2nd Workshop on Design for Social Interaction through Physical Play

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Abstract. We aim to stimulate social interaction by designing and creating interactive objects for physical play for diverse user groups, such as children, elderly or people with special needs. With this workshop we aim to bring researchers and practitioners together to share and explore issues and opportunities for technology-enhanced physical play for stimulating face-to-face social interaction (as opposed to virtual interaction through a computer). The focus of this workshop is on sharing theories that are valuable for the design and research of products and applications in this field.

Keywords: Social interaction, play, interactive technologies, theory.

1 Theme

Social interaction between people is important for many reasons. For example, children develop many skills just by playing and communicating with other children, such as cooperating, sharing and other cognitive and motor skills. Social interaction is also extremely important for the well-being of elderly people, who tend to get lonely when socializing becomes more difficult because of their age. Unfortunately, because of recent technological advances children spend an increasing amount of time behind their computer playing games on their own. Moreover, an increasing number of people interact through media such as email and instant messaging in addition to or sometimes even at the expense of face-to-face communication.

At the same time, however, new technologies provide interesting novel opportunities for entertainment and interaction. For example, nowadays a multitude of sensors can be used to detect the behavior or physical condition of users. This information can then be used to control the performance of objects or to provide feedback in the form of light, music, etc. In this way, face-to-face interaction can be enhanced and stimulated in a playful and fun way, for children and for elderly, but also for user groups with social impairments, such as autistic children.

Physical play offers many opportunities to enhance and stimulate real social interaction (as opposed to virtual interaction through a computer). For example, one of the main reasons why playing football is so popular among both children and adults is the fact that they can play with and against each other. Playing a game is also a popular

means to stimulate autistic children and elderly people to socialize and have fun. Combining technology-enhanced objects that promote social interaction with dedicated games and scenarios may enhance the experience of using those embodied objects in social settings.

Design for social and physical play is a young, multidisciplinary area of research that is closely related to various other fields, such as tangible interaction, robotics, computer games, pervasive games, and exertion games.

2 Objectives

With this workshop we aim to bring researchers together to share and explore issues and opportunities for technology-enhanced physical play for stimulating face-to-face social interaction (as opposed to virtual interaction through a computer).

The first workshop on Design for Social Interaction through Physical Play was held at the Fun and Games conference in Eindhoven, The Netherlands in 2008 and focused on sharing and identifying common interests. Researchers with various backgrounds, such as robotics, industrial design, social psychology, etc. had fruitful discussions about many of the issues that we encounter in our work. One of the conclusions of the workshop was that there is a need for sharing theories that can be used for the design and research of products and applications in this field.

For that reason, our focus for this workshop is on sharing theories about, for example, learning, play or the use of technology. We will discuss their use and applicability to our field of design research. For example, participants from the game design area were quite interested in theories about social connectedness, and how these would inform the design of social games.

Among the expected outcomes of the workshop are an overview of valuable theories that can be used in this area of research and how they inform evaluation methods and metrics. Also, we plan to select the best position papers for publication in a special issue of a relevant international journal.

References

1. Barakova, E., van Wanrooij, G., van Limpt, R., Menting, M.: Using an emergent system concept in designing interactive games for autistic children. In: Proceedings of the 6th international Conference on interaction Design and Children, IDC 2007 (2007)
2. Bekker, T., Sturm, J., Barakova, E.: Design for Social Interaction through Physical Play. To appear in Special Issue of Personal and Ubiquitous Computing (2008)
3. Sturm, J., Bekker, T., Groenendaal, B., Wesselink, R., Eggen, B.: Key issues for the successful design of an intelligent interactive playground. In: Proceedings of the 7th international Conference on Interaction Design and Children, IDC 2008 (2008)