Cognition, immersion, & interactive narration: a literature review

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Immersion is a form of cognitive illusion in which the perceiver believes themselves to be at least partially present within a fictional, non-physical world. One category of this phenomenon, often proposed by various theoretical frameworks, is narrative immersion. It occurs when the audience of a medium becomes immersed in the world it presents through engagement with the story they experience, whether due to its emotional stakes, attachment to its characters, or a simple desire to see upcoming events unfold. Narrative immersion is the primary means through which traditional, non-interactive forms of narration, such as books or films, immerse their recipients. However, in more modern forms of interactive storytelling, this phenomenon, while likely still important, exists alongside other categories of immersion, such as spatial or tactical immersion, creating a complex web of immersion-inducing interactions. The aim of this study is to review contemporary academic research on narrative immersion in interactive media from a cognitive science perspective, with a primary focus on the cognitive mechanisms underlying immersion and the methods used to measure them.
Utilised method involves the search of various academic databases using the EBSCO database provider tool for publications related to two primary topics: general non-category specific research on immersion in interactive media, and narrative specific immersion in interactive media. Those were analysed in terms of commonalities and differences in results across three categories of cognitive mechanism markers: observational reports, experiments on behavioural cues, and neuroimagining for neural correlates. The central hypothesis predicts a high level of complexity in the mental processes involved, especially emotional processing expected to occur in narrative engagement, as well as a high degree of overlap with other forms of cognitive processing caused by the interactive nature of such experiences, mainly attention modulation, creating predictions, and spatial processing. Research into how the human mind engages with stories lies at the intersection of psychology and critical media studies, therefore, the insights presented in this review may contribute to a deeper understanding of narrative experience and inform future research on the subjective experience of narration and interactive media.