Preschoolers' interpretation of the focus particle csak 'only' in Hungarian Lilla Pintér

(pinter.lilla@nytud.mta.hu)

Pázmány Péter Catholic University; Research Institute for Linguistics of the Hungarian Academy of Sciences

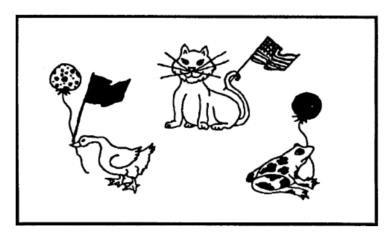
Research questions

How do Hungarian preschoolers interpret sentences containing the focus particle *csak* 'only'?

- 1. Do they have access to the exhaustive meaning of these utterances?
- 2. Do they associate this reading with the same constituent as adult native speakers?

Preschoolers' problem with the interpretation of the focus particle *only* Crain et al. (1994)

(3) Only the cat is holding a flag. (Crain et al. 1994:460) (4) The cat is only holding a flag. (Crain et al. 1994:460)



The particle *csak* 'only' in Hungarian

As opposed to English, in Hungarian the particle csak 'only' immediately precedes the focus associated with it.

(1) John only introduced Bill to Sue.

- (2) a. John <u>csak Bill-t</u> mutatta be Sue-nak. b. John csak Sue-nak mutatta be Bill-t. c. John csak bemutatta Sue-nak Bill-t.
- (Gualmini et al. 2003:88)
- only is associated with the direct object
- only is associated with the indirect object
- only is associated with the verb

Two conflicting explanations

• Crain et al. (1994), Zhou & Crain (2010): Children cannot restrict the scope of a focus particle. They are VP-oriented, i.e., they tend to associate the focus operator with the VP regardless of its surface position.

55,26% accepted both (3) and (4),

arguing that the cat is indeed not doing anything else but holding a flag.

• Paterson et al. (2003, 2005/2006): Children interpret sentences with and without focus particles as having the same meaning. They mentally represent only the presupposition (the statement in the sentence), and ignore the asserted meaning component (the requirement of exhaustivity).

Experiment 1

Participants: 15 preschoolers (mean age: 5;9), 15 adults (mean age: 37;5)

Method: sentence-picture verification task

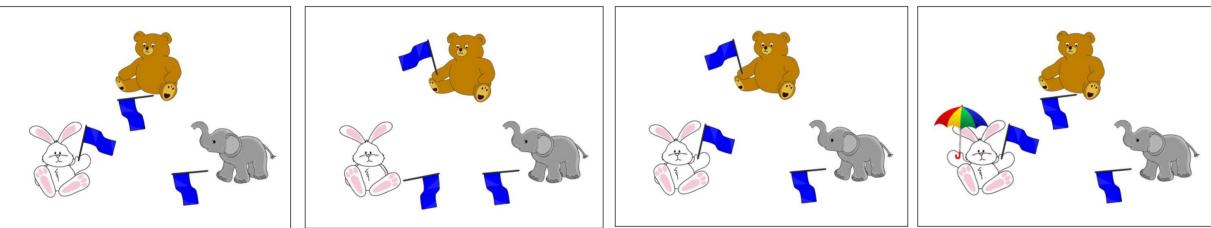
Participants had to judge a puppet's utterances on a three-point scale:

(1) (2) (3)

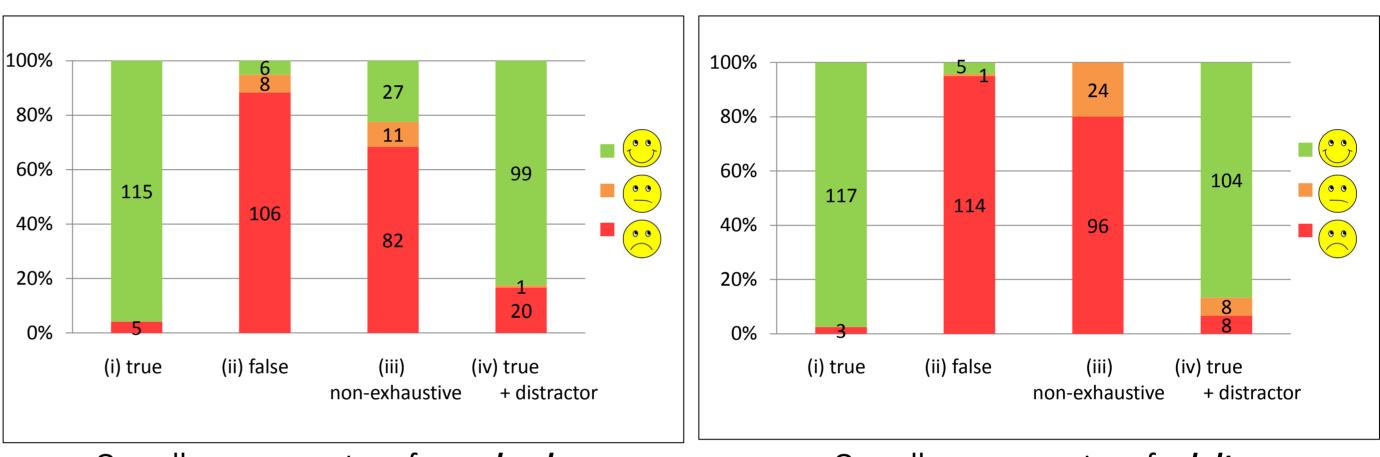
Stimuli: 32 test items and 24 filler items were presented in a random order.

(5) <u>Csak a nyuszi</u> emelte fel a zászlót. only the rabbit raised up the flag-ACC 'It is only the rabbit who has raised the flag.'

Conditions:



Results:



Overall response rates of *preschoolers*

Overall response rates of *adults*

In the critical (iii) non-exhaustive condition, the mean scores of preschoolers (1.48) and adults (1.217) did not differ significantly according to Welch's Two Sample t-test, t(21.78)= -1.397, p=0.176.

In the group of preschoolers, the mean scores of the (i) exhaustively true (2.933) and the (iii) non-exhaustive (1.48) conditions differed significantly according to the Paired t-test,

t(14)=7.923, p < 0.001.

Experiment 2

Participants: 18 preschoolers (mean age: 5;6) *Method:* forced-choice picture-selection task *Stimuli:* 8 test trials and 8 filler trials

- 4 pictures
- picture types: same as in Exp. 1 - simultaneously presented
- 4 sentence types
- 2x2 design
- 2 independent variables:
- ~ focus type (subject or object focus) ~ word order ($\underline{S}VO/\underline{O}VS$ or $O\underline{S}V/S\underline{O}V$)

Condition 1: Subject focus, <u>S</u>VO (6) <u>Csak a maci</u> húz egy szánkót. only the bear pull-3Sg a sled-ACC 'It is only the bear that is pulling a sled.' Condition 2: Subject focus, O<u>S</u>V (7) Egy szánkót <u>csak a maci</u> húz. only the bear pull-3Sg a sled 'It is only the bear that is pulling a sled.'

3.2

Condition 3: Object focus, OVS (8) Csak egy szánkót húz a maci. only a sled pull-3Sg the bear 'It is only a sled that the bear is pulling.' Condition 4: Object focus, SOV (9) A maci <u>csak egy szánkót</u> húz. the bear only a sled pull-3Sg 'It is only a sled that the bear is pulling.'

Discussion

Computing the exhaustivity of *csak* 'only'

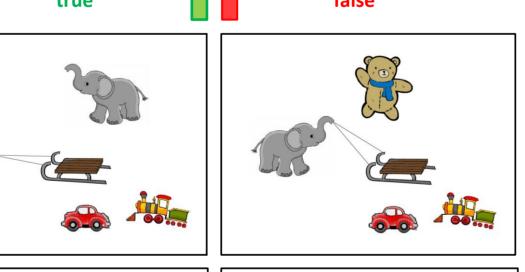
In *non-exhaustive* contexts, the majority of preschoolers correctly rejected sentences containing the particle *csak* 'only', i.e., in contrast with the hypothesis of Paterson et al. (2003, 2005/2006), they can compute both meaning components of focus operators.

As the results of Experiment 2 show, it is easier for them to do so if the focused constituent is in a sentence-initial position. (The adult-like responses are the highest in the case of subject focus and SVO word order.)

Determining the associate of *csak* 'only'

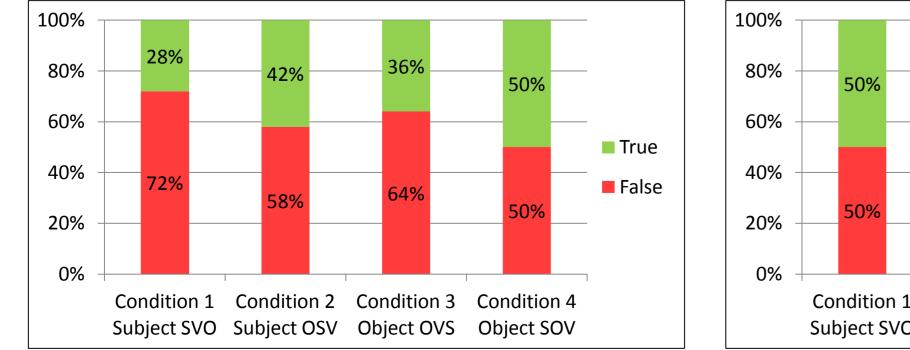
In the *true + distractor* contexts preschoolers tended to be uncertain about the scope of the particle *csak*: in Experiment 2, they performed at the level of chance regardless of the type of the sentence.

These findings partially support the claim that what children have difficulties with is assigning scope to the focus particle (Crain et al., 1994; Zhou & Crain, 2010), however, the uncertainty of Hungarian preschoolers does not arise from VP-orientation.



(iv) true + distractor

Results:



True False Condition 1 Condition 2 Condition 3 Condition 4 Subject SVO Subject OSV Object OVS Object SOV

Overall response rates of the *non-exhaustive* picture type

Overall response rates of the *true + distractor* picture type

In the case of the *non-exhaustive* picture type, the sentence type had a significant effect on the exhaustive interpretation: $X^2 = 10.929$, df=3, p < 0.05. Whereas the results of subject focus and object focus did not differ significantly, the sentence-initial csak 'only' (in Condition 1 and 3) was interpreted exhaustively in significantly more cases than the non-sentence-initial *csak* (in Condition 2 and 4): $X^2 = 4.119$, df=1, p < 0.05. In the case of the *true + distractor* picture type, the sentence type did not have any significant effect on the exhaustive interpretation: $X^2 = 4.36$, df=3, p= 0.2248.

References

- Crain, S., Ni, W. & Conway, L. 1994. Learning, Parsing, and Modularity. In C. Clifton, L. Frazier & K. Rayner (eds.), *Perspectives on sentence processing*. Hillsdale, New Jersey: Lawrence Erlbaum. 443–467.
- Paterson, K. B., Liversedge, S. P., Rowland, C. & Filik, R. 2003. Children's comprehension of sentences with focus particles. *Cognition* 89: 263–294.
- Paterson, K. B., Liversedge, S. P., White, D., Filik, R. & Jaz, K. 2005/2006. Children's interpretation of ambiguous focus in sentences with 'only'. Language Acquisition 13(3): 253–284.
- Zhou, P. & Crain, S. 2010. Focus identification in child Mandarin. Journal of Child Language 37: 965–1005.

Acknowledgements

owe a special thanks to my subjects and to Betlehem Kindergarten and Táltos Kindergarten for their cooperation and help in conducting the experiments.

This research was supported by grant 108951 of OTKA, the National Scientific Research Foundation.