

Creative Entrances to Co-Design

Exploring Collaboration through Fiction, Fairy tales, and Games

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ABSTRACT

Design fiction, storytelling, and games provide creative entrances to co-design activities with different groups. These have emerged from a need to develop joint perspectives, a joint language and technological imagination as prerequisites for participatory approaches and co-design. For this workshop, we invite researchers, practitioners and designers who are working in settings that are socially and culturally diverse, who bring together people of a broad age range and who have tried creative approaches in their co-design activities. Working in groups to co-design and further develop creative entrances, this workshop will explore and reflect upon the potential of design fiction, storytelling, and games to foster creativity in co-design activities and to support (technological) imagination. As a result, we plan to co-host together with the participants a digital exhibition with the results of the workshop.

CCS CONCEPTS

• **Human-centered computing** → Interaction design; Interaction design process and methods; Participatory design; Human computer interaction (HCI) theory, concepts and models; Collaborative and social computing; Empirical studies in collaborative and social computing.

KEYWORDS

Participatory Design, Co-Design, Design Fiction, Speculative Design, Creative Methods, Playful approaches, Research through Design

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1 INTRODUCTION AND MOTIVATION

Co-design activities usually – and ideally – require the active involvement of users throughout different ways and stages of design and research activities. Co-design processes also create opportunities for higher user satisfaction [3, 29] increased user awareness and self-confidence [22] enhanced communication, decision-making, and problem-solving skills [16, 20] which can have a positive impact on a variety of attitudes in different aspects of the users’ daily lives. However, given the variety of voices, perspectives, and ideas among the involved users, as well as the potential appearance of unforeseen obstacles in co-design spaces, the outcomes of participatory and co-design activities can sometimes be unexpected or below the set goals or expectations, if any [11].

Design fiction, storytelling, and games have the potential to be powerful and creative entrances to co-design processes, as their nature allows for (technological) imagination without needing to rely on prior technical expertise and skills. Through the sharing and implementation of concrete techniques and specific scenarios, this workshop aims to reflect not only upon the potential benefits of co-design practices and entrances such as design fiction, storytelling,

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and games. Further, we want to discuss and reflect on potential obstacles and instances of failure. What have you tried, and you failed miserably?

The theme of PDC 2022, “Embracing Cosmologies: Expanding Worlds of Participatory Design”, provides a well-suited framing for our workshop’s scope, considering the view on social justice, inclusion, and different perspectives on participation. We invite researchers, practitioners, designers, and everybody curious and working in socially and culturally diverse settings. With our workshop, we seek to create a practice-oriented and reflective space exploring answers to questions like the following ones: What potential does fiction, fairy tales and games carry regarding creative and low-threshold entrances to co-design? How do we genuinely co-design without enforcing our, often external, perception on people’s realities and needs? How does creativity in co-design look like thinking from the very beginning, before setting up the research design?

2 IMAGINATION AND CREATIVE APPROACHES IN HCI AND CO-DESIGN RESEARCH

Human Computer Interaction (HCI) and related disciplines have focused on creative approaches in design along several lines of research. One focus lies on games and play to foster thinking and discourse about technology and its design processes. Such approaches date back as early as the 1970s, e.g., with ‘Oblique Strategies’¹, a card deck aiming to foster creativity. Friedman et al. conceptualized Envisioning Cards to support designers in their reflection of long-term as well as indirect effects of technologies [15]. Buur and Soendergard [10] developed a Video Card Game to enable the transformation of video into tangible arguments to support design teams’ work. (Gender) Sensitivity in HCI research is the focus of a card-deck by Burtscher and Spiel [9]. Several works seek to foster discourse about aspects of technology use in everyday life [1, 2, 25, 28], such as computer security [12] and computational and media literacy [31]. Designing games also play a role in gaining empathy by changing perspectives and engaging in storytelling [13, 18, 19]. In a Manifesto!-Game, Hanna et al. support a creative approach to ‘revolutionary thinking’ and the development of visionary ideas for the future [17].

Design Fiction has gained popularity as a set of methods and practices to ‘expand worlds’ [14] and produce knowledge in non-traditional, speculative ways in a range of contexts [4, 6, 7, 21, 23, 26] such as the home [5], menstruation [27] and green practices [30] and being attentive to the needs and prerequisites of a broad range of people. Rüller et al. [24] worked with wearable, touch-sensitive technologies and scenario-based fictional stories to enable digital participation despite different layers of (digital) illiteracy. Bray and Harrington developed methods cards as design probes to encourage speculative and critical design thinking from an Afrofuturism lens [8].

3 WORKSHOP FORMAT

This workshop is planned as a hybrid event, online and on-site in Newcastle. In case of a global rise of Covid-19 infections, we will adjust for an online only event. We plan for a full day event to allow dedicated time to exchange on both participants’ success and failure stories and lessons learned, as well as space to explore hands-on approaches and activities to foster genuine co-design. We aim at 15-20 participants maximum, and a minimum of 10.

After setting up a workshop website, we will recruit via email lists (such as CHI, Digital Culture, AOIR) and social media platforms (Facebook groups: SigCHI, Researchers of the sociotechnical, etc.; Twitter; Discord Channels; Slack Channels). Further, we will reach out within our respective networks, inside and outside of academia.

We welcome and appreciate submissions in various formats, including traditional workshop papers, short essays, reflections (up to 5 pages, excl. references), video and audio recordings (max. 5 minutes) about experiences from previous co-design activities and overall research designs, as well as reflections, including visual and audio material (if existent) from previous and/or current co-design activities. We further encourage applications to submit existing creations, such as games, co-written tales, and fictions, that can be subject to further development and discussion in the working group activities.

All submissions should come with a short bio of the applicant(s). For better planning, we ask the applications for an indication of preferred participation format (online or on-site).

4 SCHEDULE

To counter online fatigue and to allow more hand on activities and discussion on the workshop day, we aim at conducting pre- and post-workshop activities. These will largely depend on the submissions and the participants’ wishes and goals for the workshop, but we curated a preliminary plan and schedule for the workshop day. The times will be adjusted accordingly with the time zone distribution.

Pre-Workshop Activities:

- Miro Board Activities
- posting questions for the group to reflect upon
- uploading submissions (or snippets) to Miro, look over the others and give feedback
- (Depending on group size, time zone distribution, and availability: Online meetings, informal get together, getting to know one another)

Preliminary Workshop schedule (all in BST, and preliminary until time zone distribution of participants is known):

09:00-09:30: Welcome, Agenda, Intros

09:30-11:00: Group discussions (lessons learned, failures, successes)

11:00-11:30: Activity break

11:30-12:30: Group discussions (sharing lessons learned, failures, successes in groups)

12:30-14:00: Breakfast/lunch/dinner break

14:00-14:15: Intro and set up of working groups

14:15-15:45: Working groups activities (e.g., playing and reflecting upon submitted games, developing games, co-writing fictions)

15:45-16:00: Activity break

¹<https://www.enoshop.co.uk/product/oblique-strategies.html>

16:00-17:00: Sharing experiences & discussions from the group works

17:00-17:30: Next steps and closing

No special equipment is needed. We will likely need a moderation kit for the on-site participants to write, scribble, and draw on.

Post-Workshop Activities:

- Miro Board Activities
- Adding reflections from the workshop; engaging with others
- Follow up meetings for the digital exhibition (see next section).

5 PLANNED OUTCOMES

Due to the nature of this workshop's theme, we intent to co-create a digital exhibition with all interested workshop participants. Part of the exhibition can be submissions to the workshop, preliminary results from the workshop, future co-design creations can be submitted. This can also be opened for non-workshop designers, researchers, and practitioners to take part in.

We aim at creating a network of researchers, practitioners, and designers engaging with creative approaches in co-design activities. For the workshop, we will set up a mailing list that shall be used afterwards as well for sharing resources and planning collaborations.

Further, we imagine a special issue on this topic in a related journal (e.g., ACM ToCHI, Springer CSCW, Elsevier Design Studies).

6 ORGANIZERS

Sarah Rüller and Konstantin Aal are doctoral researchers in the field of Human Computer Interaction at the University of Siegen, Germany. They are working on issues of computer-supported intercultural and collaborative learning, digital literacy, social innovation, and activism, mainly in Morocco and Palestine. They recently published *Speculative Design as a Collaborative Practice: Ameliorating the Consequences of Illiteracy through Digital Touch* in the ACM ToCHI Special Issue on digital touch technology. Through scenario-based fictional stories, grounded in ethnographic observations, the paper explores wearable, touch-sensitive technologies to enable digital participation despite different layers of (digital) illiteracy.

Belén Giménez Ciciolli is a student research assistant and a Human Computer Interaction Master's student at the University of Siegen, Germany. Her research focus is on the intersection of Human Rights and Technology, Digital Literacy, and community-building through the implementation of feminist and decolonial practices within the digital sphere.

Anne Weibert is a post-doctoral research associate at the chair for Information Systems and New Media at the University of Siegen, Germany. Her research interest is in computer-based collaborative project work and inherent processes of technology appropriation, intercultural learning, and community-building. She co-created a *Utopia (with)out Technology*, a card game about the role(s) of technology in everyday life.

Mark Blythe is Professor of Interdisciplinary Design at Northumbria University, UK. He is a design ethnographer with a background in social science and critical theory. His research activities evolve around fiction, speculation, sketching, and games in HCI and interaction design research. Among his most cited publications are

Research through design fiction: narrative in real and imaginary abstracts and Pastiche scenarios: Fiction as a resource for user centred design.

Michael Muller is a research staff member at IBM Research. He is an internationally recognized expert in participatory design and participatory analysis. His work in this area includes the development of methods (CARD, PICTIVE, participatory heuristic evaluation) and theory (ethnocritical heuristics). He is a co-author of *Understanding the Past, Present, and Future of Design Fictions* and *In the Data Kitchen: A Review (a design fiction on data science)*.

Yasmin B. Kafai is a learning scientist and designer of online tools and communities to promote coding, crafting, and creativity across grades K–16. With her pioneering research on children's learning when programming digital games, she was an early contributor to the field of serious gaming. She is the author of *Minds in Play. Computer Game Design As A Context for Children's Learning*, a book presenting a constructionist vision of computer-based learning activities in schools.

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