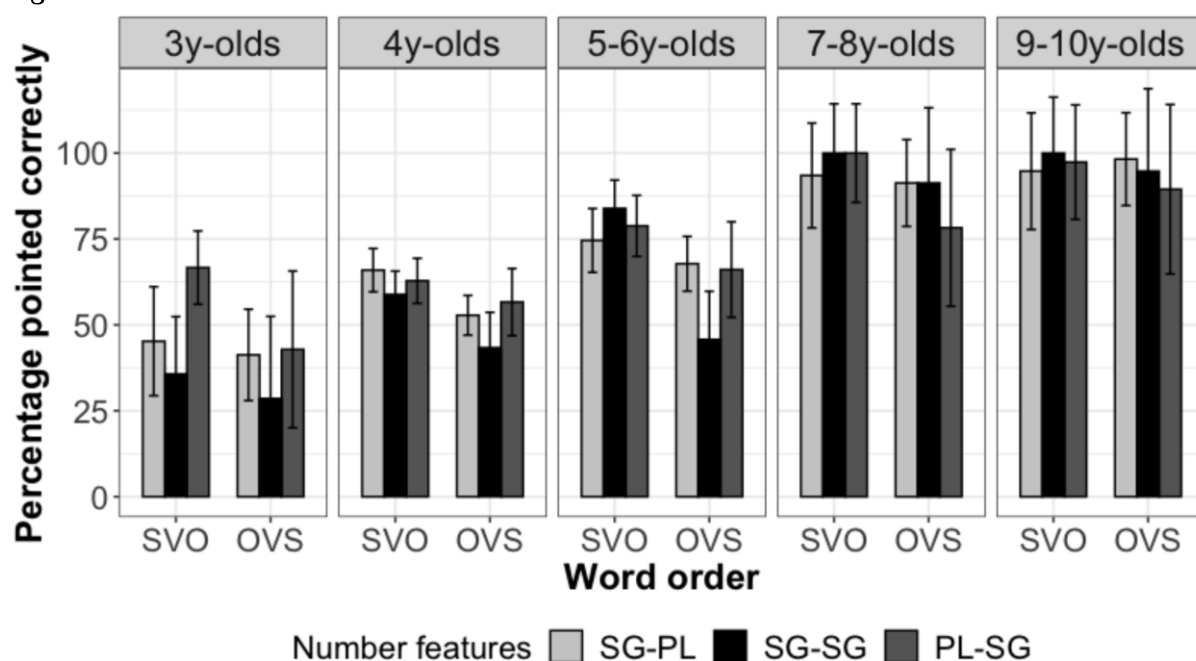


Supplemental Material S2.

This supplement reports a revised analysis of a cross-sectional study on the comprehension of object-initial sentences with and without number dissimilarity that used the same materials as the study reported in the research article. In this analysis, we revised the original analysis reported as Stegenwallner-Schütz and Adani (2017) in order to address an anonymous reviewer’s concern about two items with local syntactic ambiguities. These items are excluded from this revised analysis, allowing to test whether the effect of number facilitation can be shown in this larger sample without the criticized items 5 and 12.

In this study, $N = 235$ German-speaking monolingual children participated. They were grouped according to the following age groups: 3-year-olds ($n = 21$), 4-year-olds ($n = 113$), 5–6-year-olds ($n = 59$), 7–8-year-olds ($n = 23$), 9–10-year-olds ($n = 19$). Figure S1 displays their accuracy scores.

Figure S1.



Since the group of 7–8-year-olds and the 9–10-year-olds perform at ceiling in several conditions, we did not include their data in the statistical model. Except for age group comparisons, we analyzed the data with the same contrast and model specifications as reported for the SLI study. Table S3 provides the fixed effects output of the model.

The main result is that 5–6-year-olds find OVS: SG-PL sentences easier to comprehend than the OVS:SG-SG sentence, even when the locally ambiguous items are excluded. This is evident in the 3-way interaction of 5–6yr-olds – 4yr-olds \times Word Order \times Number Feature (SG-PL – SG-SG). We, therefore, conclude that the number facilitation emerges also when only OVS sentences with unambiguous case marking are considered. This is the age range for which we expected to find the number facilitation to occur according to our original findings with the complete item set. Children older than 6 years of age experience little difficulty with the comprehension of object-initial sentences of this test and perform very accurately. Therefore, we think that the number facilitation disappears after the age of 7 years in the accuracy data. Children younger than 5 years did not show a number facilitation of the OVS sentences in the original study, therefore, we do not expect them to show any effect with the reduced item set either.

Table S3

Model Output of the Accuracy Analysis for a Larger Sample of a Cross-Sectional Study

Fixed effects:	Estimate	SE	z-value	p-value
(Intercept)	0.362	0.193	1.876	.061
4yo – 3yo	0.647	0.249	2.598	.009
5-6yo – 4yo	0.725	0.174	4.175	< .001
Word Order	-0.756	0.361	-2.094	.036
Number Feature (sg-sg – sg-pl)	-0.399	0.423	-0.942	.346
Number Feature (pl-sg – sg-sg)	0.587	0.479	1.226	.220
4yo – 3yo × Word Order	-0.046	0.346	-0.134	.894
5-6yo – 4yo × Word Order	-0.578	0.246	-2.354	.019
4yo – 3yo × Number Feature (sg-sg – sg-pl)	0.121	0.410	0.296	.767
5-6yo – 4yo × Number Feature (sg-sg – sg-pl)	0.179	0.289	0.619	.536
4yo – 3yo × Number Feature (pl-sg – sg-sg)	-0.711	0.459	-1.549	.121
5-6yo – 4yo × Number Feature (pl-sg – sg-sg)	-0.116	0.323	-0.360	.718
Word Order × Number Feature (sg-sg – sg-pl)	-0.616	0.846	-0.728	.466
Word Order × Number Feature (pl-sg – sg-sg)	0.341	0.957	0.357	.721
4yo – 3yo × Word Order × Number Feature (sg-sg – sg-pl)	0.152	0.820	0.186	.853
5-6yo – 4yo × Word Order × Number Feature				
(sg-sg – sg-pl)	-1.650	0.579	-2.847	.004
4yo – 3yo × Word Order × Number Feature (pl-sg – sg-sg)	1.216	0.916	1.328	.184
5-6yo – 4yo × Word Order × Number Feature (pl-sg – sg-sg)	0.986	0.646	1.527	.127

Reference

Stegenwallner-Schütz, M., & Adani, F. (2017). Numerusinformation vereinfacht das Satzverständnis: Querschnittsuntersuchungen zum Verständniserwerb von transitiven Sätzen mit Wortstellungsvariation. [Number dissimilarity facilitates sentence comprehension: Cross-sectional acquisition studies on the comprehension of transitive sentences with word order variation]. *LOGOS*, 25, 96–105.