# Acquiring Romance Causatives: Evidence from Child Italian

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#### Abstract:

Romance Faire-Infinitive causatives have been thoroughly investigated in formal generative syntax (Kayne 1975; Burzio 1986; Baker 1988; Folli and Harley 2013, a.o.), conversely, they have scarcely been investigated in the domain of psycholinguistics. This study fills a gap in the acquisition literature since it provides experimental data concerning both the comprehension and the production of Faire-Infinitive causatives by three to six years-old L1 Italian-speaking children. The methodology used is a revised version of the Truth Value Judgement Task (Crain and Thornton 1998). Our data suggest that by age four Italian speaking children accurately comprehend and produce the structure under scrutiny although there is also later development. In the theoretical part of the paper some of the most influential proposals about the syntax of Romance causatives are discussed and a proposal about the status of the causee argument is developed. On the basis of crosslinguistic evidence it is argued that the *a-causee* is nothing but an oblique "quirky subject", no different from the oblique subjects found in the ergative alignment of other Indo-European languages such as Kurmanji Kurdish.

*Keywords:* Child Italian, Datives, Quirky Subject, Romance Causatives, Truth Value Judgement Task

#### 1. Introduction

The aim of the present paper is twofold: we present experimental data<sup>1</sup> concerning the acquisition of the so-called *Faire-Infinitive* causative (Kayne

<sup>1</sup> The data discussed in the present paper, previously unpublished, are the core of the author's 2013 MA Thesis (Università degli Studi di Siena).



1975) in L1 Italian and then we provide a formal account of its syntactic derivation that, in our view, is compatible with the acquisition facts. The paper is structured as follows. In the first Section we review previous experimental studies on the acquisition of periphrastic causatives. In Section 2 we describe the experimental design we used in our study and we provide information about the experimental subjects. In Section 3 we provide the results and in Section 4 we discuss our findings. Then in Section 5 we examine some issues concerning the syntax of the *Faire-Infinitive* causative. In the theoretical part of the paper we will particularly focus our attention on the status of the *causee* argument. Section 6 explores some of the implications of our theoretical claims. Section 7 concludes the paper.

# 1.1 Previous Studies on the Acquisition of Periphrastic Causatives

Before turning to reviewing previous psycholinguistic studies we exemplify an Italian periphrastic causative which will be the object of our study below:

(1) a. La mamma ha fatto leggere il libro a Sara the mum made read.INF the book to Sara 'Mum made Sara read the book'

In sentence (1a) the causative verb *ha fatto* 'made' embeds an infinitival complement which consists of a lexical verb *leggere* 'to read' which takes the DP *il libro* 'the book' as its internal argument and the a-causee a Sara' to Sara' as its external argument. Whereas the causative verb takes the *causer* argument *la mamma* 'the mum' as its external argument.

The Romance-type periphrastic causative has always been a well-studied and debated topic in the formal generative literature. Conversely, it has scarcely been investigated in the domain of psycholinguistics. Most of the acquisition studies in the literature rely on data from corpora which contain the early naturalistic productions of children until around the age of 4. Therefore, little is known about the time course of acquisition of causatives crosslinguistically after the fourth year of age. Furthermore, most of these studies target less familiar languages like Inuktitut (Allen 1996), or Taiwan Southern Min (Lin and Tsai 2008). Okabe's (2008) PhD thesis is the first attempt to assess the comprehension of child Japanese lexical and productive causatives by means of a controlled test. At present, as far as we know, there are only two experimental studies aimed at assessing the acquisition of causatives in a Romance language: Ammon and Slobin's (1979) pioneering crosslinguistic work concerning Italian among other languages and a very recent study by Santos, Gonçalves and Hyams (2013) which tests causatives among other complex structures in L1 European Portuguese. For all the above reasons, our study fills a gap in the Romance acquisition literature as we provide experimental data both on the

comprehension and the production of *Faire-Infinitive* (Kayne 1975) causatives by L1 Italian three- to six-year-olds.<sup>2</sup>

### 1.2 Studies on the Spontaneous Production of Child Causatives

Evidence from spontaneous production studies shows that children learning English start to produce well-formed causative sentences with causative verbs like *make* and *get* around the age of 24-26 months. However, crucially non-target uses are attested until age 5. By that time, the child investigated by Bowerman (1982) could use the periphrastic causative sentence productively. The hypothesis entertained by Bowerman is that, in the initial stage of acquisition, L1 English-speaking children cannot properly distinguish between the different meanings conveyed by lexical vs. periphrastic causatives respectively (direct vs. indirect causation) and therefore they use the two structures interchangeably, as the non-target productions below suggest:<sup>3</sup>

The inverse pattern is also attested (a periphrastic causative is produced in a context where only the lexical causative is felicitous). Bowerman claims that the overlapping between the two structures in the child grammar points to a formal correlation between the latter; however, the author does not discuss how the child eventually attains adult-like competence.

Courtney's (2002) study on the spontaneous production of morphological causatives in child Quechua supports Bowerman's claim that children initially do not differentiate between lexical and analytical causatives (periphrastic or morphological ones): Courtney found that children learning Quechua initially interpret all em-

<sup>&</sup>lt;sup>2</sup> I am grateful to two anonymous reviewers for their helpful and detailed comments on an earlier version of this paper. All remaining errors are my own.

<sup>&</sup>lt;sup>3</sup> Interestingly, we found a strikingly similar non-target production in L1 Italian in support of Bowerman's findings about the interchangeable use of lexical vs. periphrastic causative in early grammars (albeit one occurrence only, as most of our younger experimental subjects were either answering with a simple declarative non-causative sentence or with a target periphrastic causative):

<sup>\*</sup>Il mago ha scomparito una cosa (subject 3 (3;2))

<sup>&#</sup>x27;The magician has disappeared (incorrect past participle form) some stuff.'

bedded subjects of morphological causatives as non-volitional subjects, suggesting that they cannot properly associate the causative marker with indirect causation.

Allen (1996) investigates the spontaneous production of the analytical (morphological) causative in child Inuktitut (an Eskimo language). She found that in this language as well the causative morpheme starts being felicitously uttered between the second and the third year of age. Moreover, the author observes that it shows up in imperative contexts first.

The same data is found by Lin and Tsay (2008) for Taiwan Southern Min, a Sinitic language. The authors examine the early production of a child (1;2-3;3) and they report that the first type of causative which emerges in the child grammar is the analytic one, which is first found in imperative sentences and then it extends to proper causative contexts.

We exemplify a morphological and an analytical causative sentence in Taiwan Southern Min below:

- (3) a. li png ai ciah-hoo-liau you meal must eat- CAUS-up 'You must eat up the meal'
  - b. hoo gua sng let me play'Let me play'

(Lin and Tsay 2008: 470-471)

The authors claim that children learning Taiwan Southern Min (henceforth TSM) are able to consistently use the causative marker early on (from 1;10 years of age). The early onset of analytic causative in TSM is not surprising given that the element *hoo* is widely available in the primary linguistic data and it occurs in a variety of structures in the language: lexicalizing the causative morphological marker, the causative verb, the light verb "give", dative case and also marking the agent in passive sentences. Hence, the non-causative uses of *hoo* could possibly "prime" its causative use. This line of reasoning is corroborated by the fact that the lexical causative, which crucially does not feature an overt *hoo* functional element, is acquired later by the child learning TSM. Further studies on the acquisition of early causatives are needed in order to shed light on the crosslinguistic timing of acquisition of the structure under scrutiny.

# 1.3 Experimental Studies on the Comprehension and the Production of Causative Sentences

In this Section we review three studies on the comprehension and the production of causative sentences in controlled settings.

Ammon and Slobin (1979) performed a pioneering experimental study using the Act-Out-Task methodology, aimed at assessing the comprehension of

analytical causatives (both periphrastic and morphological) in L1 Turkish, L1 English, L1 Serbo-Croatian and L1 Italian respectively. Their main finding was that causative sentences are accurately interpreted from the third year of age. The authors hypothesized that some types of causatives might be harder to acquire than others. For instance, in Turkish and Serbo-Croatian the embedded *causee* is inflected for case and, according to the authors, the child learning these two languages can rely on this syntactic cue in order to disambiguate the underlying structure. On the other hand, the processing of causative sentences in English and Italian is not disambiguated by any local overt syntactic cue signalling the underlying semantic relations of the arguments.

The results are coherent with the authors' assumptions about the structures of the languages examined: causative sentences are processed with a lesser degree of accuracy by English- and Italian-speaking children in comparison to Turkish- and Serbo-Croatian-speaking children. The authors explain the observed pattern as follows: the children learning Italian or English have to postpone the assignment of semantic roles as it can only be carried out after the whole sentence has been uttered in the target languages. Conversely, the assignment of the semantic roles to the arguments can be carried out online as the sentence is being processed in languages with overt case-marking.<sup>4</sup>

As Okabe (2008) underlines, none of the previously quoted studies used a controlled experiment to determine if the distinction between lexical and analytic causatives, both structural and interpretative, is encoded in early grammars.

In her dissertation Okabe tested children learning L1 Japanese (4-6 y.o.) using a revised version of Crain and Thorton's *Truth Value Judgement Task*, the same methodology used in the present study. We will illustrate this methodology in more detail in the next Section. Japanese is an ideal language to test the encoding of causation in child grammar, as it features both lexical

<sup>4</sup> As far as we can see, the Italian pattern cannot be fully assimilated to the English one as the two languages differ wrt to the degree of "opacity" in Ammon and Slobin's terms displayed: in our view it is reasonable to argue that a sentence like *The horse make the camel run* does not feature any overt syntactic cues that might help the L1 learner during the processing of the sentence. However, in Italian, if the causative verb embeds a transitive lexical verb the embedded *causee* is obligatorily dative marked. The preposition a introducing the embedded causee is arguably the non-inflectional counterpart of dative case markings in languages like Turkish and Serbo Croatian. Therefore, it might indeed serve as a local syntactic cue on a par with inflectional case markings in other languages. A recent study by Serratrice (2014) targeting the production of double object vs. prepositional object constructions (e.g. Tom handed Mary the child vs. Tom handed the child to Mary) to describe transfer events by L1 English children supports this idea. The author found that overall children (age range 5;4-6;5) use fewer DO constructions than PO constructions (PO N= 526, DO N= 120), with the number of produced DO constructions increasing only in the "focus on the recipient" condition. We take Serratrice's main finding to be compatible with our suggestion that the preposition a (much as to in the PO English construction) might disambiguate the Italian structures on a par with its inflectional counterparts in languages like Turkish and Serbo-Croatian.

and analytical morphological causatives which have not only distinct interpretations as already mentioned (direct vs. indirect causation), but also two different syntactic structures, with only the latter being syntactically derived and having a Spec, *v*P complement.

To assess whether the Japanese children had already acquired the relevant syntactic representation of the structures under investigation by age 4, Okabe presented her experimental subjects with causative sentences containing an anaphora, *zibun*.

As exemplified below, *zibun* needs a subject antecedent. Therefore, the sentence in (5) is ambiguous, but not its lexical counterpart, as there are two potential subject arguments, the causer in SpecTP and the *causee* in Spec, *v*P namely (4), which can serve as antecedent for *zibun*. The children will therefore correctly interpret lexical vs. syntactically derived causatives if they are able to assign the relevant readings to the sentences, differently put, if they are aware of the structural differences between the two types of causatives.

- (4) Buta<sub>i</sub> -wa kuma<sub>j</sub> -ni zibun-no<sub>i/j</sub> bousi-o kabuse-ta Lexical causative pig-TOP bear-DAT self-GEN hat-ACC put.on-PAST 'The pig put self's hat on the bear' (*zibun* 'self' = pig, \*bear)
- (5) Buta wa kuma ni zibun-no jo bousi-o kabur-ase-ta Productive causative pig-TOP bear-DAT self-GEN hat-ACC put.on-CAUS-PAST 

  'The pig made the bear put self's hat on' (zibun 'self' = pig, bear)

  (Okabe 2008: 65)

Okabe's main result is that four years-old Japanese-learning children are aware of the structural differences between lexical and productive causatives. However, their competence is not completely adult-like in that they generally take the matrix subject rather than the embedded subject to be the antecedent of the anaphora. This preference might be due to the fact that the subject is canonically associated to the Spec,TP position. In order to verify whether her subjects were less likely to consider the embedded subject in Spec,vP as a proper subject in general, Okabe developed a second experiment where she contrasted the syntactically-derived causative with an indirect benefactive causative. The two structures minimally differ: the causative and the benefactive morphemes are, needless to say, different, but the case patterns are the same. However, despite the superficial similarity, in the case of the causative sentence the embedded subject is hosted in Spec,vP, whilst in the benefactive sentence the embedded subject is hosted in Spec,TP.

The fact that the accuracy improves in the case of benefactive indirect sentences might suggest that the strategy adopted by L1 Japanese children consists indeed in selecting a Spec,TP subject argument as antecedent of the anaphora. However, some children in the four years-old group consistently rejected the embedded subject of both causative and indirect benefactive sen-

tences as the antecedent of the anaphora, which indirectly suggests that these speakers somehow fail to recognize the "subjecthood" of the *causee* argument.

We now turn to review the only experimental study present in the acquisition literature targeting the production of a periphrastic causative (among other structures) in a Romance language. Santos, Gonçalves and Hyams (2013) are interested in the L1 acquisition of a range of infinitival structures, featuring in particular object control, perception and causative verbs in European Portuguese (henceforth EP). These infinitival structures just mentioned share a number of properties but they display structural differences at the same time. For instance, all these verbs may take an uninflected infinitival complement where a DP alternates with an accusative clitic on the main verb (6a) or they may take an inflected infinitival as shown in (7a) below:

- (6) a. A máe viu-os / os miúdos comer bolos The mother saw CL.Acc the kids eat.INF cakes 'The mother saw them / the kids eating cakes'
  - b. A máe deixou -os / os miúdos comer bolos The mother let CL.Acc the kids eat.INF cakes 'The mother let them / the kids eat cakes'
  - c. O Manuel proibiu-os / os meninos de visitar a Maria The Manuel forbade CL.Acc the kids PREP visit.INF the Maria 'Manuel forbade the kids to visit Maria'
- (7) a. A mae viu eles comerem bolos
  The mother saw they eat.INF.3PL cakes
  'The mother saw them eating cakes'
  - b. A máe deixou eles comerem bolos The mother let they eat.INF.3PL cakes 'The mother let them eat cakes'
  - c. O Manuel proibiu-os / \*eles de visitarem a Maria The Manuel forbade CL.Acc they PREP visit.INF.3PL the Maria 'Manuel prohibited them from visiting Maria'

(Santos et al. 2014: 4)

As the comparison between (7a, 7b) and (7c) shows, the embedded subject in the complement of an object control verb must check Accusative Case, whereas the embedded subject in the complements of perception and causative verb is base-generated as the subject of the lower clause and it checks Nominative Case. These facts suggest that despite the superficial similarities, the three verbs examined pertain to different verb classes.

The authors analyze object control verbs as structures taking two internal arguments: an object DP and a non-finite complement, which may canonically feature an uninflected infinitival (6c) or an inflected one (7c). On the other hand, perception and causative verbs embed various types of complements:

they can take uninflected infinitives (6a, 6b), inflected infinitives (7a, 7b), or finite complements (indicative in the case of perception verbs and subjunctive in the case of causative verbs). Interestingly, in EP, causative and perception verbs can therefore optionally embed defective complements (e.g. 8 much as in Italian) or full clausal complements (i.e. 7a, 7b).

- (8) a. A mãe viu saltar os miúdos The mother saw jump.INF the kids 'The mother saw the kids jump'
  - A m\u00e3e deixou saltar os mi\u00eddos
     The mother let jump.INF the kids
     'The mother let the kids jump'

(Ibidem: 5)

For what concerns the infinitival complements in (6a-b), the authors analyse them as instances of Raising to Object Structures (henceforth RtO) as suggested by Chomsky (2008) among others.

In these structures the embedded subject presumably cannot get its Case within the clause it belongs to and thus, it is commonly claimed that this DP raises to the relevant object position of the main clause in order to get Accusative Case. Now, the acquisition of Raising and Control are debated issues in the literature. Some authors e.g. Kirby (2011), building on production data, argue in favour of an early acquisition of RtO structures, claiming that children perform more accurately in experimental tasks involving raising rather than control, and that they may even misanalyse control structures as involving control. Conversely, Landau and Thornton (2011), basing their observation on production data (diary data from one child), analyse the development of complementation patterns of *want* and they suggest that Raising-to-Object with *want* emerges later than subject control structures with the same verb.

Therefore, Santos, Gonçalves and Hyams with their experimental work have tried to assess the rate of RtO in child EP productions, and have entertained the hypothesis that children initially tend to avoid RtO structures, as they prefer to produce less defective complements (i.e. inflected infinitives<sup>5</sup> in line with Landau and Thornton 2011). Their hypothesis is consistent with the child L1 EP data, the prominent answering strategy being the inflected infinitive in child EP.

<sup>&</sup>lt;sup>5</sup> In order to discriminate between inflected and uninflected infinitives the authors made sure to include only plural embedded subjects in the test, thus making the morphological inflection on the infinitive clearly visible.

At this point it is interesting to compare the child EP data to our findings about L1 Italian. In Section 4 we will return to child EP and we will offer a possible explanation for the EP-speaking children's behaviour, which is compatible with our findings about L1 Italian.

# 2. The Present Study

Our study aims to provide further insights into the acquisition of the *Faire-Infinitive* causative, by exploring both the comprehension and the production of this structure with Italian preschool children. In particular, we conducted an experiment based on a modified version of the *Truth Value Judgement Task* (henceforth TVJT). This methodology presents a number of advantages, in that it allows the experimenter to access the linguistic competence of an experimental subject indirectly; at the same time, the experimenter is able to control for extra linguistic factors, so that he/she can make sure that the obtained results reflect the subject's linguistic competence.

# 2.1 Subjects

30 monolingual Italian preschoolers with no language or developmental impairment 30 monolingual children with no language or developmental impairment aged from 3;1 to 6;1 (mean age 4;5, SD = 0,87) participated in the study. The children were recruited in a kindergarten in Siena and were tested individually, in a quiet room. A control group of 13 monolingual Italian adults was also tested. Adult participants were all university students aged from 23 to 28.

#### 2.2 Method and Materials

In this Section we describe the method and the materials used for testing the experimental group. The method used in the present study is a revised version of the Truth Value Judgement Task (henceforth TVJT, Crain and Thornton 1998).

In the original version of the TVJT the designed experimental trials were either drawings or scenes which were acted by an experimenter during the experimental session. We decided to present our experimental group with short videos which depicted everyday life situations. The actions displayed in the videos were carried out by dolls and Lego characters: we designed childrenfriendly video so as to make sure that even the three-year-old subjects would actively participate in the study.

During a session the experimenter uses a puppet. She introduces the puppet to the child and she asks the child to be the puppet's helper. The child (and the puppet too) is asked to carefully watch a video.

After each video is played, the experimenter asks the puppet to whisper in her ear what happened in the video. At this point the experimenter tells the child what the puppet whispered to her and the child is asked to confirm or reject the answer given by the puppet. This procedure makes sure that the experimenter can properly manipulate the kind of sentences which will be presented after each video. Therefore after each video, the child hears a wellformed periphrastic causative. If we are in the match condition, the sentence uttered adequately describes the situation depicted in the video, and the child is expected to confirm the correctness of the sentence if he/she can understand the meaning of a causative sentence. Thus, the match condition serves to measure the comprehension of causative sentences.

In the other condition, the mismatch condition, the sentence presented after the video is also a well-formed causative; however, the roles of the *causee* and the *causer* are crucially reversed.

Therefore, the child is expected to detect the fact that the sentence does not adequately describe the video and if he/she collaborates, once the experimenter asks to tell "what happened in the video instead", the subject will autonomously produce a well-formed causative sentence. In the mismatch condition, then, a periphrastic causative is elicited so that the production of the *Faire-Infinitive* causative in early Italian can be assessed.

We now recap how the experimental procedure works by providing the reader with a short dialogue:

#### Match Condition

Experimenter: (to the puppet) Tell me what happened in the video. (the puppet whispers in the experimenter's ear)
Experimenter: Ah. (the puppet said that...) *Il mago ha fatto sparire il bambino* (Lit. the magician made disappear the kid). Is that correct?
Subject: Yes.

#### Mismatch Condition

Experimenter: (to the puppet) Tell me what happened in the video. (the puppet whispers in the experimenter's ear)

Experimenter: Ah. (the puppet said that...) *Il nonno ha fatto riposare la mamma* (Lit. the grandpa made relax the mum). Is that correct?

<sup>6</sup> Notice that in the original version of the TVJT elicitation tasks are conducted by two experimenters. One experimenter presents the stimuli (drawings or scenes on a screen) to the child; the other experimenter manipulates and dubs a puppet. The present study had to be conducted by the author only. We reckoned that the children might have been puzzled if the experimenter had played multiple roles during the task; thus, to simplify the procedure and avoid possible confusion, we had the puppet whispering to the experimenter's ear rather than directly talking to the child, as required in the original version of the TVJT.

Subject: No!

Experimenter: Oh. Tell me what happened in the video instead.

Subject: La MAMMA<sup>7</sup> ha fatto riposare il nonno. (Lit. THE MUM made relax the grandpa)

The task consists of 21 items per condition for a total of 42 items, plus 20 fillers. The fillers were simple declarative ves/no sentences. The target items were divided according to different verb classes: we presented 20 stimuli containing a transitive verb (buttare 'throw', chiudere 'close', prendere 'take', riparare 'repair', lavare 'wash', raccogliere 'pick up', cercare 'find', leggere 'read', spegnere 'switch off', nascondere 'hide', pulire 'clean', sollevare 'lift', aprire 'open', spostare 'move', appendere 'hang', mangiare 'eat', strappare 'tear', guardare 'watch', spingere 'pull', portare 'bring'), 16 stimuli containing an inergative verb (nuotare 'swim', riposare 'relax', dormire 'sleep', correre 'run', smettere 'stop/quit', ridere 'laugh', fermare 'stop', partecipare 'take part', starnutire 'sneeze', tossire 'cough', lavorare 'work', funzionare 'work', impaurire 'frighten', bere 'drink', obbedire 'obey') and 14 stimuli containing unaccusative verbs (entrare 'enter', salire 'get on', partire 'leave', sparire 'disappear', apparire 'appear', scappare 'escape', cadere 'fall', scendere 'get off', andare 'go', tornare 'come back', arrivare 'arrive', uscire 'go out', inciampare 'trip', passare 'pass'). We performed a computerized randomization of the items so that we would not present more than two consecutive match or mismatch items. We designed the sentences so that they would not contain more than 9 words (causative sentences cointaining a transitive verb being the longer ones e.g. *La mamma ha fatto mangiare i pop corn ai bambini*. Lit. The mom made eat the popcorn to the kids). We included high-frequency words in the test. Since we had numerous stimuli, we tested younger children (three- to five-year-olds) in two different 30-minute sessions. Five- to six-year-olds and adults could successfully complete the task in a single 30/40-minute session.

# 2.3 Coding

All the sentences collected were produced in the mismatch condition. All the sentences produced were audio recorded and then transcribed.

A total of 664 sentences were produced (children n. 394, adults n. 270, missing answers n. 85). Children's and adults' answers were coded as:

- a) FOC CAUS (Focalized Causative) if containing a (contrastively) focalized *causer* argument (e.g. *LA MAMMA ha fatto riposare il nonno*. Lit. THE MOM made relax the grandpa);
- b) NON FOC CAUS (Non-focalized Causative) if containing a non-focalized *causer* argument (e.g. *La mamma ha fatto riposare il nonno*. Lit. The mom made relax the grandpa);

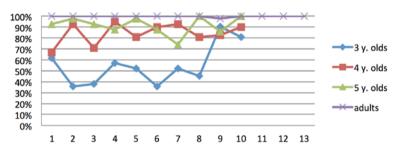
 $<sup>^{7}\,\</sup>mathrm{Note}$  that the elicited periphrastic causative features a (contrastively) focalized causer argument.

- c) CLEFT FOC CAUS (Clefted Focalized Causative) if the *causer* argument was clefted and focalized (e.g. È LA MAMMA *che ha fatto riposare il nonno*. Lit. IT IS THE MOM, who made relax the grandpa);
- d) CLEFT FOC DECL (Clefted Focalized Declarative) if the subject produced a simple declarative sentence featuring a clefted focalized external argument (e.g. È IL POLIZIOTTO *che ferma l'uomo*. Lit. IT IS THE POLICEMAN that stops the man);
- e) FOC DECL (Focalized Declarative) if containing a focalized declarative sentence (e.g *I BAMBINI vogliono partecipare*. Lit. THE KIDS want to participate);
- f) NON FOC DECL (Non-Focalized Declarative) if containing a simple non-focalized declarative sentence (e.g. *La mamma manda le bambine a lezione*. Lit. The mom sends the girls to class);
- g) NO CORRECTION if the subject misunderstands the trial and consequently fails to correct as expected in the production task;
  - h) NO ANSWER if the subject did not answer.

#### 3. Results

#### 3.1 Comprehension

Graph 1. Percentages of Correctly Understood Causatives by Age



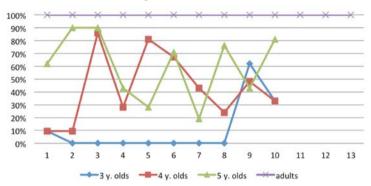
We can observe that three-year-olds are only slightly above chance level (55% percent of correctly understood causative sentences). The level of chance performance has been assessed by means of a Binomial Test which yielded the following results: 6 children out of 10 in the third-year-old group are above chance. This means that our three-year-old group is a representative sample of a three-year-old L1 Italian population. All of the four and five years-old children are above chance level.

The rate of correctly understood causatives for the four to five year old group reaches 85%, whilst five- to six-year-olds are able to understand a causative structure 91% of the time. Adults are at ceiling.

#### 3.2 Production

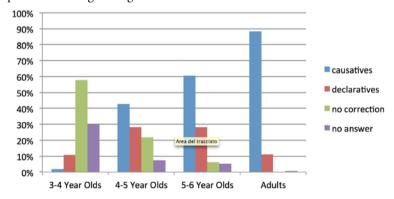
We now turn to the results concerning the elicited-production Task (Mismatch Condition).

Graph 2. Production Rate of Target Causative Sentences



As Graph 2 above shows, the overall performance of the three- to four-year-old group is affected by the poor performance of the youngest experimental subjects (subjects 1 to 7) aged 3;1 to 3;7. We will comment on this poor performance in the next Section. However, as the production of subject 9 crucially reveals, L1 Italian children start to produce well-formed causative sentences before age four, at 3;8. Four- to five-year-olds resort to a target causative sentence 43% of the time. Their behaviour then, is not yet fully adult-like, as demonstrated by the high rate of non-target declarative sentences produced. This is shown in Graph 3 below:

Graph 3. Answering Strategies Attested

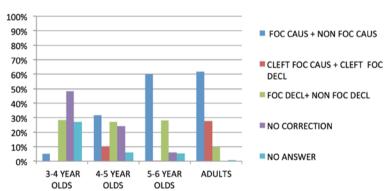


Interestingly, both the four- to five- and the five- to six-year-old groups answered with a declarative sentence 28% of the time. The controls clearly

tend to answer with a causative sentence during the elicitation task rather than with a declarative sentence, which confirms that the causative sentence is the most pragmatically appropriate.

As is shown in Graph 3 above, the four- to five-year-olds were able to meet the pragmatic requirements of our task: the children of this age group provide corrective focalized answers when necessary, as suggested by the low rate of missing answers and failed corrections (20% of the time).

At this point, it is worth having a closer look at the type of sentences produced by our experimental group.



Graph 4. Sentence Types Produced

Our controls consistently provided target causative sentences and they marginally produced (focalized or non-focalized) declaratives. As expected, the controls exclusively produce corrective (focalized) sentences. Moreover, we can observe that the cleft doesn't seem to be a particularly productive corrective answering strategy in Italian, as shown by the overall low rate of clefted causative sentences (focalized or non-focalized) produced both by adults and children.

On the other hand, children resorted to different answering strategies and a clear developmental pattern emerges. Until 3;8 (subjects 1 to 7) children resist the elicitation procedure. Crucially, they never answer with a target causative sentence, but rather resort to a simpler declarative sentence. This data suggests that children younger than 3;8 have difficulties with corrective sentences more generally. In turn, four- to six-year-olds have no problems focalizing the *causer* constituent i.e. producing corrective sentences, as suggested by the fact that they answer with a focalized declarative sentence nearly 30% of the time. However, crucially, the overall rate of pragmatically infelicitous answers progressively diminishes with age: the performance of the five-year-old group does not substantially differ from that of the controls.

#### 4. Discussion

The satisfactory performance of the 3;8 and the 3;9 subjects suggest that our experimental design is suitable for testing three-year-olds; therefore, as far as we can see, the reason why children aged 3;1 to 3;7 perform poorly in the test has nothing to do with the experimental design per se. Many acquisition studies have reported that subjects younger than 3;5 are biased to confirm what the experimenter (or the puppet depending on the task) says, (the so-called "yes-bias phenomenon" discussed by Crain and Thornton 1998) and therefore they resist the elicitation procedure. This explains the high percentages of missing answers and failed corrections observed for this age group (27.1% missing answers and 48% missing corrections with the overall percentage of non-target answers reaching 75%).

Moreover, if we compare the comprehension and the production data we can observe that overall children perform significantly better on the comprehension task rather than on the production task. Many studies targeting the acquisition of complex sentences found the same pattern (see Guasti 2007 for an overview): in general, evidence seems to suggest that the ability to process complex sentences (such as passives, causatives or object relatives) temporally precedes the ability to productively use complex sentences; in other words, the ability to process *fare a* causatives is a prerequisite for the their production. Interestingly, our results concerning the comprehension of causative sentences in L1 Italian converge with Okabe's (2008) findings for L1 Japanese. Evidence suggests that between the fourth and the fifth year of age children attain adult-like knowledge of indirect causation.

Turning to the production task, our main finding seems to be that from 3;8 years L1 Italian children start to produce well-formed causative sentences and then continue to develop their ability to do so. Therefore, any formal account of the syntax of Italian-type Romance causative should take into account the fact that this structure doesn't seem to be particularly difficult to acquire, in other words, it should presumably be regarded as a relatively computationally simple sentence.

In the light of the previous discussion it is not surprising that children younger than 3;8 answer with simple declarative sentences. More interestingly, non-target declarative sentences are marginally attested in the children's productions until age 5. Thus we need to explain this non-target behaviour. It is reasonable to assume that from age four, children are able to meet the pragmatic requirements of the task, providing a corrective answer when necessary.

In our view, there can be two different reasons why children aged 3;8 to 6;1 occasionally produce infelicitous declarative sentences. It could be the case that sometimes children misunderstand the task and consequently merely describe the situation depicted in the video, with a simple non-causative sentence. It could also be the case that, once the subjects resort to an answering strategy, say the

declarative sentence, they tend to repeatedly use it during the task, even though it is pragmatically infelicitous.

Furthermore, we checked whether the presence vs. absence of a dativized *causee* influenced the children's productions. Recall that we presented 20 stimuli featuring a transitive verb, 16 stimuli containing an intransitive verb and 14 stimuli containing an unaccusative verb. The stimuli containing intransitive and unaccusative differ from those containing transitive verbs for what concerns their argument structure. (Embedded) transitive verb have a richer argument structure featuring a theme argument and a dativized *causee*. When the causative verb embeds an unaccusative or a unergative verb, the theme argument is absent and the *causee* argument receives Accusative Case instead of Dative Case.

The presence of an extra (internal) argument plus a dativized *causee* in the case of causative complements containing transitive verbs could in principle increase the computational cost of transitive (vs. unaccusative and unergative) causative complements.

Interestingly, no significant effect of verb class was found. In other words, only two subjects (out of 30 subjects) produced significantly more causatives featuring an unaccusative or unergative verb than causatives featuring a transitive verb.<sup>8</sup>

All in all, we take the performance of our child population to be satisfactory, indicating that children as young as 3;8 are aware of the fact that not all verbs behave alike in terms of their complementation patterns, i.e. by age four L1 Italian children have learnt that restructuring verbs like *fare* in Italian embed a structurally deficient complement.

In the next Section we will show that Romance causatives embed structurally impoverished complements.

<sup>8</sup> Both subjects (subject 2 (5;2) and subject 7 (5;9)) produced 9/21 causatives. These subjects could successfully produce causatives featuring unaccusative or unergative verbs but crucially, they systematically avoided producing causative structures featuring an embedded transitive verb. Instead of producing a causative containing a transitive verb (and a dativized *causee*), they would resort to an infinitival sentence like (9a) below:

(9) a. LA MAMMA ha detto di nascondere il regalo al babbo
THE MUM told the dad to hide.INF the present
'Mum told the dad to hide the present'
Sentence expected:
LA MAMMA ha fatto nascondere il regalo al babbo
'MUM made the dad hide the present'

Apparently these subjects have problems producing embedded dativized *causees* in particular. In fact, they can successfully produce embedded goal datives as in (9a) above.

It is worth noting that the causative verb is never replaced when the *causee* gets Accusative Case. It could be the case that some datives are more difficult than others.

Further studies are needed in order to assess the complexity of different kinds of datives.

Santos *et al.* (2014) reported that children learning EP tend to produce full infinitival complements while systematically avoiding more functionally reduced structures such as RtO structures. It is certainly true that EP-speaking children avoid RtO structures, however interestingly, adults also significantly prefer a CP complement structure over a non-CP complement (the total number of answers featuring a CP complement reaches 70%), even though they master both kinds of complements. There could be different reasons why RtO structures are not mastered by EP-speaking children. Our findings indicate that L1 Italian children can actually produce and understand reduced/defective infinitival structures such as *fare a* causatives, therefore we are led to think that the observed difficulty with Raising to Object Structures (Landau and Thornton 2011; Santos, Gonçalves and Hyams 2013) probably has little to do with the fact that these are non-CP infinitival structures; rather, it could be the case that Raising is a computationally costly operation for young children.

# 5. Observations on the Syntax of Faire-Infinitive Causatives

Following a number of studies e.g. Belletti and Rizzi (2012) in Bellucci (2013), we argued for a *smuggling* approach to the syntax of Romance causatives.

A *smuggling* approach was first proposed by Collins (2005) for the derivations of Passive and Raising structures in English. Belletti and Rizzi (2012) argue that the same *smuggling* operation is involved in the derivation of active causative sentences. In active Romance causatives (just like in the passive) moving a chunk of VP out of the embedded vP is a way to avoid the intervention effect of the embedded subject in Spec, vP. The idea is that, if the chunk of VP doesn't move across the embedded subject, the internal argument cannot be properly assigned Accusative Case as the embedded subject intervenes between T phi and the object. Consequently, once the chunk of VP is attracted to the Specifier of a functional CausP head, which presumably lexicalizes the Causative Voice, the embedded subject remains stranded in the Spec, vP position. Therefore, the higher functional head responsible for the assignment of Accusative Case can identify the internal argument as a proper goal and assign Accusative Case to it and no Relativized Minimality violation arises. Collins' approach to the passive appeals to the same formal mechanism, the only difference being that the internal argument in the passive moves further to the Spec, TP position in order to satisfy the EPP; and that the functional head that triggers the movement of the chunk of the VP is Voice P hosting the preposition "by" (see the structure in 10a below) in the case of Passive voice, rather than CauseP as in (11a):

(10) a. Tphi...[VoiceP [VP V DPia] by ...[vP DP<sub>ca</sub> [<del>VP V DP</del><sub>ia</sub>]...]...] ...]

T phi...[CauseP [VP V DPia] CAUSE [vP DP<sub>ca</sub> v fare [vP a DPea [<del>VP V DPia</del>]]]]]

However, as an anonymous reviewer correctly points out, even if we want to maintain that the derivations of the passive and of *fare a* causatives involve the same formal mechanism e.g *smuggling*, children cannot be expected to acquire both structures simultaneously. In fact, a long passive structure such as *La mela è mangiata dal bambino* 'The apple is eaten by the child' formally resembles an active *fare da* causative more than an active *fare a* causative sentence (see Harley and Folli 2007 for a recent discussion of the different properties of *fare a* and *fare da* Romance causatives respectively), as suggested by the non-accidental presence of a by/da phrase.

In the acquisition literature there is no general consensus on the timing of acquisition of the passive crosslinguistically. However, recent studies on the topic have suggested that not all types of passives are equally difficult for children, thus different kind of passives emerge at different stages of acquisition in child grammars (see Manetti and Belletti 2013). In the light of the previous discussion, the data coming from studies on the acquisition of the passive in L1 Italian are better compared to those concerning the acquisition of *fare da* causatives (rather than *fare a* causatives) in L1 Italian. To the best of our knowledge, the acquisition of *fare da* causatives has not yet been investigated. This could be a topic for further research.

We now turn to examining some relevant aspects of the syntax of *fare a* causatives, focusing our attention on the status of the *causee* argument in particular.

We start by observing that there is only an apparent realignment of cases from Nominative-Accusative to Dative Accusative in an embedded sentence like (12a) below:

(12) a. L'insegnante ha fatto leggere questo libro agli studenti The teacher AUX.3SG made read.INF this book to the students 'The teacher made the students read this book'

According to Kayne (2004), prepositions, including French  $\dot{a}$  'to' and its Italian counterpart a, are probes in the sense of Chomsky (2000, 2001, and 2004), responsible for the checking of Dative Case. The author develops a raising approach to the syntax of Romance *Faire-Infinitive* causatives, whereby  $a/\dot{a}$  is a functional head on the main sentential spine. The *causee* is then attracted to the Spec position of the latter outside the causative vP where it checks Dative Case, as in (13a).

(13) a. [[PP causee [P'[P à][causeP causer vcause [vP causee[VP [V DPobject]]]]]]

The *causer* moves to the Spec of TP in order to satisfy the EPP. However while à is in the matrix sentence, the following DP is actually the subject of

the infinitival at some point in the derivation. In our view, Kayne's raising analysis is unwarranted, in that it is not obvious that à heads a functional projection taking the causative predicate as its complement. The need to place the preposition above the causative verb is a direct consequence of the authors' theoretical assumptions about Accusative and Dative Case checking.

Kayne assumes that an argument receives Accusative Case via a feature checking relation with a higher Agr-DO projection. Similarly, Dative Case is checked against a higher Agr-IO projection. Since the feature checking operation must be local, both the internal argument and, crucially, the preposition and the *causee* argument must raise to Agr-DO and Agr-IO respectively. Under this approach, VP-Preposing is a necessary step in the derivation. If VP-Preposing does not apply, the internal argument is too embedded and it cannot receive Case and therefore the derivation crashes. Recent work by Chomsky (2013) sheds doubt on the tenability of movement operations such as VP-Preposing under current minimalist theorizing. In this paper we offer an alternative view on the licensing of dativized arguments which is compatible with VP- Preposing, although it does not crucially hinge on raising (movement) of the preposition and of the a-*causee*.

We adopt Manzini and Savoia's (2011a) view that oblique case is interpretable. From this perspective, Dative Case assignment is not implemented via a feature checking relation (thus no abstract higher Agr-IO projection is needed), but rather what is descriptively known as "dative" is reduced to a more elementary predicate notated as Q⊆. Interpretively, what the Q⊆ says is that the argument to which dative morphology (or its prepositional counterpart) attaches has in its domain of inclusion either another DP as in *Ho dato il libro a Gianni* 'I gave Gianni the book' or a VP as in *Ho fatto leggere il libro a Gianni* 'I made Gianni read the book' as we will show.

Other treatments of *causees* are available, notably in the Applicative literature. According to Applicative approaches (Cuervo 2003; Pylkkänen 2008; Boneh and Nash 2012, a.o.), dativized arguments are licensed in the specifier of a functional ApplP taking the theme in its object position. *Causees* in particular are hosted in High Applicative phrases, introducing a relation between a theme and a predicate/event. It is not clear why we would want to analyze *a* as a di-functional Applicative head: in fact this is not how it is treated in Cuervo (2003). If so, however, extending the Applicative treatment to Romance is all the more problematic since there would be no overt morphological counterpart of the Applicative morphemes of the Bantu languages studied by Pylkkänen (2008) in Romance.

Our key observation is that, independently of causative environments, dative/oblique subjects are widely attested crosslinguistically.

Examples often quoted in the formal literature are the "quirky" subjects of Icelandic (14a). We may add oblique subjects in ergativity splits, e.g. Kurmanji Kurdish (15a) from Baker and Atlamaz (2013); dativized subjects are

also found in a more familiar language like Latin in necessity contexts with the gerund: in such contexts the subject (the external argument of transitives and the internal argument of unaccusatives) is turned into a dative (16a):

(14) a. Henni leiddust strákarnir Her (dat) bored boys.the (nom) 'She found the boys boring'

Icelandic (from Sigurðsson 1996: 1)

(15) a. Te ez di-m. You (dat) I (dir) see.PAST.1SG 'You (sg) saw me'

Kurmanji (from Baker et al. 2013: 2)

(16) a. hominibus moriendum est enim omnibus men (dat) to die is indeed all (dat) 'All men must indeed die'

Latin (Cicero, Tuscolanae Disputationes 1.9.15)

In this paper, we support the idea that the Romance *causee* is nothing but an oblique "quirky" subject as in (17a)

#### (17) a. [vP QUIRKY SUBJECT [v VP]]

The difference between the Romance *causee* and quirky subjects of the Icelandic type is that, according to analyses of the latter, Icelandic quirky subjects target the [Spec,TP] position, while we propose that the Romance *causee* is base-generated in [Spec,vP]. In this respect, the dative/oblique case assigned to the *causee* is better compared to the oblique case assigned to the external argument in languages like Kurmanji Kurdish in the ergative alignment (15). That the ergative case is inherent case, assigned by the verb, is a conclusion widely attested in the literature (Johns 1992; Woolford 2006; Legate 2012, a.o.).

Various questions arise at this point. A crucial question is why dativized subjects in Italian show up precisely in the complement of causative verbs. In other words why they are possible and necessary in such contexts while they are not to be found in - say - main sentences of the language. Notice that the examples in (14)-(16) are all main sentences.

The crucial fact is that restructuring predicates (which subsume *Faire-Infinitive* causatives) embed structurally deficient complements (Wurmbrand 2001 and references therein). This is exactly why these predicates are transparent for certain properties, which are otherwise clause-bound. For instance, only the complements of restructuring predicates like *fare* 'to make', allow

clitics associated with an argument of the embedded verb to cliticize on the matrix verb. This is the so-called "clause union effect". Now, the degree of structural deficiency of restructuring complements is a debated issue. Competing analyses have been proposed which all try to formally capture the already mentioned "clause-union" or "restructuring effect".

A first set of approaches (Kayne 1975; Rouveret and Vergnaud 1980; Burzio 1986; Belletti and Rizzi 2012) which we have reviewed in some detail, appeals to VP-Preposing whereby a chunk of VP including at least the infinitival and its internal argument moves to the Spec of a higher functional head leaving the embedded subject stranded in the lower VP. Couched in more recent Minimalist terms, VP-Preposing is a way to empty the phase. According to another set of approaches, causativization involves some process of incorporation; for instance, for Baker (1988) it is the embedded lexical verb that incorporates into the matrix predicate. The incorporation approach to complex predicate formation has recently been revived by Wurmbrand (forthcoming). Relying on evidence coming from German and various Austronesian languages, Wurmbrand proposes that restructuring complements feature an additional (default) Voice head. It is this Voice head which undergoes incorporation into the matrix restructuring verb.

Whatever the implementation, we side with the consequence of an incorporation analysis à la Wurmbrand that the complement selected by *fare* is effectively a predicate, possibly vP, or VoiceP, but with Voice incorporated to the matrix. In the absence of a T layer, is clear that subject of the embedded verb cannot be assigned Nominative Case; this is exactly why the *causee* shows up as a "quirky" dative subject.

In other words, what we are suggesting is that in the Italian-type complements the *causee* is licensed vP-internally. Under this approach the v category serves as both the transitivizer and the introducer of the external argument as in the formulation of Chomsky (1995). That oblique subjects can be licensed vP-internally has also been claimed by Nash (2014). The author, examining the ergativity split in Georgian, argues that the difference between a Nominative and an Ergative behavior of the same language, and possibly across languages, can be ascribed to the capacity of the transitive subject to be theta-licensed and by consequence Case-licensed in a position outside vP only in the nominative alignment.

Clearly, a result of this crucial difference is that the transitive subject in the ergative alignment is licensed in SpecvP. Similarly, we have argued that the Romance *causee* needs to be licensed vP-internally exactly for the same reason: as the causative complement is structurally deficient, the transitive subject cannot be theta-licensed and by consequence Case-licensed in a position outside the vP and this is exactly why it is realized as a "quirky dative". This also explains a fact that it has long been noted in the formal literature (Rouveret and Vergnaud 1980, a.o.), namely that a dativized *causee* only appears

when the causative verb embeds a transitive lexical verb. If we assume that T is lacking in the causative complement, Nominative Case cannot be assigned to the embedded external argument in the causative complement. Nor is the other structural case available to the *causee*, since Accusative Case is taken up by the embedded internal argument. Therefore, the *causee* must receive an oblique case i.e. Dative. If the embedded lexical verb does not take an internal argument, then the embedded external argument receives Accusative Case.

In order to formally characterize the "quirky subject" status of the a-causee we adopt Manzini and Savoia's (2011), Manzini and Franco's (forthcoming) analysis of Oblique case which reduces the descriptive dative to a more elementary predicate introducing a part-whole relation (notated as Q⊆,), ultimately a possession relation, saying that the event is "included by" the argument. The authors endorse the traditional idea that cases are relations i.e. elementary predicates equivalent to Ps (Fillmore 1968).

Various strands of literature have connected dative to possession since the work of Kayne (1984). If we examine the dativized argument of a ditransitive sentence, the link between datives and possession becomes very clear: the sentence "I give the book to John" has been analyzed as "I give [John HAS a book]" in the literature (Pesetsky 1995, a.o.). Manzini and Savoia (2011a) following Belvin and den Dikken (1997) similarly construe possessors as "zonally including" the possessee. The inclusion relation is notated as (⊆) and since the relational content is carried out by Q in DPs (as in generalized quantifier theory), dative is labeled (Q⊆). Interpretively, what the Q⊆ elementary predicate, lexicalized by a in Italian, does, is saying that the a-causee in a sentence like Maria ha fatto leggere il libro a Gianni 'Maria had Gianni read a book', has in its domain of inclusion/possession the lower VP event leggere il libro 'read the book'. Therefore, this analysis points to the different formal/scopal properties of oblique/dativized arguments as opposed to the canonical (nominal) properties of non-oblique DPs.

In short, we treat the *causee* as an oblique subject on a par with the oblique subjects found in Indoeuropean languages (e.g. Kurmanji) in the ergative alignment, which according to a number of analyses, reflect a reduced structure of perfects, parallel to the impoverished structure of the causative complement.

# 6. Further Developments

In the previous Section we argued that the Romance *causee* is structurally similar to the oblique subjects found in Indo-European languages in the so-called ergative alignment and we have shown that it has scopal properties which differentiate it from canonical DPs (non-oblique arguments). In this Section we explore the theoretical implications of our proposal.

We have also discussed the results of our experiment, suggesting that L1 Italian children by age four master *fare a* causatives and, by consequence, their

structurally deficient complements featuring a dativized subject. We therefore predict that, in the early stages of development, children can be expected to detect the fact that the formal properties of dativized/oblique (subject) arguments substantially differ from those of non-oblique arguments. Recent experimental findings, which we briefly review below, seem to suggest that our prediction is borne out crosslinguistically. The first study worth mentioning is by Mahalingappa (2013). The author examined the L1 acquisition of Case marking in Kurmanji Kurdish, using an elicitation production task and also collecting naturalistic speech productions. Recall that our analysis of the Romance *causee* rests on the assumption that this kind of subject is formally similar to the subjects found in languages which display ergativity splits. Kurmanji Kurdish features a tense-based ergativity split: in the present tense Kurmanji follows the familiar Nominative-Accusative system, conversely, in the past tense, Ergative-Absolutive case marking occurs. In (18a) we show the relevant case marking patterns in two transitive sentences:

- (18) a. Lawik-ø qîzik-ê paçî di-k-e Boy (nom.;dir.) girl (acc.;obl.) kiss dur-do;PRES.3SG 'The boy is kissing the girl'
  - b. Lawik-î qîzik-ø paçî kir Boy (erg.;obl.) girl (abs.;dir.) kiss do;PAST.3SG 'The boy was kissing the girl'

(Mahalingappa 2013: 244)

In present tense sentences, the external argument is in so-called direct case, the internal argument is oblique, and the verb agrees with the external argument, whereas in past tense sentences, the external argument is oblique, the internal argument bears direct case, and the verb agrees with the internal argument. The general result seems to suggest that as early as 2;0 children are sensitive to the ergativity split. At 2;6 years of age the children productions are comparable to the adults' ones in terms of case marking: in the present tense the most used case marking pattern is direct-oblique, whereas in past sentences, the external argument is inflected for ergative case, while the internal argument appears in the absolutive form. Interestingly, the author observed that oblique subjects were even overgenerated by two 2;5 y.o. L1 Kurmanji children; - in other words double oblique-marked sentences were attested whereby an oblique-direct case marking pattern was expected. These results converge with our results about L1 Italian in that both studies point to an early mastery of oblique subjects.<sup>9</sup>

<sup>&</sup>lt;sup>9</sup> We are aware of the fact that comparing our results to Mahalingappa's is slightly problematic, as the structures investigated do not minimally differ. Mahalingappa (2013) tested

We have already mentioned the results of Serratrice (2014), which we repeat here for ease of reference. In her study the author investigated the production of double object (henceforth DO) vs. prepositional object constructions (henceforth PO) (e.g. Tom handed Mary the child vs. Tom handed the child to Mary) to describe transfer events by L1 English children. Overall children (age range 5;4-6;5) use fewer DO constructions than PO constructions (PO N= 526, DO N= 120), with the number of produced DO constructions increasing only in the "focus on the recipient" condition. Again, these results as far as we understand are compatible with the idea that dativized/oblique arguments are easily mastered by children; whether they are morphologically marked or not, they seem, at least in some cases, to be preferentially used; in other words, evidence seems to suggests that children can discriminate between canonical DP arguments and QP arguments in the case of obliques early on, the overt case marking (or its counterpart in languages like Italian, the prepositional introducer *a, to* in English) serving as a disambiguating cue.

# 7. Summary and Conclusion

In this paper, we have examined the results of our experimental study on the acquisition of Romance *Faire-Infinitive* causatives by L1 Italian children.

We have started our discussion by reviewing previous studies on the acquisition of causative sentences. The overall results indicate that until age three (and even later on for some languages), children use lexical and analytical causatives interchangeably (Bowerman 1974 and 1982; Allen 1996; Courtney 2002). By age four, children demonstrate the ability to comprehend (Ammon and Slobin 1979; Okabe 2008 on child Japanese) and produce (Santos et al. 2014 on child EP) well-formed causatives sentences, although their performance is not fully adult-like yet.

We have then focused our discussion on the acquisition of Romance causatives in particular, and have described the experimental designed used in the study as well as the participants.

Using a revised version of the *Truth Value Judgement Task* we found that L1 Italian children as young as 3;8 can successfully understand and produce

the acquisition of oblique subjects in main sentences in child Kurmanji, whereas in this paper we are directly concerned with sentences featuring oblique subjects which are commonly analysed as bi-clausal structures (Kayne 2004, a.o.). However, dativized/oblique arguments in Romance as well are found in main sentences as well (although their distribution is quite limited): a case in point are the experiencer subjects of psych verbs or goal datives in ditransitives (note that Manzini and Franco (forthcoming) analyse Romance goal datives as obliques). It would be interesting to check when the latter structures are acquired in L1 Italian to see whether their timing of acquisition overlaps with the one indicated by Mahalingappa (2013) for the Kurmanji oblique subjects. We leave these issues for future research.

*fare a* causatives which are commonly taken to feature structurally deficient complements (Wurmbrand 2001 a.o).

A clear developmental pattern emerges: the accuracy of the answers provided by our subjects considerably improves with age, which is confirmed by the fact that the number of non-target declarative sentences produced dramatically drops as age increases.

The five-, six-year-olds already demonstrate the ability to meet the pragmatic requirements of our experimental task. Unsurprisingly, the performance of the controls is homogeneous, as they consistently produce a pragmatically felicitous focalized causative sentence.

In short, our findings suggest that *fare a* causatives are acquired early in L1 Italian therefore they should be regarded as relatively computationally simple sentences. Presumably more than one factor determines the early emergence of causatives in the Italian child grammar.

Depending on one's theoretical assumptions, for instance it can be argued that children have no problems with the *smuggling* operation (Belletti and Rizzi 2012).

In the theoretical part of the paper (Section 5) we have addressed some theoretical issues concerning the syntax of the Faire-Infinitive causative, focusing our attention on the status of the *causee* in particular.

We have proposed that the *causee* is nothing but a vP-internal oblique subject. The parallel is with the oblique subjects found in the ergative alignment in Indoeuropean languages (e.g. Kurmanji Kurdish).

In order to formally characterize our claim about the *causee*, we have adopted Manzini and Savoia (2011), and Manzini and Franco (forthcoming) analysis of oblique Case, which reduces the descriptive dative to a more primitive part-whole relation (notated as Q⊆).

Furthermore, we have predicted that children should be expected to detect the formal properties of oblique subjects and more generally, should be able to discriminate oblique arguments from non-oblique ones. Our prediction seems to be borne out: children show an early mastery of oblique arguments (both prepositional and morphologically-marked) crosslinguistically (Mahalingappa, 2013, on child Kurmanji and Serratrice, 2014, on Prepositional Object constructions in L1 English), and they also demonstrate the ability to distinguish them from non-oblique ones. We take this fact to indicate that presumably there are two distinct representations for oblique subjects and non-oblique subjects in the child grammar. If our line of reasoning is on the right track, the presence of a "quirky subject" in the *fare a* causative doesn't seem to increase the computational cost of the sentence in any way; rather, it might indeed serve as a disambiguating cue, favouring the early acquisition of the structure in L1 Italian.

As far as we can see, we can conclude that our theoretical claims are compatible with the acquisition facts, which is a welcomed result.

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