

# Caring for Reproductive Justice: Design in Response to Adversity

Benedetta Lusi <u>b.lusi@utwente.nl</u> Interaction Design Group, University of Twente, Enschede, Netherlands

Michaela Krawczyk <u>mikrawcz@iu.edu</u> Luddy School of Informatics, Computing and Engineering, Indiana University, Bloomington, IN, USA

> Madeline Balaam <u>balaam@kth.se</u> KTH Royal Institute of Technology, Stockholm, Sweden

Adrian K. Petterson <u>a.petterson@mail.utoronto.ca</u> University of Toronto, Toronto, Canada

> Emily Tseng et397@cornell.edu Information Science, Cornell University, New York, NY, USA

Katie A. Siek <u>ksiek@indiana.edu</u> Luddy School of Informatics, Computing and Engineering, Indiana University, Bloomington, IN, USA Kamala Payyapilly Thiruvenkatanathan kamala.pt@psu.edu

College of Information Sciences and Technology, The Pennsylvania State University, University Park, PA, USA

Lara Reime

<u>lata@itu.dk</u> IT University of Copenhagen, Copenhagen, Denmark

Cristina Zaga

<u>c.zaga@utwente.nl</u> Human-Centred Design Group, University of Twente, Enschede, Netherlands

# Abstract

Access to reproductive care, shaped by legal, socio-economic, political, and identity-based factors, is unevenly distributed and increasingly precarious. This one-day workshop builds on previous CSCW workshops to address the pressing need to confront issues at the intersection of Human-Computer Interaction (HCI), design research, and reproductive justice in the face of global conservatism and escalating challenges to human rights. Through speculative design, the workshop invites researchers and practitioners to address challenges in this design space, such as, but not limited to, information distribution, privacy issues, identity-based barriers, and design for care. By pulling on the threads of designed artifacts central to reproductive care and ideating on novel designs and anti-designs, participants will collaborate to formulate design and design research's role in reproductive justice futures. The workshop aims to produce provocative ideas around the messy realities of reproductive justice. We contribute critical discussions and reflections on HCI's role in promoting change and combating the oppressive forces that affect reproductive justice.

Permission to make digital or hard copies of all or part of this work for personal or classroom use is granted without fee provided that copies are not made or distributed for profit or commercial advantage and that copies bear this notice and the full citation on the first page. Copyrights for third-party components of this work must be honored. For all other uses, contact the Owner/Author. *CSCW Companion '24, November 9–13, 2024, San Jose, Costa Rica* 

© 2024 Copyright is held by the owner/author(s).

Copyright is held by the owner/author(s ACM ISBN 979-8-4007-1114-5/24/11.

https://doi.org/10.1145/3678884.3681832

# **CCS** Concepts

• Human-centered computing • Human computer interaction (HCI) • HCI theory, concepts and models

## Keywords

reproductive justice, speculative design, design for care.

#### ACM Reference format:

Benedetta Lusi, Adrian K. Petterson, Kamala Payyapilly Thiruvenkatanathan, Michaela Krawczyk, Emily Tseng, Lara Reime, Madeline Balaam, Katie A. Siek, and Cristina Zaga. 2024. Caring for Reproductive Justice: Design in Response to Adversity. In *Companion of the 2024 Computer-Supported Cooperative Work and Social Computing (CSCW Companion '24), November 9–13, 2024, San Jose, Costa Rica.* ACM, New York, NY, USA, 4 pages. https://doi.org/10.1145/3678884.3681832

## **1** Introduction

As new challenges and extremes arise around reproductive issues, we propose to shift the focus from reproductive health to the design space of reproductive justice. Reproductive justice originated from Black feminist organizations in the United States and covers topics of health, privacy, and safety, encompassing "the human right to maintain personal bodily autonomy, have children, not have children, and parent the children we have in safe and sustainable communities" [17]. Drawing from previous CSCW and SIGCHI workshops [6, 10, 16], we will use a speculative design lens to envision with participants how technology can be designed to support and care for reproductive justice in the face of

adversity. This design-jam workshop invites researchers and practitioners to address challenges around information distribution, privacy, identity-based barriers, and design for care at the intersection of CSCW, collaborative design work, and reproductive justice. We emphasize design challenges arising from adversity to underscore the importance of reproductive justice and uncover understudied areas.

# 2 Background

Across geographies, access to reproductive care is often unevenly distributed, as it is highly determinant on legal, socioeconomic, political, and identity-based circumstances. For instance, recently legal hostility towards abortion care has increased in El Salvador, Nicaragua, Poland, and the United States. This, combined with a rise in the use of technology in reproductive health, has contributed to an escalation in privacy concerns [1]. There is wariness around the datafication of reproductive data through period tracking apps [19] and its potential weaponization against people who seek or have obtained an abortion [11, 20] as well as towards healthcare workers. Further, there is an ongoing debate on technology's role in rampant maternal mortality [22], and the decision-making process in child welfare affecting the agency of parents raising their children [18]. It is in this context that the FemTech market, encompassing technologies to support "menstrual health, reproductive health, sexual health, maternal health, and menopause" [14] is rapidly expanding.

As digital technologies become more prevalent across domains, the role of designers and researchers becomes more crucial in addressing issues of reproductive justice, pushing our community to adapt its practices and address complex challenges in new ways. CSCW and the design research community have previously brought together researchers to explore feminist theories and approaches that can contribute to positive change [7], novel technology approaches to reproductive care [5], and equitable participatory design through the lens of data feminism [6]. Drawing on feminist design principles of "critique-based and generative" design [4], we propose that speculating with artifacts and critiquing the role of design itself in these spaces could support generative advocacy for reproductive justice from a designer and researcher lens. Inspired by previous workshops around reproductive health [16], we aim to bring a diverse group of people together to comprehensively collect and effectively address new challenges in the space of reproductive justice to harness them as new design opportunities. We build on a body of work addressing issues under the reproductive justice umbrella, such as women's health, reproductive health, intimate partner violence, childcare, and sexual education, as well as work that has focused on the role of tangible artifacts in challenging the societal stigma surrounding reproductive health and reproductive justice. Specific examples range from menstrual cups [9], breast pumps created through speculative design [9], and menstruation machines developed through critical design [2], to tools that encourage difficult conversations strengthening the relationship of expecting parents [21]. In this workshop, we will leverage the

tangibility of artifacts to speculate on reproductive justice challenges and use a zine to capture the design jam outcomes.

## 3 Workshop Theme and Goals

Rather than providing a rigid definition of reproductive justice, the workshop aims to develop a conceptual framework for this expansive topic, emphasizing the role of artifacts and design in theorizing around this space. As experiences of reproductive justice vary greatly, coming together and sharing them collectively in one venue is crucial to developing a design and HCI agenda in this space. We utilize a design jam format that connects to a more activist approach to design, previously adopted, for example, to address abortion advocacy [13]. The design jam format allows for divergent approaches and can facilitate connections within and across groups. Envisioning and speculating together about futures and technologies can be a powerful tool in advancing activist agendas [12]. Similarly, focusing on the critiques brought forward by the participants will encourage commitment to addressing challenges within newly focused contexts, and the needs of specific communities [8].

In this workshop, we will hold a design jam speculating on *design* and anti-design approaches to support reproductive justice, focusing on unique challenges and tensions arising from adversity. Adversity includes tangible and perceived hostilities spanning the national, local, and private spheres. Examples could include legal barriers, social stigmatization, precarious or violent domestic environments, and more. Adversity extends beyond formal barriers, encompassing the sociocultural, political, and environmental aspects. Designing to address these challenges and tensions includes examining countries where reproductive justice is a more present practice. For instance, what are the challenges we face when working towards abortion care in countries such as Denmark and India where abortion is (conditionally) legal?

The workshop encourages contributions that highlight challenges and opportunities to design for reproductive justice. This includes, but is not limited to, issues of *information distribution*, *misinformation, privacy, security, legality, and organizational and activist approaches to design around reproductive justice*. Furthermore, we consider how access is shaped by race, gender identity, sexual orientation, socioeconomic status, disability, and location. We intend to address this, including issues of *technology and social stigma* and the *perceived barriers towards design in the reproductive health space*. Applicants need not work directly with one of these topics but may work in a field with relevant expertise, such as safety and privacy, medical informatics, and policy.

The workshop aims to bring together researchers and practitioners from different parts of the world to establish new collaborations and directions that contribute towards design for reproductive justice, with an emphasis on amplifying underrepresented perspectives. We aim to contribute to a culture of transparency and supportive design collaboration among people working in the space of design, HCI, and reproductive justice. We intend for the group to explore new opportunity spaces, learn from one another, and continue their connection outside the conference. Building on previous work around reproductive health and feminist perspectives, we redirect our focus to the *messy and non-neutral experiences of reproductive justice*. We aim to produce provocative ideas that can lead to change in the face of adversities toward reproductive justice. Through speculative design, we encourage participants to imagine radical futures [3], leveraging diverse geo-political perspectives. Finally, HCI scholars have called for researchers to become activists through their research [15], which this workshop aims to address by focusing on designing with adversities.

### 3.1 Pre-workshop

We will use a combination of social media and listserv distribution to recruit participants for our workshop. We will create a website to host details and post outcomes from the workshop for dissemination. To advertise the website, along with the call for participation, we will use social media through the accounts of our organizers and the labs they are affiliated with. We will also post to Slack groups centered around our workshop topics, such as Queer SIG and Feminist HCI, and other design and HCI-related listservs. The workshop will collect contributions in the form of 1 to 3 page position papers or provocations, from a maximum of 20 participants. The contributions might discuss an issue they experienced in their research and professional practice (e.g., challenges in designing for a specific issue) or in their personal environment (e.g., autobiographical experience), as well as a topic of interest (e.g., related to reproductive justice that is currently debated in their country). The organizers will use the contributions as a starting point for the design jam and facilitate creative group brainstorming, emphasizing the role of the artifacts, tangible or digital, that the authors found critical in their contribution. After acceptance to the workshop and before the CSCW24 conference, organizers will ask participants to provide an example of an artifact that is central to their provocation or position paper. For example, a participant writing about lack of access to gynecological exams could choose a speculum. These artifacts will be used for a warm-up activity in the workshop.

#### 3.2 Workshop schedule

The workshop will begin with welcome and introductions (9:00-9:15), where participants and facilitators will introduce themselves and outline the schedule. This will be followed by a plenary session (9:15-10:45) where participants present their working papers, provocations, and key artifacts, highlighting challenges for the design jam. After a coffee break (10:45-11:00), participants will engage in a Design Jam (11:00-12:00), working in groups to explore challenges related to designing for reproductive justice. After lunch (12:00-13:00), the Design Jam continues (13:00-14:30) with a focus on refining artifacts and discussing best practices. After another coffee break (14:30-15:00), groups will conclude the Design Jam (15:00-16:00) by preparing final pitches and reflective summaries. The day will end with a plenary session (16:00-17:00) where groups present their outcomes and share final thoughts. Participants will also be invited to a Slack channel and whiteboard for further reflection.

## 3.2.1 Participant's care and privacy

In the plenary presentation and group discussions, the participants might share deeply personal and vulnerable experiences. To account for this, we will introduce guidelines for participation and advise participants to use trigger warnings in their discussions as appropriate (for example, if talking about pregnancy loss or domestic abuse). The guidelines will invite participants to use the information they receive in the workshop but keep the identities and affiliations of others private. Furthermore, the facilitators will introduce each part of the workshop, clearly outlining the content in advance to participants and offering periodic reminders that participation is voluntary. There will be a designated quiet space enabling participants to excuse themselves from the workshop as they deem necessary. Facilitators will also be circulating during the workshop with particular attention to potentially harmful discussions to support guiding discussions without censorship using their expertise. For example, Petterson is trained as an abortion doula and can guide discussions on the subject. The participants will also be invited to accept tensions and disagreements that might occur within the group and to incorporate them into their speculative artifacts.

#### 3.2.2 Inclusion and accessibility: Workshop & Required facilities

For accessibility and inclusion purposes, we will set up an online whiteboarding space alongside physical design materials such as markers, sticky notes, paper, and modeling clay (sourced by the organizers). We will also be using a microphone and opening a Zoom room so that participants may log in to the Zoom room for subtitle access. In addition, if participants require support in the design jam creation process, we will request group members to take the initiative in supporting other team members in translating their ideas through the design jam materials.

We will require space for a maximum of 20 participants to form groups and sufficient table space to do design activities in 3-5 groups. We will also need a microphone and presentation equipment, such as a large central projector for presentations and inclusivity requirements such as captioning. Facilitators will be providing materials for the design jam, such as craft supplies. We will also require access to power outlets for participants' devices.

# 4. Post-workshop outcomes

The workshop aims to set an agenda for research on reproductive justice within HCI that delves beyond conventional conceptualizations. Workshop prompts and discussions will be curated to build an expansive framework of reproductive justice within HCI and archived on the workshop website for access by the larger research community. Discussions of personal experiences, if shared during the workshop, will be anonymized or excluded based on the participants' wishes. Additionally, we will curate the artifacts created during the design jams in the form of a zine. The zine will serve both as a research dissemination and a provocation for the HCI research community to contribute towards reproductive justice through design. In addition to the documentation of workshop outcomes, we aim to foster a growing community of researchers working at the intersection of reproductive justice and HCI, which may serve as a safe space to collaborate, reflect, and share research agendas and outcomes. We have already started a Slack channel for the reproductive justice research community, which is where this workshop originated. Workshop participants will be added to the Slack channel, where we will continue to facilitate collaborations and discussions.

## Organizers

**Benedetta Lusi** (she/her) is a PhD candidate in the Interaction Design Group at the University of Twente, Netherlands. She designs technology to foster mental health and well-being, with a recent focus on design for abortion care and life transitions.

Adrian Petterson (she/they) is a PhD student in the Faculty of Information at the University of Toronto, Toronto. Their work looks at how design can support abortion access through sustainable activism and care work.

**Kamala Payyapilly Thiruvenkatanathan** (she/her) is a PhD candidate in Human-Computer Interaction at Penn State University. She works at the intersection of women's health and technology, designing for navigating pregnancy after loss.

**Michaela Krawczyk** (she/her) is a PhD student in Informatics at Indiana University Bloomington in the U.S. Her engages people in abortion storytelling through digital tools and spaces to better understand their experiences and support needs.

**Emily Tseng** (she/her) is a postdoctoral scholar at Microsoft Research. She studies how digital security and privacy intersect with power and care, with a recent focus on technology-mediated intimate partner violence.

**Lara Reime** (she/her) is a PhD Fellow at the IT University of Copenhagen. Her work combines design and ethnographic methods to investigate the social, material, and political environments of (digital) reproductive technologies.

**Madeline Balaam** (she/her) is a professor in Interaction Design at KTH Royal Institute of Technology. She works at the intersection of HCI and intimate health, designing, developing, and evaluating technologies across a spectrum of experiences.

**Katie Siek** (she/her) is a professor of Informatics at Indiana University Bloomington. She conducts research in HCI, health informatics, and ubiquitous computing to investigate how we can empower people outside of clinical environments.

**Cristina Zaga** (she/her) is an assistant professor of Human-Centred Design group and DesignLab at the University of Twente. She develops transdisciplinary approaches, blending design justice, speculation and human/more-than-human design with a focus on care and the future of work in HRI and HCI.

#### References

 Aktypi, A., Nurse, J.R.C. and Goldsmith, M. 2017. Unwinding Ariadne's Identity Thread: Privacy Risks with Fitness Trackers and Online Social Networks. Proceedings of the 2017 on Multimedia Privacy and Security (New York, NY, USA, Oct. 2017), 1–11.

- [2] Bardzell, J., Bardzell, S. and Koefoed Hansen, L. 2015. Immodest Proposals: Research Through Design and Knowledge. Proceedings of the 33rd Annual ACM Conference on Human Factors in Computing Systems (New York, NY, USA, Apr. 2015), 2093–2102.
- [3] Bardzell, S. 2018. Utopias of Participation: Feminism, Design, and the Futures. ACM Transactions on Computer-Human Interaction. 25, 1 (Feb. 2018), 6:1-6:24. DOI:https://doi.org/10.1145/3127359.
- [4] Bardzell, S. and Bardzell, J. 2011. Towards a feminist HCI methodology: social science, feminism, and HCI. Proceedings of the SIGCHI Conference on Human Factors in Computing Systems (New York, NY, USA, May 2011), 675–684.
- [5] Datey, I., Aljasim, H.K. and Zytko, D. 2022. Repurposing AI in Dating Apps to Augment Women's Strategies for Assessing Risk of Harm. Companion Publication of the 2022 Conference on Computer Supported Cooperative Work and Social Computing (Virtual Event Taiwan, Nov. 2022), 150–154.
- [6] D'Ignazio, C., Graeff, E., Harrington, C.N. and Rosner, D.K. 2020. Toward Equitable Participatory Design: Data Feminism for CSCW amidst Multiple Pandemics. Companion Publication of the 2020 Conference on Computer Supported Cooperative Work and Social Computing (Virtual Event USA, Oct. 2020), 437–445.
- [7] Hansson, R. and Skog, T. 2001. The LoveBomb: encouraging the communication of emotions in public spaces. CHI '01 Extended Abstracts on Human Factors in Computing Systems. Association for Computing Machinery.
- [8] Hirsch, T. 2009. Communities real and imagined: designing a communication system for zimbabwean activists. Proceedings of the fourth international conference on Communities and technologies (New York, NY, USA, Jun. 2009), 71–76.
- [9] Hope, A., D'Ignazio, C., Hoy, J., Michelson, R., Roberts, J., Krontiris, K. and Zuckerman, E. 2019. Hackathons as Participatory Design: Iterating Feminist Utopias. Proceedings of the 2019 CHI Conference on Human Factors in Computing Systems (Glasgow Scotland Uk, May 2019), 1–14.
- [10] Karusala, N. et al. 2021. The Future of Care Work: Towards a Radical Politics of Care in CSCW Research and Practice. Companion Publication of the 2021 Conference on Computer Supported Cooperative Work and Social Computing (Virtual Event USA, Oct. 2021), 338–342.
- [11] Kelly, H., Hunter, T. and Abril, D. 2023. Seeking an abortion? Here's how to avoid leaving a digital trail. Washington Post.
- [12] Mariam Asad, Sarah Fox and Christopher A. Le Dantec 2014. Speculative Activist Technologies. iConference 2014 Proceedings (Mar. 2014).
- [13] Michie, L., Balaam, M., McCarthy, J., Osadchiy, T. and Morrissey, K. 2018. From Her Story, to Our Story: Digital Storytelling as Public Engagement around Abortion Rights Advocacy in Ireland. Proceedings of the 2018 CHI Conference on Human Factors in Computing Systems (Montreal QC Canada, Apr. 2018), 1– 15.
- [14] Nellore, N. and Zimmer, M. 2023. Femtech Data Privacy post-Dobbs: A Preliminary Analysis of User Reactions. Computer Supported Cooperative Work and Social Computing (Minneapolis MN USA, Oct. 2023), 226–228.
- [15] Parker, A., Kantroo, V., Lee, H.R., Osornio, M., Sharma, M. and Grinter, R. 2012. Health promotion as activism: building community capacity to effect social change. Proceedings of the SIGCHI Conference on Human Factors in Computing Systems (New York, NY, USA, May 2012), 99–108.
- [16] Reime, L., Campo Woytuk, N., Park, J.Y., Søndergaard, M.L.J., Yadav, D., Tsaknaki, V. and Homewood, S. 2022. Speculations on Feminist Reproductive Health Technologies. Adjunct Proceedings of the 2022 Nordic Human-Computer Interaction Conference (New York, NY, USA, Oct. 2022), 1–5.
- [17] Ross, LJ. and Solinger, R. 2017. Reproductive Justice: An Introduction. University of California Press.
- [18] Saxena, D. and Guha, S. 2023. Algorithmic Harms in Child Welfare: Uncertainties in Practice, Organization, and Street-level Decision-Making. ACM Journal on Responsible Computing. (Sep. 2023). DOI:https://doi.org/10.1145/3616473.
- [19] Shukla, R. 2023. Privacy Issues in Fertility and Period Tracking Applications: Impact of Dobbs vs. Jackson Women's Health Organisation. Privacy Matters. R. Ramesh, B. Sharma, and P. Chaudhari, eds. 275–294.
- [20] Singer, N. and Chen, B.X. 2022. In a Post-Roe World, the Future of Digital Privacy Looks Even Grimmer. The New York Times.
- [21] Vallgårda, A., Wagner-Eckert, C., Mølhave, C.B. and Bewley, H. 2022. PregnancyCubes: A design process to cultivate tensions. Nordic Human-Computer Interaction Conference (New York, NY, USA, Oct. 2022), 1–13.
- [22] Walker, A.M., DeVito, M.A., Ringland, K.E. and Reddy, M. 2019. (In)visible Choices: Articulation Work and the Rise in US Maternal Mortality. Companion Publication of the 2019 Conference on Computer Supported Cooperative Work and Social Computing (Austin TX USA, Nov. 2019), 403–407.