Invited talk 3

Visual Array Variables that Can Affect Visually-Induced Motion Sickness

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Abstract

Although motion sickness is dependent upon a functioning vestibular system, under provocative conditions what we see can affect the severity of symptoms and the speed at which symptoms develop. When vestibular input is held constant across conditions, and visual input is systematically changed, effects of visual array variables on visually-induced motion sickness can be revealed. Using devices such as an optokinetic drum, projected images, and virtual reality technology, results have been obtained that suggest visual array features such as chromatic color, pattern complexity, stereoscopic presentation, and visual blur all lead to more severe motion sickness symptoms. These same variables can lead to increased salience of visually-induced self-motion perception (vection). ‘Why’ these variables affect visually-induced motion sickness and vection is discussed in terms of evolution and neurological pathways.
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