

**INTERACTIONS BETWEEN NUMBER & DEFINITENESS:
VIETNAMESE CHILDREN'S COMPREHENSION OF
DEFINITES**

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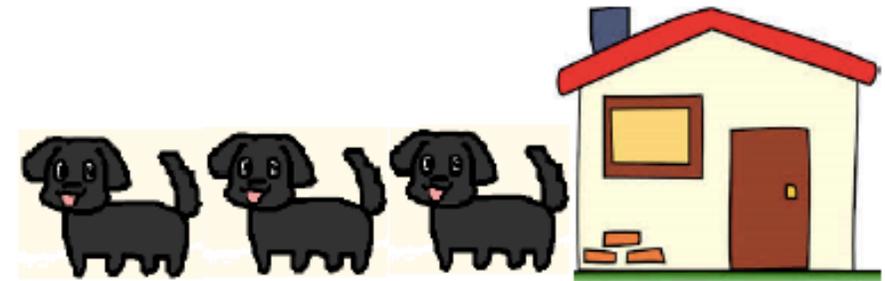
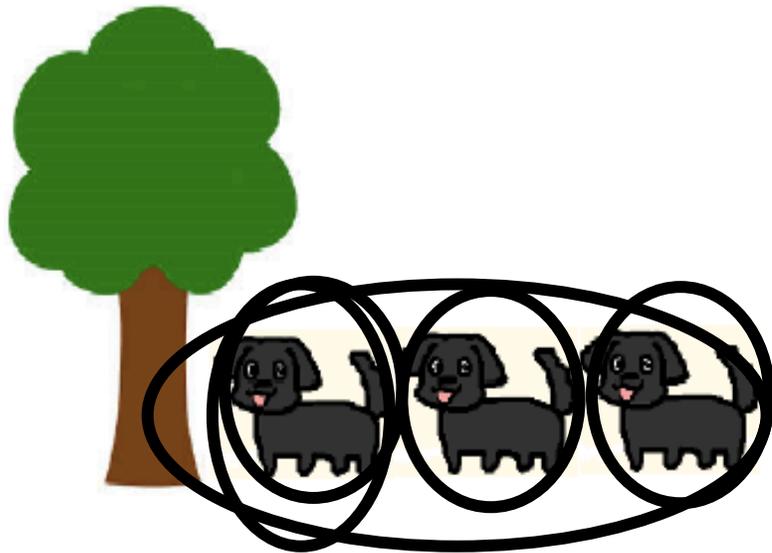
Interpreting definite noun phrases

- ❑ Across languages, definite noun phrases depend on...
 - ❑ knowing the meaning of the **noun**;
 - ❑ determining whether the noun phrase is **singular or plural**;
 - ❑ finding the referent in the discourse that satisfies the **uniqueness** presupposition.

Note: we are assuming that definiteness = uniqueness presupposition

A concrete example Munn et al. (2006)

- Give me **the dogs** next to the tree. **PL** + **Uniqueness** -> Maximal set
- Give me **a dog** next to the tree. **SG**, non-unique
- Give me **the dog**Ø next to the tree. **SG** + **Uniqueness** -> 'closest' (Implicit restriction)



Acquisition background

- **Number** is acquired early, while **definiteness** is protracted (Brown 1973; Karmiloff-Smith 1979; Mervis and Johnson 1991).
- Different proposals for why definites are difficult:
 - (i) children are egocentric (Maratsos 1976, Karmiloff-Smith 1979)
 - (ii) children don't know that the “the” has a uniqueness presupposition (Wexler 2003)
 - (iii) children have difficulty restricting the domain to accommodate the presupposition (Drozd 2001; Miller & Schmitt 2004; Munn et al. 2006)

Goals of this paper and road map

- ❑ Examine **Vietnamese** children's comprehension of number and definiteness, compared to other languages, using the Munn et al. (2006) task.
- ❑ Road map
 - ❑ Quick description of Vietnamese noun phrases
 - ❑ Study
 - ❑ Results & Discussion

Vietnamese noun phrases (1)

- ❑ Bare noun phrases [N] *chó*
 - ❑ number-neutral and definiteness neutral ‘a/the dog(s)’
- ❑ Noun phrases with classifier [CL N] *con chó*
 - ❑ singular, definite ‘the dog’
- ❑ NPs with numeral and classifier [one CL N] *một con chó*
 - ❑ singular, indefinite ‘a dog’

Vietnamese noun phrases (2)

□ NPs with pluralizer and classifier are [PL CL N]

□ plural, and...

□ definite: *các con chó* ‘the dogs’

□ specific/definite: *những con chó *(BỰ)* ‘the *(BIG) dogs’

□ NPs with **all**, either pluralizer, and a classifier

[**all** PL CL N]

tất cả các con chó ‘all the dogs’

tất cả những con chó

Research questions

- ❑ **Q1:** Do Vietnamese children know **number**?
- ❑ **Q2:** Do Vietnamese children know **definiteness**?
- ❑ **Q3:** How does behavior in this task compare to English and Spanish?
 - ❑ Munn et al (2006) found:
 - (i) **good** association of DEF-PL → unique plural set
 - (ii) **poor** association of DEF-SG → unique (= closest) singleton
 - ❑ Their interpretation: trouble restricting the domain

Materials

- ❑ Inventory: 48 sentences (6 conditions x 4 animal types x 2 landmarks).
- ❑ 6 versions: 12 items, 2 per condition

	Condition	Noun phrase	Target
Experimental	SG-def	CL N	closest dog
	PL-def	các CL N	all the dogs
	PL-def(?)	những CL N	all the dogs(?)
Control	'all' + các	tất cả các CL N	all the dogs
	'all' + những	tất cả những CL N	all the dogs
	'one'	một CL N	any single dog

- ❑ 3 phases: Pretest, training, and test

Subjects

Age group	Range	N
3-yr-olds	3;2-3;11	11
4-yr-olds	4;0-4;10	12
5-yr-olds	5;0-5;11	15
6-yr-olds	6;0-6;11	13
7-yr-olds	7;0-7;7	7
		58

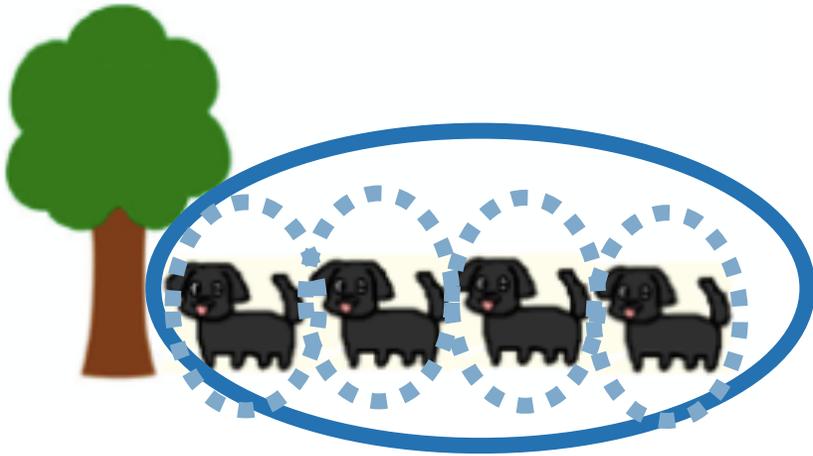
Control conditions

□ Act-out task: Give me **tất-cả** các/những con chó next to the tree.

Give me **all** PL CL dog next to the tree.

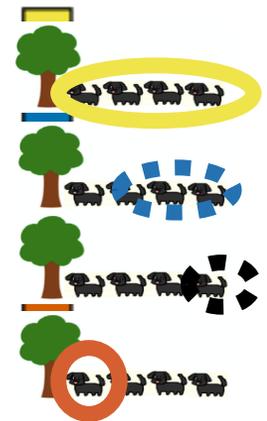
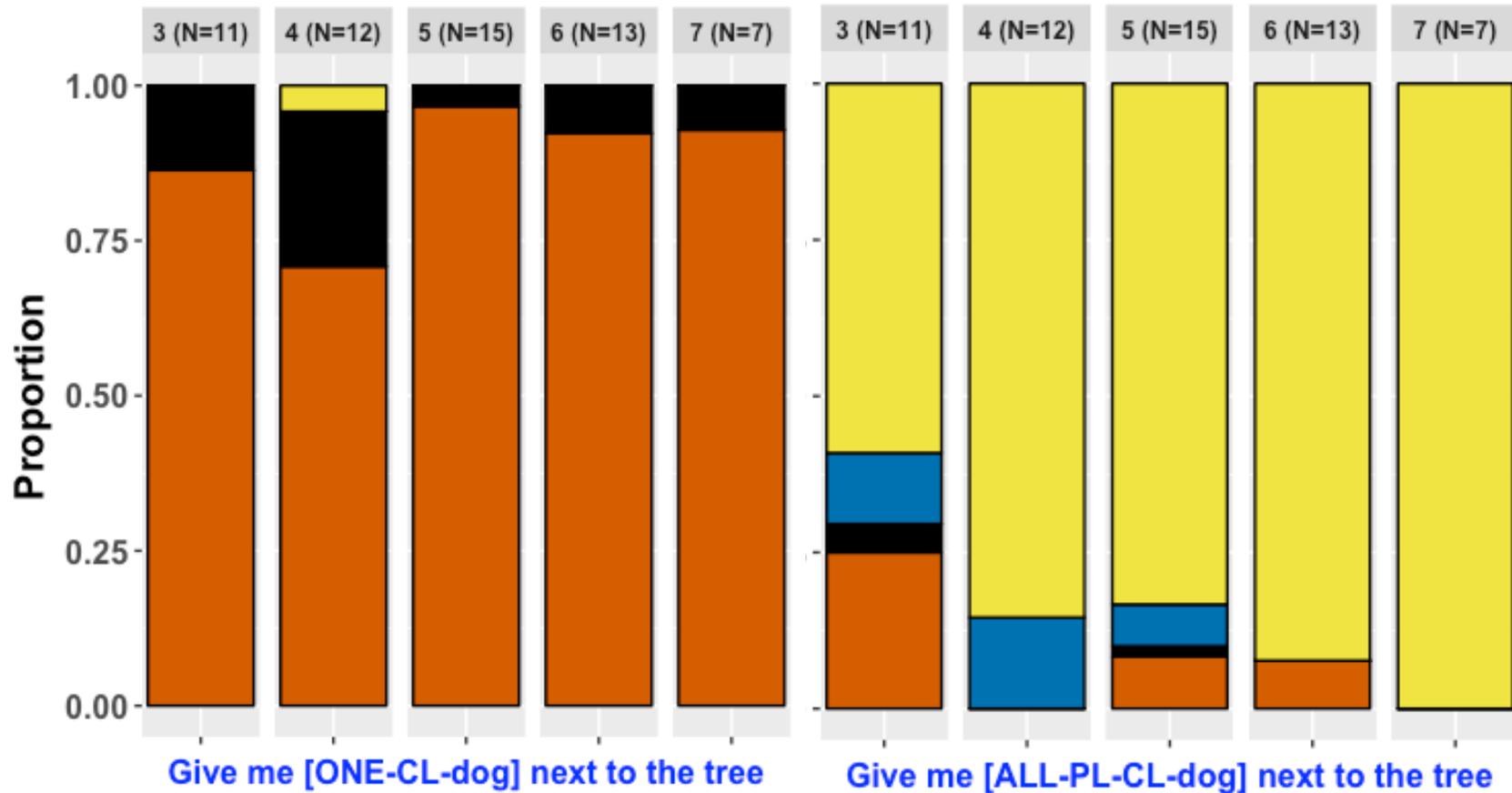
Give me **một** con chó next to the tree.

Give me **one** CL dog next to the tree.



Results: Control items

□ Majority target answers

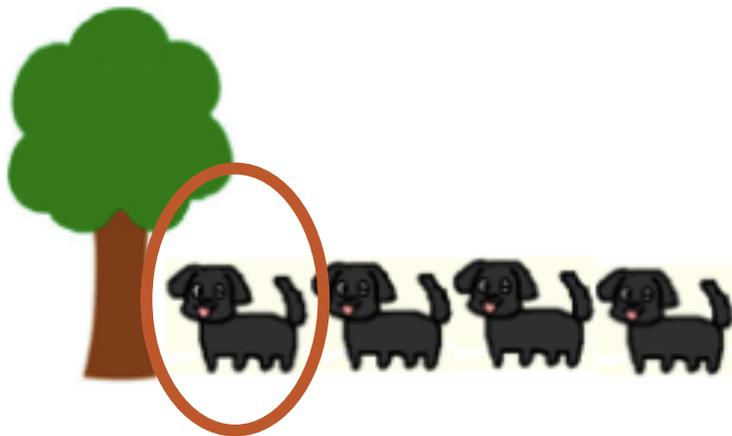


Singular definite

□ Act-out task: *Give me \emptyset **con chó** next to the tree.*

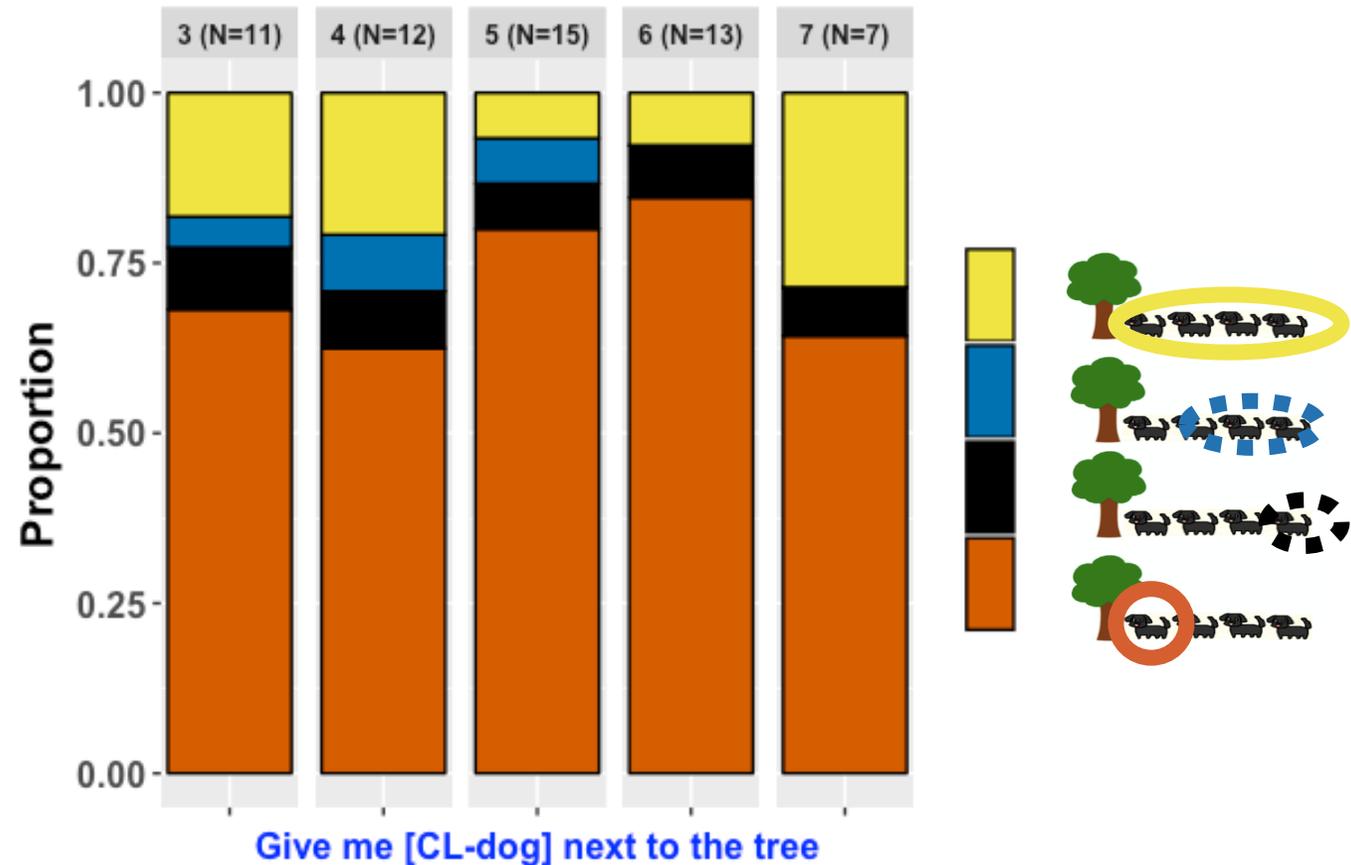
*Give me \emptyset **CL DOG** next to the tree.*

(SG + Unique: Implicit restriction)



Results: [CL+N] (Singular definite)

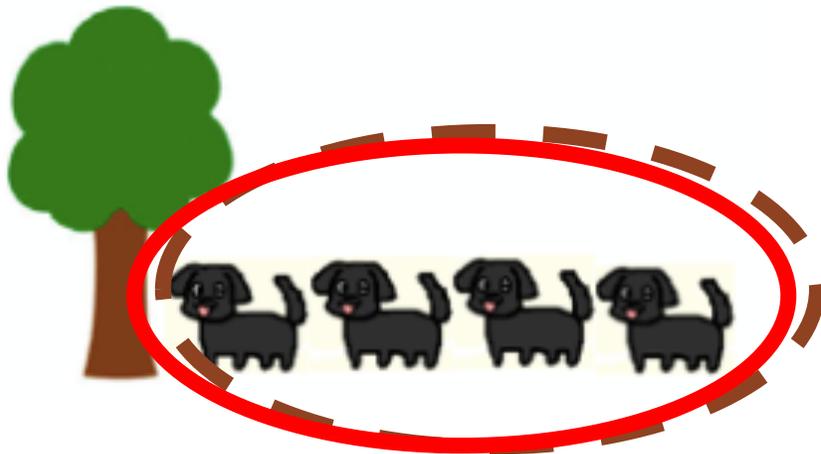
- Majority target answers
- Most common error: definite plural response



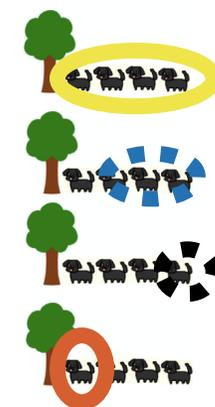
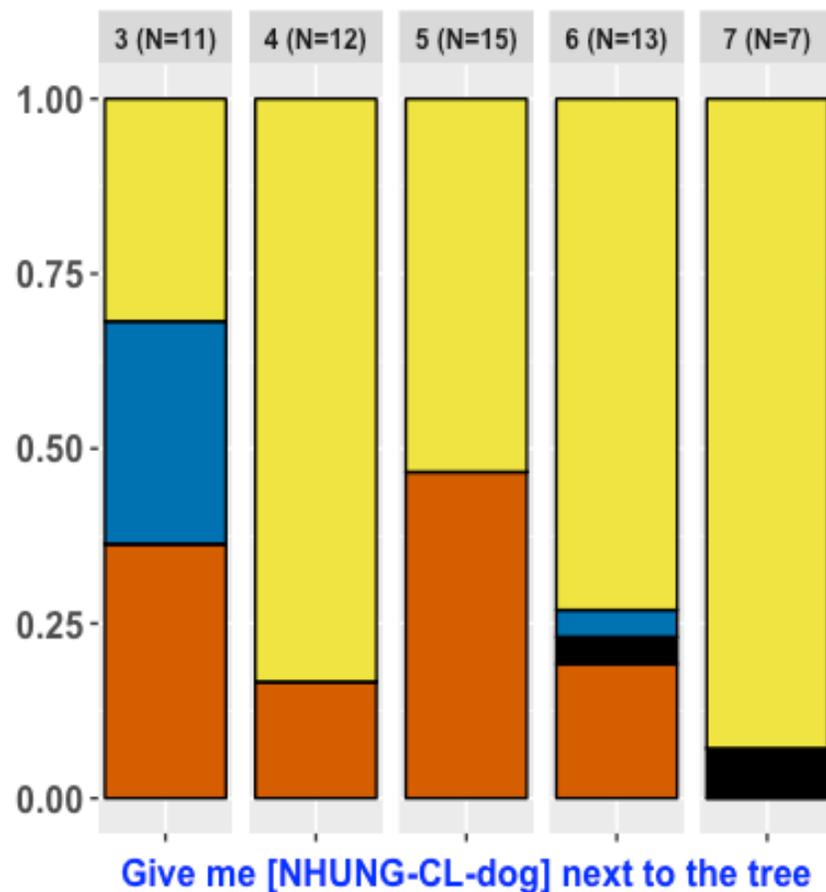
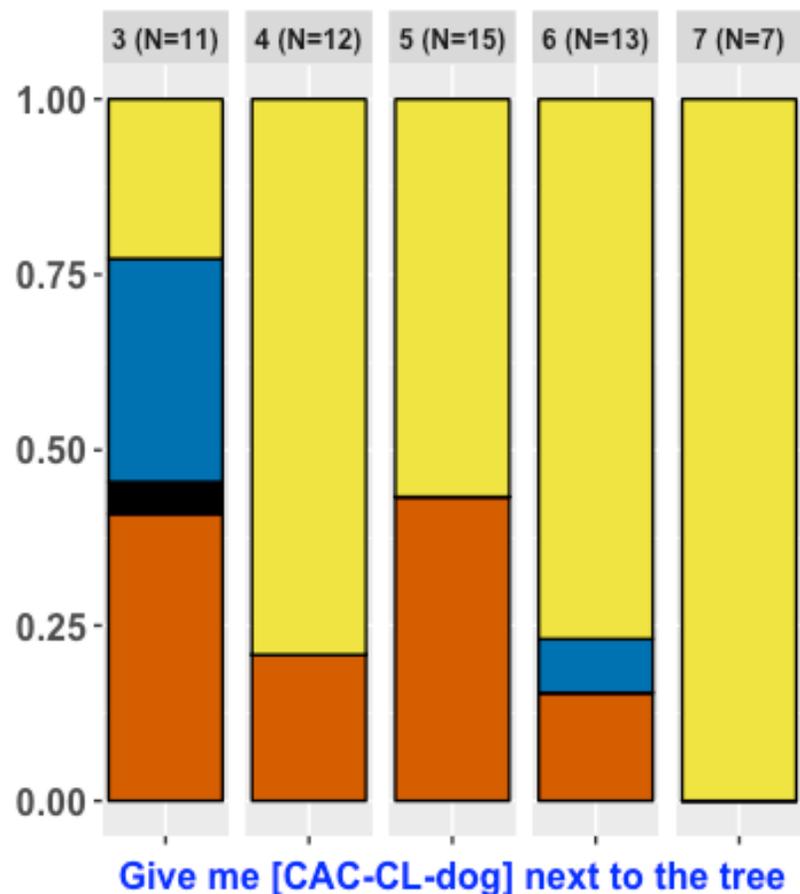
Plural definites

□ Act-out task: Give me **CÁC** / **NHỮNG** *con chó* next to the tree.

Give me **PL** **CL DOG** next to the tree.

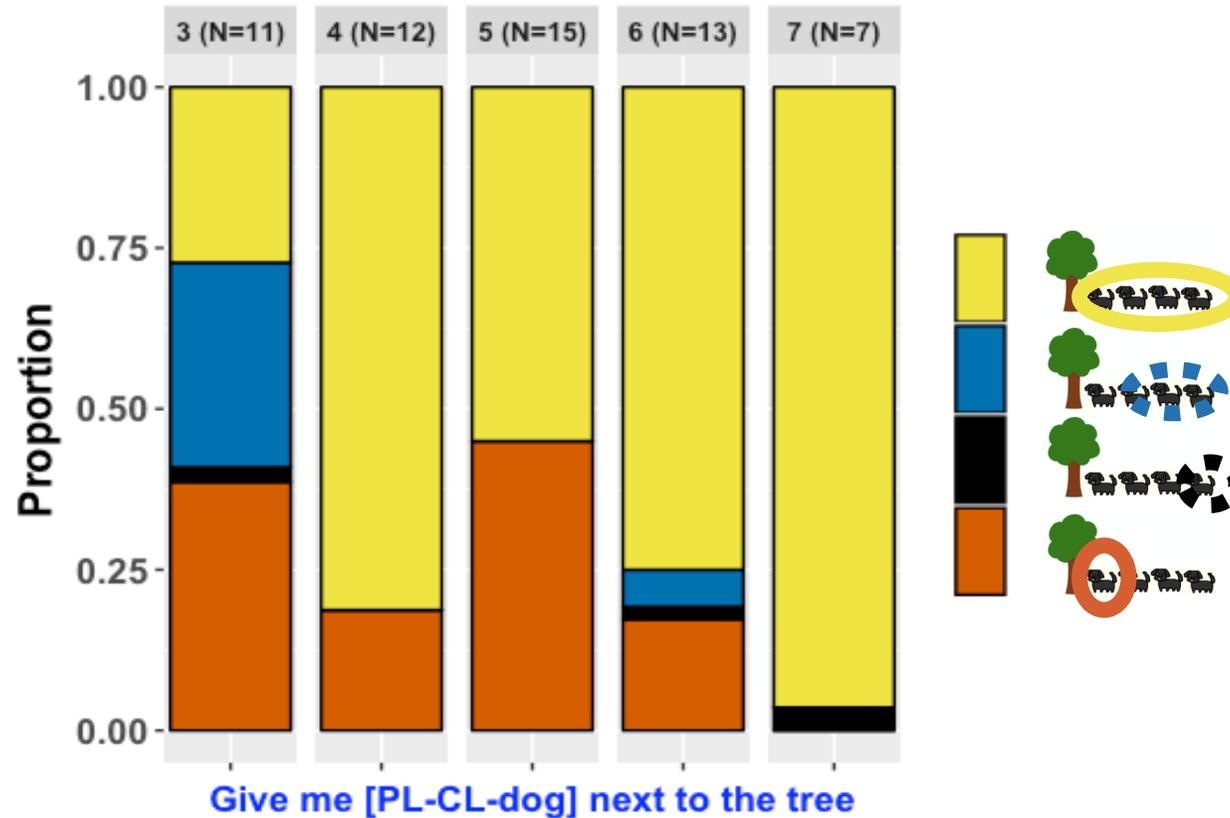


Results: [các/những +CL +N] (Plural definite)



Results: Plural definites

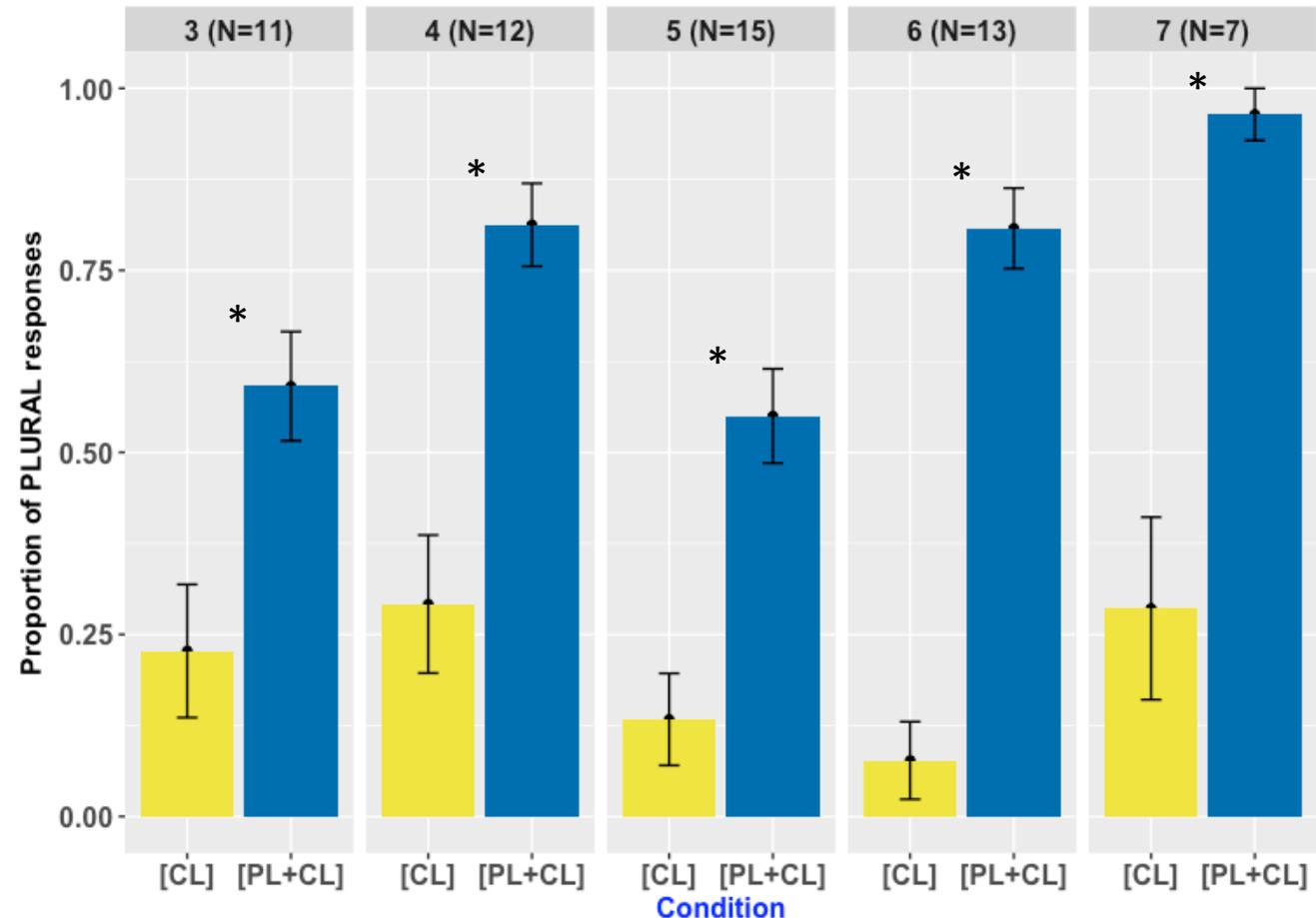
- Majority target answers after age 4.
- Most common error after age 4: definite singular response



Do children distinguish singular from plural?

[CL+N] (sg) & [PL+CL +N] (pl)

- All children *distinguish*, but 3- and 5-yr-olds not as good with plural.



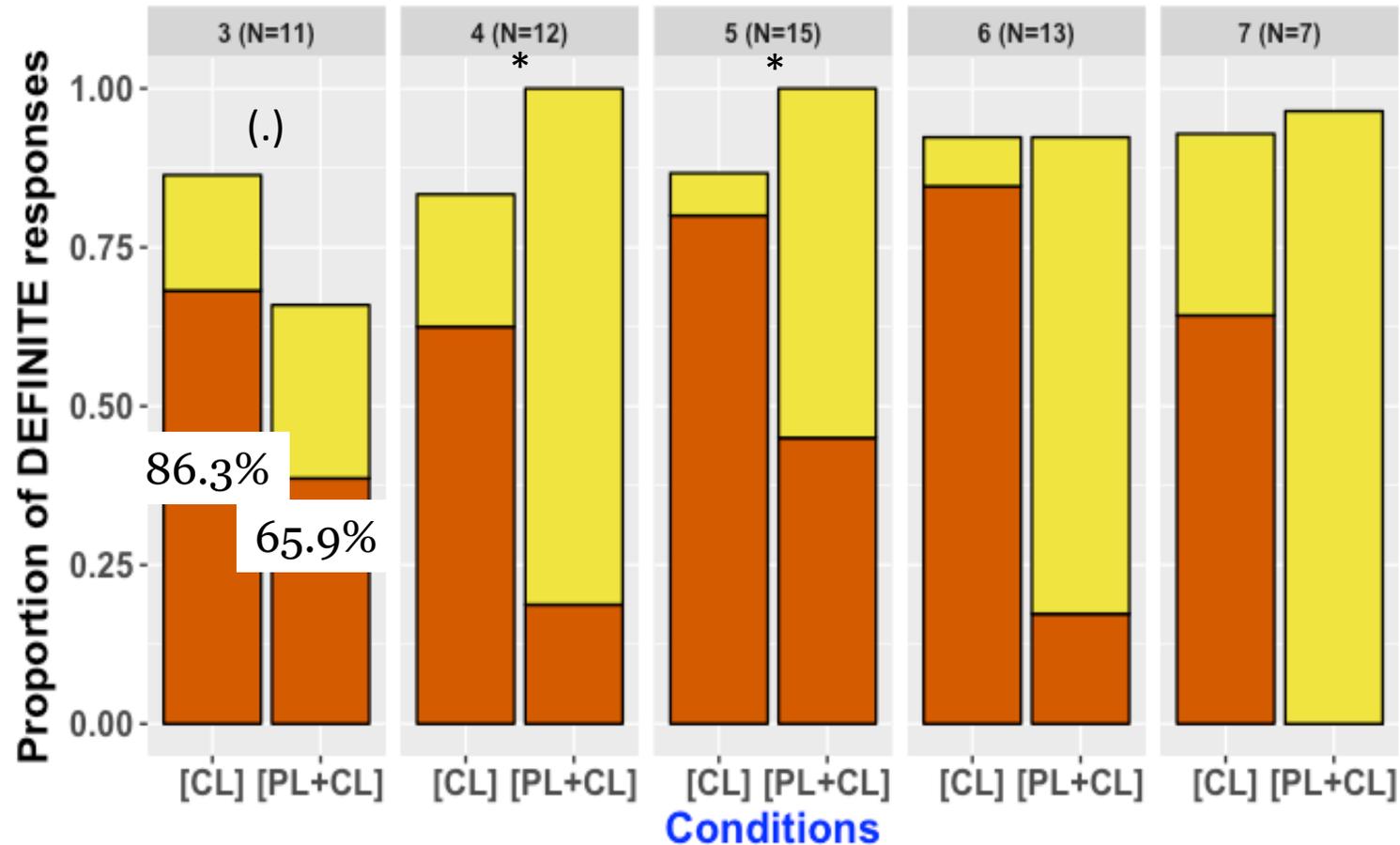
Comparing to English and Spanish

- Vietnamese children slower to reach same levels of number accuracy in the same task
(Source: Munn et al. 2006)

Proportion NUMBER-correct	Def, SG	Def, PL
English (N=15) 3;0-5;5	83.8	81.3
Spanish (N=20) 3;2-4;11	90	95
Vietnamese 3-year-olds	77	59
Vietnamese 4-year-olds	71	81
Vietnamese 5-year-olds	87	55
Vietnamese 6-year-olds	92	81
Vietnamese 7-year-olds	71	96

Do children understand the definiteness of singular [CL+N] and plural [PL+CL+N]?

- Even 3-year-olds produce majority definite answers



Discussion

1) Q1: Number

- ❑ All children *differentiate* SG from PL, but...
- ❑ Acquisition of plural [*các/những* CL N] later than singular [CL N] and later than acquisition of plurals in other languages.

2) Q2: Definiteness

- ❑ Responses are consistent with children knowing definiteness of BOTH singular and plural noun phrases.

3) Q3: Comparison with other languages.

- ❑ Unlike Spanish and English, Vietnamese children's errors **not** explained by difficulty with domain restriction.

Discussion

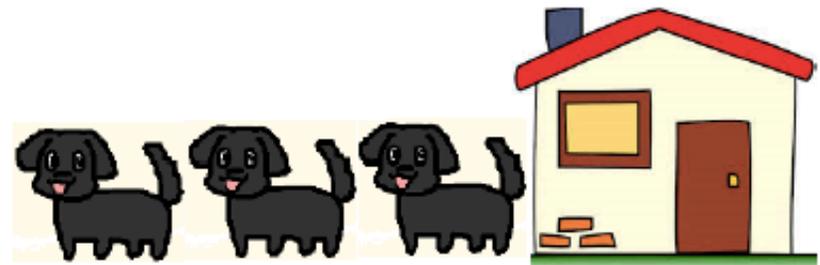
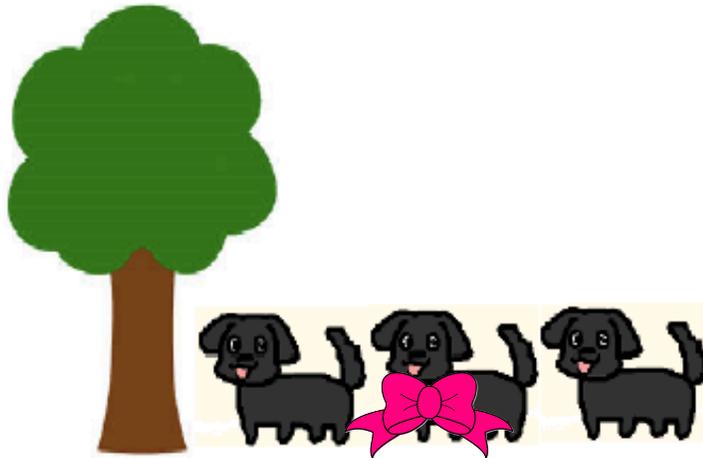
Q3: Comparison with other languages: Why the discrepancy?

- ❑ Vietnamese: correct definiteness, incorrect number.
- ❑ Spanish/English: correct number, incorrect definiteness in singular condition

Potential explanation 1

- ❑ Does Vietnamese *kế bên* “next to” = “adjacent”?
 - ❑ NO!
 - ❑ Native-speaker judgment: *Is the dog with the bow next to the tree?*

YES



Potential explanation 2

- ❑ We argue: All groups have trouble **simultaneously coordinating number and definiteness**
 - ❑ Vietnamese-acquiring children prioritize definiteness, resulting in number errors.
 - ❑ Spanish- and English-acquiring children prioritize number, resulting in definiteness errors.
 - ❑ Maximal response to “the dogs”/*los perros* may be just a default plural interpretation.
 - ❑ This difference could have to do with the fact that number is obligatorily marked on the noun in Spanish and English (inflectional languages).

Conclusion

- This study highlights the importance of cross-linguistic study: encoding the same semantic pieces in different ways may have consequences for their acquisition

THANK YOU

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