

Sentence comprehension and structural priming in Czech toddlers and preschoolers; preferential looking and offline pointing compared

Filip Smolík (Institute of Psychology AS CR, Prague, Czech Republic)

Purpose: 1) Examine whether Czech 2.5- and 4.5-year-olds can interpret simple transitive sentences based on word order and case marking. 2) Is the placement of the sentence subject and object susceptible to structural priming?

Method: Two intermodal preferential looking experiments were performed (N=104). Children heard transitive sentences and saw pairs of pictures or clips one of which depicted the sentence. Sentences were presented in pairs with identical or different word orders (SVO, OVS). The second sentence in each pair was temporarily ambiguous until the last word. Additionally, children in Experiment 2 were given an offline picture-pointing task testing their comprehension of SVO and OVS sentences. Similar experiment was presented to another group of 107 children.

Results: In prime sentences in Experiment 1, only the older group of children showed clear signs of comprehending. In target sentences, the only observed effect was on OVS targets in the younger group. In Experiment 2, prime sentences in both age groups were comprehended, and comprehension was better for SVO sentences in younger children. Structural priming was observed in SVO targets in younger children, and in OVS targets in older children. In the offline tasks, children generally showed clearer evidence of comprehending the target sentences than in the preferential looking tasks.

Conclusions: Results confirm that children can interpret SVO sentences as early as at 2.5 years of age, and that they have problems interpreting the OVS word order at this age. Structural priming effects demonstrate that children have an abstract representation of word order at the early age. Evidence from the offline tasks shows that children begin to comprehend OVS sentences around the age of four.

Keywords: preferential looking – case – word order – sentence comprehension – structural priming