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Fictional Game Elements 2016

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Abstract
Gamification has been widely accepted in the HCI community in the last few years. However, the current debate is focused on its short-term consequences, such as effectiveness and usefulness, while its side-effects, long-term criticalities and systemic impacts are rarely raised. This workshop explores the gamification design space from a critical perspective, by using design fictions to help researchers reflect on the long-term consequences of their designs.

Author Keywords
Gamification; Critical Design; Design Fiction.

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H.5.m. Information interfaces and presentation (e.g., HCI): Miscellaneous.

Introduction
In the last years, we seen the spread of different non-ludic applications and services leveraging game elements in their designs. Gamification is defined as the use of "game design elements in non-game contexts" [6], and has gained popularity as a design technique capable of increasing the user engagement, as well as pushing performances and modifying behavior (e.g. [1, 4, 5]). However, HCI community is discussing its current role gamification in design. Gamification does

have positive impacts in terms of effectiveness on certain target behaviors [7], but its ability of immersing the user in a pleasurable experience has been put into question [11], and it has been suggested to investigate new paths for designing for gamification [12].

It clearly appears that a discussion on the long-term and social impacts of gamification is in need, as it has the power to turn "normal" experiences in enjoyable ones, which could entail different and somehow unexpected side-effects or systemic consequences. Such consequences are rarely taken into account in the current gamification debate, which gives for granted a number of assumptions related to games, enjoyment, and behavior change, that actually should be discussed in deep.

It is possible, in fact, that turning a serious experience in a "fun" one could not always represent the optimal choice for users, who could also be pushed to pursue goals that they did not freely choose, or to accept of being involved in dynamics of which they are not fully aware. Design fictions, then, seem a technique that can address the exploration of such implications of gamification design.

Design fictions

HCI research seems to assume that technology makes users' lives "more enjoyable, easier, better informed, healthier and more sustainable" [9]. This premise leads researchers to focus on specific, short-term impacts of their prototypes. However, technology has consequences on both individuals and society, and long-term effects are often ambivalent, difficult to predict, and systemic [10]. Linehan et al. [9] stress that HCI researchers are not usually engaged in critical evaluations of the future consequences of their work.

Although some exceptions exist [13, 14], this attitude is also present in the gamification rhetoric, where gamification techniques are discussed with reference to their effectiveness and usefulness, but rarely in terms of their capability of systematically impacting on people's life and producing long-term side-effects. To explore these aspects, it is necessary to adopt a critical perspective on design, instead of reinforcing its embedded values [2].

Design fictions present "fantasy prototypes" in plausible near futures [3] and support the creation of a discursive space where technology assumptions may be put into questions, exploring different alternative futures [8]. In this volume we explore how design fictions can be used to make us reflect on the unexpected outcomes of gamification.

Jonah Warren in "The Behavior Pioneers Application: An Intentional Community Prototype" describes a fictional questionnaire that has to be completed by applicants to an intentional community devoted to gamifying all aspects of its members' lives.

Assia Alexandrova, Lucia Rapanotti, and Ivan Horrocks in "RE-PROVO: An Evaluation of Gamification in a Law Enforcement Organization" outline a prototype of an online discussion game designed to support the analysis and critique of functional requirements for legacy system replacement and promote creativity.

While Bernd Hollerit, Kenji Tanaka, and Helmut Prendinger in "Contribution of affordances to

gamification" propose theoretical reflections about the effects of affordances in gamification

Gustavo Tondello and Lennart Nacke in "Gamification Research: a 50-years Retrospective from PBLs Towards Conscious Evolution" present a critical design fiction in which they describe how gamification research could evolve in the new years

Lal Bozgeyikli, Andrew Raij, Srinivas Katkoori, and Redwan Alqasemi, instead, in "Effects of Environmental Clutter and Motion on User Performance in Virtual Reality Games" explore the effects of environmental clutter and motion on game design for virtual reality

Alessia Calafiore and Amon Rapp in "Gamifying the city pervasive game elements in the urban environment References" envision how a pervasive gamified app may change the relationship between citizens and the urban environments in which they live.

Finally, Seamus Forde in "Including Non-Users and Public Perception in Future Gamification Research" highlights the importance of considering the differences between users and non-users when designing for gamification.

References

1. Gabriel Barata, Sandra Gama, Manuel J. Fonseca, and Daniel Gonçalves. 2013. Improving student creativity with gamification and virtual worlds. *In Proceedings of the First International Conference on Gameful Design, Research, and Applications (Gamification '13)*, 95-98. http://dx.doi.org/10.1145/2583008.2583023
2. Shaowen Bardzell, Jeffrey Bardzell, Jodi Forlizzi, John Zimmerman, and John Antanitis. 2012. Critical design and critical theory: the challenge of designing for provocation. In Proceedings of the Designing Interactive Systems Conference (DIS '12), 288-297. http://doi.acm.org/10.1145/2317956.2318001
3. Mark Blythe. 2014. Research through design fiction: narrative in real and imaginary abstracts. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems* (CHI '14), 703-712. http://doi.acm.org/10.1145/2556288.2557098
4. Joseph A. Cafazzo, Mark Casselman, Nathaniel Hamming, Debra K. Katzman, Mark R. Palmert. 2012. Design of an Health app for the self-management of adolescent type1 diabetes: a pilot study. *J. Med. Internet Res.*, 14, 13.
5. Laurentiu Catalin Stanculescu, Alessandro Bozzon, Robert-Jan Sips, and Geert-Jan Houben. 2016. Work and Play: An Experiment in Enterprise Gamification. In *Proceedings of the 19th ACM Conference on Computer-Supported Cooperative Work & Social Computing (CSCW '16)*, 346-358. DOI=http://dx.doi.org/10.1145/2818048.2820061
6. Sebastian Deterding, Dan Dixon, Rilla Khaled, and Lennart Nacke. 2011. From game design elements to gamefulness: defining "gamification". In *Proceedings of the 15th International Academic MindTrek Conference: Envisioning Future Media Environments (MindTrek '11)*, 9-15. http://dx.doi.org/10.1145/2181037.2181040
7. Juho Hamari, Jonna Koivisto, and Harri Sarsa. 2014. Does Gamification Work? – A Literature Review of Empirical Studies on Gamification. In *Proceedings of the Hawaii International Conference on System Sciences (HICSS '14)*, 3025-3034.
8. Derek Hales. Design Fictions an Introduction and Partial Taxonomy. Digital Creativity. Vol 24. Issue 1. 2013. Special Issue: Design Fictions 30 Apr 2013
9. Conor Linehan, Ben J. Kirman, Stuart Reeves, Mark A. Blythe, Joshua G. Tanenbaum, Audrey

Desjardins, and Ron Wakkary. 2014. Alternate endings: using fiction to explore design futures. In CHI '14 Extended Abstracts on Human Factors in Computing Systems (CHI EA '14), 45-48. http://dx.doi.org/10.1145/2559206.2560472

10. Lisa P. Nathan, Batya Friedman, Predrag Klasnja, Shaun K. Kane, and Jessica K. Miller. 2008. Envisioning systemic effects on persons and society throughout interactive system design. In Proceedings of the 7th ACM conference on Designing interactive systems (DIS '08), 1-10. http://dx.doi.org/10.1145/1394445.1394446
11. Amon Rapp. 2015. A Qualitative Investigation of Gamification: Motivational Factors in Online Gamified Services and Applications. *International Journal of Technology and Human Interaction*, 11(1), 67-82. Doi: 10.4018/ijthi.2015010105
12. Amon Rapp. 2015. Designing interactive systems through a game lens: An ethnographic approach. *Computers in human behavior*, Doi: 10.1016/j.chb.2015.02.048
13. Jesse Schell. 2010. Visions of the Gamepocalypse. Presentation, Long Now Foundation, San Francisco, CA, July 27, 2010.
14. Evan Selinger, Jathan Sadowski, Thomas P. Seager. Gamification and Morality. In The Gameful World: Approaches, Issues, Applications, 577–618. Cambridge, MA: MIT Press.