The Role of Design Fiction in Participatory Design Processes

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ABSTRACT: Participatory design is in essence very malleable as any design technique could lend itself to it, as long as users and stakeholders are involved. Design fictions however, have more often been used as either a vehicle for critical designs, or as a sheer design tool, created by designers for designers as a means to drive ideation. In the 2010s however, the HCI community has opened up for using design fictions in conjunction with participatory methods and in parallel, researchers have started to explore the practices of creating and using fictions more thoroughly. In response to this, this workshop aims to explore if, how, and when in the design process participatory design practices and design fictions can be combined. We aim to create a first overview of the combined Participatory Design / Design Fiction process, including a set of practical examples. In this we invite not only interaction design researchers and practitioners, but also participants from related fields such as creative writers and artists in general.

Introduction
Definitions of design fiction range from Sterling’s [37] early description of them being a “deliberate blurring of fact and fiction”, to Bleeker’s [5] simple
“making things that tell stories” to Sterling’s [38] now revised and more complex “the deliberate use of diegetic prototypes to suspend disbelief about change.” Regardless of definition, we agree with Bleecker, who argues that “Design fiction is about creative provocation, raising questions, innovation, and exploration” ([5], p. 7). This characteristic of design fiction has been seen as highly suitable for participatory activities [26], but although design fictions have high potential in uplifting participatory design towards being playful and future-oriented, participatory design fiction research is still in its infancy; ergo the need for this workshop.

Participatory Design is a household approach in the HCI community; having been used since the 90ies [1]. As a result it has many established practices and methods [36] and has been used within a variety of different fields, e.g. urban planning [9], learning and education [13], health care [9] and political art [4]. In contrast, the use of design fictions as a tool for design and communication is comparably new and less widespread within the HCI community (with the notable exception of Future Workshops [23]). The use of fictions emerged as a tool first and foremost for critical design as advocated by Dunne and Raby [14,15] whose focus initially was mainly on creating artifacts of an imagined future. More lately, they have reoriented their practice towards what they call speculative fiction [16]; near-future technologies extrapolated and expressed in a way that opens up for speculation of consequences on this technology). Overall, there is a strong link between critical design and how its artifacts emerge from some sort of fiction or hypothetical future; see for example recent meta papers by Ferri et al [19], Malpass [31] and Auger [2].

In a similar vein, Sterling [38], Kirby [24], Reeves [34] and others have looked into the use and design of prototypes as carriers of fiction. Kirby [24] introduced the term diegetic prototypes, describing them as the objects and technologies that exist in movies, in this demonstrating “a technology’s need, viability and benevolence. [...] These technologies only exist in the fictional world — what film scholars call the diegesis — but they exist as fully functioning objects in that world.”

In parallel, the community has made efforts to look into the craft of writing fictions [6]. One example is the Poetics of Design Fiction, as outlined by Markussen & Knutz [32] which is centered around the practice of asking “what if” questions. Another approach is Imaginary Abstracts by Blythe and Buie [8,7], which are just that — fictive academic abstracts that “summarise findings of papers that have not been written about prototypes that do not exist” ([8], p. 703); the approach to write fictional research papers (as a form of diegetic
prototypes?) has also been advocated by Lindley and Coulton [28]. Addressing the need for a more structured methodology, the NordiCHI’16 conference had a track dedicated to the creation of design fictions [29]; in six full papers authors described their fictions, how they had been crafted and how they had or would be used. Interestingly, the processes shown in several of these papers pointed towards participatory practices. Two papers [17, 22] used extensive interviews as input, the latter also included myths as input. Kozubaev [27] instead placed a diegetic prototype in the wild and used Instagram and its art community as a tool for collecting others’ ideas on what the fiction could be like (see Figure 1). Several also used or aimed to use the fictions as discussion tools [11, 35, 39].

These new uses of fictions point to a will and need to create new practices. Within critical design, the fictions or fictional artifacts are often presented to audiences to create a space for discussion and debate in the spirit of critical design (e.g. Auger–Loizeau’s Tooth Implant design -- see [2]), albeit leaving the outcome of this debate undocumented. In contrast, participatory activities are increasingly being adopted in the creation and use of design fictions. Fictions have for instance been used when trying to elicit domain-specific insights from users, as in “Is this possible? What would happen if this technology/services/system was to exist?” (e.g. Prost et al [33]). Fictions also provide a means of tackling sensitive issues in co-design workshops, focus groups etc, especially when participants have conflicting interests (e.g. Baumann et al. [3]); talking about a fiction is then easier than talking about reality. In general, fictions seem to be used mostly as discussion tools in workshops with users and/or stakeholders (e.g. [12, 18], see Knutz et al. [26] for an overview). However we see an emerging practice of participatory creation of the design fictions themselves as well (e.g. [20, 25, 27] That being said, there is still much to explore within this vein.

In conclusion, we believe the time is right for the inquiry we wish to make in this workshop; if, when and how to combine Participatory Design and design fiction. Stipulating that design fictions are a valuable design and discussion tool, we would like to know how to utilize them within the realms of participatory design and co-creation with users or stakeholders. In which activities is it suitable to involve them, and which techniques could be used? And at which points in the process is it not beneficial to involve users? These questions are still open in design fiction literature.

With this workshop we are reaching out to anyone who has used participatory design and design fiction in conjunction — be it to collect data, information and stories on which to base the fiction; to co-create fictions; or to use fictions as a
design tool together with users or stakeholders. We want to know how they were combined, at which point(s) in the design process, what the consequences were (positive and negative), and what was learned from this. Basically, we are looking for examples that showcase how one can work with fictions in a participatory context as follows:

- In the **creation of fictions**: how do we go from data to fiction; how can we ideate and/or create fictions with or for participants?
- In the **use of fictions**: How can fictions be used -- to ideate concepts, to evaluate possible futures, to elicit hope, concerns and thoughts on a future, etc.
- In the **evaluation of fictions**: How can we determine which fictions will work best for what in a participatory context?

Our hope is that we together can begin to establish a Participatory Design Fiction process, using these examples as a starting point.

**Organizers**

**Sus Lundgren Lyckvi** has a PhD in Interaction design and has published several papers on design methods within as diverse topics as gameplay design, UX design, design for mobile collocated interaction, redesign of interactive artifacts, and temporal aspects of interactive artifacts, always returning to the craft (or magic if you wish) of ideating and designing. She has used various aspects of design fictions in her work and in teaching since the early 2010s. In 2016, she invented and chaired the Future Scenarios-track at the NordiCHI’16 conference. She is currently writing a serial flash fiction which can be found on Instagram under #talesfromcorrodia.

**Virpi Roto** is a research fellow in Aalto University, Department of Design. She has 20 years of experience on different forms of participatory design, from traditional user-centred design to co-design processes. Virpi is currently interested in methods that help stakeholders to digest and consider conflicting world views in co-design activities, and she sees design fiction as one such method. She has organized a number of workshops in HCI conferences, including two at NordiCHI and three at CHI.

**Elizabeth Buie** is currently working as a Senior UX Consultant at Sigma Consulting. Her PhD research explored the design of technology to support and enhance transcendent experiences, for which she created the Transcendhance design game [10] and three new forms of design fiction: extended imaginary abstracts, comparative imaginary abstracts, and design poetry.
Yiying Wu is a post-doc researcher in Aalto University. Her current project is writing design fictions on the future of automation in the marine industry, and using the fictions in co-design workshop to spark discussion on relevant complex societal issues among company participants. In her doctoral study, she brought speculative and critical thinking into service design.

In addition to the organizing team, we have started to recruit experts in this field, such as Thomas Markussen, and John Vines to the Program Committee.

**Website and Pre-Workshop Plans**

We have created a web site for this workshop and we will send out the call for papers upon acceptance. In addition to NordiCHI Announcements and CHI Announcements list, the call will be distributed to design fiction communities, such as design-fiction@jiscmail.ac.uk, and shared in social media. We will also use the same tailor-made contact list we used for the call for Future Scenarios at NordiCHI’16.

The submissions will be evaluated against methodological-related content, as we wish to learn more about the intertwined use of participatory design and design fictions. Thus, we will analyze the position papers, and identify when and how participatory vs fiction-oriented practices have been used. We will use this information in three ways:

- To help participants **focus** their short workshop presentations on what is unique and interesting with their project
- To create **discussion groups** as per based on the different experiences of the participants
- To **identify useful examples** for understanding the roles that design fiction can play in participatory processes.

**Workshop Structure**

The workshop aims to strengthen the community and thus it is based on intense but inspiring cooperative work. The aim is to analyse the examples provided by the participants, looking for activities in different design phases, together forming an outline for a Participatory Design Fiction process.

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1 http://blogs.aalto.fi/ParticipatoryDesignFiction
Schedule
09.00-09.30 Welcome. Workshop introduction
09.30-10.30 Participants present their examples. Working with a process framework.
10.30-11.00 Coffee and ice-breaker
11.00-12.00 Design task: Moving to Greenland
12.00-13.00 Lunch
13.00-13:45 Design task: Moving to Greenland
13:45-14:30 Presentations
14.30-15.00 Coffee break
15.00-16.00 What did we learn from the Design task? Working with a process framework.
16.00-16.30 Concluding the workshop. Defining future research questions, discussing potential publications.

Post-Workshop Plans
We expect the workshop to result in a number of relevant research questions that can be processed in further research as well as in joint publications, preferably in the form of a special issue. We also expect to strengthen the small but growing community of design fictioneers that wish to use their fictions in conjunction with participatory methods.

Call for Participation
Have you been using design fictions in your participatory design projects and would like to learn more? Or are you someone who creates fictions and is wondering how they can be put to use in a design context? If so, this workshop is for you.

In the last decade, there has been an increasing interest in using design fictions in conjunction with participatory methods. In parallel, researchers have started to explore the practices of writing and using fictions more thoroughly. Taking this work a step further, the topic of this one-day workshop is to explore why and how design fictions can help participatory design.

Thus we are reaching out to anyone who has used participatory design and design fiction in conjunction — e.g. to collect data, information and stories on which to base the fiction; to co-create fictions; to use fictions as a discussion tool together with users or stakeholders; or to evaluate fictions during participatory design. We wish to find out how they were combined, at which
point(s) in the design process, what the consequences were (positive and negative), and what was learned from this.

To ease analysing the different roles of design fiction in participatory design, we provide a template for position papers. In short, we’ll ask you to provide an example of when you used a fiction in a participatory design process.

Your example could encompass one or more of the following topics:

- The creation of fictions: how do we go from data to fiction; how can we ideate and/or create fictions with or for participants?
- The use of fictions: How can fictions be used -- to ideate concepts, to evaluate possible futures, to elicit hope, concerns and thoughts on a future, etc.
- The evaluation of fictions: How can we determine which fictions will work best for what in a participatory context?

Although your example does not have to involve any users or stakeholders per se, it should be clear how it benefits a participatory design process. For example, crafting a fiction for a specific outcome in a stakeholder workshop is not necessarily a participatory activity -- it may be the designers who create the fiction -- but still using it is part of a participatory process. Similarly, using focus groups to brainstorm around possible futures would be a participatory activity whereas The process of transforming that data into a fiction however, may or may not be participatory.

Position papers will be evaluated against their originality in combining participatory design and design fiction, and clarity of presentation. Submission is done via EasyChair by August 10, 2018. We aim to accept 12-18 submissions maximum. Upon acceptance, at least one author of each accepted position paper must attend the workshop and all workshop participants must register for at least one additional day of the conference.

We encourage potential Future Scenarios-authors to provide different content for this workshop.

For more information, visit http://blogs.aalto.fi/ParticipatoryDesignFiction

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