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Proceedings of the Annual Meeting of the Cognitive Science Society

Title

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Permalink

<https://escholarship.org/uc/item/8zg6w2ff>

Journal

Proceedings of the Annual Meeting of the Cognitive Science Society, 46(0)

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Publication Date

2024

Peer reviewed

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Abstract

Perceptual organization contains two interrelated sets of phenomena: visual grouping and figure-ground segmentation. Different types of grouping and segmenting (and interaction and competition between them) have been described. Less clear is what happens once an accent is added in grouping or segmenting. According to several eye tracking experiments (n=35), apart from pop-out effect of particular elements, the overall structure of the visual field is changed. If compared to the non-accentuated stimuli, adding single accent to both grouping and segmentation stimuli induces not only local changes in saccadic processes but also a more global difference in gaze alignment. Most importantly, accent assigns a directional effect to the visual structure, typically decreases the average fixation time (by 11-28% depending on stimuli) and changes location of fixations and decreases their variation (if compared to non-accentuated stimuli). However, no significant differences between the number of fixations in non-accentuated and accentuated stimuli can be observed.