UC Merced

Proceedings of the Annual Meeting of the Cognitive Science Society

Title

Motion Event Segmentation in Visual Narratives

Permalink

https://escholarship.org/uc/item/96p6p0fm

Journal

Proceedings of the Annual Meeting of the Cognitive Science Society, 44(44)

Authors

Hacımusaoğlu, Irmak
Cohn, Neil

Publication Date

2022

Copyright Information

Peer reviewed

Motion Event Segmentation in Visual Narratives

Irmak Hacımusaoğlu
Tilburg University, Tilburg, Netherlands

Neil Cohn
Tilburg University, Tilburg, Netherlands

Abstract

Motion lines are the drawn lines trailing behind an object to show movement. Prior work has shown that motion lines aid comprehension by clarifying the direction of motion, but no experimental research has examined how they interact with path segmentation, like a visual sequence in comics. In Experiment 1, participants understood panels with motion lines better than without lines. With motion lines, omitting the path's source was harder to comprehend than showing the source but having it disappear. Moreover, less experienced comic readers benefited more from showing a whole path with lines in single panels than fluent ones. In Experiment 2, reversed-direction lines were harder to process than normal or omitted lines, but segmentation did not matter. Overall, motion event comprehension can be modulated by path segmentation of lines and comics reading experience.