

# Children's visual attention when planning informative multimodal descriptions of object locations

Dilay Karadoller

Middle East Technical University, Ankara, Turkey

Asli Ozyurek

Donders Institute , Nijmegen, Netherlands

Ercenur Ünal

Özyeğin University, Istanbul, Turkey

## Abstract

Children frequently use under-informative expressions (e.g., Side) while describing Left-Right relations between objects but use gestures to disambiguate the relative locations of objects (Karadöller et al., 2022). Here we ask how children collect visual information about the spatial relations they express when planning such descriptions. Twenty Turkish-speaking 8-year-olds saw displays with four pictures of the same two objects in various spatial configurations. Target pictures described to a confederate depicted left-right relations (e.g., lemon left to box). Descriptions were coded whether they were informative in speech, informative with gesture, or under-informative. Children had more target fixations when planning (1) informative than under-informative descriptions ( $\beta=0.515$ ,  $SE=0.131$ ,  $p<0.001$ ); (2) descriptions that are informative with gesture than informative in speech ( $\beta=-0.827$ ,  $SE=0.171$ ,  $p<0.001$ ). Results extend previous literature showing that visual attention changes as a function of informativeness and the modality (Ünal et al., 2022) of the description for 8-year-old children.