Vol. 51 - Settembre 2017

[online] ISSN 2499-1562 [print] ISSN 2499-2232

# **Explicit Teaching of Syntactic Movement in Passive Sentences and Relative Clauses**

The Case of a Romanian/Italian Sequential Bilingual Child

Francesca Volpato, Giulia Bozzolan (Università Ca' Foscari Venezia, Italia)

**Abstract** This study presents a language learning approach involving the explicit teaching of syntactic movement to a sequential bilingual (Romanian-Italian) child aged 7;4, who was exposed to Italian at the age of 3. The child was assessed on her general skills in Italian and on production and comprehension of relative clauses (RCs) and passive sentences (PSs). Her performance was assessed before and after the teaching period. At the first administration, she had low results in all tests compared to monolingual Italian children. After the period of explicit teaching, improvement was observed especially in PSs. In the use of RCs, improvement was less evident, especially in production, but it is worth noticing that metalinguistic awareness was developed.

**Summary** 1 Language Acquisition in a Bilingual Context. – 2 Linguistic Properties of Relative Clauses and Passive Sentences and their Acquisition. – 2.1 Relative Clauses. – 2.2 Passive Sentences. – 3 Explicit Syntactic Teaching: Previous Studies. – 4 The Experiment: the Pre-Teaching Phase. – 4.1 Participants. – 4.2 Test di Comprensione Grammaticale per Bambini (TCGB): Task and Results. – 4.3 RCs Production: the Elicitation Task and Results. – 4.4 Relative Clauses Comprehension: Task and Results. – 4.5 Passive Sentences Production: the Elicitation Task and Results. – 4.6 Passive Sentences Comprehension: Task and Results. – 5 Discussion. – 6 The Explicit Syntactic Teaching Phase. – 7 Post-Teaching Results. – 8 Discussion and Conclusion.

**Keywords** Bilingualism. Explicit syntactic teaching. Passive sentences. Relative clauses.

## 1 Language Acquisition in a Bilingual Context

This study investigates the effect of explicit syntactic teaching of Italian relative clauses (RC) and passive sentences (PS), in JM, a 7 years old sequential bilingual speaker. JM was born from Romanian immigrant parents in Italy, moved to Romania at the age of 8 months and went back to Italy at the age of 3. Accordingly, JM was first exposed to Romanian for her first 3 years of life and then to Italian.

Some researchers claim that the particular situation of bilingual children born and grown up mainly in their host country, but with immigrant parents, could have remarkable consequences on their linguistic experience: according to some authors (Páez, Tabors, López 2007, Verhoeven et al. 2007), migrants' children show lower level of accuracy than their monolingual peers, and show moreover a drop in both languages skills. Oral and writing competencies are compromised, especially reading and writing.

An important distinction is between sequential and simultaneous bilingualism, which depend on the age of onset (AO) of each linguistic system. Most researchers generally agree with an arbitrary cut off age, namely 3 years (McLaughlin 1978), beyond which a situation of simultaneous bilingualism switches to sequential. Age 3 actually refers to the age of onset of one of the two languages: if exposure of L2 starts at a point which lays between birth and this age, we deal with a case of simultaneous bilingualism; if second language acquisition begins at or after the 3rd year of life, but before puberty, it is a sequential bilingualism situation.

Even though different critical periods for different linguistic domains have been detected, most studies agree on the fact that a child experiences a situation of sequential L2 acquisition when (s)he is exposed to only one language, the one spoken by his/her parents and relatives, from birth, and starts experiencing a second language in kindergarten or in pre-school day care environments (Lesaux, Rupp, Siegel 2007; Genesee 2008). This is usually the case of migrants' children.

Some studies detect a sharp difference between simultaneous and sequential second language acquisition, while others claim that no matter what the AO is, if the first exposure to L2 is before the closure of the critical period, the child can attain a native-like proficiency in his/her second language.

Another issue which has been deeply debated as far as this distinction is concerned, is the modality through which sequential bilinguals acquire their L2: are the phases and the strategies similar to L1 acquisition or do they differ to some extent?

Several studies were carried out on this topic. Some authors, including McLaughlin (1978), support the idea that L2 acquisition does not differ too much from L1 acquisition, whereas others (Hakuta, Butler, Witt 2000; Meisel 2008) demonstrate that a difference between L1 and L2 development actually exists.

What is important to notice, however, is that every experiment brings with it an amount of variables which must be taken into consideration. Considering the AO as the only variable, comparing bilinguals between them may be simplistic: Unsworth et al. (2012) firmly state that a complex interplay between amount of input and AO influences the way children acquire their L2. These main features characterizing bilingualism, especially the sequential one, are of great interest with regard to the study presented in this article. The addressee of the experiment is, in fact, a sequential bilingual child who had been exposed to Romanian from birth and was first exposed to Italian around the age of 3.

A crucial role is also played by an amount of other factors, which affect economic, social, and personal spheres (Paradis, Nicoladis, Genesee 2000; Bhatia, Ritchie 2006; Genesee et al. 2006). In particular, economic circumstances, race, immigration status, health, educational environment, geographic location, parents' (especially mother's) grade of education, level of integration achieved by the child's family, or only by the child, with the respect to the L2 speaking community (Genesee et al. 2006).

A case that is worth mentioning is the bilingual experience of immigrants' children. The linguistic experience of those immigrant people's children who are either born in their host country or come there with their parents at a very early age, is particularly interesting as, on the one hand, very few light has been shed so far onto it and, on the other hand, there are many factors (psychological, economic, social, inter alia) which deeply affect their second language acquisition. Adults who have to migrate from their native country, usually for economic or socio-political unfavourable reasons, reach the host country with a solid native language and are rarely able to acquire the language of the host community at a high level. What happens, instead, to the children who still have to acquire their L1 completely? According to Páez, Tabors and López (2007) children of immigrants may show significantly lower levels of accuracy with respect to their monolingual peers in their general linguistic abilities such as literary and oral language skills. These difficulties may be observed in the acquisition of both L1 and L2.

Relatively recent studies demonstrate that those who attended preschool in their early years, not only experienced an effortless and fully successful second language acquisition, but had also more positive outcomes in their later school experiences (Hyltenstam, Abrahamsson 2003 for English; Spiess et al. 2003, for German; Beltrame 2011, for Italian). Spiess et al. (2003) report that 51% of immigrants who had previously attended German kindergarten went to secondary school, compared to the 21% who did not experience preschool activities.

Since the majority of children of immigrant people speak their own language at home, kindergarten attendance has been identified as a crucial propeller towards the use and the acquisition of the second language (Beltrame 2011).

JM is sequential bilingual child living in Italy, but exposed to the Romanian language at home. Following previous studies on the incomplete language acquisition reached by immigrants' children (Páez, Tabors, López 2007; Verhoeven et al. 2007), we expect that also JM will show some difficulties in the acquisition of some linguistic properties of the Italian language. Through the use of standardized and non-standardized tools, we aim at investigating her linguistic competence, in order to identify the vulnerable aspects of grammar and propose some teaching activities. In addition, we want to verify whether the explicit syntactic teaching ac-

tivities contribute to the acceleration of her language development and whether the teaching of some properties can contribute to the improvement of other properties that were not taught.

## 2 Linguistic Properties of Relative Clauses and Passive Sentences and their Acquisition

#### 2.1 Relative Clauses

The RCs investigated in this study are subordinate sentences introduced by the complementizer *che* 'that', intended to modify a nominal element, which is defined as the head of the relative clause (Cinque 1982; Bianchi 1999).

The type of RC we are going to deal with is the restrictive right-branching one. The modified element moves from its original position to a position in the left periphery of the clause and leaves a copy. Movement can involve either the subject or the object, therefore subject relative clause (SR) as in (1) and object relative clause (OR) (2) are derived:

- (1) Il topo che <il topo> spinge le galline 'The mouse that <the mouse> pushes the hens
- (2) Il topo che le galline spingono <il topo>'The mouse that the hens push <the mouse>

Being Italian a *pro-drop* language, it is possible for the subject to occupy a post-verbal position (Rizzi 1982). Hence, relative clauses can be built with a post-verbal subject (ORps), as we can see in (3):

(3) Il topo che spingono le galline
The mouse that push the henssubj
'The mouse that the hens push'.

RCs are complex sentences due to the presence of syntactic movement, non-canonical word order, and long-distance dependencies between the moved constituent and its original position. Because of their complex structure and the complex relations involved, the acquisition of relative clauses is highly debated. All studies however converge on the fact that SRs are easier than ORs in both production and comprehension tasks. In production, the percentage of accuracy of SRs is 61% between the age of 3;0--3;11, around 90% at the age of 4 (Belletti, Contemori 2010), and approaches 100% at adolescence and adulthood. As for ORs, their percentage of occurrence is 37% at the age of 3, 52% at the age of 4, and 45% at the age of 5 and 6. They increase until the age of 6 and 7, and then they start to decrease, being

replaced by causative constructions and passive relatives (Re 2010). In some cases, ORs are produced with resumptive clitic pronouns. The presence of these elements is observed in child and spoken colloquial language by people of different socio-economic backgrounds (Guasti, Cardinaletti 2003).

In comprehension, SRs are well-mastered at the age of 3 years, while ORs, and especially ORps, are quite problematic and some difficulties are found even in adolescents (Adani 2011, Volpato 2012). What facilitates the comprehension of ORs by monolingual typically-developing children and adolescents is the presence of number dissimilarities between the RC head and the RC subject (Adani et al. 2010, Volpato 2012). To our knowledge, no such information is available for bilingual children.

#### 2.2 Passive Sentences

PSs are complex structures presenting a marked word order and derived through a reorganization of the grammatical functions. In addition, the verb morphology changes; in Italian, it is formed by the auxiliary *essere* (to be) or *venire* (to come) followed by the past participle of the main verb. The agent of the action can be expressed by a PP, called *by-phrase*. The patient of the active sentence become the subject of the passive one, with which the verb agrees in number and gender.

According to early approaches (Jaeggli 1986), the NP object moves from its original position after the verb to the Spec/IP position and leaves a coindexed trace in the embedded position, forming a chain.

Recent approaches to the derivation of PSs (Collins 2005) suggest that these structures are derived through a mechanism called *Smuggling*. The derivation of passives involves two steps, as (4) shows:

According to locality principles (Rizzi 1990, 2004), the movement of the internal argument (the patient) is blocked by the presence of the external argument (the agent), with which it shares features. In the smuggling approach, the first movement involves the whole VP (verb + object) past the external argument. The presence of the verb licenses the *smuggling* of the object to a position higher than the subject (SpecVoiceP). A further movement involves the patient, which reaches the A-positon in the left edge of the sentence, namely Spec/TP.

The acquisition of PSs represents a much debated issue cross-linguistically. The question is whether the passive voice is correctly represented since the early stages of language acquisition or it is acquired later, at the age of 5-6 years. For Italian, few studies exist on this topic (Manetti 2013;

Volpato et al. 2013, 2014, 2016). Manetti's study (2013) was carried out through three experiments devoted to assess passive clauses production in 12 Italian-speaking children aged between 3;5 and 4;6. Results showed that under priming, children produced PSs with both *essere* (to be) and *venire* (to come), demonstrating that they already master long verbal passive clauses at the age of 4.

Volpato et al. (2016)'s study investigated the comprehension of PSs in 75 Italian-speaking children aged between 3;4 and 6;2. Three variables were taken into account: actional vs non-actional verbs, absence or presence of the *by*-phrase, the use of auxiliary *essere* (to be) or *venire* (to come). Results demonstrated that children understand sentences containing actional verbs better, and that there is no significant difference between PSs with and without the *by*-phrase or between the two auxiliaries *essere* and *venire*. This is an important result since a PS with the auxiliary *venire* can only be interpreted as an eventive passive: therefore, it provides support to the fact that A-chains are available to children from the earliest stages of language acquisition.

## 3 Explicit Syntactic Teaching: Previous Studies

Explicit syntactic teaching is based on a meta-linguistic approach: it is carried out through the presentation of the processes laying behind a linguistic phenomenon, with the aim to reach *comprehension* rather than mere *acceptation* of the rules. This path has been shown to be really helpful in several conditions, especially with individuals affected by brain (Thompson et al. 2003; Thompson, Shapiro 2005), sensory (D'Ortenzio 2015) or specific language impairment (Ebbels & van der Lely 2001; Levy, Friedmann 2009), and also with the purpose of accelerating language acquisition in very young children (Roth 1984).

Ebbels & van der Lely's (2001) study was carried out with four English-speaking children aged between 11;8 and 12;9 affected by syntactic Specific Language Impairment (SySLI). The focus of the intervention was on the use of PSs and Wh-questions. It used a codified visual scheme which identified theta-roles, syntactic dependencies, grammatical categories, morphological inflections, and hierarchic relations through the use of colours and shapes. After treatment, all participants showed improved performance in both production and comprehension.

Levy and Friedmann's (2009) treatment took as addressee a Hebrew-speaking SySLI boy aged 12;2. The structures assessed before, during, and after the treatment, both in comprehension and production, were RCs, PSs, focalizations, and other movement-derived structures.

Argument structure, Thematic Criterion and syntactic movement were explained. The use of colours was crucial. Thanks to Gal's inventiveness,

it was possible to use a metaphor in order to understand better these notions: verbs were compared to some officials who, according to their grade, could exerce their command upon the soldiers, which represented the arguments. It was very important to take advantage of the patient's interests, in order to make the therapy lighter and more agreeable.

After this introduction, the Thematic Criterion was explained to Gal and, after that, syntactic movement was introduced. The experimenters made great use of cards with one word written on each of them, to make the movement issue clearer and more tangible. The phenomenon was indeed *shown* to Gal, through cards movement. Chains and traces were explained to the patient by using colours. After this part, characterized by high tangibility, a more abstract phase including oral tasks began. The participant's performance during and after treatment was astonishing: his final scores were almost all at ceiling, ranging from 90 to 100%.

Thompson and Shapiro (2005) focused on a sample of subjects affected by non-fluent agrammatic aphasia and found that the syntactic treatment of some structures, besides improving them, can have positive effects on similar untreated structures, leading to generalization effects. The intervention was useful to increase the MLU of grammatical sentences and the VP production, to improve the processing of verb argument structure, also consisting in a more correct use of theta-roles, and to bring positive outcomes on adjunct production.

D'Ortenzio's (2015) intervention involved comprehension and production of RCs and mainly followed Levy and Friedmann's (2009) procedure. The addressee of the study was an Italian-speaking deaf child aged 8;4 implanted at the age of 2;7. The intervention was useful and had positive outcomes on different linguistic and grammatical aspects of the language. Great importance was given to the child's interests: characters from 'Geronimo Stilton' were used in the submitted sentences. Post-treatment results were excellent: the child performed at ceiling in every type of RC, both in comprehension and production.

These teaching approaches started from the linguistic properties that were simpler and preserved in the grammar of the participants (as for instance, argument structure, simple sentences, and SRs), proceeding with more difficult properties (ORs) in order to help them develop a metalinguistic competence and to obtain generalization effects also in other structures that were not directly considered during the teaching activities (wh-questions, ORps).

Roth's (1984) study constitutes a very interesting experiment as it was addressed to a group of 18 very young typically-developing children (age range: 3;6-4;6 years), in order to verify whether it would be possible to accelerate children's language acquisition by explicitly teaching them linguistic structures beyond their developmental mastery. The structures which were involved in the study are RCs. Some toys were used and ma-

nipulated during the activities, in order to literally show the relations between the arguments. A significant improvement in children's performance was observed after the syntactic explicit teaching. The study made it possible to determine that direct intervention can accelerate young children's language development.

In this study the linguistic, competence of JM is assessed in order to identify the linguistic properties that were found to be problematic. On the basis of these outcomes, some teaching activities are proposed, starting from the simplest aspects of grammar, as previous studies suggested. In addition, a further aspect that was investigated was the effectiveness of the explicit syntactic teaching activities in order to determine whether they contribute to the acceleration of JM's language development and whether the teaching of some properties can contribute to the improvement of other properties that were not taught.

## 4 The Experiment: the Pre-Teaching Phase

This study was carried out in three phases: pre-teaching testing, explicit syntactic teaching, and post-teaching testing. In both the pre- and the post-teaching phase, JM was assessed on her general level of Italian and her comprehension and production of both RCs and PSs.

## 4.1 Participants

JM is sequential bilingual child speaking Romanian and Italian. She was 7;4 at the time of the first test administration. Both parents are native speakers of Romanian, the language which is mainly spoken at JM's home. The child was born in Italy, but went to Romania at the age of 8 months, where she stayed until the age of 3. When she came back to Italy, she attended kindergarten and began her exposure to her L2. Her parents were not submitted to any formal interview, but during normal conversation, her mother provided the information provided above. The child has one brother, who was about one year old at the time of the experiment, and therefore too young for linguistic assessment. JM did not attend kindergarden, was not submitted to any language therapy or other programs for language promotion. She was attending the second year of primary school at the time of the experiment.

The child's performance was compared to that of two control groups (CG). As far as RCs were concerned, JM's performance was compared to a control group that included 6 monolingual Italian-speaking children aged between 7;2 and 7;9 (mean age: 7;5), whereas for the passive experiment, the control group is composed of 7 children of comparable linguistic age,

selected on the basis of the scores obtained in the standardized comprehension test (TCGB), aged between 5;10 and 6;2 (mean age: 6;0).¹ All the children included in the CG groups were either monolingual speakers of Italian or they spoke Italian and the Venetian variety of the place in which they lived. They did not show any language impairment, hearing or mental disabilities.

## 4.2 Test di Comprensione Grammaticale per Bambini (TCGB): Task and Results

JM was evaluated in her general level of Italian comprehension using the TCGB (Chilosi, Cipriani 2006), a standardized comprehension test for children ranging in age from 3;6 to 8 years. It is composed of 76 stimuli, which investigate several types of structures (locative complements; verbal and nominal inflectional morphology; affirmative active sentences; negative active sentences; affirmative PSs; negative PSs; RCs; sentences containing dative complements).

For every stimulus, the child had to select the correct picture out of four possible choices after listening the sentence read by the experimenter. The error scores assigned to every item are 0 if the child answers correctly, 0.5 if the child answers correctly after a repetition and 1.5 if the answer is incorrect even after a repetition. The results are to be compared to normative sample's data provided with the materials.

The whole test was submitted to JM in a quiet room at her school and lasted 30 minutes.

JM's overall error score was 9 and matched that of monolingual Italianspeaking children aged 6; hence, she was below her age-peers. The most problematic structures were those containing locative complements and PSs.

#### 4.3 RCs Production: the Elicitation Task and Results

The RCs elicitation task was created by Volpato (2010) following Friedmann and Szterman's (2006) model for Hebrew. It is a preference task in which the child has to express his/her preference between two options, being forced to produce a RC. It is composed of 36 stimuli, 12 eliciting a SR, 12 eliciting an OR (involving animate subjects and objects), and 12 requiring the production of a filler sentence (SVO or SV sentence with

<sup>1</sup> We would have preferred to compare JM with her age-peers on passives as well, but no existing data are available yet on passive sentences as regards this age range. However, already at the age of 6 children show levels of accuracy approaching 100% in particular in sentences with actional verbs (Author et al. 2016).

animate subjects and inanimate objects). All verbs are transitive and reversible, in order to make the child rely on syntactic cues and not on pragmatic ones. Figure 1 and (5) show an example of stimulus for the elicitation of a SR:

(5) There are two pictures. In the former, the children stroke the cat. In the latter, the children hit the cat. Which children do you like? Start with 'I like the children...' or 'The children...'

Target: '(I like) the children that stroke/hit the cat.'

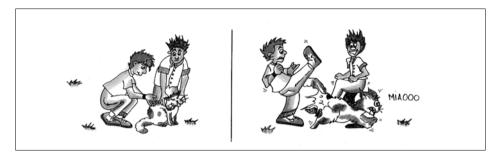


Figure 1. Elicitation of a subject relative

The number and percentage of target sentences produced by JM are shown in table 1:

		10/ 6.			
Table 1	Number an	id % of target	sentences in	the production task	

	JM		CG	
Type of sentences	No.	%	No.	%
SRs	10/12	83%	72/72	100%
ORs	0/12	0%	20/72	28%

All filler sentences were correctly produced. When SRs and ORs were elicited, answering strategies different from the target one were found, especially in the case of ORs. From a qualitative point of view, JM's strategies in order to avoid ORs were examined and compared to the CG of comparable chronological age 7;5. The most frequent constructions in JM's production were ambiguous sentences, which had a twofold interpretation between SR and ORp (*Mi piace il bambino che abbraccia la mamma* – 'I like the child that hugs the mother'). This strategy is rarely found in the CG group. This fact is remarkable as JM shows a pattern which differs from the one of her monolingual peers, even if her productions are grammatically acceptable. In two cases, she used a SR instead of producing an OR, therefore either she changed the head of the relative, or she inverted the

thematic roles; in two other cases, she produced ORs with a clitic pronoun (*Mi piace il bambino che il leone lo segue* – 'I like the child that the lion chases him'), a strategy that was also used by the CG group.

In most cases, the CG group produced causative (*Il bambino che si fa lavare dal papà* 'The child that has himself washed by the father') and passive (*Il bambino che è lavato dal papa* 'The child that is washed by the father') constructions. Differently from the CG's participants, JM never recurred to these constructions.

#### 4.4 Relative Clauses Comprehension: Task and Results

The test assessing RCs comprehension was created by Volpato (2010), following Friedmann and Novogrodsky's (2004) model. It is composed of 48 experimental stimuli and 20 filler sentences.

The child is shown two figures, representing same actions and characters, but reversed theta-roles. After having heard a RC read by the experimenter, (s)he has to pinpoint at the right character who is the head of the just heard sentence.

All verbs are transitive and reversible, number features are manipulated on both DPs, and the characters are chosen in order not to influence the child's performance with semantic or pragmatic cues. Figure 2 shows an example of item matching the SR\_SG\_PL *Tocca/Indica il coniglio che colpisce i topi* 'Touch the rabbit who hits the mice'.<sup>2</sup>

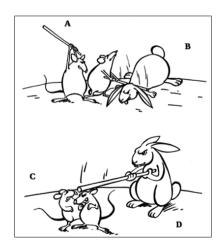


Figure 2. Example of an experimental trial

2 In this abbreviation and in those in table 4, SG identifies a singular DP and PL identifies a plural DP. The first DP is the relative head, the second is the DP occurring inside the relative clause.

Eight different kinds of sentences were assessed, grouped into 3 bigger types: SRs, ORs with preverbal subject, ORs with post-verbal subject (ORp). Table 2 represents JM's performance compared to CG's one in each condition:

Table 2. JM's relative clauses com	prehension compared	to the control group (CG)

Type of sentence	JM%	CG%
	М	M (SD)
SR_SG_PL	100%	100% (0%)
SR_PL_SG	100%	100% (0%)
OR_SG_SG	67%	89% (20%)
OR_PL_PL	50%	94% (9%)
OR_SG_PL	67%	97% (7%)
OR_PL_SG	67%	92% (9%)
ORp_SG_PL	0%	81% (19%)
ORp_PL_SG	0%	69% (27%)
TOT	62%	92%

Filler sentences were correctly produced by all participants. If we compare JM's performance with the means of the CG group, it is evident that she shows lower levels of accuracy than the CG group in the comprehension of both OR and ORps. The comprehension of the latter type is especially problematic.

#### 4.5 Passive Sentences Production: the Elicitation Task and Results

The test we used for the elicitation of PSs was developed by Verin (2010). It is a picture description task administered with a Power Point presentation. It is composed of 24 experimental items. Twelve items contain actional verbs (*spingere* 'push', *colpire* 'beat', *imboccare* 'feed', *prendere a calci* 'kick', *inseguire* 'chase', *baciare* 'kiss') and 12 contain non-actional verbs (*sentire* 'hear', *vedere* 'see', *amare* 'love', *annusare* 'smell'). The battery also included 12 filler sentences. All verbs are transitive, reversible and either actional or non-actional. In some items, the *by*-phrase can be omitted, whereas in some other items, it is compulsory. Figures 3 and (6) shows an example of an experimental item testing the use of an actional verb with an obligatory *by*-phrase.

(6) **Experimenter:** Ci sono due foto. Nella prima foto Sara spinge Marco, nella seconda foto la mamma spinge Sara. Cosa succede a Marco nella prima foto?

'There are two pictures. In the first one Sara pushes Marco, in the second one the mum pushes Marco. What happens to Marco in the first picture?'

Target: Marco è/viene spinto da Sara.

'Marco is pushed by Sara.'

Sara pushes Marco The mother pushes Marco

Figure 3. Experimental trial eliciting a passive sentence

JM did not produce any passives. From a qualitative point of view, JM's strategies were compared to those used by a CG with a mean age of 6, as there are no available data on PSs production by JM's Italian-speaking peers. PSs were never produced by anyone. While the most recurrent structure among CG's children were SVO sentences with correct thematic roles, the main constructions which JM recurred to were SVO sentences with reversed thematic roles, as the following example shows:

(7) JM: Sara colpisce il papà.
 'Sara hits her father.'
 Target: Sara è colpita dal papà.
 'Sara is hit by her father.'

#### 4.6 Passive Sentences Comprehension: Task and Results

The test we used was the one adapted to Italian by Verin (2010) from the Greek version developed by Driva and Terzi (2008). It is composed of 40 experimental stimuli and 10 filler items. The child was shown three pictures on the computer screen and the experimenter read a PS. After that, the participant should indicate the correct image. Three variables were taken into account: actional vs non-actional verb, auxiliary *essere* (to be) vs *venire* (to come), and presence or absence of the *by*-phrase. All experimental conditions are shown in table 3:

Table 3. Experimental conditions

		In quale foto Marco è spinto?
	essere	'In which picture is being Marco pushed?'
		In quale foto Marco è spinto da Sara?
۸ مان د د د ا د د د داد د	essere + by-phrase	'In which picture is being Marco pushed by Sara?'
Actional verbs		In quale foto Marco viene spinto?
	venire	'In which picture is being Marco pushed?'
	venire + by-phrase	In quale foto Marco viene spinto da Sara?
		'In which picture is Marco being pushed by Sara?'
		In quale foto Marco è visto?
	essere	'In which picture is Marco seen?'
		In quale foto Marco è visto da Sara?
Non-actional	essere + by-phrase	'In which picture is Marco seen by Sara?'
verbs		In quale foto Marco viene visto?
	venire	'In which picture is Marco seen?'
		In quale foto Marco viene visto da Sara?
	<i>venire</i> + <i>by</i> -phrase	'In which picture is Marco seen by Sara?'

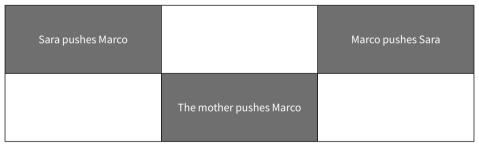


Figure 4. Experimental sentence

Figure 4 shows an example of an experimental item matching the sentence *In quale figura Marco è/viene spinto da Sara?* (In which picture is Marco being pushed by Sara?).

In the item showed in figure 4, two types of error were possible: either the selection of the picture displaying reversed theta-roles (RR error: Marco pushes Sara) or the selection of the picture in which the agent changes (CA error: The mother pushes Marco).

Table 4 provides JM's results on PSs comprehension compared to those of the control group (CG).

Table 4. Percentage of accuracy of JM and CG (SD in brackets) on PS comprehension (Yes condition identifies long passives and No condition short passives)

Age Groups By-Phrase		Act. verbs Act. verbs		Non-act. verbs	Non-act. verbs	
		Aux. essere	Aux. venire	Aux. essere	Aux. venire	
JM	Yes	100%	83%	0%	25%	
	No	83%	100%	25%	25%	
	Yes	100% (0%)	93% (26%)	71% (46%)	86% (36%)	
CG	No	100% (0%)	100% (0%)	75% (44%)	100% (0%)	

In the CG group, the performance on actional verbs is at ceiling in almost all conditions. Lower percentages of accuracy are instead found with non-actional verbs. For JM, the percentages of accuracy are lower than in the CG group in almost all conditions. A remarkable difference is especially found in the use of non-actional verbs. When the correct picture was not selected, in most cases, children choose the picture in which the characters were the same but theta-roles were reversed.

#### 5 Discussion

In the pre-teaching phase, JM was tested to check her baseline level of linguistic competence in Italian. Considering the different tasks, her performance was lower than chronological age peers, and in some cases, also than younger control children. JM never produced unambiguous ORps (she uttered ambiguous sentences, and we are not sure that they actually are ORps). The reasons of this pattern may be found in her linguistic background: the fact that Romanian, her L1, has unmarked ORs with post-verbal subjects (8) may lead us to the hypothesis that her ambiguous sentences are to be interpreted as ORps. However, the failed comprehension of ORps does not fully support this hypothesis.

(8) Băiatul care îl caută **mama**Boy.the that cliticacc  $3_{RD}$  MASC SG look.forpres  $3_{RD}$  SG mother 'The boy that mother is looking for'.

Moreover, JM uttered two ORs with clitic pronouns. Since in standard Romanian, clitic insertion is obligatory in RCs (Sevcenco et al. 2011) (9), these productions may be due to interference from Romanian; note however that Italian child language also makes a frequent use of this construction (10).

- (9) Băiatul care **îl** cauţi
  Boy.the that cliticACC 3<sub>RD</sub> MASC SG look.forPRES 2<sub>ND</sub> SG
  'The boy that you are looking for'.
- (10) Il ragazzo, che l'ho visto.

  The boy, that him, cl (I) saw.

  'The boy whom I saw'.

As regards PSs, it was peculiar that JM produced many SVO sentences with reversed thematic roles. The fact that this kind of mistake did not occur in the comprehension task may let us hypothesize that it was not related to the verb thematic structure. One reason we hypothesized was that the 'stress' of being repetitively asked to begin the sentence in an uncommon way, namely with the patient of the action, could have led JM to focus on the structure of the sentence – in order to perform the task correctly rather than on the event she had to describe.

JM's data seem to support the claim that immigrants' children may persist in having some difficulties in the acquisition of some properties of their L2 (Páez, Tabors, López 2007).

## 6 The Explicit Syntactic Teaching Phase

After the analysis of JM's performance in the various tasks, the intervention process was planned. The sessions of explicit syntactic teaching began in October 2015 and lasted three months. They consisted in ten weekly meetings, each of them lasting from 45 to 60 minutes.

Argument structure and the notion of reversible and irreversible transitive verbs were introduced following Levi and Friedmann's (2009) and, especially, Ebbels and van der Lely's (2001) methodology through a large use of shape and colours. Hence, in this first session, JM was presented with lots of pieces of paper of different colours and shapes, like those shown in figure 5.

The categories of words were subjects, direct objects, indirect objects, intransitive verbs, transitive reversible verbs, transitive irreversible verbs, and ditransitive verbs. JM was asked to build simple sentences using one subject, one verb and, if appropriate, one direct and one indirect object. She formed 10 sentences. We observed with her that some verbs were accompanied by only one argument, while other verbs may be combined with two or even three arguments.

After this first step, JM was shown the difference between reversible and irreversible verbs. She was asked to observe that among the sentences which she had built up, some of those with one verb and two characters maintained a grammatical and acceptable status even though we switched the order of the characters (11-12), whereas the structure is weird or unacceptable if the same change occurs in other sentences (13-14).



Figure 5. The coloured pieces of paper we used for explicit teaching



Figure 6. The 'stage' used to explain the thematic criterion



Figure 7. The activities done to present movement in SRs



Figure 8. The activities done to present movement in SRs

- (11) Le maestre sgridano Paolo. 'The teachers scold Paolo.'
- (12) Paolo sgrida le maestre. 'Paolo scolds the teachers.'
- (13) I bambini comprano la pizza. 'The children buy pizza.'
- (14) ??La pizza compra i bambini. '??Pizza buys the children.'

During the second meeting, we checked the topics taught in the previous week. A grammatical judgement activity was designed for JM, relying on the use of shapes and colours. The sentences were written on a sheet and JM had to put next to them a little circle-shaped piece of paper, representing either a sad or a happy face, according to the judgement she gave to each item. The activity was carried out within a 'role-playing game': the experimenter was the student who had written the sentences and JM was the teacher. Besides loving the activity, the child managed to complete it in a very good way.

After this step, the Thematic Criterion was introduced comparing verbs and a theatre. A paper 'stage' was built, onto which JM was asked to imagine that the verbs ('the directors') put their arguments ('the actors') and gave them specific roles. Some of the directors could afford only one actor, while others could have two or even three actors. All the actors had to be on the stage, otherwise the play would not have worked. In this way, the notions of subject ('the protagonist'), patient, beneficiary, theme, and adjunct were introduced.

The following step consisted in introducing to JM the derivation of SRs and ORs. JM was presented with a simple SVO sentence, then a little sheet with 'mi piace' ('I like') was added at the beginning of the clause. The movement done by the subject or the object to reach the position at the right of mi piace 'I like' was shown to the girl. After this movement, we showed that a trace was left in the original position of the moved element. The trace was represented as a footprint (or a pawprint, if the subject was an animal), with a 'T' written on it; the notion of chain was then explained and shown using paper clips attached between them. To conclude, the 'magical word' che ('that') was added, written on a bow-shaped piece of paper, to symbolize the idea of 'blending', as figure 7 shows. JM had no problem in understanding these issues and showed great autonomy, already from the first items, in performing the movement in a correct way.

The step forward consisted in asking JM to write some sentences on her copybook and transform them into SRs and ORs. Also in these tasks, JM succeeded in doing the activity very well. Following previous studies on syntactic teaching, we introduced SRs and ORs, presenting SRs in the different combinations of number features, with the aim of verifying whether improvement would have been observed also with ORps.

To introduce PSs, eighteen pictures representing actions were shown to JM. Some of the chosen verbs were the same used by Verin (2010) in her test on passive structures, and all of them were transitive and reversible. For every picture, we pronounced an SVO sentence (*la ragazza pettina il gatto* 'The girl combs the cat'). After that, JM chose one photo she liked, starting from which the experimenter built up the first passive sentence. The first observation was that the sentence could begin in another way, namely with the patient *il gatto* ('the cat'). To do so, some movements were necessary. Inspired by Collin's (2005) theory of *Smuggling*, paper cases were introduced to explain the process: the subject was put into a little case, whereas the verb and the object were put into a bigger case. The first step consisted in the movement of the bigger case leftwards, i.e. past the subject. Afterwards, the bigger case could open and let the object out.

In order to make the subject-patient and the verb agree, a 'helper' (aiutante, which is a synonym of 'auxiliary') arrived. It was written in a heart-shaped piece of paper to symbolize agreement, the 'peace' it was responsible for. To complete the process, one 'magical word' was neces-

sary to make the reader remember that the actor (the agent) of the action was the girl, therefore the 'da' ('by') had to be put before the agent. JM liked this task very much.

The final step was dedicated to a session of reviewing all the issues JM had dealt with. It was carried out in the form of a game, using the model of the famous 'Gioco dell'oca' (known as 'Snakes and ladders' in English). For every box, the child was administered either an activity on argument structure, Thematic Criterion, RCs or PSs, or some little games or riddles. It proved to be an original and fun way to make a revision of the whole program, which JM enjoyed a lot.

## 7 Post-Teaching Results

JM was assessed again a week past the end of explicit teaching, therefore two months after the pre-treatment testing phase. The materials we used were the same as in the pre-teaching testing phase.

In the TCGB test, the data analysis shows that JM's performance slightly improved, especially in the use of PSs, reducing the value of the error score (7 instead of 9 in the pre-test assessment). The PSs contained in the TCGB test, which were observed to be problematic at the first administration, improved after the teaching sessions reducing also in this case the value of the error score (1.5 instead of 2.5 in the pre-test assessment). In the RC production, the percentage of SRs reached ceiling levels (100%), while target ORs were still missing from their productions. From a qualitative point of view, the strategies adopted by JM when ORs were targeted were similar to the ones in the pre-treatment session, as table 5 shows.

Table 4. Answers strategies used by JM when ORs were targeted before and after the teaching sessions

	Before teaching		After teaching	
	No.	%	No.	%
SR (role inversion) i bambini che sgridano la maestra 'the children that scold the teacher'	2/12	17%	2/12	17%
Ambiguous sentences il bambino che lava il papà 'the child that washes the father'	8/12	67%	7/12	58%
OR + clitic pronoun il bambino che il dottore lo visita 'the child that the doctor visits him'	2/12	17%	2/12	17%
Simple SVO I nonni baciano i bambini 'the grandparents kiss the children'	0/12	0%	1/12	8%

In the RC comprehension task, a slight improvement was observed for some structures with respect to the pre-teaching results, although the level of accuracy remained behind that of age peers. Unexpectedly, during the post-teaching testing, JM showed lower accuracy in the ORs in the mismatch conditions as opposed to ORs in the match conditions. In addition, there was also an increase in the number of ORps, which were not taught during the training activities.

	Pre-teaching %	Post-teaching %	CG
SR_PL_SG	100%	100%	100%
SR_SG_PL	100%	100%	100%
OR_SG_SG	67%	83%	89%
OR_PL_PL	50%	83%	94%
OR_PL_SG	67%	50%	92%
OR_SG_PL	67%	50%	97%
ORp_PL_SG	0%	17%	69%
ORp_SG_PL	0%	67%	81%
TOT	67%	72%	92%

Differently from RCs, the intervention on PSs gave encouraging results. While PSs were absent before the explicit teaching, after it the percentage of target productions reached 42%. From a qualitative perspective, the strategies used by JM were more or less the same as in the pre-teaching testing session. It is however interesting to notice that the child improved on theta-roles assignment errors (tab. 7). The uttered PSs were all with the auxiliary *essere* ('to be') and with the *by*-phrase; actional-verbs were preferred to non-actional ones.

Table 6. JM's strategies on passives elicitation task before and after explicit teaching

	Pre-teaching %	Post-teaching %
Passive sentences	0%	42%
SVO (correct theta)	25%	17%
SVO (incorrect theta)	42%	13%
Structures with clitic pronoun	4%	8%
Other structures (correct theta)	8%	21%
Other structures (incorrect theta)	21%	0%

The most positive results were observed in the passive comprehension task, where JM performed at ceiling in all conditions.

#### 8 Discussion and Conclusion

In this study, a sequential bilingual Romanian-Italian child was tested on complex sentences and was given training on the derivation of these constructions using the explicit teaching approach. As far as RCs are concerned, slight improvement has been recorded. One interesting issue, which would be worth of further research, was the atypical pattern shown by JM in ORs with number mismatch, compared to match conditions. While monolingual Italian-speaking peers are facilitated by mismatch conditions in parsing ORs (Adani et al. 2010, Volpato 2012), number dissimilarities did not constitute a helping clue for our participant, even though the child was presented with sentences displaying different combinations of number features. These patterns made us think about what happens in standard Romanian: the verb, indeed, presents the same form both for the 3rd person singular and plural.3 These characteristics, therefore, suggested that maybe JM, influenced by her L1, may feel confused when the two verbs in the sentence present dissimilar number features. In future research, these properties as well as the use of ORps deserve more in-depth investigations in the teaching process and more activities with these properties should be proposed, in order to verify whether comprehension would improve.

As regards PSs, the obtained scores are much more encouraging.

Some observation can be made with respect to this difference between the two constructions.

As regard RCs, not having manipulated number features enough during the explicit training activities might have been a weakness in the whole program.

As we cannot disregard the possibility of an influence from JM's L1, it would be interesting to assess her on the same constructions in Romanian: this might shed light on the reasons of the pattern shown in RCs, as we could hypothesize that the difficulty be related not only to Italian, but to her general linguistic system.

It is crucial to remember, however, that the acquisition of PSs reaches 100% at the age of 6-7 years old, whereas ORs could be problematic even for older children (Adani 2011, Volpato 2010).

In conclusion, we have shown that explicit syntactic teaching of complex relative and passive structures can be effective in sequential bilingualism. However, we have to consider that a certain amount of variables might

(1) I canta. (they) subj.cl sing3<sub>rd</sub>sing 'They sing'.

**<sup>3</sup>** This feature, interestingly, is found also in a variety of Venetian dialect, namely the one spoken in the environment where JM lives now:

have influenced the results. For instance, the fact that JM actually preferred the activities on PSs should not be underestimated with respect to the outcomes of the experiment.

In conclusion, we must also not keep unmentioned the effectiveness of the explicit teaching on the general attitude of the child towards her language environment. Indeed, an increasing reflective approach has characterized JM during explicit teaching, demonstrated by her increasingly positive attitude towards the activities. The child's metalinguistic awareness has developed during this period and has helped her to understand that being able to think about one's own language can have extremely positive outcomes. According to Kaushanskaya and Marian (2009), this ability is emphasized in bilingual people: a further reason to enhance the advantages of explicit teaching with bilingual children.

#### **Bibliography**

- Adani, Flavia (2011). «Re-Thinking the Acquisition of Relative Clauses: Towards a Grammatically-Based Account». *Journal of Child Language*, 38(1), 141-65.
- Adani, Flavia et al. (2010). «Grammatical Feature Dissimilarities Make Relative Clauses Easier: A Comprehension Study with Italian Children». *Lingua*, 120(9), 2418-66.
- Belletti, Adriana; Contemori, Carla (2010). «Intervention and Attraction. On the Production of Subject and Object Relatives by Italian (Young) Children and Adults». Castro, Ana; Costa, João; Lobo, Maria; Pratas, Fernanda (eds.), Language Acquisition and Development. Proceedings of GALA 2009. Cambridge: Cambridge Scholars Press, 39-52.
- Beltrame, Rossella (2011). Acquisizione della lingua italiana e integrazione sociale in bambini d'età prescolare figli di immigrati: Fattori di promozione vs. ostacolo [Tesi di dottorato] [online]. Verona: Università degli Studi di Verona. URL http://www.univr.it/documenti/AllegatiOA/allegatooa 7964.pdf (2017-08-20).
- Bhatia, Tej K.; Ritchie, William C. (2006). *The handbook of Bilingualism*. Malden (MA): Blackwell.
- Bianchi, Valentina. (1999). Consequences of Antisymmetry: Headed Relative Clauses. Berlin: Mouton de Gruyter.
- Chilosi, Anna Maria; Cipriani, Paola (2006). *TCGB. Test di comprensione grammaticale per bambini* (in collaborazione con Giorgi, Alessandra, Fazzi, Barbara, Pfanner, Lucia). Pisa: Edizioni del Cerro.
- Cinque, Guglielmo (1982). «On the Theory of Relative Clauses and Markedness». *The Linguistic Review*, 1, 247-94.
- Collins, Chris (2005). «A Smuggling Approach to the Passive in English». *Syntax*, 8(2), 81-120.

- D'Ortenzio, Silvia (2015). *Produzione e Comprensione delle Frasi Relative in bambini sordi con Impianto Cocleare: Analisi di un tentativo di riabilitazione* [Tesi di Laurea Magistrale]. Venezia: Università Ca' Foscari Venezia.
- Driva, Evangelia; Terzi, Arhonto (2008). «Children's Passives and the Theory of Grammar». Gavarró, Anna; Freitas, M. Joao. (eds.), *Generative Approaches to Language Acquisition*. Cambridge Scholar Publishers, 189-200.
- Ebbels, Susan; van der Lely, Heather (2001). «Meta-Syntactic Therapy Using Visual Coding for Children with Severe Persistent SLI». *International Journal of Language & Communication Disorders*, 36, 345-50.
- Friedmann, Naama; Novogrodsky, Rama (2004). «The Acquisition of Relative Clause Comprehension in Hebrew: A Study of SLI and Normal Development». *Journal of Child Language*, 31(3), 661-81.
- Friedmann, Naama; Szterman, Ronit (2006). «Syntactic Movement in Orally-Trained Children with Hearing Impairment» [online]. *Journal of Deaf Studies and Deaf Education*, 11, 56-75. URL https://goo.gl/EDBEyJ (2017-08-20).
- Genesee, Fred (2008). «Dual Language Development in Preschool Children». NIEER Chapter.
- Genesee, Fred et al. (2006). Educating English Language Learners. Cambridge: Cambridge University Press.
- Guasti, Maria Teresa; Cardinaletti, Anna (2003). «Relative Clause Formation in Romance Child's Production». *Probus. Special Issue on Language Acquisition*, 15(1), 47-89.
- Hakuta, Kenji; Butler, Yuko Goto; Witt, Daria (2000). *How Long Does It Take English Learners to Attain Proficiency?*. University of California Linguistic Minority Research Institute, Policy Report. URL https://goo.gl/3fjHus (2017-08-20).
- Hyltenstam, Kenneth; Abrahamsson, Niclas (2003). «Maturational Constraints in SLA». Doughty, Catherine; Long, Michael H. (eds.), *The Handbook of Second Language Acquisition*. Oxford: Blackwell, 539-87. Jaeggli, Osvaldo A. (1986). «Passive». *Linguistic Inquiry*, 17, 582-622.
- Kaushanskaya, Margarita; Marian, Viorica (2009). «Bilingualism Reduces Native-Language Interference During Novel-Word Learning». *Journal of Experimental Psychology*, 35(3), 829-35.
- Lesaux, Nonie K.; Rupp, Andre A.; Siegel, Linda S. (2007). «Growth in Reading Skills of Children from Diverse Linguistic Backgrounds: Findings from a 5-Year Longitudinal Study». *Journal of Educational Psychology*, 99(4), 821-34.
- Levy, Hagar, Friedmann, Naama (2009). «Treatment of Syntactic Movement in Syntactic SLI: A Case Study». *First Language*, 29, 15-49.
- Manetti, Claudia (2013). «On the Production of Passives in Italian: Evidence Form an Elicited Production Task and a Syntactic Priming Study

- with Preschool Children» [online]. Baiz, Sarah; Goldman, Nora; Hawkes, Rachel (eds.), *BUCLD 37 Proceedings Online Supplement*, 1-16. URL http://www.bu.edu/bucld/files/2013/06/Manetti.pdf (2017-09-03).
- McLaughlin, Barry (1978). Second Language Acquisition. Hillsdale (NJ): Erlbaum.
- Meisel, Jürgen M. (2008). «The Bilingual Child». Bhatia, Tej K.; Ritchie, William C. (eds.), *The Handbook of Bilingualism*. Malden (MA): Blackwell.
- Páez, Mariela M.; Tabors, Patton O.; López, Lisa M. (2007). «Dual Language and Literacy Development of Spanish-Speaking Preschool Children». *Journal of Applied Developmental Psychology*, 28, 85-102.
- Paradis, Johanne; Nicoladis, Elena; Genesee, Fred (2000). «Early Emergences of Structural Constraints on Code-Mixing: Evidence from French-English Bilingual Children». *Bilingualism: Language and Cognition*, 3(3), 245-61.
- Re, Agnese (2010). Strategies for the Production of Relative Clauses by 5,6,7-Year-Old Children [BA Dissertation]. Venezia: Università Ca' Foscari Venezia.
- Rizzi, Luigi (1982). *Issues in Italian Syntax*. Dordrecht: Foris Publications. Rizzi, Luigi (1990). *Relativiz*. Cambridge (MA): The MIT Press.
- Rizzi, Luigi (2004). «Locality and Left Periphery». Belletti, Adriana (ed.), *Structures and Beyond*, vol. 3, *The Cartography of Syntactic Structures*. Oxford; New York: Oxford University Press.
- Roth, Froma P. (1984). «Accelerating Language Learning in Young Children». *Journal of Child Language*, 11(1), 89-107.
- Sevcenco, Anca; Stoicescu, Ioana; Avram, Larisa. (2011). «Direct Object Relative Clauses: the Acquisition of a Variable Construction». Ferré, Sandrine et al. (eds.), Selected Proceedings of the Romance Turn IV Workshop on the Acquisition of Romance Languages. Cambridge: Cambridge Scholars Publishing, 240-60.
- Spiess, C. Katharina; Büchel, Felix; Wagner, Gert G. (2003). «Children's School Placement in Germany: Does Kindergarten Attendance Matter?» [online]. *IZA Discussion Paper* nm. 722. URL https://goo.gl/NWWE1u (2017-08-20).
- Thompson, Cynthia K. et al. (2003). «The Role of Syntactic Complexity in Treatment of Sentence Deficits in Agrammatic Aphasia: The Complexity Account of Treatment Efficacy (CATE)». *Journal of Speech, Language, and Hearing Research*, 46, 591-607.
- Thompson, Cynthia K.; Shapiro, Lewis P. (2005). «Treating Agrammatic Aphasia Within a Linguistic Framework: Treatment of Underlying Forms». *Aphasiology*, 19(10-11), 1021-36.
- Unsworth, Sharon et al. (2012). «The Role of Age of Onset and Input in Early Child Bilingualism in Greek and Dutch». *Applied Psycholinguistics*, 35(4), 765-805.

- Verhoeven, Ludo et al. (2007). *Diagnostic Test of Bilingualism*. Arnhem: CITO.
- Verin, Laura (2010). Le frasi passive in età prescolare: un test di comprensione e produzione e un'esperienza di lettura ad alta voce [Tesi di Laurea]. Venezia: Università Ca' Foscari Venezia.
- Volpato, Francesca (2010). The Acquisition of Relative Clauses and Phifeatures in Hearing and Hearing-Impaired Populations [PhD Dissertation]. Venice: Ca' Foscari University of Venice.
- Volpato, Francesca (2012). «The Comprehension of Relative Clauses by Hearing and Hearing-Impaired, Cochlear-Implanted Children: The Role of Marked Number Features». Ferré, Sandrine; Prévost, Philippe; Tuller, Laurice; Zebib Rasha (eds.), Selected Proceedings of the Romance Turn IV Workshop on the Acquisition of Romance Languages. Newcastle: Cambridge Scholars Publishing, 306-25.
- Volpato, Francesca et al. (2013). «The Comprehension of (Eventive) Verbal Passives by Italian Preschool Age Children». Stavrakaki, Stavroula; Lalioti, Marina; Konstantinopoulou, Polyxeni (eds.), Advances in Language Acquisition. Proceedings of GALA (Generative Approaches to Language Acquisition) (Thessaloniki, 2011). Newcastle Upon Tyne: Cambridge Scholars Publishing, 243-50.
- Volpato, Francesca et al. (2014). «The Acquisition of Passives in Italian: Auxiliaries and Answering Strategies in an Experiment of Elicited Production». Costa, João et al. (eds.), New Directions in the Acquisition of Romance Languages: Selected Proceedings of The Romance Turn V. Newcastle: Cambridge Scholars Publishing, 371-94.
- Volpato, Francesca et al. (2016). «The Comprehension and Production of Verbal Passives by Italian Preschool-age Children». Applied Psycholinguistics, 37, 901-31