
Jamming and researching the Play BOOST framework

Elena Márquez Segura

Uppsala University, Uppsala,
Sweden*,
and Exertion Games Lab, RMIT
University, Melbourne, Australia[☉].

*elena.marquez@im.uu.se

☉elena@exertiongameslab.org

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Abstract

In this paper, I will try to motivate my participation in the Game Jam [4Research] at CHI 2014 by introducing the research interests and the research question that I would like to address during the event. Then, I will conclude with my personal position regarding this game jam, and an abridged of my bio, and expertise.

Author Keywords

Game, play, playfulness, movement, design, social play, Play BOOST, design framework, technology—supported.

ACM Classification Keywords

H5.m. Information interfaces and presentation (e.g., HCI): Miscellaneous.

Introduction

The challenge of designing for games and playful activities has moved past the technical, to focus on how to design and evaluate for a design space where the threads of the digital technologies and the physical world interweave and entangle creating a hybrid fabric where play can take place [5].

But how can we bridge between the digital and physical world where play is enacted and unravel the tangle of this hybrid fabric? How can we braid the physical and



Figure 1 Entertainment Kids Workshop in one school in Kathmandu, Nepal, part of the ACE 2013 conference. This workshop formed part of the last studies done for the Oriboo, the first case example used in my licentiate thesis [10].

digital threads to spur playful experiences? In my PhD thesis, I'm focusing on a concrete fabric of hybrid play: co-located physical and social play, and I propose a framework for design in this scenario: what I called the PLAY BOOST (BODily-Oriented, Social, and Technology—supported) framework [10].

The framework is elaborated and substantiated through design concepts drawn from literature – in the fields of movement-based games, social play, physical play, and playfulness ([1, 2, 3, 4, 5, 6, 11, 12, 13], just to name but a few references)– as well as from my own experiences designing movement-based body games and physical and social activities [8, 9, 10].

The Play BOOST framework

In my thesis, I'm using the PLAY BOOST framework as a tool in the form of lenses, which can be used both for opening up the design space, and for studying playfulness. The framework emphasizes the interplay between the formal structure of the activity and how it is implemented using certain design resources: the technology and the socio-spatial setting.

I have used a particular perspective to spur and study playfulness, in which play is understood as "free movement within rigid structures" [12].

With this approach, I use both the formal elements and the design resources to design a 'rigid' structure for the activity, which drives it. Then, I suggest to design for 'free movement' using concepts from game studies, such as self-effacing play [4], 'unachievement' and festive contexts [13], coliberation [3], and transformative play [12].

This makes the structure of the activity flexible enough to afford its exploration, appropriation, bending, and transgression by the players. In the Play BOOST framework, I encourage to pay attention to when this happens, keeping an eye out for how, and what happens [10].

A research question

Two case studies have been used to develop the PLAY BOOST framework: the first one is about designing body games for a limited movement-based game platform, the Oriboo [9, 10] (See Figure 1); the second case study is about re-designing rehabilitative physiotherapy sessions for the elderly of an assisted living facility [8, 10] (See Figure 2, and 3). Both share the traits of being technology-supported, co-located, physical, and social activities [10].

The framework has been very useful in both scenarios. However, having been both design cases conducted by myself, the usefulness of the framework remains in the very subjective sphere of my personal assessment. Therefore, the first research question:

Is the Play BOOST framework a suitable design and analysis tool for game designers in a game jam like the Game Jam [4Research]?

Unveiling the answer to this question, as well as other secondary follow-up question, like *why?* will surely shed some light to the following steps in my PhD. More questions spur from the main one: *Is the Play BOOST framework clear enough to be understood? Is it ready to hand? If not, what is missing/lacking? What are its strengths and weaknesses? Does it inspire the designs? In which ways? Does it help in the evaluation of the*



Figure 2 First design iteration of the PhySeEar project [8].



Figure 3 Second design iteration of the PhySeEar project, second case example in my licentiate thesis [10].

designs? How? Is it preferred as an inspiration tool for
 To answer all these questions, I will prepare a handout to give to the colleagues in my group prior to the workshop, as well as some questionnaires and/or semi-structured interviews. During the workshop, if possible and non disruptive to the game jamming, I will briefly explain my research question to my teammates. When discussing what to design, I will suggest designing for co-located social and physical play. If the group embraces this suggestion and is happy to try out the Play BOOST framework, I will provide the handouts and will very briefly introduce it. Finally, at the end of the workshop, I will hand in the questionnaires and/or conduct the interviews.

A position statement

I see the Game Jam [4Research] as a great opportunity to help me see my work through the eyes of other researchers and game designers and therefore obtain valuable feedback that will help me in my PhD.

I am lucky enough to have participated in last year's Game Jam at CHI 2013, which I truly enjoyed. That was the first game jam in which I was involved and it surprised me positively. It was exciting and really fun, which was expected. However, I recall that it inspired me: I wondered about the potential that game jamming had for research and thought it would be great to try it out in my research environment.

However, time and resources constrains pushed this idea to the background and I never got to make it happen.

Fortunately, the seed of using such these events in research were there for more than myself, and this

year's game jam revolves around its use as a research method.

In this paper, I have posted several research questions that I would very much like to address during the game jam. However, I am aware that I might not manage to answer them—my experience from last year tells me how much time is pressing, for instance. Be that as it may, looking into *whether* I am able to pursue the goal of researching my research question(s), and the possible reasons behind, are interesting questions for me as well. And finally, even in the worst-case scenario of none of these questions being addressed, my experience in last year's game jam tells me that it is still worth participating! We had so much fun both designing our game and playing all of the rest of the games! Not to mention the great people I got to know. For this and much more, I would really like to repeat!

Short bio, skills, and expertise

This is Elena Márquez Segura, Ph.D. student in Uppsala University, Uppsala, Sweden. I find myself in the middle of my PhD, having recently presented my licentiate thesis [10] in Mobile Life @ Stockholm University, under the supervision of Annika Waern and Kristina Höök. The licentiate is a thesis that, once mandatory in Sweden and now optional, compiles the work done during the first years of the PhD and draws the future plan for the rest of the PhD. I was lucky to count with Oskar Juhlin as my examiner, and Florian 'Floyd' Mueller as my opponent.

After the presentation of my licentiate, I moved to Melbourne, for a three-month internship in the Exertion Games Lab @ RMIT University, supervised by Florian 'Floyd' Mueller.

Regarding my background, I have a Bachelor & Master degree in Telecommunication Engineering (Escuela Técnica Superior de Ingenieros, Sevilla) and I have also studied a master in Interactive Systems Engineering (KTH, Stockholm). During my master thesis, I was part-time employed in Mobile Life, becoming a full-time research assistant at the end of it, which continued until I started my PhD in the centre at the end of 2011. Currently, my research revolves around designing for and studying playfulness in co-located social and physical activities.

Regarding my skills, my mixed background grants me the possibility to design, balancing user and technology perspectives. I have experience in designing games and game-like activities that feature the body as key in the interaction. I also have extensive experience in conducting user studies with games, robots and robotic technology (LIREC project [7]). More about me in:

- <http://mobilelifecentre.org/people#elena-marquez-segura>, and
- <http://elenamarquezsegura.wordpress.com/>

References

- [1] Bekker, T., Sturm, J., and Eggen, B. 2010. Designing playful interactions for social interaction and physical play. In *Personal Ubiquitous Comput.*, 14(5):385–396.
- [2] De Kort, Y. A. W. and Ijsselstein, W. A. (2008). People, places, and play: player experience in a socio-spatial context. In *Computer Entertainment*, 6(2).
- [3] De Koven, B. 2011. On coliberation: exploring the experience of having fun together. <http://www.deepfun.com/coliberation>

[4] Gaver, B. 2011. Designing for homo ludens, still. In Binder, T., Lowgren, J., and Malmberg, L., editors, (Re)searching the Digital Bauhaus, pages 163-178. London: Springer.

<http://www.gold.ac.uk/media/46gaver-ludens-still.pdf>

[5] Isbister, K. 2010. Enabling social play: A framework for design and evaluation. In Bernhaupt, R., editor, *Evaluating User Experience in Games: Concepts and Methods*. Springer-Verlag, 1st edition.

[6] Lindley, S. E., Le Couteur, J., and Berthouze, N. L. 2008. Stirring up experience through movement in game play: effects on engagement and social behaviour. In CHI '08, pp. 511–514.

[7] LIREC project. <http://lirec.org/>

[8] Márquez Segura, E., Márquez Segura, L., López Torres, C. 2012. PhySeEar. Moving yourself to shine and sound in geriatric physiotherapy interventions. In *PervasiveHealth '12*, pp.179–182.

[9] Márquez Segura, E., Waern, A., Moen, J., and Johansson, C. 2013. The design space of body games: technological, physical, and social design. In CHI '13. ACM, New York, NY, USA, pp. 3365–3374.

[10] Márquez Segura, E. 2013. Body Games. Designing for movement-based play in co-located social settings. Licentiate thesis of Philosophy, DSV, Stockholm University.

[11] Mueller, F. F., Edge, D., Vetere, F., Gibbs, M. R., Agamanolis, S., Bongers, B., and Sheridan, J. G. (2011). Designing sports: a framework for exertion games. In CHI '11, pp. 2651–2660, New York. ACM.

[12] Salen, K. and Zimmerman, E. 2003. Rules of Play: Game Design Fundamentals. The MIT Press.

[13] Wilson, D. (2011). Brutally unfair tactics totally OK now: On self-effacing games and unachievements. *Game Studies*, 11(1).