09.11.2022

Masterarbeit

A systematic review and meta-analysis of body transfer illusions

Over the years, an increasing number of applications in entertainment, medicine, retail, research, and education have begun utilizing Virtual Reality (VR) and Augmented Reality (AR) systems, calling for an increasing need for an interface to enable an embodied interaction between the user and the virtual environment. While the embodiment is often investigated with the virtual hand illusion, there lacks a systematic review of the virtual hand illusion itself. Through this thesis, we are interested in investigating the robustness of the virtual hand illusion using the method of meta-analysis.

Arbeitsauftrag

- Review the literature on body transfer illusions, focusing on the virtual hand illusion.
- Learn and conduct a meta-analysis of virtual hand illusion based on the systematic literature review.
- Write and present the findings.

Anforderungen

- Basic understanding of statistics
- Basic programming skills with Python or R

Verweise

Brundin, M. (2020). The rubber hand illusion effectiveness on body ownership induced by self-produced movements: A Meta-Analysis.

Fröhner, J., Salvietti, G., Beckerle, P., & Prattichizzo, D. (2018). Can wearable haptic devices foster the embodiment of virtual limbs?. *IEEE transactions on haptics*, *12*(3), 339-349.

Beginn: Januar 2023
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