Please Enjoy!?
Workshop on Playful Experiences in Mobile HCI

Ylva Fernaeus and Henriette Cramer
Mobile Life Centre
Stockholm, Sweden
{ylva, henriette}@mobilelifecentre.org

Hannu Korhonen and Joseph 'Jofish' Kaye
Nokia Research
Tampere, Finland and Palo Alto, CA, USA
{hannu.j.korhonen | jofish.kaye }@nokia.com

ABSTRACT
This workshop aims to explore different approaches and challenges in studying playfulness as a mode of interacting with mobile technology. Researchers, designers and developers with interest in this theme are welcome to participate in a full day activity of demos, presentations and discussions. In particular, our emphasis is on how to introduce, explore and understand playful interaction in mobile applications used in the wild.

Categories & Subject Descriptors
K. Computing Milieux: K.0 GENERAL; J. Computer Applications: J.0 GENERAL

General Terms
Design, Human Factors, Theory

Keywords
Mobile interaction, Playful Interaction

1. INTRODUCTION
Playful, spontaneous and joyful experiences have recently become an increasingly important theme in HCI – drawing partly on a vision of a society where enjoyment, experience and play is regarded as essential and important for human well being [4]. This also relates to results from empirical studies, where the increased focus on natural use settings have shown how various aspects of enjoyment often seems impossible to neglect completely from how people use technology. A very clear example is Jarkievich et al's study of children's use of mobile phones in their everyday after school practices [6], but playfulness is also observed in studies of adult users in highly serious work settings [10].

We believe that mobile devices are especially interesting to study in this respect. First, mobile devices include a range of interesting sensors and media facilities (GPS, Sensors, Camera) which potentially enable extended possibilities for playful interaction [5]. The widespread use of mobile devices also means that they are used in many different contexts, including social settings where playful activities emerge easily. With respect to this, mobile devices are used as mediators in social interaction both remotely and locally. Moreover, people carry mobile devices with them, making for very personal, smooth, and habitual practices,

integrating some play in daily routines, in transitional 'non-places', and while waiting. A simplistic example is how people no longer have to 'stop' what they are doing and go away to participate in e.g. an online social network, instead such activities may run in parallel and on top of other activities. These are all aspects that have been extensively studied and addressed in e.g. ubiquitous gaming [see e.g. 1].

2. WORKSHOP THEMES
An overarching theme of the workshop is to discuss what kinds of experiences can be considered playful, especially as there are many uncertainties as to how playful experiences can be addressed in design as well as in research. Play and playfulness are concepts with many and overlapping meanings. By *playful* we here refer to an everyday understanding of aspects of interactions that provide pleasure or amusement. This naturally includes a very range of activities, contexts, artefacts and social constellations. Following up on the works of [e.g. 2, 6, 9], we would here like to initiate a discussion that goes beyond fun and pleasure as a definition of playful experiences.

More specifically, this workshop will be conducted by addressing a series of challenges that we see as essential to overcome in order for a discourse grounded on playful experiences to become fully integrated into the mobile HCI community. These challenges are briefly outlined below.

2.1 Inducing a playful attitude
Obviously, there are large variations between people and contexts in what is considered pleasurable, playful or fun. What constitutes an enjoyable experience for one person in one setting is highly annoying and unwanted for another. Cziksentmihayli [3] did for instance observe how people who despite similar or same professions had completely different experiences of their work. A conclusion from his analysis was that some of the workers took on a playful approach to their (by others) seemingly tedious tasks, thus getting another and richer experience of the activity. This and other studies indicate that playfulness to a large extent is a matter of *human attitude*, rather than an intrinsic property of the activity itself.

An open question concerns how to study and evaluate a phenomenon that is experiential, attitude dependent and may change over time and between contexts?

2.2 The open-ended nature of play

Rather than only pre-defined activities such as games, playfulness is often associated with casual leisure [12] activities, which tend to develop on the spot, by the participants themselves, without assumptions of *a priori* commitments of what exactly should be completed or performed. Designing explicitly for and studying playfulness with mobile technology similarly brings about challenges of allowing for unexpected uses and interpretations.

If users should be allowed to engage in multiple possible interpretations of a technology, this puts the designer in a new position in terms of how to set up goals for their work and also how they orient themselves towards these goals. Sengers and Gaver [11] have framed it as a research challenge of "staying open to interpretation", suggesting that designers should not have only one preferred interpretation in mind of how their system should be taken into use.

An open question then is how to approach what to evaluate and study, and how to make meaningful sense of what constitutes a 'successful' design?

2.3 Fun creating shared identity

In addition to being an aim unto itself, fun also provides certain opportunities for improving existing interactions. Playing together provides shared opportunities for creating and substantiating identity. For example, in the decisions about how and what families play together, families make and enact statements about they value as a family. At its most basic, a family that emphasizes soccer may be making different statements to a family that emphasizes chess, but choices about what games to play and how are significant, and as designers, mediators and scholars of mobile playfulness we need to explore and be aware of the possibilities we allow.

2.4 The dark sides of fun

There is a tendency in the literature to separate fun from more negative experiences. However, temporary, seemingly negative attributes of experiences can be a critical part of a broader positive, playful and rewarding experience. Challenges and seemingly negative aspects such as 'strenuousness', waiting, physical hardship, unfriendliness, and tension are usually essential elements of experiences that people categorise as 'fun' (achieved with moments of 'relief' or excitement), well documented in games as well as in leisure activities such as hunting [8] and spectator sports [5].

How may we, as researchers, address these more negative aspects as part of the activities that we design for and study? What may be the challenges in terms of e.g. sensitivity to the value systems of our users and perhaps even research ethics? This may be especially relevant as this research may push existing boundaries and taboos. How can we make use of the tedious and boring, e.g. lost moments, waiting, stress, when designing for, studying, and understanding playful experiences?

2.5 Playing across contexts

Notions such and play and learning, work and leisure, as well as casual and serious technology use, are often presented as conceptual dichotomies that may be difficult to combine. However, to many people, life is not meaningful to compartmentalize in such a way. Practices and technologies –

perhaps especially mobile ones – travel between the different social spheres of our life, accompanying users wherever they go. As work, leisure and social activities blend together, and amateur and professional practices becomes harder to distinguish, we need to explore the role of technology that works to support people in this rich range of everyday experiences.

How may we investigate playful experiences when these are in a constant move between activities, use settings and social contexts?

3. GOALS

The workshop aims to embrace the above broad range of challenges, investigating different ways that researchers approach these in their current work in mobile HCI.

The three primary goals for the workshop are:

- To bring together a community of researchers and designers who are creating "playful" interactive technologies to share and develop understandings;
- To generate a shared set of explanatory concepts that can be used for creating a theoretical foundation for investigating playful experiences with mobile technology;
- To identity fundamental differences, similarities and synergies between our different approaches in order to lay out a common research agenda.

Parts of the workshop will be to investigate existing systems that enables and encourages users to take on a *playful attitude*. In designing technology for playful experiences Korhonen et al [9] state: *"Our hypothesis is that playful experiences emerge from interactive products that allow users to have a playful approach while using them"* (p. 277). By investigating this theme we aim to generate a greater understanding in what constitutes enjoyment in using a product; the different kinds of playful experiences a mobile interactive product can elicit, and how to design in a manner that evokes a playful approach to interaction.

4. STRUCTURE

We hope to bring together a community of researchers who are investigating different dimensions of playfulness in the use of mobile technologies.

4.1 Participation

Before the workshop potential participants submit a short position paper related to their own experiences with workshop issues, themes and goals. The paper should be maximum 4 pages in the Mobile HCI paper format.

Participants are expected to read all position papers prior to the workshop.

4.2 At the workshop

The workshop is split into three sections. In the first section of the morning participants give a five minute presentation of themselves and their position papers, and how a perspective of playfulness is reflected in their own concrete research practice. This sets the stage for coming to a shared understanding of each other's work.

In the second section of the workshop we work together to identify and discuss playfulness concepts that may especially important for the design of mobile technology. This is guided by

presentation of interaction scenarios and demonstrations that the participants have brought to the workshop. For this activity, each participant is expected to bring and present an *example scenario* with an existing mobile system they consider playful. This we hope may be useful to get a broadened discussion on how openings towards a playful attitude are manifested in these particular designs.

In the final section of the workshop, new small groups iterate their research topics and brainstorm future questions in order to integrate ideas and directions with other group members. The session concludes with the formation of a preliminary agenda for doing research on playful experiences with mobile technologies.

4.3 After the workshop
We aim to develop a shared set of understandings and identification of differences, similarities and synergies between our research approaches. The main outcome for the workshop is the formation of a small network of research for investigating and understanding playful experiences with mobile technology.

A summary of the discussions will be presented in a jointly written report, hopefully with plans and interests for a follow up workshop on a similar theme. One of the submitted workshop papers will be selected to appear in a special issue of the International Journal of Mobile Human Computer Interaction (IJMHCI).

5. Organisers
Ylva Fernaeus is a researcher at SICS and the Mobile Life Centre and works in the areas of human-machine interaction, with special interest in casual, mobile and physical interaction. Her PhD work at Stockholm University focused on creative, bodily and social forms of computer programming with children. Currently, she explores novel robot technologies and is especially interested in different ways for people to control, interact with, and program their own artefacts.

Henriette Cramer is a ERCIM postdoctoral fellow at the Mobile Life Centre and Swedish Institute of Computer Science. She is interested in people's reactions to semi-autonomous (mobile) technology, creatures and 'things'. She's currently focusing on mobile apps supporting playful interactions and social connectedness.

Hannu Korhonen is a senior researcher at Nokia Research, Finland. He has been working in game research area, focusing on developing playability heuristics that are used with expert review method. Recently, he has been studying the nature of user experience, especially playful experiences on mobile devices, which applies game research knowledge to regular software design to make them more engaging, attractive, and most importantly, more playful for the users.

Joseph 'Jofish' Kaye is a Senior Research Scientist & Ethnographer at Nokia Research, Palo Alto. His work concentrates on experience-focused HCI, and particularly evaluation that encourages open-ended and exploratory approaches. His recent work explores how families' values influence their technology choices.

REFERENCES
[1] Bichard, J-P , Waern, A. (2008). Pervasive play, immersion and story: designing interference, In proc. DIGRA'08

[2] Costello, B. and Edmonds, E. (2007). A Study in Play, Pleasure and Interaction Design. In proc. of DPPI'07.

[3] Csíkszentmihályi, M. (1990). Flow: The psychology of optimal experience. New York: Harper Row.

[4] Davenport, G., L.E., H., and Thomas, M. (1998). Fun: A condition of creative research. IEEE Multimedia, 1998. 5(3): p. 10-15.

[5] Esbjörnsson, M., Brown, B., Juhlin, O., Normark, D., Östergren, M., and Laurier, E. (2006). Watching the cars go round and round: Designing for active spectating. In proc. of CHI'06. ACM.

[6] Håkansson, M. (2009). Playing with Context: Explicit and Implicit Interaction in Mobile Media Applications, in Man-Machine Interaction, Department of Computer and Systems Sciences Stockholm University.

[7] Jarkievich, P., Frankhammar, M., and Fernaeus, Y. (2008). In the hands of children: Exploring the use of mobile phone functionality in casual play settings. In proc. of Mobile HCI. ACM.

[8] Juhlin, O. and Weilenmann, A. (2008). Hunting for Fun: Solitude and Attentiveness in Collaboration. In proc. of CSCW'08.

[9] Korhonen, H., Montola, M., and Arrusvuori, J. (2009). Understanding playful user experience through digital games. In proc. of International Conference on Designing Pleasurable Products and Interfaces.

[10] Mentis, H.M., Reddy, M., and Rosson, M. (2010). Invisible Emotion: Information and Interaction in an Emergency Room. In proc. of CSCW'10.

[11] Sengers, P. and Gaver, W. (2006). Staying Open to interpretation: Engaging multiple meanings in design and evaluation. In proc. of DIS'06. 99 - 108.

[12] Stebbins, R.A. (1997). Casual leisure: a conceptual statement. Leisure Studies, 1997. 1997(16): p. 17–25.