

Focus interpretation in Child Hungarian

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- **Research questions**
- Background
- Experiments
- Results
- Discussion
- Conclusion

Research questions

1. Regarding the exhaustive reading, what are the main differences between the acquisition processes of the following 3 sentence types:
 - (i) sentences with *csak* ‘only’,
 - (ii) sentences with **structural focus**,
 - (iii) **neutral SVO** sentences?
2. How do these results contribute to the semantic discussion concerning the exhaustive interpretation of these constructions?

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Background – *csak* ‘only’

Horn (1969): sentences containing focus particles
have **two meaning components**

(1) *Only Muriel voted for Hubert.* (Horn 1969: 98)

Assertion: ‘No one other than Muriel voted for Hubert’
(negative contribution)

Presupposition: ‘Muriel voted for Hubert’
(positive contribution, prejacent)

Hungarian *csak*: Kenesei (1986), Szabolcsi (1994)

(2) *Csak Péter alszik.* (Kenesei 1986: 134)

Background – structural focus

structural / pre-verbal / identificational focus

- syntactically and prosodically marked

(3) *Péter meg-vette a ház-at.* Ø focus

Peter PRT-bought the house-ACC

‘Peter bought the house.’

(4) *A HÁZ-AT vette meg Péter.* Object focus

the house-ACC bought PRT Peter

‘It was the house that Peter bought.’

- express **exhaustive identification** (É. Kiss 1998)

Background – structural focus

How do sentences containing structural focus express this exhaustive meaning?

1. [+exhaustive] semantic feature

Szabolcsi 1981, É. Kiss 1998, among others

2. presupposition

Kenesei 1986, van Leusen & Kálmán 1993,
Szabolcsi 1994, Bende-Farkas 2009, É. Kiss 2011

“The focus-containing utterance *presupposes* rather than *asserts* the uniqueness of its antecedent.”

(van Leusen & Kálmán 1993: 12)

Background – structural focus

3. implicature

- conversational implicature

Wedgwood 2003, 2005; Onea & Beaver 2011

“The pragmatic tendency to interpret cooperative answers to questions as complete then explains the exhaustivity effects.”

(Onea & Beaver 2011: 358)

- conventional implicature

Gerőcs, Babarczy & Surányi 2014

Background – Previous experiments

Experiments with adult native speakers

- Onea & Beaver (2011) – yes, and.../yes, but.../no, ...
- Gerőcs, Babarczy & Surányi (2014)
 - Experiment 1 – online truth-value judgment task
 - Experiment 2 – offline, indirect task

Acquisition studies:

- Kas & Lukács (2013) – binary yes/no answers
 - Neither 6-year-olds nor 10-year-olds showed any sign of focus sensitivity as a group.
 - Responses of adults were inconsistent too.
- Balázs & Babarczy (2014) – 3-point-scale

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Experiment 1–3

Experiment 1. (sentences with *csak* ‘only’)

(1) Csak a nyuszi emelte fel a zászlót.
only the rabbit raised up the flag-ACC
‘Only the rabbit has raised the flag.’

Experiment 2. (sentences with structural focus)

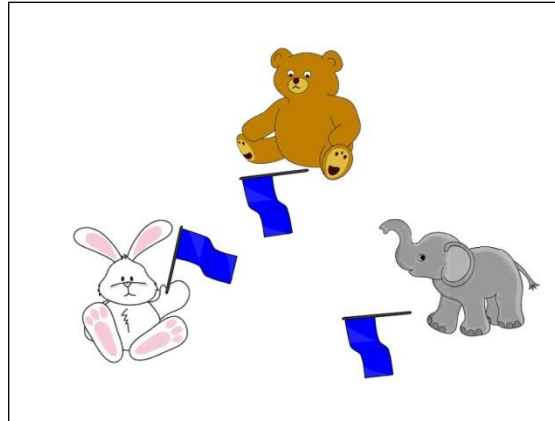
(2) A NYUSZI emelte fel a zászlót.
the rabbit raised up the flag-ACC
‘It is the rabbit who has raised the flag.’

Experiment 3. (neutral SVO sentences)

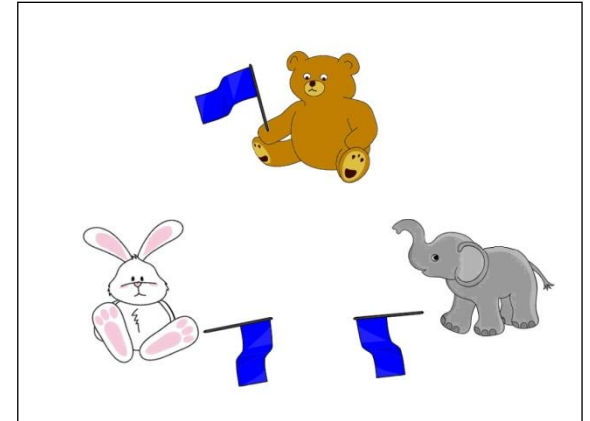
(3) A nyuszi fel-emelte a zászlót.
the rabbit up-raised the flag-ACC
‘The rabbit has raised the flag.’

Conditions of Experiment 1–3

Control conditions:

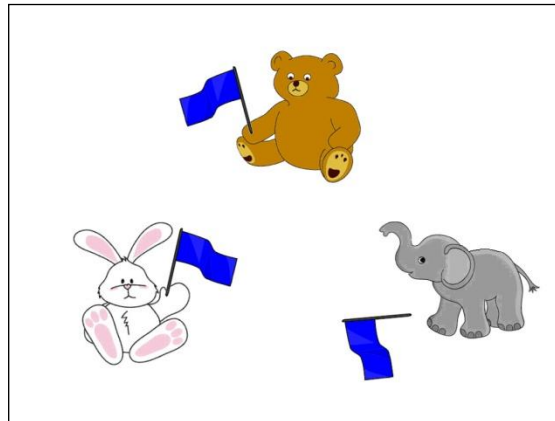


(i) true / exhaustive condition

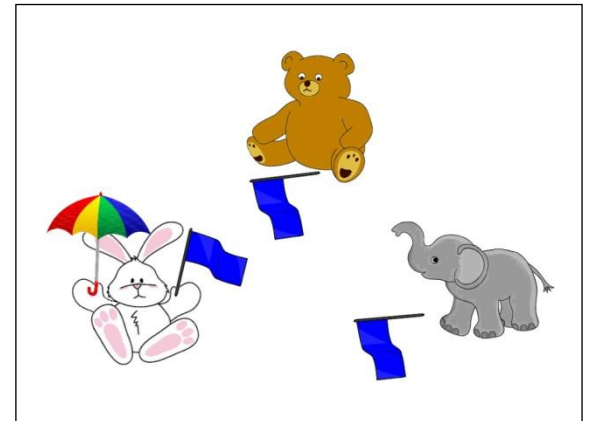


(ii) false condition

Critical conditions:



(iii) non-exhaustive condition



(iv) condition (i) with a distractor

Procedure

Sentence – picture verification task

3-point-scale



cf. Katsos & Bishop (2011)

Balázs & Babarczy (2014)

4 conditions x 8 items = 32 test sentence-picture pairs
+ 24 filler sentence-picture pairs

- randomized order, SR Research Experiment Builder
- 2 occasions

Procedure

Participants:

4 age groups in each experiment (Experiment 1, 2, 3)

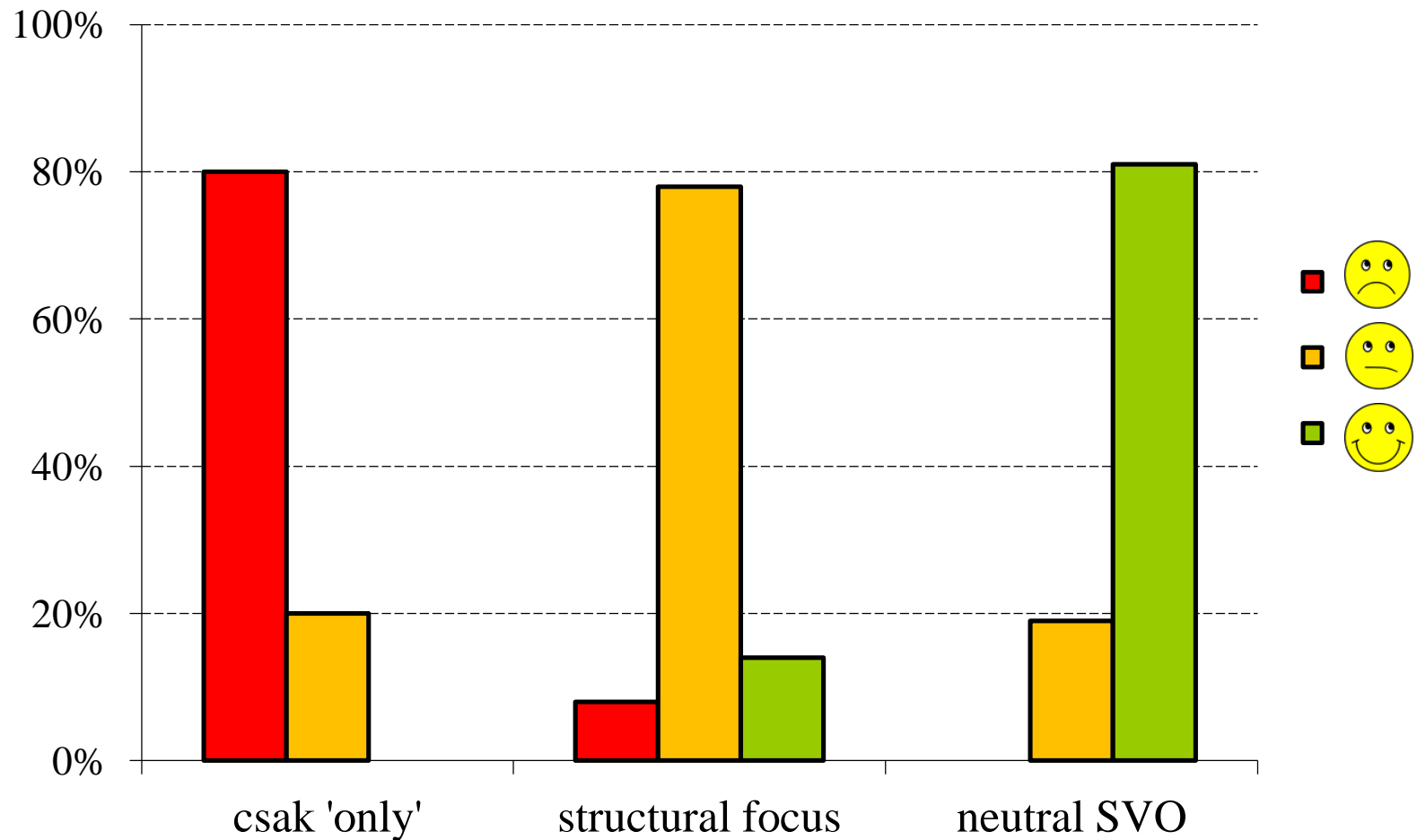
- 15 **preschoolers** (mean ages: 5;9, 6;2 and 6;4)
- 15 **7-year-olds** (mean ages: 7;2, 7;5 and 7;6)
- 15 **9-year olds** (mean ages: 9;3, 9;7 and 9;6)
- 15 **adults** (mean ages: 37;5, 42;7 and 22;10)

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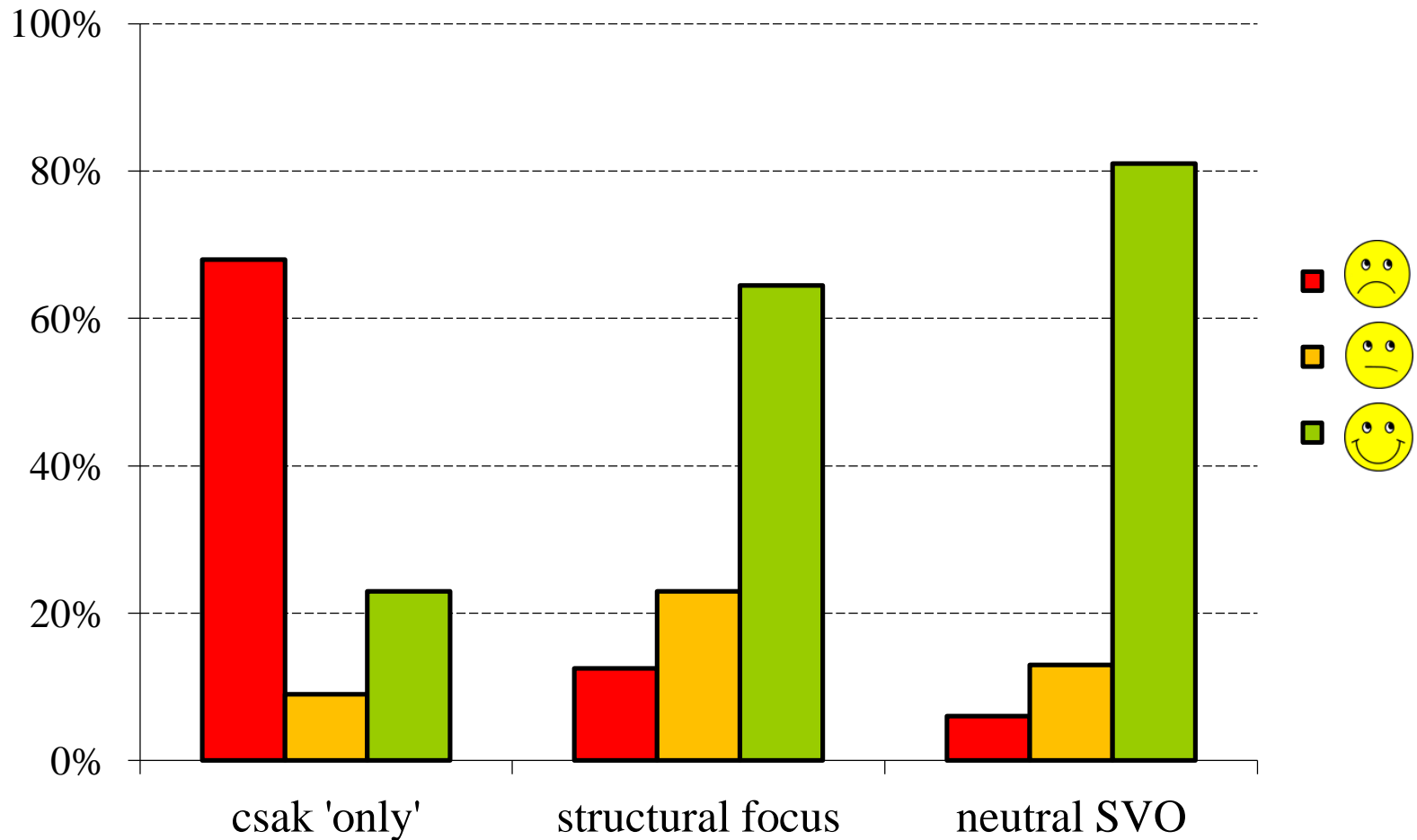
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Results of the **adult** control groups in the
non-exhaustive conditions of Experiment 1–3

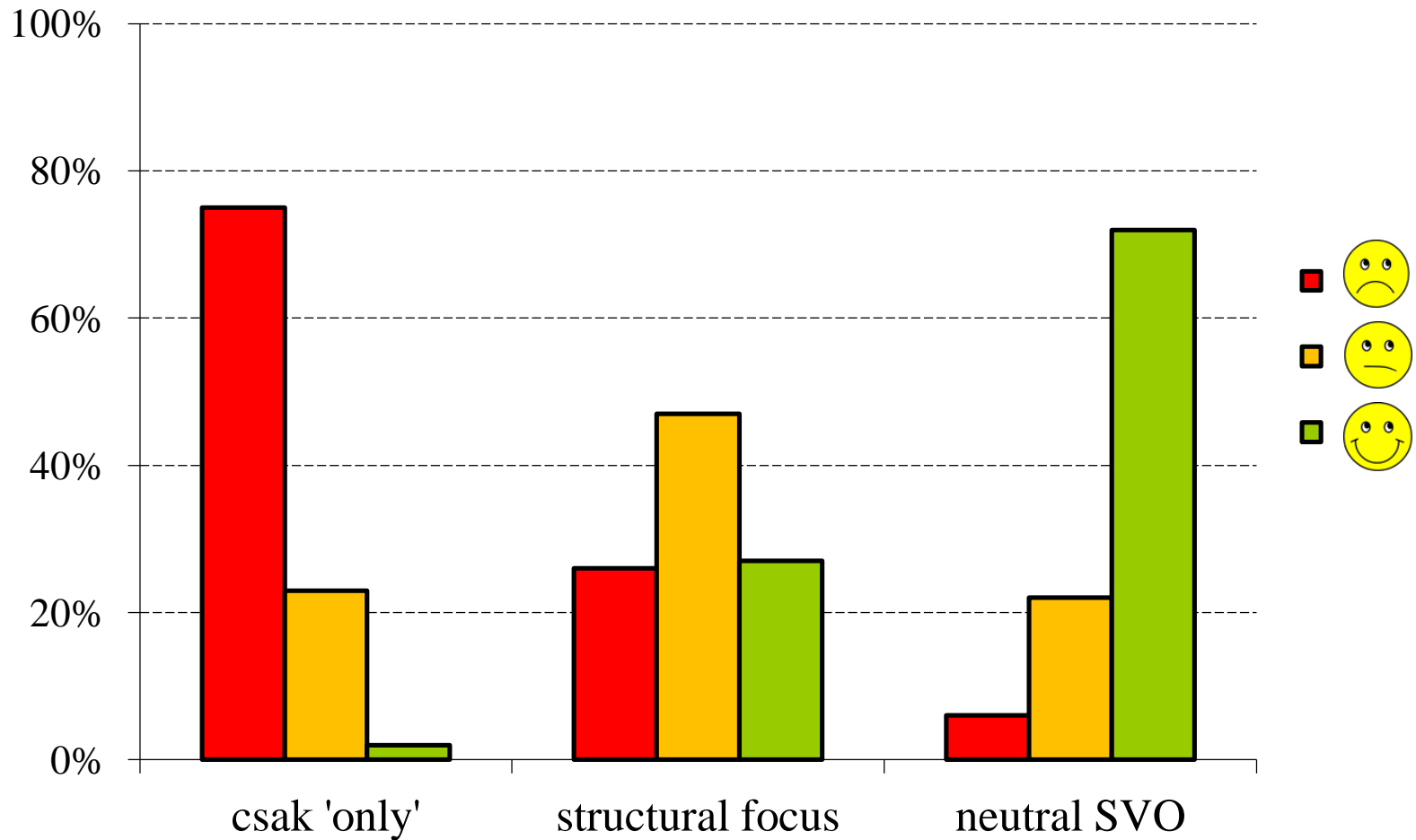
Results of the **adult** control groups in the **non-exhaustive conditions** of Experiment 1–3



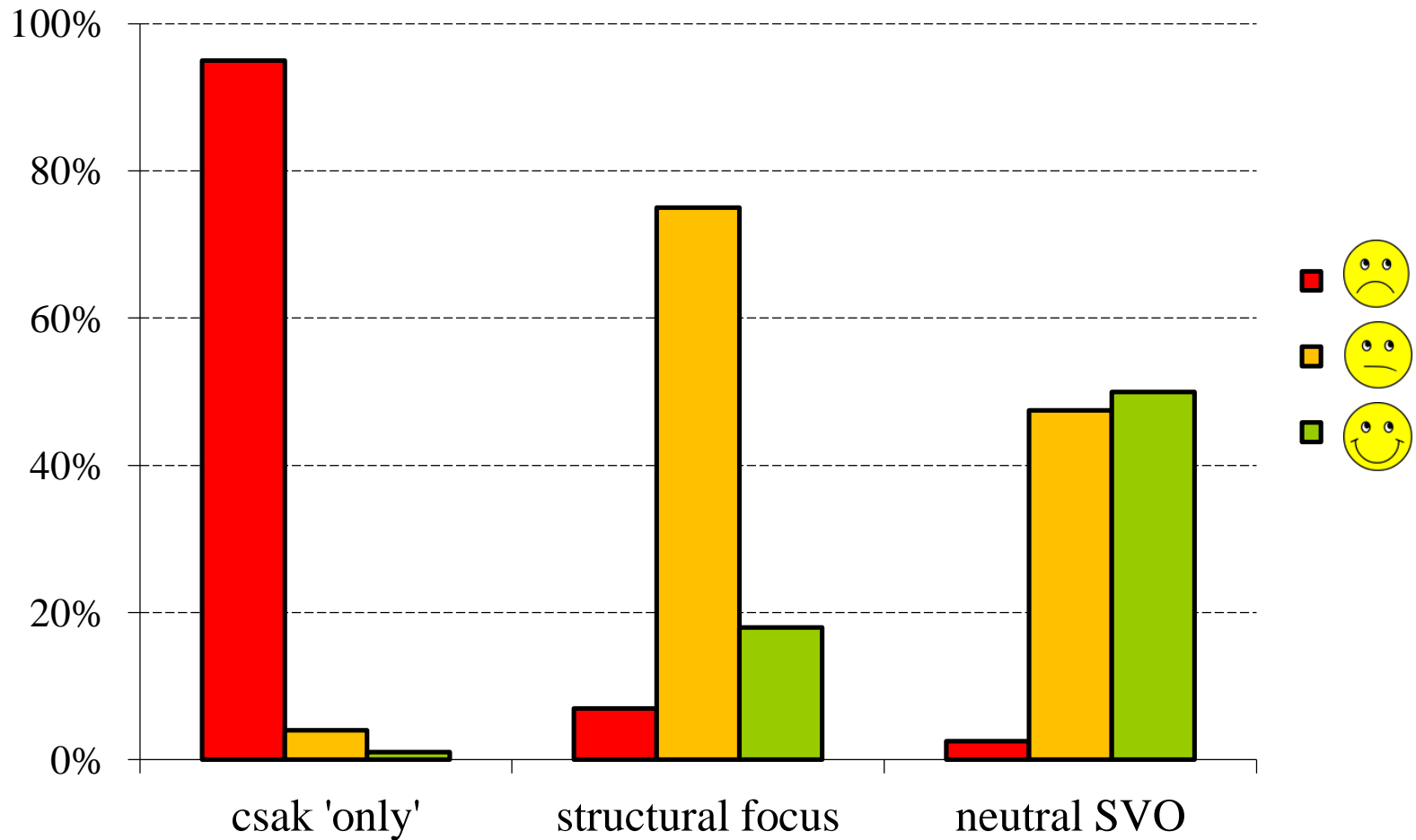
Results of the preschoolers in the non-exhaustive conditions of Experiment 1–3



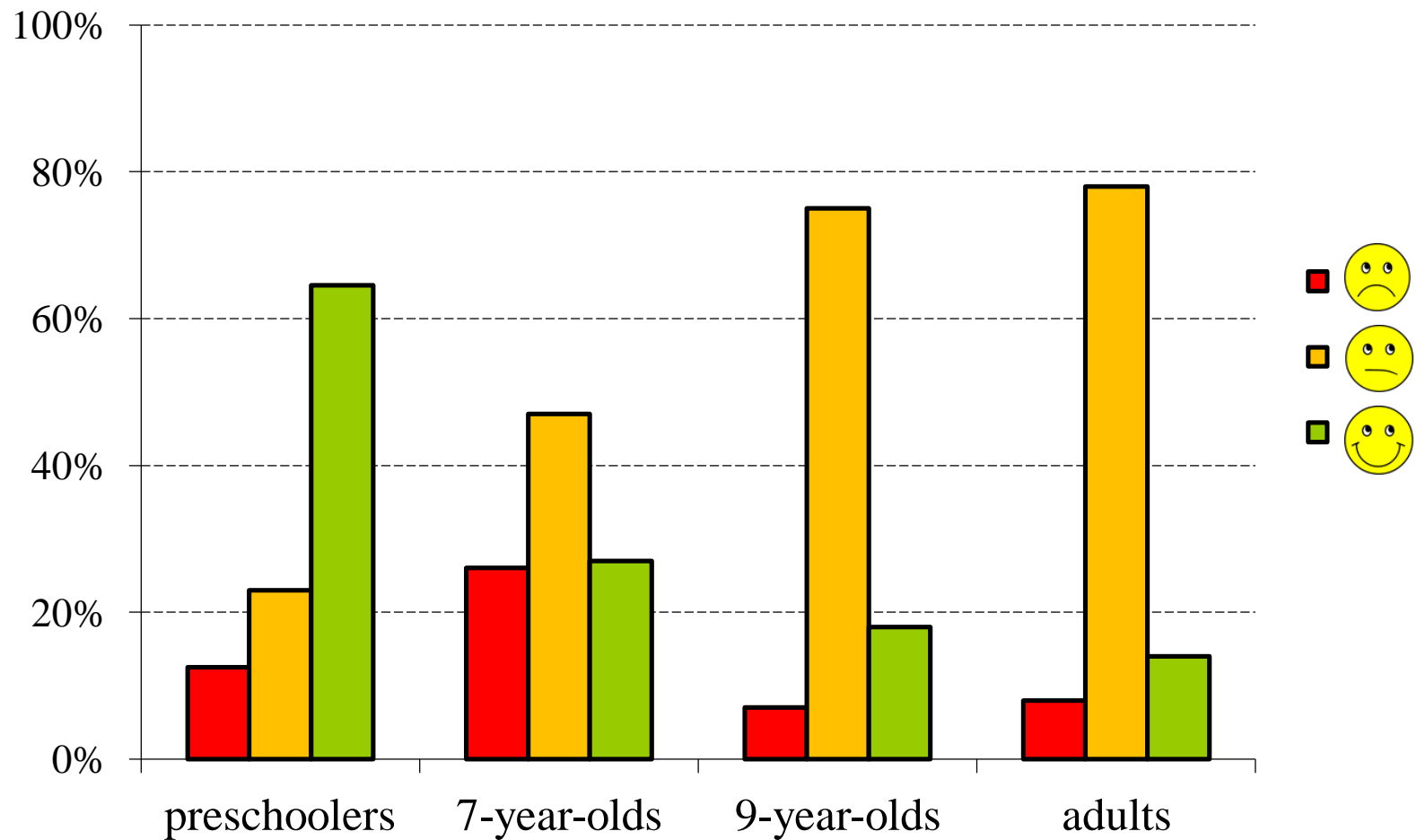
Results of the 7-year-olds in the non-exhaustive conditions of Experiment 1–3



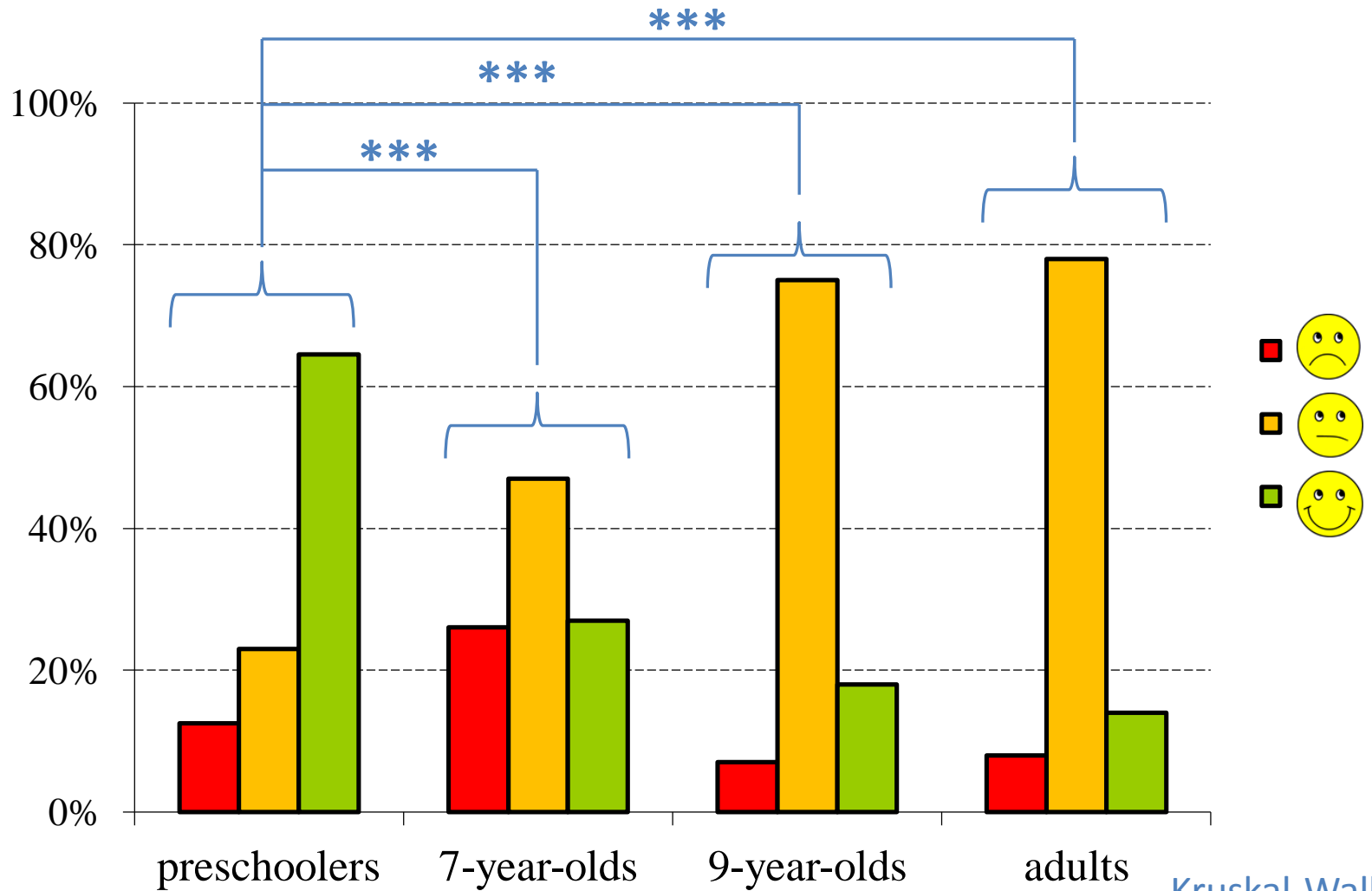
Results of the 9-year-olds in the non-exhaustive conditions of Experiment 1–3



Proportion of responses of the **non-exhaustive condition** of **Experiment 2** (structural focus)



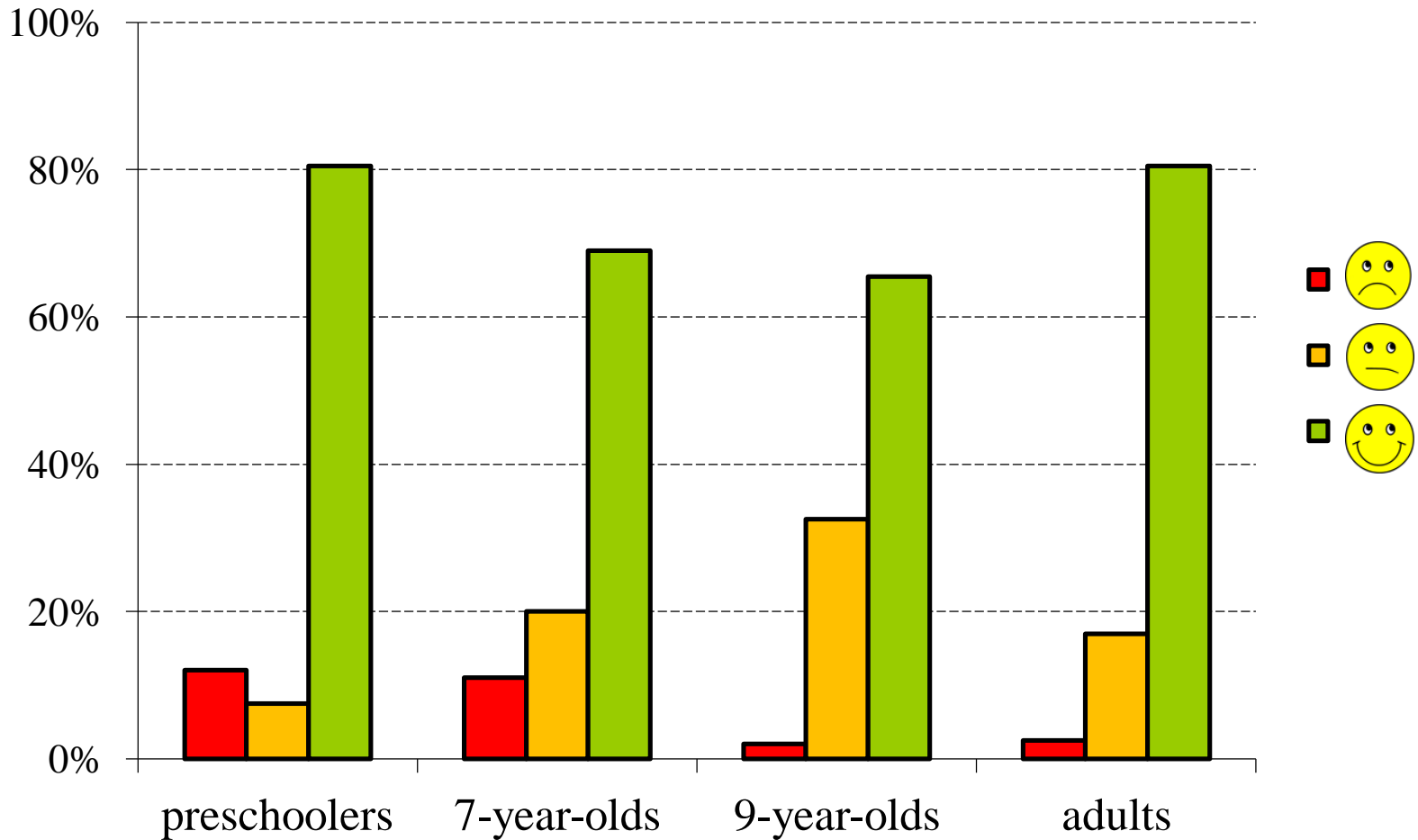
Proportion of responses of the **non-exhaustive condition** of **Experiment 2** (structural focus)



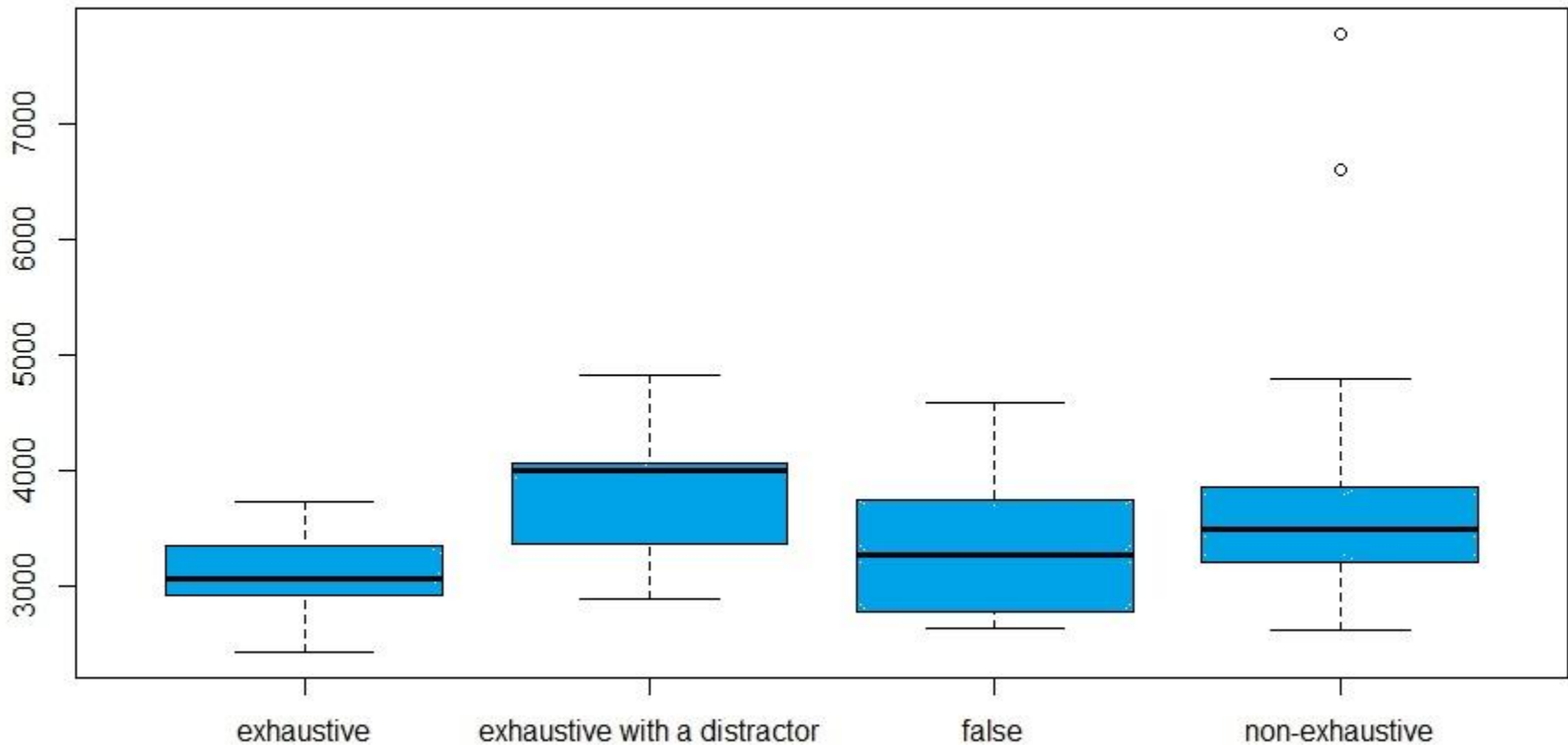
Kruskal-Wallis test

***: $p < 0.001$

Proportion of responses of true plus distractor condition of Experiment 2 (structural focus)



Reaction times of adult participants in Experiment 2 (structural focus)



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Discussion – Findings

- No difference between the age groups in the interpretation of *csak* 'only'.
- In the case of neutral SVO sentences, only 9-year-olds differed from other age groups.
- In the case of structural focus, there is an **increase of exhaustive interpretation with age**.
 - Exhaustivity encoded by a specific syntactic configuration is harder for children to process.

Discussion – The exhaustivity issue

What type of meaning is the exhaustive meaning of structural focus?

- **At-issue meanings** can be ruled out, because of the differences between Experiment 1 and 2.
(structural focus vs. *csak* ‘only’)
- **Context dependent meanings** (conversational implicatures and conversationally-triggered presuppositions) can be excluded, because of the differences between Experiment 1 and 3.
(structural focus vs. neutral SVO)

Discussion – The exhaustivity issue

- **Conventional implicature or presupposition?**

Potts (2005):

- CIs are speaker-oriented entailments which are independent of the at-issue entailments.
- CPs are speaker-oriented, backgrounded meanings that are **not easily altered by contextual factors**.

Exhaustivity of English cleft constructions was claimed to be a **conventional presupposition**.

(Karttunen 1974, Gazdar 1979, Büring and Križ 2013)

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Conclusions

Experimental data support the view that there are 3 different kinds of exhaustivity in the 3 discussed constructions.

- Csak – **assertion**
- Structural focus – **conventional presupposition**
- Neutral SVO sentences can also be interpreted exhaustively, however, this is only a **pragmatic implicature** arising in certain contexts.

References

- Abbott, B. (2000). Presuppositions as non-assertions. *Journal of Pragmatics* 32(10), 1419–37.
- Balázs, A. & Babarczy, A. (2014). *A felnőttek és a négyévesek ige előtti fókuszos mondat értelmezése*. Paper presented at Pszicholingvisztikai Nyári Egyetem, Balatonalmádi.
- Bende-Farkas, Á. (2009). Adverbs of quantification, it-clefts and Hungarian focus. In K. É. Kiss (ed), *Adverbs and adverbial adjuncts at the interfaces*, 317–48. Berlin: M. de Gruyter.
- Destruel, E., Velleman, D., Onea, E., Bumford, D., Xue, J. & Beaver, D. (2015). A cross-linguistic study of the non-at-issueness of exhaustive inferences In. F. Schwarz (ed), *Experimental Perspectives on Presuppositions*, 135–56. Berlin: Springer.
- É. Kiss, K. (1998). Identificational focus versus information focus. *Language* 74, 245–73.
- Gerőcs, M., Babarczy, A. & Surányi, B. (2014). Exhaustivity in Focus: Experimental Evidence from Hungarian. In J. Emonds & M. Janebová (eds), *Language Use and Linguistic Structure*, 181–94. Olomouc: Palacky University.
- Kas, B. & Lukács, Á. (2013). Focus sensitivity in Hungarian adults and children. *Acta Linguistica Hungarica* 60(2), 217–45.
- Katsos, N. & Bishop, D. V. M. (2011). Pragmatic Tolerance: Implications for the Acquisition of Informativeness and Implicature. *Cognition* 20, 67–81.
- Kálmán, L. & van Leusen, N. (1993). *The semantics of free focus*. Amsterdam: ILLC.

References

- Kenesei, I. (1986). On the logic of Hungarian word order. In W. Abraham & S. de Meij (eds), *Topic, Focus and Configurationality*, 143–59. Amsterdam: John Benjamins.
- Onea, E. (2009). Exhaustiveness of Hungarian focus. Experimental evidence from Hungarian and German. In A. Riester & E. Onea (eds) *Focus at the syntax–semantics interface*, 53–68. Stuttgart: University of Stuttgart.
- Onea, E. & Beaver, D. (2011). Hungarian focus is not exhausted. In E. Cormany, S. Ito & D. Lutz (eds), *Proceedings of the 19th Semantics and Linguistic Theory Conference*, 342–59.
- Potts, C. (2005). *The logic of conventional implicatures*. New York: Oxford University Press.
- Schwarz, F. (2015). Presuppositions vs. asserted content in online processing. In F. Schwarz (ed), *Experimental Perspectives on Presuppositions*, 89–108. Berlin: Springer.
- Szabolcsi, A. (1981a). Compositionality in focus. *Folia Linguistica* **15**, 141–61.
- Szabolcsi, A. (1981b). The semantics of topic-focus articulation. In J. Groenendijk, T. Janssen, and M. Stokhof (eds), *Formal methods in the study of language*, 513–40. Amsterdam: Mathematisch Centrum.
- Szabolcsi, A. (1994). All quantifiers are not equal: The case of focus. *Acta Linguistica Hungarica* **42**, 171–87.
- Wedgwood, D. (2005). *Shifting the Focus. From Static Structures to the Dynamics of Interpretation*. Amsterdam: Elsevier.

Thank you for your attention!

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