Towards experiencing our bodies as digital play

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Abstract

There is an ongoing trend towards digital games that require bodily investment in the form of gross-motor interactions to inform the outcome of a game, we call them exertion games. Research has developed various frameworks to support such exertion game experiences, we extend this work by exploring a collated approach that proposes a set of design sensitivities that aim to aid designers in a view of supporting people "experiencing their bodies as digital play". By attending this workshop, we hope to refine this understanding of how to design for an active human body while aiming to contribute to the researchers around us from what we have learned designing our various systems.

Introduction

There is an ongoing trend towards digital games that require bodily investment in the form of gross-motor interactions to inform the outcome of a digital game. We call them exertion games [6] and have built several of these systems ourselves [2, 9, 10]. Prior research has developed various frameworks how to support such exertion game experiences [1, 3, 5, 7]. In order to aid designers, we are aiming to combine these prior experiences and articulate a collated perspective on how to support the active human body in HCI.

Experiencing our bodies as digital play

We are advocating a view where we are *experiencing our bodies as digital play*. We see this perspective as a natural three-step consequence out of the history of computer games and how they supported an active human body. Initially, in the early days of computer games, interactive systems allowed us to play *with* digital content. With the advancements of the Nintendo Wii and Kinect, we can now play with the digital *using* our bodies. However, in the future, what we want to see is that we are *experiencing our bodies as digital play*.

Our current work is examining how we can advise designers to support this notion. We are inspired by prior works such as Young's [11] and combined with our craft knowledge having designed several systems, we are proposing the following design sensitivities [4] on how we can experience our bodies *as* digital play.

- Supporting reverie through digital fantasy elements
- Enabling pride through rewards
- Highlighting sacrifice through digital awareness
- Stressing beauty through digital emphasizing
- Strengthening humility through digital comparisons
- Celebrating pain through new sensors
- Promoting consistency through documentation
- Elevating the sublime through digital framing
- Affording oneness through integrated game design

These design sensitivities are our starting point and are meant as practical guidance for anyone interested in supporting a body-centric view in HCI, including the full range of subtle playful exertion activities [2] but also intense sports HCI experiences [8].

Conclusion

In sum, with our work we aim to support the trend in HCI towards a more body-centric interaction design perspective. By attending this workshop, we hope to enhance our understanding of how to design for an active human body whilst aiming to contribute to the researchers around us from what we have learned designing our various systems.

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