Abstract

This paper explores methods used to direct viewer attention in 360-degree film, investigates the effectiveness of two specific methods: Action Units and Pointing Arrows, and looks into new possibilities for directing attention. In recent years, the emergence of 360-degree videos and immersive content has presented new challenges and possibilities for filmmakers and content creators. This immersive medium has unique features, for which traditional methods of directing attention, such as framing and editing, must be adapted to. Previous research identified various methods like adjusting the field of view and other visual guidance techniques like object to follow, person to follow, forced rotation, object manipulation and so on (Speicher et al., 2019), shot orientation control (Pavel et al., 2017) and Action Units (Tong et al., 2019). This study the researcher explored further and aimed to compare the effectiveness of two attention-directing methods in 360-degree films: Action Units and Pointing Arrows, basing it on the previously conducted 2019 study by Tong et al. The study hypothesized: Action Units in a 360° narrative more efficiently direct viewer attention, promote focused attention on relevant story information, make viewers less aware of the attentional guidance, and enhance narrative engagement compared to Pointing Arrows.

For the study, 2 versions of the same 360-degree film were made, one with Action Units and one with Pointing Arrows to measure which attention directing method has better effect on narrative engagement, immersion, and enjoyment. The researcher recruited 71 participants using a convenience sampling method and presented them with two versions of the same 360-degree film, one with Action Units and the other with Pointing Arrows. The participants were asked to watch the film while wearing an Eye Tracker device, which collected information about their gaze patterns and duration of attention in the virtual environment. After watching the film, the participants filled out a self-reported experience questionnaire which had 48 questions to measure their awareness of directed attention, immersion, narrative engagement, and enjoyment. The data from the eye tracker and questionnaire were analysed to determine whether Action Units can guide viewer attention, measure to what extent were participants aware of their attention being directed, and the effects on narrative engagement, immersion, and enjoyment. The findings of the study suggest that participants of both test groups reported similar levels of awareness of attention and both methods resulted in having similar effects on narrative engagement and immersion. However, the data revealed an effect opposite to what had been expected: Pointing Arrows were more efficient in directing attention to the important part of the 360-degree film than the Action Units. Participants of the Pointing Arrow test group also reported higher level of enjoyment than the participants of the Action Units test group. These findings have significant implications for commercial communications in the realm of 360-degree storytelling. By understanding the attention-directing methods that work best in this medium, filmmakers and advertisers can deliver more impactful, immersive, innovative, and engaging content in the future bringing audiences closer to the story world. The researcher recommends exploring attention-directing methods in social media content and other forms of advertising or communication.