Avatars rendering and its effect on perceived realism in Virtual Reality

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Immersive virtual environments have proven to be a plausible platform to be used by multiple disciplines to simulate different types of scenarios and situations at a low cost. When participants are immersed in a virtual environment experience presence, they are more likely to behave as if they were in the real world. Improving the level of realism should provide a more compelling scenario so that users will experience higher levels of presence, and thus be more likely to behave as if they were in the real world. This paper presents preliminary results of an experiment in which participants navigate through two versions of the same scenario with different levels of realism of both the environment and the avatars. Our current results, from a between subjects experiment, show that the reported levels of quality in the visualization are not significantly different, which means that other aspects of the virtual environment and/or avatars must be taken into account in order to improve the perceived level of realism.

http://dx.doi.org/10.2312/gch.20201295