



Justice-oriented Participatory Electronic Textile Making

Fostering shared spaces of knowledge dialogues through the process of making, un-making, and re-making justice-oriented participatory praxis

Angelika Strohmayer *
School of Design, Northumbria
University, Newcastle upon Tyne, UK
angelika.strohmayer@northumbria.ac.uk

Laura Cortés Rico
Multimedia Engineering, Universidad
Militar Nueva Granada, Colombia
laura.cortes@unimilitar.edu.co

Tania Pérez-Bustos
School of Gender Studies, National
University of Colombia, Colombia
tcperezb@unal.edu.co

Afroditi Psarra
Digital Arts and Experimental Media,
University of Washington, USA
apsarra@uw.edu

Daniela Rosner
Human Centered Design and
Engineering, University of
Washington, USA
dkrosner@uw.edu

Özge Subaşı
Media and Visual Arts, Koç
University, Turkey
ozsubasi@ku.edu.tr

Irene Posch
Design and Technology, University of
Art and Design, Linz, Austria
irene.posch@ufg.at

Sara Nabil
HCI, Queen's University, Ontario,
Canada
sara.nabil@queensu.ca

Jihan Sherman
Georgia Institute of Technology,
Atlanta, Georgia, USA
jihansherman@gatech.edu

ABSTRACT

Participatory Design and Participatory Textiles Practices have only recently begun to address their shared roots in notions of solidarity and community-building, as well as movements towards more just worlds. With this workshop, we hope to address, unpick, and strengthen them, by building an interdisciplinary and international community. Our workshop will focus on the processes involved in Participatory Design and Participatory Textiles Practice rather than outcomes, allowing us to acknowledge the need for continuous work and effort, project and relationships maintenance, and so on; and allowing us to appreciate that this work may never be complete. We will do this through fostering shared spaces of knowledge dialogues through the process of making, un-making, and re-making our projects metaphorically and physically.

CCS CONCEPTS

• **Human-centered computing** → Human computer interaction (HCI).

KEYWORDS

textiles, justice-oriented participatory design, e-textiles

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Angelika Strohmayer *, Laura Cortés Rico, Tania Pérez-Bustos, Afroditi Psarra, Daniela Rosner, Özge Subaşı, Irene Posch, Sara Nabil, and Jihan

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1 INTRODUCTION

Participatory Design and Participatory Textiles Practices have only recently begun to address their shared roots in notions of solidarity and community-building, as well as movements towards more just worlds. With this workshop, we hope to address, unpick, and strengthen the relationships between participatory design and textiles praxes towards just worlds through the building of interdisciplinary and international community as well as the un-making and re-making of current participatory praxis.

In recent years, researchers and practitioners have also started to introduce digital technologies, electronics, and other interactive materials into participatory projects to develop what we are calling a participatory e-textiles practice. For example, at PDC 2020 a situated action explored notions of reconciliation through participatory e-textile practices synchronously (Sánchez-Aldana et al., 2020), building on Lindström and Ståhl's (2010) work on assembling stories through 'threads'. On top of this, some of the same authors also dug deeper into this work, looking at the embodiment of testimonies of reconciliation (2020) Looking beyond the PDC community, Posch and colleagues (2019) explored the relationship of craft and computing across boundaries to build community in HCI more widely, starting broad conversations that we hope to build on in this workshop.

Participatory textiles work has longstanding links to notions of justice, both within and outside the academy. Collective textiles-making provides space for reflection and building of solidarity, can give rise to conversations and actions that materialise ecologies

of care (Fox, Ulgado and Rosner, 2015), and can of course also have pragmatic outcomes such as blankets that provide warmth, narrative pieces that document atrocities (Agosin, 1989; Hunter, 2019), or digitally augmented interactive pieces that allow people to interact with stories in new ways (Posch and Kurbak, 2016). Strohmayr (2021) describes some of these possibilities of shared e-textiles practices as opportunities for developing shared praxes of hope. Which in turn provide material consequences that go far beyond the scope of a sewing and/or electronics project, allowing us to address wider societal concerns of social justice in reflexive, participatory, and critical ways.

Building on the legacies of both Participatory Design and Participatory Textiles Practices (see eg <https://stitchingtogether.net/>), our workshop will have two main aims: (1) incorporating participatory textiles practices into participatory design discourse through building interdisciplinary community; and (2) reflecting on how our past, current, and future participatory e-textiles projects relate to notions of justice.

The central tenet of our workshop will be to focus on process rather than outcomes, to allow us to acknowledge that the work (technical upgrades, infrastructural support, movement building, and so on) requires continuous effort, maintenance, and adaptation – and that this may never be ‘complete’. We do this as an act of resistance to neoliberal approaches (such as design thinking and unreflected practices of design justice) as well as a way of building resilience to counter injustice with and for those who participate in the workshop (both organisers and participants). We will do this through fostering shared spaces of knowledge dialogues through the process of making, un-making, and re-making our projects metaphorically and physically. As such, we will draw on the transformational power of participatory stitching circles that give us space to discuss and reflect together, or as Fox, Shorey, and colleagues (2020) highlight: “anyone who has knitted, quilted, scrapbooked, or painted with others has felt the way that our focus on doing gives way to talking; starting and stopping; intimate, as if the movement of your hands distract you just enough to overcome the hesitation that limits regular conversation.”

2 WORKSHOP GOALS

- To build community among Participatory Design researchers and practitioners that use stitching, electronic-textiles, and other forms of textiles-making in their research and practice
- To expand Participatory Design research and community to include the work of participatory textiles and e-textile practices and practitioners
- To explore the potentials of participatory e-textiles making (un-making and re-making) as justice-oriented participatory design praxis that foregrounds process rather than outcomes

3 IMPORTANCE OF RUNNING THE WORKSHOP AT PDC AND RELEVANCE TO CONFERENCE THEMES

PDC is the prime venue for our workshop, as it brings together international and interdisciplinary researchers, designers, and practitioners. This topic in particular is part of a justice-oriented praxis,

requiring the interweaving of theoretical and methodological conversation with knowledge and experience gained through practice

With this workshop, we argue that participatory e-textiles practices should have a place in the PDC community. Some conversations about this have started in situated actions and publications, but there is yet to be a space for researchers to come together to discuss this practice and its relation to justice-oriented ways of working as researchers and designers. Our workshop will address topics of careful design practices that are passionate, material, and emotional. We will work together to create opportunities for generative design practices metaphorically, materially and practical. On top of this, we also argue that due to our focus on unpicking and understanding justice as part of this practice, we also contribute to the PDC theme of activating protest against injustice. We set the stage for researchers and designers to meaningfully reflect on what we mean with justice and injustice, and will look to future uses of justice-oriented participatory e-textile praxes.

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4 PROPOSED WORKSHOP FORMAT

We propose a half-day hybrid workshop. To minimize zoom-fatigue and due to the collaborative and praxis-oriented nature of our topic, we encourage those participating virtually to find colleagues and friends to work with in a co-located fashion, as some of the workshop organisers will aim to do (eg. the two colleagues in Bogotá, Colombia).

Participants will contribute to the workshop meaningfully through discussions and engagement with workshop activities. We hope that they will play an active role in sustaining and furthering the conversations started at this workshop through their own research, teaching, and practice, as well as proposing future workshops. Workshop participants will also be invited to participate in the production of our workshop outputs. All activities will make use of breakout groups on the video conferencing platform chosen by PDC organisers, a shared online whiteboard, and any physical spaces at the conference venue to help facilitate discussions and activities.

Participants will be asked to bring an example of a finished or unfinished (e-)textiles piece to materially support the discussions we will have during the workshop - to unpick this in activity one and re-work it in activity 2. We understand the tensions, difficulties, and discomfort that can arise from unpicking textile pieces - feelings which have parallels to the discomfort and tensions of the unpicking of our privileges and oppressions which is necessary for justice-oriented work. We hope this workshop will be an introduction to this practice, allowing participants to decide for themselves how far they take this unpicking - we will expand on this practice in our proposed outputs.

4.1 Workshop Programme

As we aim to run a half-day workshop, we will have the opportunity of adjusting the start time to fit with proposed PDC conference times as well as with the timezones of organisers and participants, where possible. For the purpose of outlining the schedule of the workshop, we will start at 15:00 UTC in this proposal:

- 15:00-15:45 Welcome and introductions. Making our justice oriented praxes. (after a brief welcome from the organisers, participants will be put into small groups to allow for more conversation to meet one another. In these breakout groups participants will introduce themselves and a participatory e-textiles project they have worked on, are currently working on, or are planning to start in the near future. After this, participants will introduce one another to the main group.
- 15:45-16:45 Activity 1: un-making our justice-oriented participatory textiles praxes. Participants will work in breakout groups to physically unpick their own projects and to reflect together on at least one of the following starting points for reflection: How did we address the topic of justice (e.g., environmental perspectives, inclusion, etc.)? What is participatory textiles making? How is it related to hybrid (digital-material, academic-activist, etc.) practices? What would it mean to see e-textiles as tensions, testimonies, questions, process, layers, communication, or criticism? How does participatory e-textile making provoke dialogue? Breakout group discussions will be fed back to the main group.
- 16:45-17:00 comfort break
- 17:00-18:00 Activity 2: re-making our justice-oriented praxes. Outcomes from activity 1 will be used to look forward to re-making our practices metaphorically, theoretically, and practically. In breakout groups, we will look for new aspects and avenues of justice-oriented ways of working through the use of participatory e-textiles practises. Participants will also physically re-make their brought piece during this session.
- 18:00-19:00 Consolidating discussions and planning next steps. At this final stage of the workshop, we will reflect on the two previous activities together - drawing out potential good practice guidance, methods for un-making and re-making our understanding of justice and their relation to participatory e-textiles practices, or other important aspects that allow us to look forward. We will also make concrete plans for the dissemination of our learning, as well as plans for publication thereof.

4.2 Participant numbers and recruitment

We expect a minimum of 10 and a maximum of 20 participants in our workshop. We will recruit participants via our various international networks as well as mailing lists that relate to participatory design, participatory textiles, and e-textiles practices. We will ask prospective participants to submit a reflexive case study about an e-textiles project (including but not limited to justice-oriented and/or participatory design) they have worked on or are currently working on. For those who are not yet working on such projects but are interested in learning out more about them, we ask them to reflect on their understanding of the relationship between one or more aspect of: justice, materiality or craft, and participatory making.

- Workshop website: http://artesanatecnologica.org/pdc_2022_workshop/
- Call for contributions published: 13 May 2022 (provisional date)
- Deadline for workshop contributions: 10 June 2022 (provisional date)
- Notification of acceptance for workshop participants: 8 July 2022 (provisional date)

4.3 Planned workshop outputs

- A strategy for our community of researchers and practitioners to stay in touch and expand our own networks across regional and disciplinary borders
- A collection of case studies of justice-oriented ways of working that we will publish on our project website
- A proposal for an application to SIGCHI to run an exhibition and/or series of workshops, which address the unpicking of e-textiles pieces as justice-oriented reflexive praxis. We will invite workshop participants to contribute.
- A co-authored workshop report, co-produced by workshop organisers and workshop participants will be invited to participate; this may be in a self-published or academic format

5 ORGANISERS AND EXPERTISE

Angelika Strohmayer is a Senior Lecturer and co-director of the Design Feminisms Research Group at Northumbria University. Her research explores notions of feminist and justice-oriented research praxis; working at the intersection of participatory action research with groups who are made marginal (eg. through criminalisation) on topics related to safety, advocacy, technologies, and textiles.

Laura Cortés-Rico is an Assistant Professor and Academic Director in the Multimedia Engineering Program at Universidad Militar Nueva Granada, Colombia. She is co-founder of the collective Artesanal Tecnológica. Her research interests are plural understandings of technologies that involve material - frequently textile - and digital components, and the interweaving between textile crafting and computational representations from material and political perspectives.

Tania Pérez-Bustos is an Associate Professor in the School of Gender Studies at the National University of Colombia, she is the co-founder of Artesanal Tecnológica. Her research focuses on technologies of care and knowledge as well as on the feminization of knowledge making practices. For the past 8 years she has been studying textile handcrafts in Colombia, and has promoted transdisciplinary research connecting digital arts and engineering in dialogue with traditional textile making.

Afroditi Psarra is a transdisciplinary artist and an Assistant Professor of Digital Arts and Experimental Media at the University of Washington, where she runs the DXARTS Softlab. Her research focuses on the art and science interaction with a critical discourse in the creation of artefacts. She is interested in the use of the body as an interface of control, and the revitalization of tradition as a methodology of hacking existing norms about technical objects. She uses cyber crafts and other gendered practices as speculative strings, and open-source technologies as educational models of diffusing knowledge.

Daniela Rosner is an Associate Professor in Human Centered Design & Engineering (HCDE) at the University of Washington and co-director of the Tactile and Tactical Design (TAT) Lab. Her research investigates the social, political, and material circumstances of technology development and use, with a particular interest in the overlapping legacies of fiber and bits and their implications for design and tech labor.

Özge Subaşı is an Assistant Professor at Koç University Media and Visual Arts Department and the director of Futurewell Lab in Istanbul. Özge's work aims to question the equity dialogues in interaction design with a current focus in contextualisation of the new crafts with communities.

Irene Posch is a Professor of Design and Technology at the University of Art and Design Linz, Austria, where she directs the Crafting Futures Lab. Her research and practice explore the integration of technological development into the fields of art and craft, and vice versa, and social, cultural, technical and aesthetic implications thereof.

Sara Nabil is an Assistant Professor of HCI at Queen's University (ON, Canada), an alumna of Newcastle University (UK), and head of the Interioraction Design Studio (iStudio) Lab. Her research interests lie in integrating design, making, and crafting with interaction design, using e-textiles and interactive smart materials. Her novel making techniques and fabrication methods facilitate the design of everyday computational objects and wearables. Her work aims to support the living quality of marginalised groups such as refugees, individuals with dual-identities, people with physical disabilities, and other underrepresented groups including women and visible minorities, through participatory design.

Jihan Sherman is an architect and a PhD student at Georgia Institute of Technology. Her research seeks approaches to design that confront historical transgressions, engage present bias and harm, and imagine progressive futures. She is currently working

with African American craftswomen to explore counter-narratives of design and craft-based methods that center on care and the lived experiences of Black women. Her work spans design disciplines and follows a curiosity about how we make with the world around us and how design and technology negotiate social, political, cultural, and material relations.

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