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Fictional Game Elements: Critical Perspectives on Gamification Design

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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 will explore 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.

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

Introduction
In the last few years, we witnessed the spread of a number of non-recreational services and applications that make use of game elements. Gamification, commonly defined as the use of "game design elements in non-game contexts" [6], gained an increasing popularity as a means for enhancing the user engagement, increasing performances and changing behavior in a variety of contexts (e.g. [1, 4, 5]). Despite this growing interest, HCI community

animatedly debated the role that gamification could play in design. If, on the one side, it has been highlighted that gamification may have positive psychological and behavioral outcomes [7], on the other side, it has been questioned in its capability of providing a truly engaging experience [11], and it has been suggested to explore new ways to design for gamification [12]. However, the current discussion appears to be focused on its short-term effectiveness and usefulness, while other, and perhaps more important, aspects are not receiving a similar attention. Side-effects, long-term and systemic consequences, ethical and societal impacts and concerns are rarely raised in the current gamification rhetoric, and a variety of assumptions related to games, fun, and enjoyment are far from being called into question. In this workshop we want to elicit a critical discourse about gamification design. Primary aim of the workshop is to create a debate that can make researchers and designers reflect on the consequences of their work, by framing gamification in unusual, ambiguous, provocative perspectives, through the design of fictional prototypes in plausible distant futures, as well as in utopian or dystopian societies.

Background and Motivation

It has been noted that HCI research shares the common assumption that technology and design will make people's lives "more enjoyable, easier, better informed, healthier and more sustainable" [9]. This premise leads researchers to focus on the singular, short-term consequences of their designs, while it has been largely recognized that technology affects both individual and society, with long-term impacts that are complex, emergent, ambiguous and linked to other changes [10]. Linehan et al. [9] emphasized that HCI researchers do not commonly produce critical evaluations of the potential future consequences of their designs. With some remarkable exceptions (e.g. [13, 14], this attitude can also be encountered in the current gamification debate, where gamification techniques are mostly discussed in terms of their effectiveness, usefulness, and by and large capability of producing positive impacts on experience and behavior. However, this rhetoric appears to be informed by a variety of assumptions that are rarely called into question: for example, that making an experience more enjoyable and engaging is *per se* a valuable outcome; that increasing the performances by exploiting "fun" elements is always desirable; that changing behavior by leveraging "gameful" reinforces makes the behavioral intervention more acceptable and somehow less questionable; that a game frame is applicable to every domains and that this, if well designed, will turn the experience to the better.

In this workshop, instead, we aim at deconstructing these and similar premises by highlighting the potential future, ambivalent and systemic consequences of gamification designs, in order to produce a critical discourse on gamification. A critical perspective on design, instead of reinforcing needs and values as they are interpreted in the present society, tries to disrupt and transgress such constructions, by embodying cultural critique in designs [2]. We want to engage HCI researchers in asking not only *could it be done?* but also *should it be done?* and *how would society look like if this will be done?*. We want to explore possible answers to questions like: *Are there fields in which gamification should not be employed? What are the unexpected impacts/side effects that a pervasive gamification design could produce on the individual and*

society (e.g. addiction, isolation, escapism, hedonism)? What if entire aspects of our life will be turned into a game? What if novel, more effective, immersive, and pleasurable game elements will be successfully employed in gamification design? Is gamification implicitly reinforcing some aspects of our society (e.g. consumerism, individualism)? To answer these questions we propose to look at *research through design* and, in particular, at design fictions. They present "fantasy prototypes" in plausible near futures, on the assumption that designs can be usefully discussed without necessarily making them [3]. These fictional designs create a discursive space where diverse kinds of future may emerge, exploring at the same time the present condition [8]. Although their growing popularity in HCI community, design fictions have not been used to produce critical reflections on specific design domains. In this workshop, we want to apply them to the gamification field, in order to elicit discussions about opportunities and criticalities of the usage of game elements in different aspects of our lives.

To summarize we are looking for insights that can question what is currently taken for granted in gamification designs and enrich our imagination when dealing with them, also to envision radically new applications of such techniques. Relevant workshop topics include, but are not limited to: i) Envisioning of future and unexpected uses of gamification techniques; ii) Theoretical reflections about how games and gamification could change our lives in the future; iii) Critical insights on side-effects of gamification design; iv) Ethical issues related to the employment of gamified technologies; v) thought-provoking designs of novel gamified applications; vi) novel game design elements; vii) fictional prototypes, evaluations, scenarios of "critical" gamified systems.

Novelty and Expected Impact

The Design Futures journal has recently published a special issue on design fiction. CHI '16 has dedicated an alt.chi session to design fiction. At NordiCHI '16 is planned a track on "Future Scenarios". Our workshop is timely and interesting for a large audience of HCI, game and gamification researchers and designers. Until now, no workshop has explored the long-term and systemic consequences of gamification through a critical lens. Our workshop aims to use design fictions to fill this gap helping designers envision the unexpected consequences of their designs. Through group activities we aim at gathering an interdisciplinary forum to create provocative concept designs that embody critical insights and deconstruct the current gamification assumptions. We expect to collect a "portfolio" of fictional prototypes that will be shared on the workshop website, making them accessible to a larger audience of researchers, to generate further discussions. We aim at involving not only those already interested in critical design approaches, but also mainstream HCI, game and gamification researchers in a critical reflection on their work.

Pre-Workshop Plans

The workshop website will go online before sending the CFP to all the major HCI, Games and Gamification mailing lists. We will accept submissions in two forms. First option is a standard position paper, where authors discuss one of the workshop topics, or describe how their area of expertise may be of interest for the workshop discussion. The second option is a contribution in the form of a "critical" design fiction, in

which authors may explore the future consequences of their work and of gamification design. Both the option should be 2-6 page long in the ACM Extended Abstract Format. Papers will be reviewed based on their relevance, quality and, mainly, potential to trigger insights for the design phase of the workshop.

Workshop Structure

The workshop will follow a one-day format. In the first part of the morning participants will have 3 minutes to present their work in a presentation madness session. This session will have the main function of generating insights for the following workshop phases. Then, participants will be divided in groups of 3-4 persons and each group will have to define collaboratively one "design challenge". A design challenge is formulated as a sentence beginning with "How might we…" and is intended as a question addressed to turn a problem area into an opportunity for design. Then, participants will have to envision new directions for solutions to address the design challenges individuated. They will be asked to push forward their imagination and produce thought provoking and "critical" ideas that could make visible the underlining assumptions of the current gamification designs. Each participant, in each group, will have 5 minutes to sketch 5 design ideas related to the design challenge defined in their group. Then, everyone will have 3 minutes to present their ideas to the rest of the group, while the group will have 2 minutes to constructively criticize the ideas presented. This format is aimed at quickly generating many solutions to a problem through sketching, exposition and critique. Then, the group will have 10 minutes to select the most promising solution that addresses the design challenge. In the afternoon each group will have to produce a fictional prototype enacted in a future narrative scenario (50 years forward in the future) where the imagined technology could become completely effective and pervasive among individuals and society. These scenarios could also take the form of utopias and dystopias to open spaces for reflection about the desired or undesired consequences of design. This activity will be conducted through the outline of narratives (e.g. written stories, storyboards) in which the main character will show, from her point of view, how the use of the proposed solution could impact on her life and on the world she inhabit. The workshop will conclude with the presentation of the scenarios produced.

Schedule

09:15 - 09:30 Introduction
09:30 - 10:30 Paper presentations
10:30 - 11:00 Coffee Break
11:00 - 12:30 Work group: design challenge definition and idea generation
12:30 - 14:00 Lunch
14:00 - 16:00 Work group: scenarios definition
16:00 - 16:30 Coffee Break
16:30 - 17:30 Presentations and discussion
17:30 - 17:45 Closing remarks

Post-Workshop Plans

After the end of the workshop we plan to: i) produce a report of the workshop to disseminate the insights emerged during the design phase; ii) include all the participants in a mailing list where they could discuss new ideas; iii) submit an article to ACM Interactions reporting the insights emerged during the workshop.

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