
Participatory Design for Serious Game Design: Truth and Lies

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Abstract

While the importance of participatory design has been acknowledged broadly within the field of HCI, its use in serious games is less frequent. This workshop will explore the underpinning reasons for this gap and advance the identification of philosophical, methodological and pragmatic opportunities as well as challenges. The workshop will serve as a venue for synthesizing productive practices and a future agenda that will benefit serious game design processes.

Author Keywords

Serious games; learning games; game design, participatory design; user-centered design, co-creation

ACM Classification Keywords

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

Introduction

Serious games, games with an agenda alongside entertainment [11], are paradoxical. They are *games*, which Suits has defined as voluntary attempts to overcome unnecessary obstacles [10]. Yet they are used instrumentally, thus their obstacles are often necessary. In some cases, serious games are not even played voluntarily. Serious games owe much of their lineage to entertainment-oriented games, frequently borrowing

not only their design tropes and mechanics, but also their design processes. As entertainment-oriented game design has traditionally been perceived as closer to artistic practice and more definitively serving aesthetic – or at least – hedonic rather than utilitarian ends, “designer-led” design has remained the norm, with players frequently only contributing once a testable prototype exists.

In light of the duality of expectations associated with serious games, strictly adopting the design processes of entertainment games will rarely yield effective serious games. General game design processes neither shed much light on how to embed and communicate particular ‘serious’ content within gameplay, nor on how to design for the values and expectations of specific audiences, both of which hold paramount importance in the design of serious games. While the former concern has essentially been the core focus of numerous serious and persuasive game design approaches, e.g. [11], the latter concern has typically been the focus of Participatory Design (PD).

PD activity is extraordinarily diverse and this diversity has not lent itself to a single theory or paradigm of study or approach to practices. At the same time, many PD researchers and practitioners agree on the importance of the value of democracy in civic, educational and commercial settings. Democracy has been seen as means to empower disempowered groups, to improve internal processes and to combine diverse knowledge to produce better services and products [9]. Reciprocity and symmetry of knowledge are also widely viewed as important; it is taken as a given that designers cannot, from the outset, understand the needs of end users. Thus, non-designer stakeholders should participate in, and contribute towards decisions that affect them [2] .

A number of PD methods concern gaining insight into stakeholder perspectives. For example, *design games* have been used as a means for designers and users to develop shared vocabulary [3]. Other methods concern how to engage users in co-creation. For example, in *future workshops* designers and users collaboratively identify current problems, propose future solutions, and identify ways to bridge the distance between the two [6]. We point out, though, that it is not just the use of these methods that characterizes design efforts as PD. Rather, it is when, how and why these methods are used that renders efforts as PD [5].

Philosophically and methodologically, participatory design has much to offer to serious game design. Indeed, in recent years growing numbers of researchers have reported adopting PD-inspired methods during serious game design processes. For example, Danielsson and Wiberg used PD-inspired approaches with teenagers to design a learning game about gender identity [4]. The authors of this proposal devised a game-specific PD method for engaging game-literate users in the design of learning game mechanics [7] as well as a participatory player-centered serious game design framework [1]. Unfortunately, these reports provide only limited details of how exactly (and if) design concepts were co-created between designers and players. Other reports emphasize that attempts to employ PD in serious game design processes happen neither smoothly nor automatically [1][7][8].

In fact, these difficulties of fit between PD and serious game design are not surprising: characteristic qualities of PD and serious game design are, along certain dimensions, in explicit tension with one another. PD posits that design should be a reciprocal activity and that users should co-create artifacts destined for them.

In contrast, serious game design requires the translation of specific domain knowledge and rhetorical perspectives into game systems, which have traditionally been designed via designer-led approaches.

Workshop Goals

In this workshop, we reflect on the reciprocal influence of PD and serious game design. Employing PD in serious game design requires us to extend conceptualisations of both PD and serious game design; a core workshop goal is to establish what happens within these extended spaces. We intend to explore and map out the ways in which researchers and practitioners of the games and PD communities have approached this in academic and industry settings alike. We will seek *case studies* of how PD has been used in different stages of serious game design processes, specific *methods* appropriated or developed for doing so, and details of problematic *dynamics* between PD processes and serious game design. We are interested in *critical reflections* on how and when PD approaches were helpful for serious game design, and new forces and considerations that the inclusion of PD may have introduced. We also wish to examine how PD can create *new forms of empowerment* for players in serious game design contexts. Case studies will be encouraged to address, while not being limited to, the following questions:

- How does expertise influence power dynamics between different stakeholders? How should future players be involved in the design of game systems if they do not understand how game systems work, or equally if they don't possess domain expertise?
- How should we build on the perspectives, values, and ideas of players if, as politically incorrect as it sounds, these are not game-friendly, clash with the

design aesthetics of game designers or contravene evidence from learning theories?

- Given the type of stakeholders involved in serious games design, what are the value dilemmas that can occur and how can these be overcome by fostering intragroup or co-design dynamics?
- What do researchers and users expect from PD and are these expectations realized in PD projects?
- In light of the empowerment focus of PD, how can we use game design processes to empower users, and what do we do when users do not want to be empowered?
- How might we use PD to foster an accountability culture in relation to the promise of serious games? How do we identify and address tokenism?

Workshop Outcomes

The workshop will define and prioritize a future agenda for PD and serious games design. This will be fostered before, during and after the workshop through a number of forums. A dedicated website will serve as a portal for forming and discussing this agenda within and outside the workshop. A special journal issue will be organized after the workshop and a SIG will be established to build a community of researchers with this shared interest. SIG meetings and follow up workshops at related venues will be discussed and planned during the workshop.

Tentative Plans and Schedule

Before the Workshop

The call for participation will be distributed via HCI, child-computer interaction, games and entertainment related mailing lists as well as specialized ones (e.g. ACM SIGCHI, British HCI News, etc.). The workshop organizers will also publicize the workshop via a

WordPress website. Submissions will consist of narratives on key workshop questions (appr. 500 words). Accepted participants' narratives will be made available and shared with other participants through the website. All participants will be asked to read the narratives and to add comments, questions or sum-up what they took away from each contribution.

During the Workshop

Themes explored during the day will be identified from participants' narrative submissions. The workshop will be structured to explore and discuss each theme. Emerging concepts and patterns will be identified and documented. In the second part of the workshop, the concepts identified earlier in the day will be explored in a more focused format. Participants will be asked to pick a concept they affiliate with. The resultant sub groups will lead on particular concepts. The purpose of this will be twofold: (1) teams will be encouraged to find cross links between their case studies toward collaborating on joint submissions for the special issue; (2) given the expertise within teams we will push the agenda further by formulating new research questions and plans to advance the respective themes.

After the Workshop (Dissemination)

The website will be maintained past the workshop to foster a community of interest for those who seek to apply PD processes in serious game design. The website will allow interested parties to contribute their own stories and share relevant events. Additionally, the workshop organizers are planning to propose a special issue. The call will be advertised to the serious games, HCI and PD communities.

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