Systematic omission Vs random selection of functional elements

In case of Null Syntactic Competence, absence of functional structure should clearly emerge from the data. A precise set of predictions on how to detect the presence or absence of functional structure in non target productions is independently formulated in Borer&Rohrbacher (2003).<sup>13</sup> According to the authors, the systematic omission of functional material in a given corpus should indicate the presence of functional structure, whereas the random over use of functional material should argue for the absence of functional structure. A given functional element - the copula *Essere* - was then chosen and its production analysed in both the normal acquisition corpus and in Gabriele's corpus.

#### 3.1. Acquisition data

The data taken into consideration for the present analysis were drawn from the CHILDES corpus.<sup>14</sup> Production data were compiled from three monolingual Italian children, their ages ranging from 1;7 to 3;3. 1587 utterances were coded that could be analysed as copular constructions. The most relevant non adult like phenomenon detected was omission of copula.<sup>15</sup>

##### 3.1.1. Omission of the copula

Examples under (6) to (8) and the data in *Table 1* show that omission of copula is a relevant phenomenon in Italian Child Language, both considering all data and selecting only omissions in contexts with a realised subject (+subject contexts).

(6)-(8) Copula omission in +Subject contexts (SP) and in -Subject contexts (P).

- |     |                    |      |   |
|-----|--------------------|------|---|
| (6) | Martina (1; 08.02) | (SP) | quello pezzo<br>[That <sub>masc. sing.</sub> Ø <sub>BE</sub> piece <sub>masc. sing.</sub> ] |
|     |                    | (P)  | un pezzo<br>[Null Subject Ø <sub>BE</sub> Det <sub>masc. sing.</sub> piece]                 |

<sup>13</sup>Henceforth B&R.

<sup>14</sup>The Childes Database, November 2002, but see also MacWinney&Snow (1985).

<sup>15</sup> For a more detailed discussion of the data, see Franchi (in press\_a).

- (7) Raffaello (1; 11.25) (SP) Pallo butto  
[Paolo  $\emptyset_{BE}$  ugly<sub>masc.sing.</sub>]  
(P) glossa  
[Null Subject  $\emptyset_{BE}$  big<sub>fem.sing.</sub>]
- (8) Rosa (2; 10.14) (SP) ette bee  
[Demonstr<sub>fem.plur.</sub>  $\emptyset_{BE}$  sheep]  
(P) zucchero!  
[Null Subject  $\emptyset_{BE}$  sugar]

**Table 1:** Number of contexts and omission rate in +Subject contexts (SP/SCP), -Subject contexts (P/CP) and total, per child and in total.

	n. SP/SCP	% SP/SCP	n. P%CP	% P%CP	n. total	% total
Martina 1;7-2;7	69/197	35%	70/169	41%	139/367	38%
Raffaello 1;7-2;11	30/113	27%	92/218	42%	122/331	37%
Rosa 1;7-3;3	136/382	36%	310/506	61%	446/888	50%
<b>TOTAL</b>	<b>235/692</b>	<b>34%</b>	<b>472/893</b>	<b>53%</b>	<b>707/1586</b>	<b>45%</b>

The analysis of the realised subject contexts, which were considered genuine omission data, indicates the existence of a 1<sup>st</sup> stage of acquisition in which the omission phenomenon is even more relevant (Table 2).

The child language copular data seem then to indicate that omission corresponds to a syntactic option available in child grammar.

**Table 2:** Age span and omission rate in +Subject contexts in the 1<sup>st</sup> and in the 2<sup>nd</sup> stage of acquisition.

	1st stage	1st stage	2nd stage	2nd stage
<b>Martina</b>	1;7-1;11	<b>49%</b>	2;1-2;7	<b>17%</b>
<b>Raffaello</b>	1;7-2;4	<b>65%</b>	2;5-2;11	<b>17%</b>
<b>Rosa</b>	1;7-2;5	<b>81%</b>	2;3-3;3	<b>26%</b>

### 3.1.2. Patterns of omission: the WH contexts

The possible influence on the omission pattern of declarative versus WH interrogative contexts was taken into account.

419 WH copular contexts were isolated in the acquisition corpus, finding only two cases of copula omission, with an omission rate of 0,48% (relevant data are presented in *Table 3*).

**Table 3:** Number of contexts and omission rate in WH contexts, per child and in total.

<b>Copular Wh</b>	<b>n. contexts</b>	<b>n. omissions</b>	<b>% omissions</b>
Martina (1;7-2;7)	51	1	2,00%
Raffaello (1;7-2;11)	78	0	0,00%
Rosa (1;7-3;3)	290	1	0,34%
<b>TOTAL</b>	<b>419</b>	<b>2</b>	<b>0,48%</b>

The data so far analysed show that Italian children have the option of omitting the copula in declarative contexts but must produce a fully inflected copular form in very specific syntactic environments.<sup>16</sup>

### 3.1.3. Agreement data

In the Full Competence Hypothesis children are expected to always produce the correct copular form when they choose not to omit it. Consistently with this hypothesis, children in this study are shown to use the correct morphological form of the copula 99% of the time, as shown in the second and third column of *Table 4*.

<sup>16</sup> A similar pattern emerges from the analysis of Auxiliary data. The presence of this “WH constraint” leads one to imagine a Truncation strategy operative in Italian Child Grammar. The possibility of generating truncated structures would account for both the omission of functional verbs and its restrictions, crucially predicting obligatory presence of a realised copula (and auxiliary) in cases of WH preposing. See Franchi (in press\_b) for a discussion of this proposal.

**Table 4:** Agreement data

	Errors / total	%	Errors/Plurals	%
MARTINA	1/367	0,27%	1/26	3,85%
RAFFAELLO	3/331	0,91%	3/43	6,98%
ROSA	13/888	1,46%	13/ 101	12,87%
<b>TOTAL</b>	<b>17/1586</b>	<b>1,07%</b>	<b>17/170</b>	<b>10,00%</b>

As the fourth and fifth column in *Table 4* show, the few non target forms detected are all related with the production of the 3<sup>rd</sup> person plural form of the copula (10% of errors detected), as the examples in (9) to (11) show.

- (9) Martina (2; 03.22)                    s'è i gatti  
[there is the cats]
- (10) Raffaello (2; 11. 09)                cos'è quelle?  
[what is those]
- (11) Rosa (2; 9. 04)                        tuo c'è e@p macchine intanto  
[(in) yours there is the cars meanwhile]

A detailed analysis of the plural contexts in which non target forms emerge shows that the 3<sup>rd</sup> person plural form *Sono* is only replaced by the 3<sup>rd</sup> person singular form *È*. This form mainly appears in post-verbal plural subject contexts (14 cases out of 17).

As shown in Guasti&Rizzi (2002), there appear to be free variation amongst languages in expressing the morphological agreement with post verbal subjects, as the examples in (12) indicate.

- (12) Patterns of agreement with post verbal subject.
- a. Three girls are in the garden.
  - a'. There are three girls in the garden
  - b. Trois filles sont arrivées.  
[Three girls are arrived]
  - b'. Il est arrivé trois filles.  
[It is arrived three girls]
  - c. Questo, i bambini lo fanno sempre  
[This, the kids it do<sub>plur</sub> always]
  - c'. Questo, lo fa sempre i bambini.<sup>17</sup>

<sup>17</sup>Examples (12a) to (12c') are drawn from Guasti&Rizzi (2002).

[This, it do<sub>sing</sub> the kids]

- d. Ci sono troppi soldi  
[there is too much money<sub>plur</sub>]
- d'. C'è troppi soldi<sup>18</sup>  
[there is too much money<sub>plur</sub>]

In a cross-linguistic perspective, child language data seem then consistent with adult language data and - therefore - consistent with UG. The agreement “errors” found in copular constructions in acquisition are not errors at all, but instances of an option made available by UG and exploited both in child and in adult languages.

### 3.2. *The deaf subject Italian data*

The deaf subject Italian data were analysed, looking for either systematic omission of the copula and syntactically constrained morphological errors or for random over-use of *Essere* and random distribution of morphological errors.

During the experimental sessions, 262 utterances were produced, 145 of which contained forms of *Essere*.

No omission of copula is detected in Gabriele's corpus. In his production a form of *Essere* is always present when a sentence is to be understood as copular.

#### 3.2.1. *Random selection of Essere*

As the few examples reported in (13) and (14) show, the coding of the different uses of *Essere* was a non trivial task.

- (13) a. Io sono più vecchio.  
[I BE<sub>1st sing</sub> more old]
- b. No, però [lei] sono dottoressa  
[No, but <she> BE<sub>1st sing</sub> doctor<sub>fem.</sub>]
- c. Ieri, io sono andato a XXX  
[Yesterday I BE<sub>1st sing</sub> gone to XXX]

- (14) a. La Juve è cade, sono sconfitta ha perso!

<sup>18</sup>Langhe dialect, Piedmont.

[The Juventus BE<sub>3rd sing</sub> fall<sub>3rd sing</sub> BE<sub>1st sing</sub> beaten HAVE<sub>3rd sing</sub> lost]

b. C'È SONO QUESTO È NOME SONO IN BARBIERE.

[There is BE<sub>1st sing</sub> this is name BE<sub>1st sing</sub> in barber's shop]

Not all instances of *Essere* could be easily assigned a copular or auxiliary reading (as in (14b), for instance). In the whole of Gabriele's production, only 70 utterances containing forms of *Essere* out of 145 (48%) were coded as copular structures and 14 as uses of Auxiliary *Essere* (10%).

The remaining 65 instances of *Essere* could not be assigned the syntactic role of copula or that of auxiliary. Some examples are reported under (15).<sup>19</sup>

(15) a. SI, MA SONO FAVORE ANCHE TI SONO LAVORO PER OPERAIO.

[Yes. but BE<sub>1st sing.</sub> favour also you<sub>dat</sub> BE<sub>1st sing.</sub> work<sub>1st sing./Noun</sub> for worker]

b. NON È VERO, NON IL TELEFONARE È CELLULARE!

[It is not true, not the phoning BE<sub>3rd sing.</sub> mobile phone]

c. MA SONO IL CAMPIONATO DILETTANTI GIRONE "C" ERA A XXX HO PERSO SONO CLASSIFICA PER 31 PUNTI.

[but BE<sub>1st sing.</sub> the amateur championship Round C BE<sub>3rd sing. past</sub> in XXX HAVE lost BE<sub>1st sing.</sub> classification for 31 scores]

d. IERI ERO MOLTO FRESCO SONO L'ARIA PERCHÉ UMIDA SONO VENTO.

[Yesterday BE<sub>1st sing. past</sub> very fresh BE<sub>1st sing.</sub> the air because damp BE<sub>1st sing.</sub> wind]

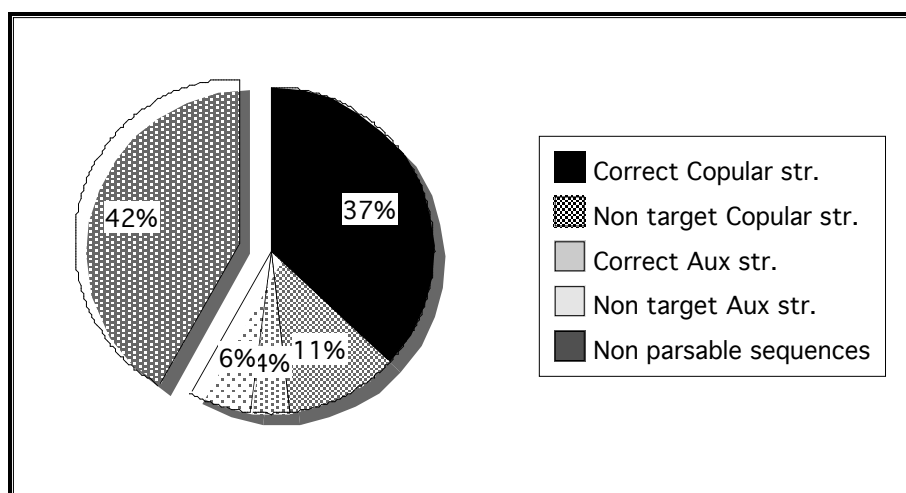
e. Sì, sono poco piove!!!

[Yes, BE<sub>1st sing.</sub> little RAIN<sub>3rd sing.</sub>]

As summarised in *Table 5*, 42% of the total of Gabriele's uses of *Essere* were impossible to code as copular or auxiliary constructions.

**Table 5:** Proportion of correct, incorrect and non parsable forms of *Essere* in Gabriele's data.

<sup>19</sup> Each sequence presented under (15) is drawn from a different session. The over-use of forms of *Essere* is not limited to a specific session and no evolution over time emerges along the 5 months of data collection.



In Gabriele's Italian production data, over use of forms of *Essere* emerges instead of the systematic and highly constrained omission pattern that emerges from normal acquisition data, as summarised in *Table 6*.

**Table 6:** Omission versus Random Over Use of *Essere*

Forms of ESSERE	Acquis data	Deaf data
Omission	45%	1%
Random Over Use	0%	42%

### 3.2.2. Agreement data

Once the 85 instances of *Essere* that can actually be analysed as copular or auxiliary forms are taken into account, 16% of non target forms emerge with respect to verbal agreement.

Agreement errors do not appear to be restricted to any specific syntactic context, and mainly appear in preverbal subject contexts.

The non target forms are not limited to 3<sup>rd</sup> person plural contexts, but are distributed across different contexts, as shown in (16).

- (16) a. Gli occhiali è blu [the glasses<sub>plur.</sub> BE<sub>3rd sing</sub> blue]  
 b. [io] è contento [I BE<sub>3rd sing</sub> happy<sub>masc/sing</sub>]  
 c. Elena sono alta. [Elena BE<sub>1st sing</sub> tall<sub>fem/sing.</sub>]

**Table 7:** The distribution of agreement errors in Gabriele's corpus.

Contexts	<b>SONO</b>	<b>E'</b>	<b>SEI</b>	Errors %
Ip.s.	13	2 (*)	-	13% (2/15)
Iip.s.	1 (*)	-	6	14% (1/7)
IIip.s.	5 (*)	48	1 (*)	11% (6/54)
IIIp.p.	4	5 (*)	-	56% (5/9)
Total	6*/23	7*/55	1*/6	16% (14/85)
%	<b>26,09%</b>	<b>12,73%</b>	<b>16,67%</b>	<b>16,47%</b>

In Gabriele's corpus, the 3<sup>rd</sup> person singular form *È* emerges in more than a half of the 3<sup>rd</sup> person plural contexts. *È* also appears in 1<sup>st</sup> person singular contexts. The 1<sup>st</sup> person singular form *Sono* appears in 3<sup>rd</sup> person singular contexts. In these contexts also the 2<sup>nd</sup> person singular *Sei* can emerge (relevant data in *Table 7*).

The data indicate spontaneous use of the two forms *Sono* and *È* only.<sup>20</sup> Those forms are selected in the appropriate context most of the time, but they also freely appear 16% of the time in all other syntactic contexts.

In Gabriele's corpus, agreement errors are more frequent than they are in normal acquisition data and they are not as predictable and syntactically restricted, as shown in *Table 8*.

**Table 8:** Syntactically constrained errors versus random selection of forms of *Essere* in Child Italian (C.I.) and in Gabriele (G.).

<b>Agreement errors</b>	<b>C. I.</b>	<b>G.</b>
<b>I p. sing.</b>	0%	13%
<b>II p. sing</b>	0%	<b>43%</b>
III p. sing.	0%	11%
III p. plur.	<b>10%</b>	<b>56%</b>

<sup>20</sup> The form *Sei* in fact emerges only in contexts of elicited production such as (i) and is therefore not considered productive in Gabriele's system:

- (i) E. Sono magra? [BE<sub>1st sing</sub> skinny<sub>fem/sing.</sub>]  
 G. Sì, sei magra. [Yes, BE<sub>2nd sing</sub> skinny<sub>fem/sing.</sub>]

### 3.2.3. *Comprehension data*

Given the syntactically unpredictable pattern emerging from the deaf subject production data, comprehension data were considered too.

Data on the comprehension of agreement features on the copula were elicited through minimal pairs of declarative sentences such as (17) or Yes/No questions such as (18).<sup>21</sup>

- (17) Sono in piscina. [BE<sub>1st sing</sub> in the swimming pool]  
 Sei in piscina. [BE<sub>2nd sing</sub> in the swimming pool]

- (18) È seduta? [BE<sub>3rd sing</sub> sitting]  
 Sono seduta? [BE<sub>1st sing</sub> sitting]

The comprehension tasks were designed so that only subjects able to “read” the syntactic information expressed by the verbal morphology could produce a correct answer.

Gabriele's correct answers were 37% of the total. His data thus indicate no access to the syntactic information expressed by the verbal morphology.

Gabriele's comprehension of the specific information carried by the verbal morphology was further investigated with a second task in which he was asked to identify the referent of the subject in overt pronominal subject contexts. Some examples are under (19) and (20).<sup>22</sup>

- (19) E. Tu sei Elena? [You are Elena]  
 G. Sì (#) [Yes]  
 E. Tu sei Gabriele? [You are Gabriele]  
 G. Sì [Yes]

- (20) C. Io sono Gabriele? [I am Gabriele]  
 G. No. [No]  
 C. Io sono Elena? [I am Elena]  
 G. No. [No]  
 C. Io sono Carol? [I am Carol]

<sup>21</sup> Gabriele was asked to write WHO was in the swimming pool after reading a sentence such as (17a/b) or asked to answer Yes or No to questions such as (18a/b). The yes/no questions were structured so that all the information was available from the extra-linguistic context, once the referent of the syntactic subject was identified.

<sup>22</sup> Questions in (19) were asked by Elena, questions in (20) by Carol. Answers marked with (#) are not correct in the given context.

G. No (#) [No]

Gabriele's performance in this task was at chance level (50% of correct responses). The same performance emerges when he is asked to identify the subject of copular forms he had produced himself, as shown in (21) and (22).<sup>23</sup>

- (21) E. Sono magra? [BE<sub>1st sing</sub> skinny<sub>fem/sing</sub>.]  
 G. Sì, sei magra. [Yes, BE<sub>2nd sing</sub> skinny<sub>fem/sing</sub>.]  
 E. Chi? [Who?]  
 G. Carol (#) [Carol]
- (22) C. Sono magra? [BE<sub>1st sing</sub> skinny<sub>fem/sing</sub>.]  
 G. Sì, sei magra. [Yes, BE<sub>2nd sing</sub> skinny<sub>fem/sing</sub>.]  
 E. Chi? [Who?]  
 G. Elena (#) [Elena]

Gabriele's ability to respect syntactic constraints on subject-verb number agreement was further investigated through grammaticality judgments on sentences such as (23) and (24).<sup>24</sup>

- (23) a. \*I capelli è lunghi. [The hair<sub>plur</sub> BE<sub>3rd sing</sub> long ]  
 b. I capelli sono lunghi. [The hair<sub>plur</sub> BE<sub>3rd plur</sub> long ]
- (24) a. La penna è nuova. [The pen<sub>sing</sub> BE<sub>3rd sing</sub> new]  
 b. \*Le penne è nuova. [The pen<sub>plur</sub> BE<sub>3rd sing</sub> new]

Gabriele's performance on the grammaticality judgement task was below chance level (35% of correct answers). Some of his answers are reported under (25) and (26).<sup>25</sup>

- (25) \* ✓ La penna sono sul tavolo. [The pen<sub>sing</sub> BE<sub>3rd plur</sub> on the table]  
 ✓ ✓ Le penne sono sul tavolo. [The pen<sub>plur</sub> BE<sub>3rd plur</sub> on the table]  
 ✓ ✓ I miei capelli sono biondi e neri.

<sup>23</sup> In this task Gabriele is not able to identify the referent of the 2<sup>nd</sup> person singular form *Sei*. This fact further suggests a non productive use of this form. Answers marked with (#) are not correct in the given context.

<sup>24</sup> It is important to notice that every native speaker of Italian would give a straightforward answer to the grammaticality judgment task proposed here.

<sup>25</sup> The left most column indicates a native speaker's answer, the second indicates Gabriele's answers.

[My hair<sub>plur</sub> BE<sub>3rd plur</sub> blond and black]

\* √ I miei capelli è biondi e neri.  
[My hair<sub>plur</sub> BE<sub>3rd sing</sub> blond and black]

- (26) √ \* La penna è blu. [The pen<sub>sing</sub> BE<sub>3rd sing</sub> blue]  
 \* √ La penna sono blu. [The pen<sub>sing</sub> BE<sub>3rd plur</sub> blue]  
 \* √ Le penne è blu. [The pen<sub>plur</sub> BE<sub>3rd sing</sub> blue]  
 √ \* Le penne sono blu. [The pen<sub>plur</sub> BE<sub>3rd plur</sub> blue]

An average performance at chance level or below emerges from Gabriele's data on the perception of the information carried by the verbal morphology and from his data on the perception of agreement constraints.

#### 4. Conclusion

Gabriele's data do not show the pattern of regular and syntactically restricted omission or use of a default form that can be found in normal acquisition data, where functional structure is supposed to be active.

**Table 9:** The contrast found between Child Italian data (C.I.) and the deaf person data (G.)

Forms of ESSERE	C. I.	G.
Omission	45%	1%
Random Over Use	0%	42%
Agreement errors	1%	19%

Agreement errors	C. I.	G.
I p. sing.	0%	13%
II p. sing	0%	43%
III p. sing.	0%	11%
III p. plur.	10%	56%

In Gabriele's production data, the rate of correct use of *Essere* copula and *Essere* auxiliary is only 41%. If comprehension of copular constructions is taken into account, the correct answers rate lowers further to 37% and 35%. The pattern emerging from production and comprehension data seems then to indicate a general strategy of random selection of forms of *Essere*, to which no syntactic content is assigned.

Given those facts, it seems possible to conclude that the deaf subject data concerning *Essere* do not correspond to a syntactically constrained system. As proposed in Borer&Rohrbacher (2003), random over use of functional

material indicates no availability of functional structure. Gabriele's performance seems then to suggest - in the case of *Essere* - a non syntactically constrained language behaviour.

The emergence of such an unexpected pattern from Gabriele's data could be correlated to the deprivation of the primary linguistic data to which he has been exposed to. The data so far discussed seem then to suggest that deafness can in some cases drastically reduce the quantity and alter the quality of the linguistic information present in the input so that no triggers are available to activate the process of language acquisition.

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