



Topics and Passives in Italian-speaking children and adults

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Aims

- Compare use of structures involving a **Topic, overt/covert, + pronoun vs use of passive** in early ages.
- The comparison will allow us to dig into three interrelated research questions in acquisition and the relevant theoretical analyses:
 - 1. When and how do children master appropriate use of **left peripheral topic position(s)**?
 - 2. When and how do children master appropriate use of **passive** and of what **type**?
 - 3. What can the acquisition results tell us on the nature of the relevant constructions, CLLD and types of passive?
- Comparison with adults' behavior in the same experimental conditions will also drive the analysis.

Previous findings on the elicitation of the passive

- Previous studies investigating the production of passives have shown that after patient-oriented questions, **Italian-speaking children prefer pronominalisations over passives until a later stage (around 9 y.o.) as a way to express a topic patient**, whereas adults mainly opt for passive (*venire* passive) (Volpato et al. 2015; Manetti 2013; Pivi & Del Puppo 2013);
- In Manetti (2013), **3-4 y.o. children strongly preferred the use of clitic pronouns (e.g. Subj - CL-V)** in response to patient-oriented questions, and when using a clitic structure **they did not produce an overt dislocated topic** (1b):

(1) a. *Che cosa succede al re?*

‘What happens to the king?’

b. *La mucca lo graffia*

‘The cow him.CI scratches.’

- Structures expressing a topic patient may vary depending on the experimental settings and the informational context (see Volpato et. al 2015).

The study

- We aim at further investigating children's use of structures involving topic patients, with special attention to their production of **overt vs. covert topics**.
- We manipulated the discourse conditions in which we ask to talk about the patient:
 - children were asked to talk about **one patient vs. two patients**.
- We ask whether children could differentiate between the two topic conditions (one topic vs. two topics); and if they do, we ask how they linguistically encode this difference.

The study

- This manipulation would enable us to control for
 - the production of **pronominalizations** -> **condition 1** (the *baseline* condition).
 - the production of **overt topics** -> **condition 2** (contrastive topic condition) possibly resulting in a clitic (left) dislocated structure.
 - the production of other felicitous structures, such as the **passive** (as already shown in adults' productions), and this would help us shed some light on the use of pronoun vs. passive structures, and on the potential preference for certain types of passive (e.g. Si-causative).

Participants

	n=	Age	MA (SD in months)
4 y.o.	17	4;1 - 4;11	4;6 (3.3)
5 y.o.	19	5 - 5;11	5;6 (3.8)
Adults	24	19 - 25	21 (2)

Table 1

- 39 monolingual Italian-speaking children (from 4 to 5;11), attending two kindergartens in Florence and Montespertoli (FI); and 24 Italian students of the University of Siena.
- 3 children were excluded (2 of them only answered to filler questions; one described the pictures before listening to the question).

Method and Materials: Elicited Production Task

- 8 Patient-oriented questions were asked **under two discourse conditions**:
 1. Condition 1: **One topic** (=> one patient)
 2. Condition 2: **Two topics** (=> two patients - Contrastive Topic condition)

- **8 transitive verbs**
(*lavare* 'wash', *pettinare* 'comb', *fotografare* 'photograph', *vestire* 'dress', *accarezzare* 'caress', *spingere* 'push', *coprire* 'cover', *leccare* 'lick').
- **Characters:** Pairs of either **humans** (+ human) or **animals** (-human); both patient and agent are singular.
- The test: 8 experimental items + 5 warm-up trials + 8 fillers



Quattrocchi is a curious smurf. He walks around his village to visit some friends. He needs children to help him answer all his questions

Condition 1: One topic

(Che cosa succede alla mia amica, la gatta?)



Slide 1 -

Experimenter says: :

The smurf walks around.

He sees a house. In this house there are a cat, a cow and a hedgehog.

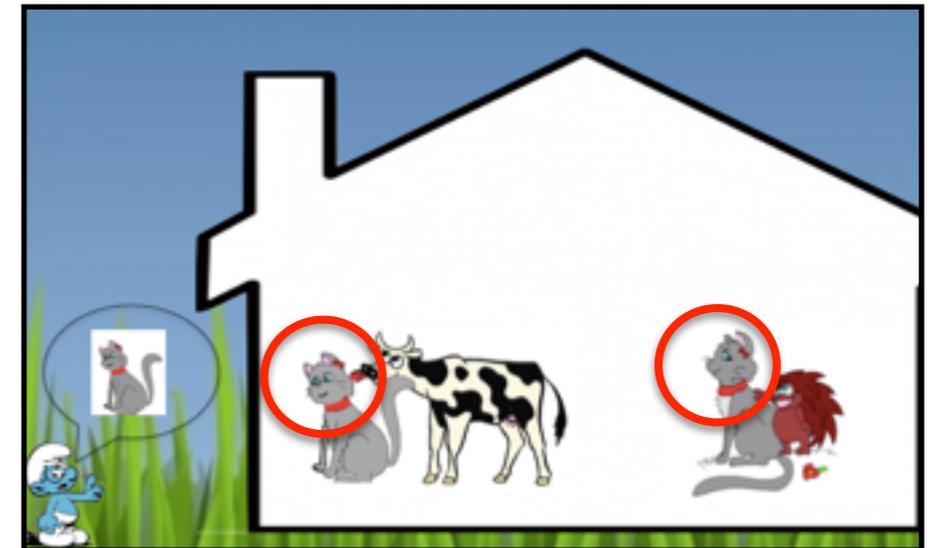


Slide 2 -

Experimenter says:

The smurf is very curious to know something about his friend 'the cat'.

So he gets close to the house but he cannot enter the house so he needs your help.



Slide 3 -

The smurf asks:
What happens to my friend, the cat?

Condition 2: Two topics

(Che cosa succede ai miei amici, il cane e l'orso?)



Slide 1 -

Experimenter says:

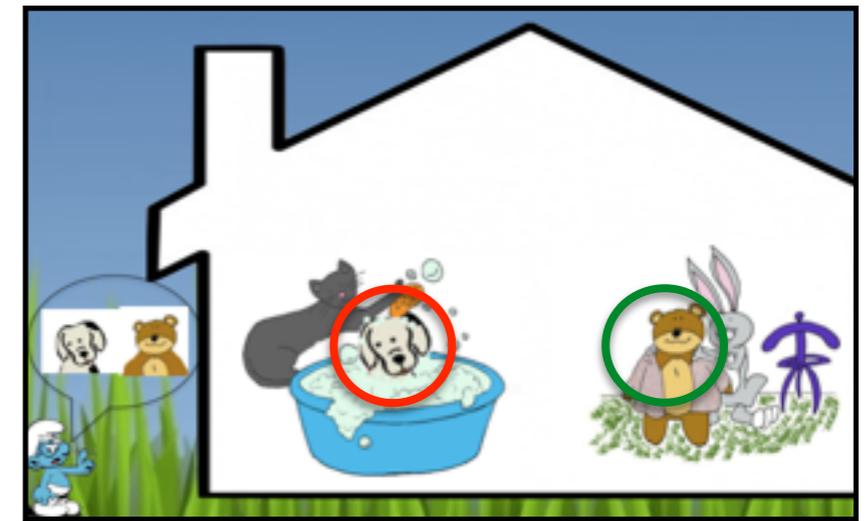
The smurf walks around. He sees a house. In this house there are a dog, a cat, a bear and a rabbit.



Slide 2 -

Experimenter says:

He is very curious to know something about his friends 'the dog and the bear'. But he cannot enter the house so he needs your help.



Slide 3 -

The smurf asks:
What happens to my friends, the dog and the bear?

Coding Criteria

1. Pronominalisations - (Covert Topic)

I. (Subject)-Clitic-Verb: e.g. “Il gatto lo lava”

II. Clitic-Verb-Subject: e.g. “Lo lava il gatto”

2. Clitic Left Dislocations - (Subj - **Obj** - CL - V; **Obj** - Subj - CL- V; **Obj** - CL - V - Subj; with subject overt or null)

3. Passives:

I. Copular/*venire* Passive: e.g. *il cane è/viene lavato dal gatto*

II. Si-causative Passive: e.g. *il cane si fa lavare dal gatto*

4. **Other** (SVO, intransitive verbs, Copulas, Clitic doubling; Reflexive passives; uncompleted utterances)

Results - Children vs. Adults

- **Result 1:**
 - **Children** used **pronominalized structures with covert topics (67%)** in condition 1; covert topics decrease in condition 2, and **CLLDs increase up to 25% ($p < .001$)**. Passives were only SI-causative (9%-11%)
- **Result 2:**
 - **Adults** used **passives (58%)** and **S-CL-V (22%)** in condition 1; in the two-topic condition **passive is the most frequent answer (68%)**, CLLD was 1%.

	CHILDREN				ADULTS			
	One Topic		Two Topics		One Topic		Two Topics	
Pronoun (covert topic)	191	67%	23	8%	42	22%	0	0%
CLLD (overt topic)	9	3%	71	25%	1	0%	2	1%
(Essere/venire) Passive	1	0%	0	0%	87	45%	94	49%
SI-causative Passive	24	9%	32	11%	24	13%	37	19%
Other	58	21%	160	56%	38	20%	58	31%

Table 2

Results - Children (by age group)

- **One topic:** both groups opted for pronominalisations
- **Two topics:** The use of left dislocated structures (overt topics) already emerges at age 4 (23% at 4 y.o.; 27% at 5 y.o.).
- ★ **SI-causative passive:** significant difference emerged between 4 and 5 y.o (n= 6 to 50, 4% to 17%; ($\chi^2= 32.70$; $p < .0001$)).
 - ★ 92% null subject (One topic) vs. 100% preverbal lexical subject (Two-topics);

		4 YEAR-OLD				5 YEAR-OLD			
		One Topic		Two Topics		One Topic		Two Topics	
Pronoun CLLD (Essere/venire) Passive SI-causative Passive Other	Pronoun	93	71%	16	12%	98	64%	7	5%
	CLLD	4	3%	31	23%	5	3%	40	27%
	(Essere/venire) Passive	0	0%	1	1%	0	0%	0	0%
	SI-causative Passive	0	0%	6	4%	24	16%	26	17%
	Other	34	26%	82	60%	25	16%	77	51%

Table 3

'Other' responses

- SVO - active
 - children: condition 1 (6%)- condition 2 (29%)
 - adults: condition 1 (12%)- condition 2 (13%)
- Clitic Doubling in children only:
 - condition 1 (1%)- condition 2 (6%)
- **SI-verb (Reflexive passive) in children only:**
 - **condition 1 (7%)- condition 2 (6%)**
- Other verbs/uncompleted utterances:
 - children: condition 1 (6%)- condition 2 (15%)
 - adults: condition 1 (7%)- condition 2 (18%)

Causatives and reflexives:

- In their answers to the patient oriented questions, children also produced some **SI-verb structures, as in (1)**, despite the transitivity of the action. We refer to these structures as Reflexive-passive:
 - ✓ **16 sentences: Subject + SI-verb** -> e.g. L'orso si lava (see 1)
 - ✓ **20 sentences: SI-Verb** -> e.g. Si lava
 - ✓ **1 sentence: Subject + SI-verb + By-phrase** -> (see 2)

(1) a. What happens to the the dog and the bear?

b. Il cane si lava e l'orso si sta asciugando.

(2) a. What happens to the penguin and the cow?

b. Il pinguino si ...sta massaggiando dal coniglio

Types of left-dislocated structures in children

- We coded 9 CLLDs in the one topic condition and 71 in the contrastive topic condition (from 3% to 25%):
 - A closer look at the total number of CLLDs produced by children (n=80)

Types of left-dislocated structures in children

(A) Subject and Pre-posed Object:

❖ Subject + aObject + CI - Verb:

(1) *Il gatto al cane lo pulisce con la spugna*
'The cat to the dog him.CI washes with the sponge.'

❖ aObject + Subject + CI-Verb:

(2) *Ai're il bambino lo pettina*
'To the king the kid him.CI combs'

❖ Subject + Object + CI-Verb

(3) *Il coniglio l'orso lo asciuga*
'The rabbit the bear him.CI dries'

❖ Object + Subject + CI-Verb

(4) *La formica la rana l'asciuga*
'The ant the frog her.CI dries'

(B) Null/Post-verbal Subject

❖ aObject + CI-Verb

(null subject in singular or plural)

❖ aObject + CI-Verb + Subject

aTopic

❖ Object + CI-Verb

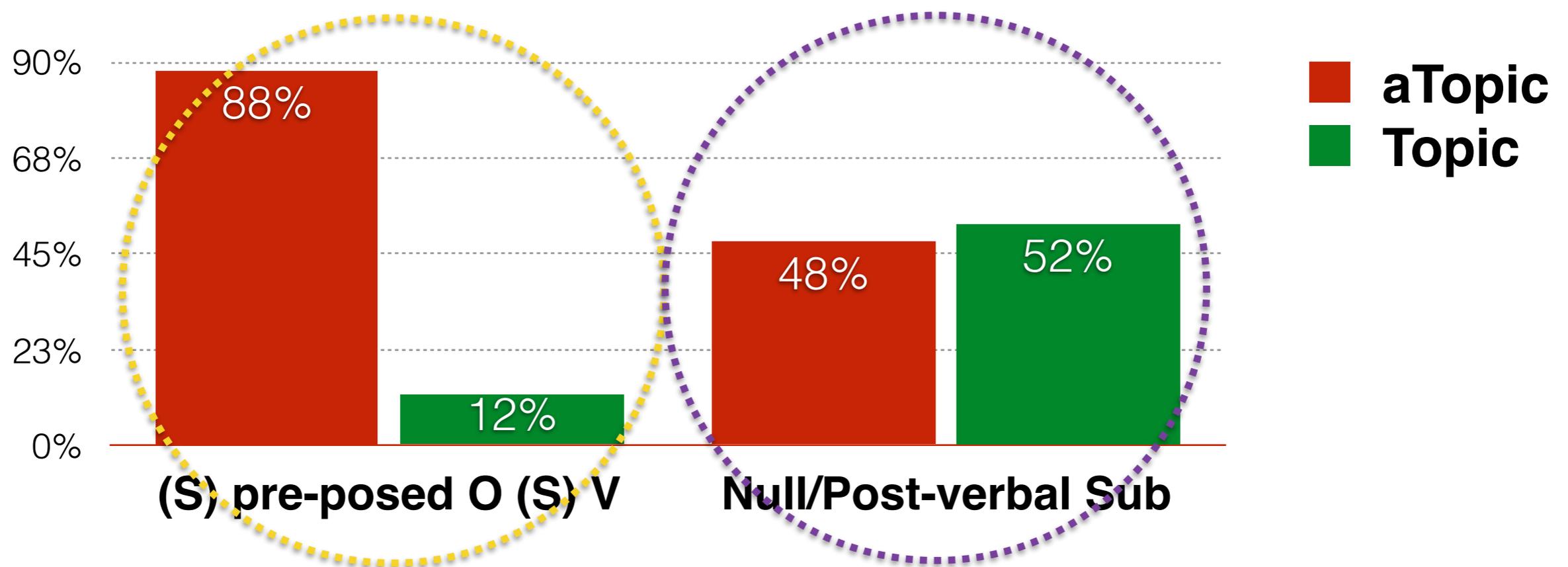
(null subject in singular or plural)

❖ Object + CI-Verb + Subject

Topic

Types of left-dislocated structures in children

- Left dislocations with **aTopics** vs. **Topics** (as preverbal)
- Children produced **58 aTopics**, and **22 Topics**



- **(S) pre-posed O (S) V**: children produced **88% aTopics** vs. **12% Topics**
- Null or post-verbal subject: no difference emerges in the **aTopic** vs. **Topic** production.
- ($\chi^2= 14.840$; $p < .0001$);

Summary of main results

- Children (at 4 and 5 y.o.) used **pronominalisations in the one topic condition**, in line with previous studies.
- **Both age groups (4 and 5 y.o.) treated the two conditions differently**: in condition 2, when they used a clitic structure, they opted for the overt expression of the two topics (i.e. contrastive topics), and simple pronominalisations were less frequently produced.
 - **The overt preposed object topic was often preferably expressed in the form of an aTopic.**
- Adults preferred the use of passives (*copular*, *venire* and *Si-causative*), and few dislocations were found (3, 1%)
- Children only produced some *Si-causative* passives; the production of *Si-causative* passives started at age 4 (3%), and increased at age 5 (17%). Children of the younger group also produced structures containing a reflexive, which can be interpreted as reflexive passives, to a non negligible extent.

Closer discussion of one main
finding: aTopics

aTopics

- A clear finding in our results is that when children at age 4, and even more so at age 5, **overtly express the left peripheral Topic** they do so by expressing the preposed direct object topic in the form of an aTopic.
- aTopics do not seem to be resorted to at random by children, as clearly indicated in both groups.

aTopics and intervention locality/RM

- 4 year-olds -

- **4 y.o.:** out of the 22 cases in which the DO has been pre-posed as a left peripheral topic **16 are in a situation of intervention with lexical S:**

72% so distributed:

- **13: S-aTopic-CL-V** -> (1) *L'orso all'elefante lo lava*
'the bear to the elephant it-CL washes'
- **3: aTopic-S-CL-V** -> (2) *A i' cane i' gatto li fa i' bagno*
'to the dog the cat it-CL washes'
- **(6: aTopic-CL-Vplu)** -> (3) *(Alla formica la stanno asciugando)*
('to the ant it-CL (they) are washing')

Topics and intervention locality/RM

- 4 year-olds -

- **4 y.o.:**
 - the direct object is pre-posed as O in 12 cases. In all cases **there is no lexical S:**
- **5: O-CL-V-S** -> (1) *Il principe lo sta pettinando il bambino*
'the prince him-CL is combing the kid(S)'
- **3: O-(pro)-CL-V(null subject, plu)**
(2) *L'orso li mettano la camicia*
'the bear (to) it-CL put the shirt'
- **4: O-(pro)-CL-V (null subject, sing)**
(3) *Il bambino lo sta pettinando*
'the kid him-CL (he) is combing'

aTopics and intervention locality/RM

- 5 year-olds -

- **5 y.o.:**

- out of the 30 cases in which the DO has been pre-posed as a left peripheral topic all of them but 2 are in a situation of intervention with lexical S:

93% so distributed:

- **17: S-aTopic-CL-V** -> (1) *Il gatto al coniglio lo tocca*
'the cat to the rabbit it-CL touches'
- **11: aTopic-S-CL-V** -> (2) *A i' re il bambino lo sta pettinando*
'to the king the kid him-CL is combing'

➔ At age 5 use of **aTopic** is the clearly preferred option.

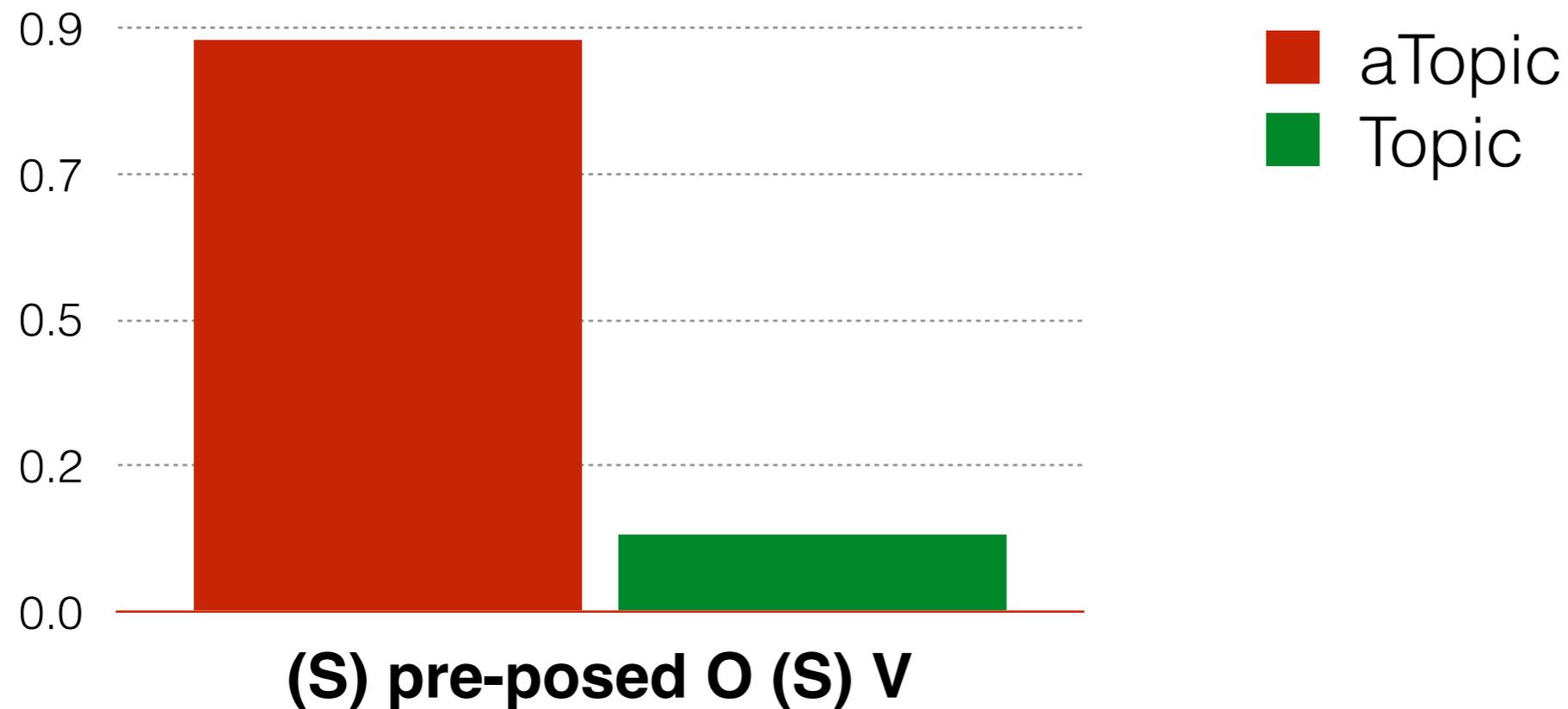
Topics and intervention locality/RM

- 5 year-olds -

- **5 y.o.:**
 - In 7 cases the direct object is pre-posed as O, of which only 5 in situation of intervention with S and 2 with no intervening lexical S:
- **2: O-CL-V-S** -> (1) *La formica la sta asciugando la rana*
'the ant (O) it-CL is drying the frog (S)'
- **4: O-S-CL-V** -> (2) *La formica la rana l'asciuga*
'the ant (O) the frog (S) it-CL dries'
- **1: S-O-CL-V** -> (3) *Il coniglio l'orso lo veste*
'the rabbit (S) the bear (O) it-CL dresses'
- **Again: O is virtually never pre-posed in a situation of intervention with a lexical S.**

Types of left-dislocated structures in children

- Left dislocations with **aTopics vs. Topics in the (S) pre-posed O (S) V:**



- **(S) pre-posed O (S) V:** children produced **88% aTopics** (n= 44) vs. **12% Topics** (n= 6)

aTopics and intervention locality/RM

- We conclude that:
 - **Resort to aTopic is a solution to solve the difficulty posed by intervention locality**, a notoriously difficult domain in (early) acquisition, as shown by the rich cross-linguistic literature on the acquisition of Object Relative clauses and Object WH-questions (Friedmann et al. 2009 and references cited there; Belletti & Guasti 2015 for an overview on Italian).

aTopic as affected Experiencers

- Some properties of aTopics:
 - **a**= affected
 - **aTopics**: they are typically compatible with the Experiencer role
 - **aTopics**: they can be realized in the left periphery (in Italian)
 - **aTopics**: they can be seen as an instance of differential object marking

aTopic as affected Experiencers

- The Experiencer object of psych-verbs of the *preoccupare* class can be a left peripheral aTopic in standard Italian.
- Despite the fact that DOs are generally not differentially marked in the standard language (differently from e.g. Spanish and southern varieties of Italian). Belletti & Rizzi 1988, quoting Benincà's 1986 observation:
 - (1) A Gianni, questi argomenti non l'hanno convinto
to Gianni, these arguments him-CL have not convinced
 - (2) *A Gianni, la gente non lo conosce
to Gianni, people him-CL do not know

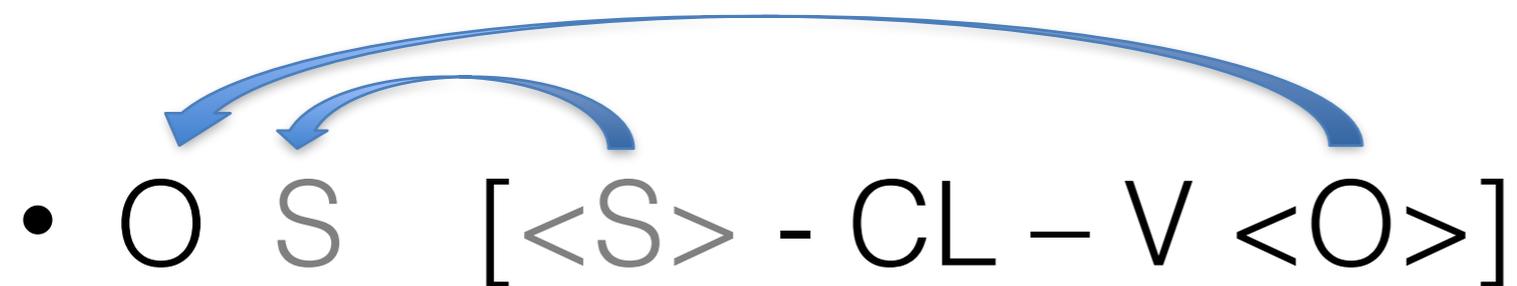
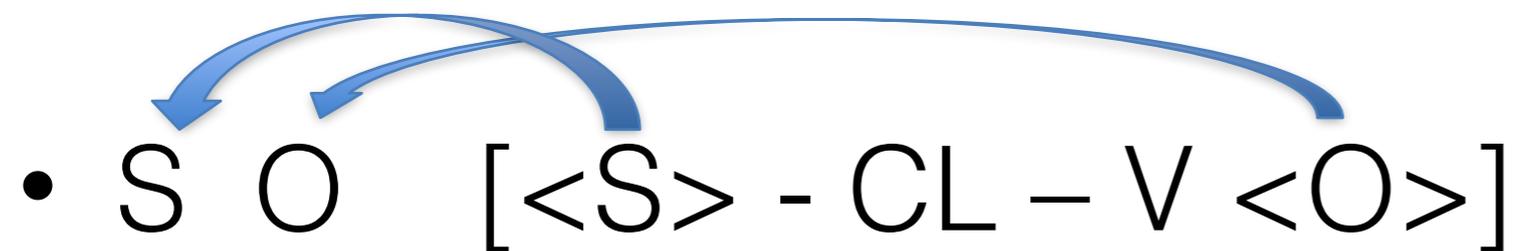
(Belletti & Rizzi 1988, footnote 27)

aTopic as affected Experiencers

- In the experimental condition the patient oriented question on the object makes use of the verb *succedere/happen*, involving a dative experiencer (*succedere a*, as in the *piacere* class of psych-verbs).
- It is possible that this creates a favorable interpretation of the object as an *affected* experiencer.
- In this conditions, when the affected experiencer is expressed as a left peripheral topic (in the 2 Topics condition), it can then be naturally expressed as an aTopic, an option available in the left periphery of standard Italian.

Back to a-Topics and intervention locality/ RM

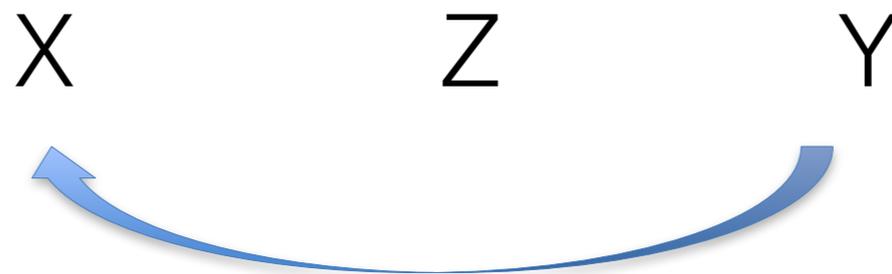
- The interpretation of the pre-posed object as an aTopic opens up the possibility of best coping with intervention locality/RM, as pre-posing of O over S, in either order, instantiates an intervention situation whose computation is notoriously difficult for young children:



Featural Relativized Minimality

- Under the featural approach to RM developed in Friedmann, Belletti & Rizzi 2009 (based on Rizzi 1990, 2004; Starke 2001), further developed in Belletti, Friedmann, Brunato & Rizzi 2012:

In a RM configuration:



If the features shared by X (target) and Z (intervener) relevant for the principle are in a relation of:

Relations w.r.t. relevant features between target and intervener expressed in set theoretic terms

	X	Z	Y	Children	Adults
Identity	+A	+A	<+A>	*	*
Inclusion	+A +B	+B	<+A,+B>	*	ok
Intersection	+A+B+C	+B+D	<+A+B,+C>	ok	ok
Disjunction	+A	+B	<+A>	ok	ok

a-Topics and intervention locality/RM

- Proposal:
- When O is expressed as an aTopic the intervention locality problem (due to identity or inclusion of relevant features) is solved since target and intervener are in a relation of **Intersection** of relevant features, a relation that young children master well (Belletti, Friedmann, Brunato & Rizzi 2012).
- **a = affected Topic**
- **u = unaffected Topic**
- Active features in left periphery of Italian, to which the locality principle is sensitive (as for all features attracting movement; Friedmann, Belletti & Rizzi 2009 proposal).

a-Topics and intervention locality/RM

(1) La giraffa alla mucca ___ la sta leccando ___
+Top +N +u +Top+N +a
(the giraffe to the cow it-CL is licking)

(2) A i' re il bambino ___ lo sta pettinando___
+Top +N +a +Top +N +u
(to the king the boy him-CL is combing)

Some conclusions

- The first well-formed types of passive resorted to by children are *si*-causative passives, thus confirming previous results (Manetti & Belletti 2015; Contemori & Belletti 2013).
- In their first attempt to produce a passive type structure children resort to a reflexive passive, only marginally present in the target language (i.e. middle impersonal constructions). A developmental trend is likely to have been identified with *si*-causative passive resorted to in a significant proportion once the computation of the causative construction is better mastered; this allows for the expression of the external argument of the descriptive vP different from SI (identified with the EA of causative *fare* in those structures)
- Already **at age 4 children are able to express overt topics in the left periphery**; they do so **in a way that solves a major locality problem** through use of an **aTopic object**.
- **Until (at least) age 5 children prefer use of a CLLD structure over a passive structure**, also with the expression of an overt topic. This is in contrast with adults.
 - ➔ We have then identified a clear developmental trend in the expression of a (contrastive) Topic patient.

Grazie!

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