

How children "add" or "restrict" entities and temporal spans in narrations: evidence from Italian and English native children

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Abstract

This work focuses on the acquisition of restrictive and (temporal and non temporal) additive means by Italian and English native children, especially including scope particles, together with children's progressing ability to build textual cohesion in a narrative text. In particular, the author tries to identify the age at which additive and restrictive means appear and the functions they carry out in discourse organization of very young subjects, as well as the cognitive operations the latter can use. Thanks to the consideration of two different languages, this work also explores the possible language-specific strategies exploited by the two groups of children.

Part of the results can be read as age cognitive restrictions independent of the L1 of the child. Additive means appear from the age of four on but with some differences according to the types of quantification solicited, namely the quantification of entities and that of time spans: the 4-year-olds clearly have less problems in quantifying entities rather than time spans. In comparison with adult reference groups, Italian and English L1 children of any group exploit additive temporal means less frequently than means quantifying entities; the quantification of entities involving a negation shows up from the age of seven. From a cognitive viewpoint, the precocious emergence of entity contrasts by additive means is in agreement with what Givón (1995) maintains with respect to nominal referents (they are perceptually and cognitively more salient, they are acquired early in ontogeny and evolve early in phylogeny, they are culturally central entities etc.). Concerning negative particles, their later appearance is in agreement with some studies about negation showing the more problematic processing of negative structures by children with respect to the positive ones (cf. Giuliano 2004).

Some other strategies identified in children's retellings are, conversely, to be interpreted as language-specific. The more frequent problems that Italian children have with the concept of iteration with respect to English L1 children could be due to the polyfunctional semantics of the Italian particles *ancora* ('more, again, still') and *sempre* ('always, again, still'); the late appearance of *also* in English L2 children's data, an internal positioning particle, is probably caused by the fact that English has an external, perceptually more salient particle, namely *too*, whose semantics is equal to that of *also*.

1 Introduction

The role of additive and restrictive means in textual cohesion has attracted the attention of several scientists in the last twenty years, but generally with respect to adult native speakers or adult learners of some Romance and Germanic languages (cf., for example, Andorno 2005; Benazzo 2003; Dimroth 2002; Watorek/Dimroth 2005). The role of these same items in the acquisition of an L1 by children is less studied (cf., among other studies, Benazzo et al. 2004; Dimroth 2009; Giuliano 2012a/b), although they are crucial means for textual cohesion and can occur in any type of text.

In the present paper I shall discuss the acquisition of restrictive and (temporal and non temporal) additive means by Italian and English native children, especially including scope particles, together with the child's progressing ability of building textual cohesion in a narrative text. In particular, I shall try to identify the age at which additive and restrictive means appear and the functions they carry out in discourse organization of very young subjects, as well as the cognitive operations the latter have resort to. Furthermore, thanks to the consideration of two different languages, it will be possible to explore the possible language-specific strategies exploited by the two groups of children.

2 The informants and the task

The informants are Italian and English native children of 4, 7 and 10 years and their narrations will be compared to those of two adult (Italian and English native) reference groups.

English native groups			Italian native groups		
Age	N. Interviews	Place of Birth	Age	N. Interviews	Place of Birth
4	10	USA (9); Australia (1)	4	20	Naples (19); Rome (1)
7	10	USA (7); UK (3)	7	20	Naples (19); Milan (1)
10	10	UK	10	20	Naples (17); Milan (3)
Adults (23-31)	20	USA (14); UK (5); Ireland (1)	Adults (22-35)	20	Naples

Table 1: The informants.

The type of texts analysed are narrations collected using the video clip *The Finite Story* created by Dimroth (2006). The video clip *The Finite Story* is about three men, Mr. Blue, Mr. Green and Mr. Red, living in three different flats of the same building, which one night catches fire. It is subdivided into several segments – the content of which is illustrated in Table 2 infra – and involves several referential restrictions: **contrasts**¹ of entity and polarity, maintenance of the same predication, temporal shifts etc., which induce the narrator to employ a great variety of contrasting and anaphoric means. I shall focus on four information structures (IS: I, II, III and IV), each of which is repeated two or three times during the story, that are shaded in Table 2.

1 A marked change of information is defined as a contrast when it evokes a search for an antecedent utterance that can be compared with respect to the filling of the relevant information unit. In this respect, following Dimroth et al. 2010, we shall adopt the notion of contrast proposed by Umbach (2004), which is based on comparability presupposing both similarity and dissimilarity.

Nr. ²	Film segment	Information Structure with respect to. antecedent segment	Utterances with Information Structure marking ³
1-2	Introduction protagonists / flats		
3	<u>Mr. Blue going to bed, sleeping</u>		
4	Mr. Green going to bed, <u>sleeping</u>	I: Different Time Span, different Entity, same Polarity, same Predicate (wrt 03)	Anche il sig. Verdi va a letto ; Mr. Green also goes to bed
5	Mr. Red going to bed, <u>sleeping</u>	I: Different Time Span, different Entity, same Polarity, same Predicate (wrt 03/04)	IL SIG. ROSSI ⁴ va a letto; MR. RED goes to bed (or additive particles)
6	Fire on the roof		
7	<u>Mr. Green sleeping</u>	IV: continual Time Spans, same Entity, same Polarity, same Predicate (wrt 04)	Il sig. Verdi sta ancora/ sempre dormendo; Mr. Green is still sleeping
8	Mr. Red sleeping	I: different Time Span, different Entity, same Polarity, same Predicate (wrt 07); IV: continual Time Spans, same Entity, same Polarity, same Predicate (wrt 05)	I: Il sig. Rossi fa la stessa cosa ; So does Mr. Red (or additive particles) IV: Anche il sig. Rossi sta ancora dormendo; Mr. Red is still sleeping as well
9	Mr. Blue not sleeping	II: different Time Span, different Entity, opposite Polarity, same Predicate (wrt 03/04)	Solo il sig. Blu non dorme; Only Mr. Blue does not sleep (lexical modifiers and highlighting of polarity are also possible)
11	<u>Mr. Blue calling fire brigade</u>		
12	Fireman in bathroom, not answering		
17	<u>Mr. Blue calls the fire brigade</u>	III: different Time Span, same Entity, same Polarity, same Predicate (wrt 11)	Il sig. Blu chiama di nuovo/ancora/sempre... i pompieri; Mr. Blue calls the fire brigade again
18	Fireman answering the phone		
22	Arrival of fire engine		
24	Rescue net: <u>Mr. Green not jumping</u>		
25	<u>Mr. Red not jumping</u>		
26	Mr. Blue jumping	II: different Time Span, different Entity, opposite Polarity, same Predicate (wrt 24/25)	Il sig. Blu invece SALta ; Mr. Blue on the other hand DOES JUMP/JUMPs (the particles only/solo and lexical modifiers are also

2 The numbers in this column refer to the chronological segments of the story.

3 The sentences in this column are potential verbalizations suggested by the author.

4 Capital letters mark prosodic prominence.

			possible)
27-28	The firemen try to rescue Mr. Green and then Mr. Red	III : different Time Span, same Entity, same Polarity, same Predicate (wrt 24-25)	I pompieri tentano di salvare di nuovo/ancora... il sig. Verdi e il sig. Rossi; The firemen try to rescue Mr. Green and Mr. Red again
29	Mr. Red does not want to jump	III or IV : different Time Span(s), same Entity, same Polarity, same Predicate (wrt 25)	Il sig. Rossi si rifiuta ancora/di nuovo di saltare; Mr. Red still refuses to jump / refuses to jump again
30-31	One by one, all of them jump and the happy end		

Table 2: The Finite Story.

In what follows I shall comment the hypothetical means and structures by which native Italian and English speakers could mark the information configurations in question.

As to the first information structure (cf. segments 4, 5 and 8 in Table 2), this is, theoretically, the prototypical information structure for setting up a contrast in the domain of entities, since it involves a shift in the domains of the protagonists and time but maintenance of the levels of polarity and predicate. So, considering the types of means available in Italian and English, I expect informants to use additive particles (It. *anche*, *pure*; Engl. *also*, *too*, *as well*;) and their negative counterpart (It. *neanche*, *neppure*, *nemmeno*; Engl. Not... either; neither).

- (1) a. It.: Il signor Blu va a letto
The Mr. Blue goes to bed
Engl.: Mr. Blue goes to bed
- b. It.: **Anche** il sig. Verdi va a letto; **Neanche / neppure / nemmeno** il
Also the Mr. Green goes to bed; Neither the
sig. Verdi si sveglia
Mr. Green wakes-up
Engl.: Mr. Green **also** goes to bed; Mr. Green does **not** wake up **either**

A second strategy to signal the addition of an entity is the prosodic prominence on the entity:

- (2) a. It.: Il signor Blu va a letto
Engl.: Mr. Blue goes to bed
- b. It.: **Il signor VERdi** va a letto
Engl.: **MR. GREEN** goes to bed

It is also possible to employ verbal additive periphrases (It. *fare lo stesso*: Engl. *to do the same*):

- (3) a. It.: Il signor Blu va a letto
Engl.: Mr. Blue goes to bed

b. It.: Il signor Verdi **fa lo stesso**

Engl.: Mr. Green **does the same**

For the Second Information Structure (cf. segments 9 and 26 in Table 2), speakers have to convey that a situation applying for the first two characters (Mr. Green and Mr. Red) does not apply for the third one (Mr. Blue), therefore we have a change in the entity and time domains, an opposite polarity but the maintenance of the predicate. For this information structure speakers could either mark the contrast on the entity or highlight the change of polarity. If speakers opt for the entity contrast, they can use restrictive particles: It. *solo, solamente, soltanto*; Engl. *only, just*. But the exploitation of adversative expressions is also possible (It. *invece, in compenso, diversamente da Mr. X* etc.: Engl. *on the other hand, instead, differently from Mr. X*)⁵. The case of opposite polarity represents a third possible strategy for the narrators and it can be marked by the pitch accent on the finite verb; nevertheless, the latter is not a preferential strategy in Romance languages.

(4) a. It.: Il signor Verdi continua a dormire
The Mr. Green continues to sleep-INF

Engl.: Mr. Green continues to sleep

b. It.: Anche il signor Rossi continua a dormire
Also the Mr. Red continues to sleep-INF

Engl.: Mr. Red also continues to sleep

c. It.: **Solo** il signor Blu non dorme / Il signor Blu **invece** non dorme /
Only the Mr. Blue not sleeps / The Mr. Blue instead not sleeps /

Il signor Blu **SI SVEglia**
The Mr. Blue wakes-up

Engl.: **Only** Mr. Blue does not sleep / Mr. Blue **instead** does not sleep / Mr. Blue **WAKes UP – DOES WAKe** up

As far as the Third Information Structure is concerned (segments 17, 27 and 28 in Table 2), in this case one of the protagonists repeats the same action, so we have an iteration of the same event (that we can also describe as an addition of an event of the same type). In Italian, many iterative devices are at the speaker's disposal (*di nuovo, nuovamente, ancora, sempre* generally when marking habitualness, *un'altra volta, ri-verb*); in English the prototypical means to mark iteration is the particle *again*.

(5) a. It.: Il signor Blu chiama i pompieri
the Mr. Blue calls the firemen

Engl.: Mr. Blue calls the firemen

⁵ The adversative expressions are different from scope particles for several reasons: their domain of influence can be more difficult to identify unless the prosody disambiguates their scope; they cannot appear in absentia, that is to say that the alternatives to which they apply must necessarily be expressed together with the other components of the utterance as in the following interaction:

A: I have a black bag

B: Me **too** / *me **instead**

- b. It.: Il signor Blu chiama **di nuovo / ancora / un'altra volta / richiama**
 The Mr. Blue calls **again / *still / *another time / *recalls**
 i pompieri
 the fire brigadedon

Engl.: Mr. Blue calls the firemen **again**

The Fourth Information Structure (segments 8 and 29 in Table 2), finally, is concerned with continual time spans – namely an addition of events of the same type –, that can be marked by temporal particles (It. *ancora / sempre* and Engl. *still*) or verbal periphrases such as It. *continuare a + Infinitive* and Engl. *continue to do, keep on V-ing*:

- (6) It.: Il signor Rossi dorme **ancora / continua a dormire**
 The Mr. Red sleeps still / continues to sleep.INF

Engl.: Mr. Red is **still** sleeping / **continues to sleep**

On the whole, I considered nine segments of the story, **five of which are concerned with temporal quantification** (information structures III and IV), two focus on the polarity contrast (Information structure II) and three on the entity contrast (information structure I).

3 Theoretical framework and research hypothesis

In the present study I have decided to compare English and Italian speaking children in order to identify the possible similarities and differences by which textual cohesion is built in a Romance language with respect to a Germanic language. By doing so, my work can give a contribution to the debate about restrictive and (temporal and non temporal) additive particles as used in narrations (cf., in particular, Dimroth *et al.* 2010 and Giuliano 2012c), even though from the perspective of children's acquisition of the mother tongue rather than from that of native adults or adult L2 learners.

As anticipated in the introduction, I shall try to answer the following questions:

- (1a/1b) at which age do additive and restrictive means appear?
 (2) which functions do additive and restrictive quantification strategies carry out in the discourse organization of very young subjects?
 (3) what do the acquisitional paths of these forms in children tell us about the cognitive operations by children of the same age learning different languages?
 (4) which strategies, among the ones identified, are language-specific?

The answers will take the adult data as a point of comparison to identify what children still have to learn and what they have to modify to match the adult perspective.

From the textual viewpoint, my analysis is based on the *Quaestio* approach as described by Klein/von Stutterheim (1989, 1991), according to which a text is shaped and informationally organized with respect to an unconscious question individuals learn to formulate since early childhood. The prototypical question, or *Quaestio*, concerned with a narrative text is **what happened to the protagonist in time X?**, where the event is the information segment to specify, or focus, and the protagonist and the time span the segments in topic. But the

Quaestio is influenced by the formal and conceptual patterns a certain language has available, which explains the possibility for individuals of different native languages to conceive, for the same type of text, relatively different Quaestiones (for instance, What happened to the protagonist **and why?**, What happened to the protagonist **after** time X? etc.)⁶. In Klein' and von Stutterheim's opinion, the Quaestio guides the speaker's formal and content choices while building the information structure of a text (introduction, maintenance, shifting and reintroduction of referents)⁷, or **referential movement**. On the whole, this internal question 'dictates' the discourse principles coherence and cohesion are based on.

Now, with respect to my children's data, my purpose is to test the adoption of such an internal model by very young speakers of English and Italian and the way it combines with restrictive and additive cohesion strategies.

4 The retellings of adult native speakers of Italian and English: what do children have to learn?

Tables 3 and 4 show the results concerned with the retellings of adult native speakers of Italian and English.

IS I	Means	IS II
Time	Adverbs <i>Infine</i> 1 ('finally')	Time Adverbs <i>Finalmente, infine</i> 2 ('finally')
Entity	Additive Particles <i>Anche, pure</i> 34 ('also'); <i>Nemmeno, neanche</i> 4 ('neither, not.. either')	Entity Restrictive Particles <i>Solo</i> 2 ('only')
	Verb-anche-Subject 1	
Same Predication	Anaphoric VP <i>Fare la stessa cosa</i> ('do the same thing') 5	Generic Conjunctions <i>Però</i> ('but') 1
	Other <i>(Così) come</i> 3 ('like')	
Total	Additive Means 48	Restrictive Means 5⁸

⁶ Giuliano / Di Maio (2008) show that different pragmatic ways of conceiving interaction across cultures also influences the selection of linguistic and conceptual preferences.

⁷ The Quaestio shaping a whole text is said to be **global** by contrast to an incidental or **local** Quaestio a speaker can answer during his textual production, and that he can abandon immediately afterwards. So, with respect to our stimulus, a narrator could focus on a protagonist instead of the event, answering by that a **local Quaestio** such as **Who else jumps?**

⁸ Corresponding to *solo* 2 and *è l'unico che* 3.

IS III	Means		IS IV	Means	
Time	Adverbs	<i>di nuovo</i> 9 ('again'); <i>al nuovo invito</i> 3 ('at the new invitation'); <i>un'altra volta</i> 1 ('another time')	Time	Particles	<i>ancora</i> 4 ('still') (Segment 8); <i>ancora</i> 4 ('still ou again?') / <i>ancora una volta</i> 1 ('once again') (Segment 29)
	Verbs	<i>Ri-verb</i> 17 ; * <i>continuare a</i> 1 ('keep on'); <i>tornare</i> 2 ('go back'); <i>insistere</i> 1 ('insist')		Verbs	<i>Continuare a</i> ('keep on...') 11 (segment 8); 4 (segment 29)
Same Predication	Anaphoric VP	<i>Fare la stessa cosa</i> ('Do the same thing') 1			
Total		Additive Temporal Means 34			Additive Temporal Means 24

Table 3: Information Structures I, II, III, IV: adult Italian native speakers.

IS I	Means		IS II	Means	
			Time	Adverbs	<i>This time, finally</i> 2
Entity	Additive Particles	Also 11, as well 4, too 2, even 3, not...either 2	Entity	Stressed NP	2
	Stressed NP	3		Clefts	<i>He's the brave one that</i> 1
Same Predication	Anaphoric VP	<i>Do the same thing</i> 7	Polarity	Adverbs	<i>Actually</i> 1
	Others	<i>Same for</i> 1		Stressed VP	1
			Generic	Conjunctions	<i>But, however, though</i> 3
Total		Additive Means 36			No Restrictive Means
IS III	Means		IS IV	Means	
Time	Adverbs	<i>Again</i> 20, <i>still... not</i> 1, <i>finally</i> 1	Time	Particles	<i>Still</i> 12 (segment 8); <i>Still</i> 14 (segment 29)
	Anaphoric VP	<i>Another phone call</i> 3		Verbs	<i>Continue to</i> 1
Total		Temporal Additive Means 24			Temporal Additive Means 27

Table 4: Information Structures I, II, III, IV: adult English native speakers.

As we would expect it, the means concerned with temporal quantification are more numerous, which seems obvious since five of the nine segments that I considered in my analysis involve temporal reiteration or continuity (Italian speakers mark 58 contexts out of 100; English speaking informants mark 51 contexts out of 100).

For the First Information Structure, the tables show that:

- both Italian and English adult native speakers copiously mark this information structure by additive particles and only in a minor way by exclusive particles (Engl. *not... either, neither*; It. *nemmeno, neanche*);
- both groups of informants also exploit anaphoric verbs and noun phrases (*he does the same, the same* for etc.);
- only English native speakers resort to prosody to mark addition, as in examples 7 and 8:

(7) Lauren, English L1, adult

Mr. Green did not wake up // **MR. RED** did not wake up

(8) Ailish, English L1, adult

Mr. Green slept while the fire became stronger and stronger // **MR. RED** slept while the fire became stronger and stronger

For reasons linked to their mother tongue flexible syntax, Italian speakers can exploit the verb-subject order to mark the addition of a new entity (with or without an additive particle), but this strategy turns out to be extremely rare in my data and is used with the subject-pronoun *lui* (1 occ.), that in spoken Italian replaces *egli* (the written variant):

(9) Nicola, Italian L1, adult

Si è coricato pure lui
Himself is laid-down too him

'He laid down too'

For the Second Information Structure, where restrictive strategies are theoretically possible, English native speakers never exploit them; as to Italian speakers, they use them by means of two devices: the restrictive particle *solo* (ex. 10) and a *lexical-syntactic strategy of restrictiveness* (ex. 11):

(10) Francesco, Italian L1, adult

Solo il signor Blu comincia ad accorgersi di qualcosa di strano
Only the Mr. Blue starts to realize-INF-himself of something of strange

'**Only** Mr. Blue starts to realize [that there is] something strange'

(11) Antonella Italian L1, adult

Il signor Blu invece è l' **unico** che: accetta di lanciarsi
The Mr. Blue instead is the only-one who: accepts of launch-INF-himself

'Mr. Blue instead **is the only one who accepts to jump**'

As far as the Third Information Structure is concerned, English native narrations are more "monotonous", so to speak, since the prevailing temporal additive device is the particle *again*; Italian speakers, conversely, can vary, having at their disposal more devices: so they have resort both to the expressions *di nuovo/nuovamente* ('again') and to the iterative verbal prefix *ri-*, conversely, they never use *ancora*. In both groups there are also other less frequent strategies (*another phone call, un'altra volta*: another time = 'once again' etc.).

For the Fourth Information Structure, finally, English native speakers definitively prefer *still* to mark it and they never interpret segment 29 as an iterative process (*he still refuses to jump* instead of *he refuses to jump again*). For this same Information Structure, Italian speakers continually alternate between the particle *ancora* and verbal periphrases such as *continuare a + infinitive* ('keep on V-ing'); furthermore, Italian speakers sometimes clearly interpret segment 29 as an iterative process (*rifiuta di nuovo di saltare*: 'he refuses to jump again').

To summarize:

- both English and Italian L1 children have to learn **specific additive particles** for the First, Third and Fourth Information Structures;
- the task appears to be **more difficult for Italian children**, since the additive particle *ancora* can quantify both entities and time spans and have both an iterative and a continual reading: in other words, the use of the same items in similar contexts could make the identification of the specific semantics of a particle slower. To make things even more complicated there is the possibility of using the particle *sempre* with the same temporal values (iterative – generally in habitual contexts – and continual) as described for *ancora*;
- Italian children also have to learn that **restrictive means** can be used in order **to mark a contrast of actions**, as that is the case for the Second Information Structure (someone does something that someone else refuses to do);
- English native children have to learn **the frequency preference for a particle such as still** instead of verbal periphrases ('keep on, continue to') for continual processes;
- English native children also have to notice **the exploitation of prosody to convey the concept of addition in absence of any lexical or syntactic additive means**.

5 The retellings of Italian and English native four-year-old children

Tables 5 and 6 are concerned with the data of four year old children.

IS I	Means	IS III	Means	IS IV	Means
Time	Adverbs (deictic) <i>Un'altra volta</i> 3 ('another time')	Time	Ad-verbs <i>Di nuovo</i> 1, <i>ancora</i> 1 ('again')	Time	Part-icles <i>Ancora</i> 2 ('still') (segment 8)
Entity	Additive Particles <i>Anche</i> 1; (deictic) <i>Anche</i> 2; <i>pure</i> 5 ('also')				
	Verb-(anche)-Subject 3				

	Others	<i>Un altro</i> 1 ('another one'); <i>tutti dormono</i> 1 ('everybody sleeps')		
Same Pre-dication	Ana-phoric VP	<i>Fa lo stesso</i> 1 ('he does the same'); <i>sono tutti uguali</i> 1 ('they're all the same')		
	Others	<i>Lo stesso</i> 1 ('the same')		
Total	Additive means 19 (deictic use 5)		Temporal Additive Means 3	Temporal Additive Means 2

Table 5: Information structures I, III, IV: Italian 4-year-old children.

IS I	Means		IS III	Means	
Time	Adverbs	<i>Now</i> 1	Time	Adverbs	<i>Again</i> 3, (deictic) <i>again</i> 2, (deictic) <i>too</i> 2
Entity	Stressed NP				
	Additive Particles	<i>Too</i> 4			
	Others	<i>The other one</i> 3			
Same Predication	Anaphoric VP				
Total		Additive Means 7			Temporal additive means 5 (deictic use 2)

Table 6: Information Structures I, III: 4-year-old English native children.

The Second Configuration is never marked either by Italian or English 4-year-old children. As to the First and Third Information Structures, some of the attempts to express the repetition of the same action by two different characters or the same character are given by examples 12-14 (the symbol // marks the passage to a different scene of the story; three full stops indicates the suppression of a passage):

- (12) Ofek, English L1, 4-year-old, First Information Structure
 He goes to sleep // he go to sleep **too** // he go to sleep **too**
- (13) Alessandra, Italian L1, 4-year-old, 1st Information Structure
 Dorme // **pure** lui dorme // **pure** lui dorme
 Sleeps // also him sleeps // also him sleeps
 'He sleeps // he also sleeps // he also sleeps'
- (14) Ashley, English L1, 4-year-old, Third Information Structure
 He's on the telephone... // He's on the phone **again**
- (15) Francesca, Italian L1, 4-year-old, 3rd Information Structure
 Ha finito di telefonare... // sta telefonando **di nuovo**
 Has finished to call.INF... // is calling again

'He has finished to call... // he is calling again'

Despite the correctness of the additive means in the passages that we have just seen, the retellings of the 4-year-olds can also be **very ambiguous**, as in example 16:

(16) Désirée, Italian L1, 4-year-old, First Information Structure

Il bambino che stava a letto e ha spento la luce... //
The child that was at bed and has switched.off the light

'The child that was in bed and switched the light off [referred to Mr. Red]'

È andato a letto e il bambino ha spento **un'altra volta** la luce //
Is gone at bed and the child has switched.off an other time the light

'He went to bed and switched the light off **again** [referred to Mr. Green]'

Tutti sono uguali // È andato a letto a spegnere la luce **anche**... //
All-PL are equal // is gone to bed to switch.off the light also [...]

'**All of them are equal** // he went to bed to switch the light off **too** [referred to Mr. Red]'

E: ha fatto un rumore //

E: has made a noise //

'E: he made a noise [the scene where Mr. Green keeps on sleeping] //

Ha fatto un rumore **anche**

Has done a noise also

'Has made a noise **too** [the scene where Mr. Red keeps on sleeping]'

Despite the clear attempts to mark anaphoric links, the Italian passage shows strong failures both for the lexical selection of some items and for their position in the syntactic chain. In the second line, the expression *un'altra volta* ('another time = again') could prompt us to think that the young informant has not grasped the change in the entity domain; but, immediately afterwards, she adds, with respect to the three protagonists, that *tutti sono uguali* ('all of them are equal'), which shows her being conscious as to the existence of three different characters. The source of the mistake could lie not in the lexical choice but rather in the fact that the subject **confuses the intratextual relations with deictic relations**: so *un'altra volta* is referred to the repetition of a scene similar to one she has already watched, and consequently to *the stimulus* rather than to the action of a specific protagonist. As to the last utterance: *ha fatto un rumore anche* ('has made a noise too'), here the scope of *anche* (indicated by the underlining) is once again deictic (= *anche in questa scena si è sentito un rumore: 'in this scene too you heard a noise'*). For this sentence you have to notice the position of *anche* at the end of the sentence, which puzzles the listener, since *anche* cannot normally be placed in this position (except in very rare and pragmatically very marked contexts). The placement of *anche* at the end of the utterance also appears in *è andato a letto a spegnere la luce anche* ('[he = Mr. Red] went to bed to switch the light off **too**'), where the final position prevents us from deciding whether *anche* scopes over the implicit subject (intratextual interpretation) or

over the stimulus (deictic interpretation): in both interpretations the demanded syntax in Italian would be '*anche* + Mr. X/In this scene + VP'.

Let's look at some other Italian and English examples:

- (17) Francesca, Italian L1, 4-year-old, outside the Information Structures considered
Ha chiuso la porta // Sta telefonando di nuovo // **Anche** questo sta telefonando
Has closed the door // is telephoning again // also this is phoning
'He closed the door // he [Mr. Blue] is phoning again // This **too** is phoning [referred to the fireman who answers the phone]'
- (18) Rosalinda, English L1, 4-year-old, First Information Structure
There was two fires [the fire spreads out] // there was fire on his house **too** [Mr. Green wakes up and is scared] // there's fire **too** [Mr. Red wakes up and is scared as well]
- (19) Finni, English L1, 4-year-old, outside the Information Structures considered
He's speaking on the telephone [referred to Mr. Blue] // on the telephone **again** [referred to the fireman who answers the phone]
- (20) Penelope, English L1, 4-year-old, First Information Structure
He is in the dark because it's night time // it's night time **again** // and then night time **again**

The young narrators, similarly to the author of example 16, highlight the similarity of two scenes instead of the logical relationship between them with respect to the story plot. For examples 17 and 18, children are establishing an external comparison between three similar scenes; in passages 19 and 20 the comparison is with respect to someone on a telephone, so the anaphoric linkage that It. *anche* and Engl. *again* mark is external to the plot of the story and refers to the fact that a scene where someone is on a phone shows up twice.

It can be interesting to remark that the only additive particle scoping on entities, appearing in the 4-year-old data of English L1 children, is the particle *too*, even outside the information structures that I considered, maybe because of the more perceptible position that this additive item demands, namely **the end of the utterance**; as a matter of fact, the final syntactic position of *too* causes no troubles to very young children.

A further remark can be noticed for the 4-year-old groups: the expressions *the other one* / *another one* and their Italian equivalents can function as additive strategy:

- (21) Ashley, English L1, 4-year-old, 1st Information Structure
He go to sleep [referred to Mr. Blue] // and **the other one** go to sleep [referred to Mr. Green] // **the other one** go to sleep [referred to Mr. Red]
- (22) Pasquale, Italian L1, 4-year-old, 1st Information Structure
Uno che dorme sul letto //
One who sleeps on-the bed //
'someone who sleeps on the bed' //

Un altro che dorme sul letto
 A other who sleeps on-the bed
 'Another one who sleeps on the bed'

To summarize, 4-year-old subjects:

- in general, are not capable of organising what they say in a holistic narration;
- tend to confuse the intratextual relations with deictic relations whatever the mother tongue they are learning;
- can have troubles with the positioning of some additive particles (Italian children) or – if possible – they avoid the particles requiring an internal positioning (English L1 children);
- have more problems with temporal quantification than with the quantification of entities (scarce frequency of temporal means in Italian and deictic use of temporal means in English);
- the Second Information Structure is never marked by any child of the two groups whereas the Fourth Information Structure shows up in just the Italian narrations.

The first two Points have certainly a relationship since progressively the very young child will select and link the right position to the right scope (cf. par. 6 and 7).

6 The retellings of Italian and English L1 7-year-old-children

Tables 7 and 8 are concerned with Italian and English L1 children.

IS I	Means		IS II	Means	
Time	Adverbs	(deictic) <i>Un'altra volta</i> 2 ('again')	Time	Adverbs	<i>Poi</i> 1 ('then')
	Particles	(deictic) <i>Ancora</i> 2 ('still'); * <i>sempre</i> 1 ('always')			
Entity	Stressed NP	<i>Il Signor ROsso</i> 1 ('Mr. RED')	Entity	Restrictive Particles	<i>Solo</i> 1 ('only')
	Additive/ Exclusive Particles	<i>Anche</i> 7, <i>pure</i> 4 ('also'); <i>manco</i> 1, <i>nemmeno</i> 1 ('neither')			
	Verb- anche- Subject	2		Adverbs	<i>Invece</i> 7 ('instead')
	Others	<i>Un altro</i> 1 ('another')			
Same Predication	Anaphoric VP	(deictic) <i>E' lo stesso</i> 1 ('it's the same'), <i>stessa cosa</i> 1 ('same thing')	Polarity	Adverbs	<i>Sì</i> 1 ('yes')
Total		Additive Means 22 (deictic use 5)			Restrictive Means 1

IS III	Means		IS IV	Means	
Time	Particles	<i>Ancora</i> 4 ('again'); <i>*un altro poco</i> ('a bit more')	Time	Particles	<i>ancora</i> 3, <i>sempre</i> 1 (Segment 8) ('still'); <i>ancora</i> 1, <i>sempre</i> 1 (Segment 29) ('still ou again? '); <i>di nuovo</i> (1)
	Verbs	<i>Ri-verb</i> 4; <i>insistere</i> 1		Verbs	<i>Continuare a</i> ('keep on') 1 (segment 8)
				VP Repetition	<i>Diceva no diceva no</i> 1 ('he said no') (segment 29)
Total	Temporal Additive Means 9		Total	Temporal Additive Means 8	

Table 7: Information structures I, II, III, IV: Italian 7-year-old children.

IS I	Means		IS II	Means	
Time	Adverbs	<i>Then</i> 1, <i>now</i> 1	Time	Adverbs	<i>Finally</i> 1
Entity	Additive Particles	<i>Too</i> 5, <i>as well</i> 1	Generic Means	But	1
	Same Predication	Anaphoric VP 1			
Total	Additive Means 7		Total	No Restrictive Means	
IS III	Means		IS IV	Means	
Time	Particles	<i>Again</i> 4, <i>always</i> 1	Time	Particles	<i>Still</i> 2 (segment 8); <i>Still</i> 3 (segment 29)
Total	Temporal Additive Means 5		Total	Temporal Additive Means 5	

Table 8: Information structures I, II, III, IV: 7-year-old English native children.

As far as Italian 7-year-old children's retellings are concerned, we still find, for the First and Third Information Structures, some problems with occurrences of additive means such as It. *un'altra volta*, *ancora*, *sempre* in contexts involving iteration.

(23) Benedetta, Italian L1, 7-year-old, 1st Information Structure

Nella **casetta verde** sta facendo una musica che lo sta facendo spaventare //
 In-the house-DIM green is doing a music that him is making scare-INF //
 'In the little green house there's music which is scaring him //'

Nella **casetta rossa** sta facendo un'altra musica uguale a quell'altra
 In-the house-DIM red is doing a other music equal to that other
 'In the little red house there's some other music equal to the other one'

Che lo sta facendo **ancora** spaventare
 That him is making still scare-INF
 'Which is **still** scaring him'

(24) Rossella, Italian L1, 7-year-old, 1st Information Structure

Il signor Rosso si è messo sopra al letto //
The Mr. Red himself is put on at-the bed //

'Mr. Red lied down on the bed' //

Il signor Verde si è steso ***sempre**⁹ sopra al letto
The Mr. Green himself is lied.down ***always** on at-the bed

'Mr. Green also lied down on the bed'

For examples (23) and (24) it is difficult to decide whether the informants use *ancora* and *sempre* in a deictic way or, alternatively, they have problems with the functional and discourse peculiarities of these means, namely with the fact that: *ancora* and *sempre* refer to the iteration or continuation of an action by the **same character**. The polyfunctional semantics of It. *ancora* (= *some more, again, still*) and *sempre* (= *still, again*) could, at least partly, explain the ambiguities found in the retellings in question.

Still for Italian children, the most striking difference between the 7-year-old and the 4-year-old subjects lies in the emergence of markings for the Second Information Structure, and among these devices the restrictive particle *only*.

(25) Camilla, Italian L1, 7-year-old, 2nd Information Structure

Solo quello Blu si è svegliato
Only that Blue himself is woken up

'**Only** the Blue one woke up'

Outside the information structures that I analysed, I also found the construction *è l'unico che...* ([he] is the only one who...'), which together with the restrictive particle *solo* ('only') actualize the **uniqueness strategy**, appearing in Italian adults' retellings (cf. § 4).

Concerning the Third Information Structure, the Italian 7-year-old group exploits varied means such as the verbal prefix *ri-*; a semantic lexical strategy such as the use of the anaphoric verb *insistere* also shows up.

As to the use of prosodic means, I identified, for the First Information Structure, a prosodic stress on *signor ROSSo* replacing a lexical marking such as *anche*:

(26) Giacomo, Italian L1, 7-year-old, 1st Information Structure

Poi il signor **ROSSo** e: va a letto spegne la luce si mette le coperte
Then the Mr. RED e: goes to bed switches.off the light himself puts the covers
e va a dormire
and goes to sleep-INF

'Then Mr. **RED** e: goes to bed he turns the light off he covers himself and goes to sleep'

9 Here the use of *sempre* is not grammatical since the continual reading is referred to a character different from Mr. Red in the first sentence.

This prosodic device never appears in Italian adult retellings and otherwise it is exceptional in children's narrations of any age as well, and for this reason I consider it as an occasional childish strategy.

Concerning the English L1 7-year-olds, the following observations apply:

- the deictic use of *again* as additive particle referred to the stimulus disappears;
- a new expression to add entities shows up, that is to say *as well*;
- similarly to the younger 4-year-old group, the 7-year-olds **never exploit restrictive particles** to mark the Second Information Structure;
- no prosodic stress on NP is exploited to mark the addition of entity involved by the First Information Structure.

With respect to the Italian children of the same age, English L1 7-year-olds show no significant problem with the expression of iteration, except for example 27 below, in which we find a use of the temporal particle *always* comparable to It. *sempre* in example 24, since *always* – as used by the child – refers to the iteration of an action by a **different character** with respect to the previous scene, which is inappropriate because *always* presupposes the same agent.

(27) Adrian, English L1, 7-year-old

He laid on his bed and then he had a moustache on his face [referred to Mr. Green who sits up in his bed] // ***Always** standing up and he had a beard on his face [referred to Mr. Red]

To summarize:

on the whole, seven-year-old children's retellings show several additive and restrictive cohesive elements (inside and outside the information structures that I considered), some of which never appear in the younger group: so for the English group, we find *still* and *as well*; for the Italian group, we have, *sempre* ('always, still'), the iterative verb prefix *ri-*, the restrictive particle *solo* ('only') and the exclusive particles *nemmeno*, *manco* ('neither'). In other words, the narrations of the seven-year-olds show a perspective which is already very close to that of the adult group of the specific language.

7 The retellings of Italian and English 10-year-old children

As emerges from tables 9 and 10, by the age of ten we observe a continued progression for the four information structures in question.

IS I	Means	IS II	Mean
Time	Adverbs	Time	Adverbs
	<i>*Ancora</i> 1 ('more and more')		<i>A questo punto</i> 1 ('at this point')
Entity	Additive Particles	Entity	Restrictive Particles
	Verb-Subject		Adverbs
	<i>Anche</i> 31, <i>pure</i> : 7 ('also'); <i>nemmeno</i> : 1 ('neither')		
	2		<i>Invece</i> 10 ('instead')
			Others
			<i>Per primo</i> 1 ('as first')
Same Predication	Anaphoric VP	Generic	Conjunctions
	<i>Fare /succedere lo stesso</i> 6 ('do / happen the same')		<i>Però / ma</i> 4 ('but')

	Others	<i>Stessa cosa / lo stesso</i> 5 ('same thing / the same')		
Total		Additive means 55		Restrictive Means 1
IS III	Means		IS IV	Means
Time	Adverbs	<i>Un'altra volta</i> 1 ('another time'); <i>di nuovo</i> 6 ('again'); <i>al terzo invito</i> 1 (at the 3rd invitation'); <i>un altro po'</i> 1 ('a bit more'); <i>sempre</i> 1, <i>ancora</i> 1 ('still')	Time	Particles
	Verbs	<i>Ri-verb</i> 7; <i>insistere</i> 4 ('insist'),		<i>Ancora</i> 2 (Segment 8) ('still'); <i>ancora</i> 5, <i>sempre</i> 2 ('still or again?') (Segment 29)
Total		Temporal Additive Means 21		Temporal Additive Means 10

Table 9: Information structures I, II, III, IV: Italian 10-year-old children.

IS I	Means		IS II	Means
Time	Adverbs	<i>Now</i> 1		
Entity	Additive particles	<i>Also</i> 4; <i>too</i> 1; <i>as well</i> 1 <i>Not... either</i> 1; <i>neither</i> 1		
Same Predication	Anaphoric VP	<i>Do the same thing</i> 2;	Polarity	Particles
	Others	<i>The same thing</i> 2	Generic	Conjunctions
Total		Additive Means 12		No Restrictive Means
IS III	Means		IS IV	Means
Time	Adverbs	<i>Again</i> 3	Time	Particles
	Verbs	<i>Retry</i> 1		<i>Still</i> 1 (segment 8); <i>Still</i> 5 (segment 29)
Total		Temporal Additive Means 4		Temporal Additive Means 6

Table 10: Information structures I, II, III, IV: 10-year-old English native children.

For Italian children, this progression is concerned with the frequency of the means that ten-year-old children use rather than with their variety. Problems with iterative means such as *sempre* and *ancora* have disappeared.

For English native children, the progression observed by ten involves the typology of additive means rather than their quantity, since we find the particle *also* – which is completely lacking in the other age groups, even outside the information structures considered –, the exclusive expressions *not... either* and *neither* and the iterative re-Verb strategy (*retry*), an uncommon strategy in English. Still for the English L1 group, the inappropriate use of *always* has disappeared.

From a global viewpoint, the retellings of the 10-year-old groups are very cohesive and well integrated into a holistic perspective of the proposed narrative task. But what do children aged

of ten still have to learn with respect to adults? As for the Italian ten-year-old children, the comparison with adults' retellings of *The Finite Story* demonstrates a great analogy between the means that the latter employ and those exploited by children. Nevertheless, **the temporal additive means are less exploited than the additive means concerning the contrast of entities**, whereas the opposite is true for adults (adults: 58 occ. s out of the 100 possible markings; ten-year-old children: 31 out of 100; 20 interviews for both groups). Let's not forget that for temporal quantification I considered five segments but just three for entity additive quantification. The unbalance in the use of temporal additive means is also valid for the comparison between adult English native speakers and ten-year-old children, even considering that for children I have just 10 interviews (adults 52 occ. s out of 100; ten-year-old children: 10 occ. s out of 50).

Still for the English L1 group, they show no sensitiveness for the use of prosody to mark addition (First Information Structure); more data is certainly needed, but we can remark the low frequency of this strategy in the adult reference group as well.

8 Back to the research questions

In what follows I shall discuss the research questions presented in par. 7 and try to interpret my results by the perspective of the Quaestio theory.

- (1a) At which age do additive means appear?
- (3) What do the acquisitional paths of these forms in children tell us about the cognitive operations by children of the same age learning different languages?

According to the ages that I considered and to the task that I used, additive means appear from the age of four on but with some differences according to the types of quantification solicited, namely the quantification of entities (3 segments in the story) and that of time spans (5 segments in the story):

- Italian L1 children of any age, but particularly the 4-year-olds, clearly have less problems in quantifying entities rather than time spans;
- English L1 children show a greater balance between entity and temporal quantification but, at four, most of the temporal additive means have a deictic meaning;
- with respect to adult reference groups, Italian and English L1 children of any group exploit additive temporal means less frequently than means quantifying entities;
- the quantification of entities involving a negation (exclusive particles: It. *neanche, nemmeno, neppure, manco*; Engl *not... either, nor... neither*) shows up from the age of seven on for Italian and from the age of ten on for English.

Now, these results push me to hypothesize an acquisitional path such as the one illustrated in Scheme 1:

Scheme 1. Acquisitional path at the conceptual level

Addition of entity (entity contrast: *also*) > addition of time span (temporal contrast: *again, still*) > exclusion of an entity (entity contrast: *neither*)

Contrasts focusing on the addition of an entity (cf. the First Information Structure) appear in a precocious way; contrasts focusing on the addition of **different time spans** by the same character (cf. the Third and Fourth Information Structures) show up more slowly; the concept of exclusion (negative addition) shows up even later.

The results summarized by scheme 1 turn out to be valid for another experiment (created by C. Dimroth, *Mr. Blue and Mr. Red Story*) that I tested just on Italian children (cf. Giuliano 2012a). This second task consists of several pictures in which two different characters do the same thing, or one character keeps on doing the same action for a period of time or repeats an action after some time. This experiment was also tested by Benazzo *et al.* (2004) on French, German and Polish children and they also ascertained that the addition of entity is marked in a more precocious way than temporal iteration or continuity. From a cognitive viewpoint, the precocious emergence of entity contrasts by additive means is in agreement with what Givón (1995: 380) maintains with respect to nominal referents: they are perceptually and cognitively more salient, they are acquired early in ontogeny and evolve early in phylogeny, they are culturally central entities, in particular those that are subject-agent (human, active, conscious, wilful) or object-patient (concrete, compact, usable). As to negative particles, their later appearance is in agreement with some studies about negation showing the more problematic processing of negative structures by children with respect to the positive ones (cf. Giuliano 2004 for an overview of the several works). So I hypothesize that scheme 1 has to do with **age cognitive restrictions independently from the L1 the child is learning**.

(1b) at which age do restrictive means appear?

(2) which functions do additive and restrictive quantification strategies carry out in discourse organization of very young subjects?

As for means concerning the addition of entity or time spans (*also, too...; anche, pure...; again...; di nuovo*), very young children tend to use them with a **deictic/extra-textual function**, in other words they confuse the plot line of the story and the succession of video-clips or pictures by which the story itself is furnished. This functioning of additive means in the narrative task proposed progressively disappears from the age of seven in agreement with the progressive dismissal of the egocentric perspective typical of the very young child. At this point children can make additive contrasts by using scope expressions in the appropriate way, a consideration valid both for the acquisition of English and Italian.

As far as the restrictive means are concerned, in the retellings of *The Finite Story* task, they have a secondary role in the narrations of Italian children from the age of seven on and no role in the retellings of English L1 children. Nevertheless, this result can depend on the features of *The Finite Story* stimulus; as a matter of fact, the Second Information Structure involves several strategies to contrast different actions of different characters and not necessarily restrictive devices, but whereas in English they are never used, in Italian they show up. So the emergence of *solo* ('only') and *è l'unico che* ('he's the only one who') in Italian 7 and 10-year-old children's narrations for the Second Information Structure could be due to specific strategies of building textual cohesion in their mother tongue as otherwise some other studies using *The Finite Story* as experimental test seem to confirm (cf. Dimroth *et al.* 2010; Giuliano 2012c).

- (4) Which strategies, among the ones identified in children's retellings, are language-specific?
- the exploitation of restrictive means for the Second Information Structure by Italian children from the age of seven on is an Italian specific cohesion strategy;
 - the more frequent problems that Italian children have with the concept of iteration with respect to English L1 children could be due to the polyfunctional semantics of the Italian particles *ancora* ('more, again, still') and *sempre* ('always, again, still');
 - the late appearance of *also* in English L2 children's data, an internal positioning particle, is probably caused by the fact that English has an external, perceptually more salient particle, namely *too*, whose semantics is equal to that of *also*.

From the perspective of the Quaestio theory that I have adopted (cf. par. 3), my data let me interpret the results obtained for *The Finite Story* task in the following way: in terms of textual organisation, four-year-old children are not capable of planning a global narrative perspective such as the one intervening when the Quaestio principle has definitively been elaborated by the cognitive system. This perspective is just "sketched", so to speak, and it matches the concept of **script** proposed by Fayol (1985), by which the author refers to a banal sequence of actions with no hierarchical organization and purpose, which explains the incomplete and referentially ambiguous character of utterances but also the incompleteness of the retellings altogether. This result could partly be due to children's inability to select the conceptual domains pertinent for the Quaestio a certain task requires, which justifies four-year-old children's dispersion of attention and their focus on details of little or no importance for the dynamics of the story. Between the ages of 7 and 10, my results show the increasing ability of Italian and English speaking children with the conceptual and linguistic specificities the task in question demands in their mother tongue, namely their aptitude to contrast **entities, actions and temporal spans** in agreement with the increasing holistic planning of a narrative text. (cf. the concepts of **plan** and **schema** by Fayol 1985).

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