

Tracking object location: Evidence from eye movements during event comprehension

Yuki Kamide

University of Dundee

Anuenue Kukona

University of Dundee

Abstract: If depicted objects visually remain where they are, but are linguistically described as moving to new locations ('onto the table'), subsequent reference to them directs attention to their new locations. But, do these attentional shifts depend on updated spatial screen coordinates, or new object associations? We investigated situations wherein depicted containers moved between spatial locations after non-depicted referents were described as moving between these containers. Listeners heard 'The boy will pour the sweetcorn from the bowl into the jar... and... taste the sweetcorn', while viewing arrays with a bowl, jar, and distractors. In Static conditions, containers remained in one location; in Scrambled conditions, they moved to new locations before 'and'. During the discourse-final 'sweetcorn', we observed virtually no fixations to pre-scramble coordinates, but more fixations to the depicted jar than bowl, although this was delayed in Scrambled vs. Static conditions. We argue that discourse-based object associations drive these attentional shifts.