

Cambridge Elements

Elements in Perception
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ELEMENTS OF SCENE PERCEPTION

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Abstract: Visual cognitive processes have traditionally been examined with simplified stimuli, but generalization of these processes to the real world is not always straightforward. Using images, computer-generated images, and virtual environments, researchers have examined processing of visual information in the real world. Although referred to as scene perception, this research field encompasses many aspects of scene processing. Beyond the perception of visual features, scene processing is fundamentally influenced and constrained by semantic information as well as spatial layout and spatial associations with objects. In this Element, we will present recent advances in how scene processing occurs within a few seconds of exposure, how scene information is retained in the long term, and how different tasks affect attention in scene processing. By considering the characteristics of real-world scenes, as well as different time windows of processing, we can develop a fuller appreciation of the research that falls under the wider umbrella of scene processing.

Keywords: scene perception, visual attention, eye movements, visual memory, spatial processing

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