

# Not *only* task matters, position *also*

**Focus particles** *Only* and *also* are focus particles and both require the retrieval of contextual alternatives.

*Also/Only* Lyn came.

*Prejacent:* Lyn came

*Alternatives:* Someone else besides Lyn came

The **exclusive** operator *only* asserts the negation of all of its contextual alternatives (→ no-one else came) and presupposes its prejacent [Horn, 1969]

the **additive** operator *also* asserts its prejacent and presupposes that at least some of its alternatives is true [Karttunen & Peters, 1979]

**Acquisition studies** show that children have problems with *only* and *also* (Crain et al. 1999; Paterson et al. 2003; Hüttner et al 2004; Bergsma 2002, 2006). Berger and Höhle (2012) argued that children's poor performance might be due to the paradigms used in previous studies (Truth-Value-Judgment and Picture Selection Task), and show that children from age 3 are competent with *auch* (*also*) and *nur* (*only*) if tested with a Reward Paradigm.

## OUR STUDY

We tested children's comprehension of the Italian versions of *also* (*anche*) and *only* (*solo*) with Berger and Höhle's Reward Paradigm

**Participants** 16 4 year-olds (age range: 4,1-4,11; MA=4,5) and 17 5 year-olds (age range: 5,0-5,11, MA=5,4)

**Material** **C1:** 8 sentences with focus particles modifying the **Subject-NP**: 4 *Solo* NP<sub>subj</sub> V NP<sub>obj</sub> 4 *Anche* NP<sub>subj</sub> V NP<sub>obj</sub>  
**C2:** 8 sentences with focus particles modifying the **Object-NP**: 4 NP<sub>subj</sub> V *solo* NP 4 NP<sub>subj</sub> V *anche* NP<sub>obj</sub>

**Task & Procedure** 2 counterbalancing conditions (within subjects)

**C1: pre Subject-NP**

4 puppets are introduced: the Elephant, the Frog, the Zebra and the Giraffe.  
Your bedrooms are messy.  
To get a reward, each of you has to tidy up her room.

1 The Elephant assigns a task to the Zebra and the Giraffe

2 The zebra and the giraffe go behind a curtain to do their job

3 The frog peeps behind the curtain to check

4 Then the Giraffe and the Zebra come back...

5 The Giraffe surely tidied up her room.

6 Guess what? *Also* / *Only* the zebra tidied up her room.

Who deserves the reward?

*Also* → The Zebra and the Giraffe  
*Only* → The Zebra

**C2: pre Object-NP**

3 puppets are introduced: the Elephant, the Frog and the Lion.  
I've prepared an apple and a pear to peel out there.  
To get a reward, you have to peel both.

1 The Elephant assigns a task to the Lion

2 The lion goes behind a curtain to do his job

3 The frog peeps behind the curtain to check

4 Then the Lion comes back...

5 You've surely peeled the apple

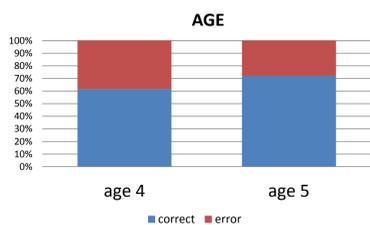
6 Guess what? He *also* / *only* peeled the pear

Does he deserve the reward?

*Also* → YES  
*Only* → NO

## RESULTS: exclusive vs. additive particles?

Significant effect of **AGE**:  
4 year olds made significantly more errors than 5 year olds (38% vs. 28%, Est.= -3.07, Std. Err.=1.29, z=-2.37, p=.017)



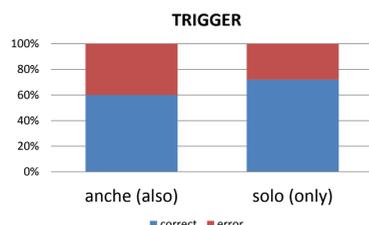
### Additive vs. Exclusive particles

In order to answer, children had to retrieve the alternatives triggered by the focus operators.

This operation turned out to be easier for the exclusive particle *only* than the additive particle *also*.

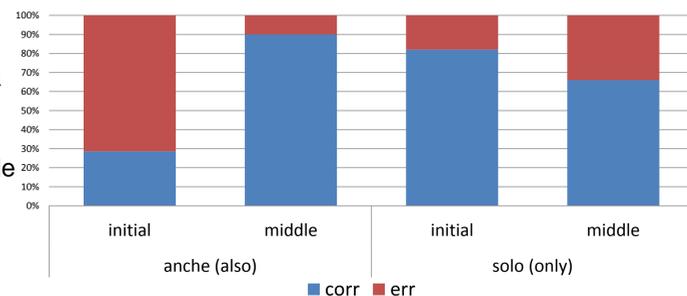
This result is consistent with the idea that the relation between *only* and its alternatives is semantic (Horn, 1969) and more *grammaticized* (Partee, 1999; Beaver & Clark, 2003), being more pragmatic in case of *also* (Karttunen & Peters, 1979)

Significant effect of **TRIGGER**:  
more errors with *also* (40%) than with *only* (28%) (Est.= -4.99, Std. Err.=.96, z=-5.20, p<.001)



Significant effect of **POSITION** (Est.= -6, Std. Err.=1.01, z=-6, p<.001) and significant interaction between **POSITION** and **TRIGGER** type (Est.=7.6, Std. Err.=1.25, z=6.08, p<.001):  
independently of age, children made significantly more errors when *also* appeared pre- Subject-NP than when it appeared pre Object-NP

Accuracy by conditions and triggers



### A processing explanation?

The presupposed content of the particle is integrated **incrementally** (Romoli et al., 2014)

#### sentence initially (before Subject-NP):

in case of *only* the integration of the **exclusive** content (**no-one else except than x VP**) does not require the identification of a specific individual that VP;

in case of *also*: the presupposed (**additive**) content (**someone other than x VP**) has to be integrated immediately AND the domain has to be restricted incrementally to the individuals that VP

#### before Object-NP

"The lion peeled *also* the pear"  
the incremental accommodation of the presupposed content might be easier in case of *also* because the predicate restricts the set of alternatives to "the lion peeled the apple" and "the lion peeled the pear"