Sophie Mobbs
Soothing Pain through Animation: the Opportunities for the Animator's Art to Treat Pain through the Medium of Virtual Reality Simulations

Virtual reality (VR) has been investigated as a method for treating pain for some time. For example Hoffman 's work with burns patients (Hoffman et al 2000, 2008), found that immersing patients into virtual reality reduced the levels of discomfort experienced during painful treatments. However, it is only fairly recently that virtual reality technology has reached a level of accessibility, both for patients to use as consumers and for animators to turn their artistic skills to this medium. Robust hardware, at a more affordable cost coupled with accessible animation and game engine software has opened up a new world for animators to work in. They can now create virtual reality experiences without the need to access cumbersome and expensive equipment in a science laboratory. This presentation will discuss the opportunities this opens up to animators, with reference to my own practice and theoretical research into gamemaking in virtual reality and my industry experience in creating animation and art for games. In particular, using examples from my current VR research, I will describe the collaborations that may now be made between artists, medical researchers, doctors and patients themselves. Such teams can produce animations that contribute to virtual reality narratives and games for treating physical pain and for providing respite from anxiety and stress.

Hoffman, H.G., Doctor, J.N., Patterson, D.R., Carrougher, G.J. and Furness III, T.A., 2000. Virtual reality as an adjunctive pain control during burn wound care in adolescent patients. *Pain*, *85*(1), pp.305-309.
Hoffman, H. G., Patterson, D. R., Seibel, E., Soltani, M., Jewett-Leady, L., & Sharar, S. R. (2008). Virtual reality pain control during burn would debridement in the hydrotank. Clinical Journal of Pain, 24, 299–304.

Biography

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Sophie Mobbs is a senior lecturer and the programme leader of BA 3D Animation and Games at Middlesex University in London. She specializes in teaching 2D and 3D animation and animation, character creation, and art for virtual reality narratives and games. Her research interests focus on animation with regards to body language, and the use of virtual reality and animation to provide relief from pain, anxiety and stress. More specifically, she uses a Creative Practice research methodology to explore the relationship between non-verbal communication and animation, and the use of interactive animated avatars within virtual reality settings.

Prior to working in Higher Education, Sophie spent 10 years working as an animator in the games industry, where she took particular interest in character and monster animation and worked for companies that included Sony, Silicon Dreams and Rebellion, contributing to 8 published games across various platforms.