Fostering Feminist Community-Led Ethics: Building Tools and Connections

Ana O. Henriques Hugo Nicolau ITI/LARSyS, Instituto Superior Técnico, Universidade de Lisboa Lisbon, Portugal

Cayley MacArthur University of Waterloo Waterloo, Ontario, Canada Anna R. L. Carter Kyle Montague Reem Talhouk Angelika Strohmayer Northumbria University Newcastle, UK

Shaowen Bardzell Georgia Institute of Technology, the School of Interactive Computing Atlanta, GA, USA

Eleonore Fournier-Tombs United Nations University New York, NY, USA Sarah Rüller University of Siegen Siegen, Germany 60

61 62

63

65

66

67

68

69 70

72

73

74

75

76

80

81

82

83

86

87

88

89

90

92

93

94

95

96

97

100

101

102

103

104

105

106

107

108

109

110

111

112

113

114

115

116

Colin Gray Indiana University Bloomington Bloomington, USA

ABSTRACT

10

11

14

15

16

17

18

19

20

21

22

23

24

25

27

28

29

30

31

32

33

34

35

36

37

38

39

41

42

43

44

45

46

47

48

49

50

51

52

54

55

56

57

58

This workshop proposal advocates for a dynamic, community-led approach to ethics in Human-Computer Interaction (HCI) by integrating principles from feminist HCI and digital civics. Traditional ethics in HCI often overlook interpersonal considerations, resulting in static frameworks ill-equipped to address dynamic social contexts and power dynamics. Drawing from feminist perspectives, the workshop aims to lay the groundwork for developing a meta-toolkit for community-led feminist ethics, fostering collaborative research practices grounded in feminist ethical principles. Through pre-workshop activities, interactive sessions, and postworkshop discussions, participants will engage in dialogue to advance community-led ethical research practices. Additionally, the workshop seeks to strengthen the interdisciplinary community of researchers and practitioners interested in ethics, digital civics, and feminist HCI. By fostering a reflexive approach to ethics, the workshop contributes to the discourse on design's role in shaping future interactions between individuals, communities, and technology.

CCS CONCEPTS

• Human-centered computing \rightarrow HCI theory, concepts and models; Heuristic evaluations; User interface toolkits.

KEYWORDS

Ethics, Community-led design, Feminist HCI, Digital Civics, Toolkit

ACM Reference Format:

Ana O. Henriques, Hugo Nicolau, Anna R. L. Carter, Kyle Montague, Reem Talhouk, Angelika Strohmayer, Sarah Rüller, Cayley MacArthur, Shaowen

Permission to make digital or hard copies of part or all 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(s).

DIS '24, July 1-5, 2024, Copenhagen, Denmark

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

ACM ISBN XXXX.

https://doi.org/10.1145/XXXXXXXXX

Bardzell, Colin Gray, and Eleonore Fournier-Tombs. 2024. Fostering Feminist Community-Led Ethics: Building Tools and Connections. In *Proceedings of the 2024 ACM Designing Interactive Systems Conference (DIS '24), July 1–5, 2024, Copenhagen, Denmark*. ACM, New York, NY, USA, 5 pages. https://doi.org/10.1145/XXXXXXXXX

1 INTRODUCTION AND BACKGROUND

Ethics is seen as a core focus in HCI; however, discussions surrounding it typically focus on machine ethics and bioethics principles rather than considerations about and between people. Additionally, though ethics in HCI has been evolving substantially in the past few years [4, 6, 11, 32], it still begs considerations on power and justice within the academic space [10, 24, 27].

Feminism, especially within academia, is typically held as a domain of critical theory aimed at analysing the systemic and manifold ways gendered oppression manifests. It is plural in both construction and presentation but has key concerns "such as agency, fulfilment, identity, equity, empowerment, and social justice" [1, p. 1302]. A feminist ethics would, thus, reflect on objectivity [14] and be cognizant of standpoints [15], and power dynamics [8].

On the other hand, the field of digital civics aims to empower citizens and non-state actors to co-create, take an active role in shaping agendas and move from transactional to relational service models due to the potential of such models to reconfigure power relations between citizens, communities, and institutions [31]. Further, within the purview of digital civics, community-led design is a movement focused on reframing the approach to co-design with a specific focus on empowering communities to catalyse their own needs/context-based solutions [26]. Given the overlap in intention, we believe these missions to be intimately entwined with those of feminism.

Feminism is, in essence, a blueprint for a political movement [19], and, as such, a fundamental tactic is to deconstruct and challenge the normative in pursuit of actionable alternative approaches [1]. Given the previously laid-out overlap in their core concerns, we argue that digital civics, as a field, could greatly benefit from

1

feminist action-based praxis to lay out an actionable and transformative agenda. Feminist community-led ethics lies, hence, at the intersection of all these concepts, as a more relational and reflexive approach to ethics. A process of frameworking rather than a fixed framework.

Ethics discussions are inherently shaped by moral agendas, which are necessarily contingent. This is a key thing to acknowledge as unchecked bias can further oppressive value systems [18]. Ethical deliberations must, then, grapple with complex power dynamics.

This is why an intersectional feminist approach is particularly relevant. It highlights the necessity for researchers to sidestep their pre-established ethics when engaging in community projects, while simultaneously examining the power differentials present in these interactions. Likewise, a feminist community-led approach to ethics would be capable of discerning ethics within the fabric of interpersonal relationships within the community itself, fostering a dynamic ethical landscape that evolves alongside people and their contingencies. This approach advocates for a departure from rigid, prescriptive ethical frameworks that often fall short in real-world applications. By embracing contextual ethics as a departure from the traditional standpoint of so-called objectivity [14], the aim is to deepen the understanding of ethical considerations within the intricate dynamics of community projects, ultimately promoting more nuanced and responsive ethical practices.

Indeed, this workshop will explore the ways in which we can establish ethics discussions within digital civics and community-led research that explicitly and purposely draw from feminist theory and practice.

2 MOTIVATION

Ethics, especially within the context of HCI tends to be prescriptive, typically following the form of set guidelines or codes of conduct, rather than processual, where it might take on feedback structures such as Tronto's ethics of care [30] or Puig de la Bellacasa's dynamic understanding of more-than-human networks [3].

Indeed, as Komesaroff argues, prescriptive ethics is ineffective; ethics is inherently about people, it is dynamic and continuously subject to change [20]. Moreover, this prescriptive nature typically assigned to ethics means that, most of the time, the ethics of a given project are only superficially addressed a priori for approval and are rarely revisited throughout.

This static nature of hitherto ethics applications leaves little room for contingency, variation, and social dynamics — indeed, for life. This is where we would like to intervene. Drawing from feminist perspectives in HCI, we propose more dynamic tools for exploring ethics — community-led and continuous — which account for local contexts and are inherently cognizant of how power dynamics can influence decisions; and, in turn, society [21].

We begin by exploring tools and concepts for feminist ethics with the primary goal of developing a processual ethics meta-toolkit for community-led use. This is an area of research we would like to see grow and, as such, this workshop is an invitation to think it and grow it together as a broader community.

3 GOALS AND QUESTIONS

3.1 Goals

The workshop aims to explore the intersection of community-led ethics, feminist HCI, and digital civics, focusing on fostering collaborative research practices grounded in ethical principles. As such, the main goal is as follows:

Developing a meta-toolkit for community-led ethics:
 The primary objective is to collaboratively brainstorm the preferred features for a meta-toolkit for community-led feminist ethics in HCI projects, to later develop this toolkit to provide practical guidelines and heuristics for ethical considerations in community projects situated within their local contingencies.

Other secondary goals include:

- Exploring opportunities for the use of the meta-toolkit: Identifying opportunities for use by discussing common challenges in community-led research as an exploration of how such a toolkit might mitigate these issues and enhance embedded research practices in HCI projects.
- Identify and share relevant theories and concepts for feminist community-led ethics research: Compiling relevant theories and concepts for future toolkits and enhancing participants' understanding of community-led ethical research practices while highlighting the importance of community-led ethics from a feminist perspective.
- Strengthen the community of researchers and practitioners across the fields of ethics, community-led design, digital civics, and feminist HCI: Bring together a community of researchers, practitioners, and community stakeholders to exchange insights, share experiences, and collaborate on ethical research practices with the goal of facilitating cross-disciplinary knowledge exchange and opportunities for future collaborations.

3.2 Questions

The following research questions guide the exploration and discussions within the workshop, aiming to generate insights and practical outcomes that advance our understanding of community-led feminist ethics, as well as its application in HCI.

- How might HCI research, particularly that related to digital civics, move towards deeper engagement with ethics through the use of our meta-toolkit?
- What are the key components of a toolkit for communityled feminist ethics in HCI research?
- How could such a toolkit be used within a variety of contexts across embedded research design?

4 WORKSHOP STRUCTURE

Format: One-day, hybrid workshop.

The workshop is designed to foster networking and innovation through positional presentations, interactive activities, and group discussions. As such, a hybrid model will be used as a way of optimising engagement and allowing the organisers to be more flexible with accommodations and address more accessibility concerns, thus

enabling seamless participation before, during, and after the conference. To assist in the integration of breakout discussions, each physical table will be paired with a designated laptop member and a notetaker will be assigned to each table/online breakout room. We also intend to leverage digital whiteboard tools such as Miro so that participants, whether onsite or remote, can share and collaborate on visuals, promoting community cohesion in the lead-up to the event and throughout its duration. There will also be paper tools in person if people prefer to use them. Any material produced this way will later be added to the collective Miro board by the organisers for ease of future referencing. All the collected material will be gathered and shared with the participants for later thematic analysis toward the goal of building a meta-toolkit for community-led ethics.

4.1 Pre-Workshop

Ice-breaker (asynchronous): Participants will be invited to join a Discord server where they can get to know one another and begin to interact before the workshop. We will be leveraging the existing server of the DCitizens project, where we can offer participants access to an already existing network of researchers and practitioners working within community-led projects. Some interactive ice-breaker activities will be planned on Discord to establish a sense of community and connection. Such activities would be, for example, a game of This Or That, or asking members to share something they failed and excelled at during the week.

4.2 During the Workshop

The workshop is planned to be a full-day hybrid event. Activities will be provided in asynchronous and synchronous formats to provide flexibility for participation. Breaks and lunch will be confirmed later, as per the DIS 2024 schedule. The workshop schedule will be roughly divided into a morning plenary session and breakout rooms for discussion during the afternoon.

Welcome (30min): The organisers will welcome the participants and deliver a brief overview of the workshop goals and structure. Participant Presentations (1hr): Each participant will have up to 3 minutes to present themself and their interest in the workshop topic to ensure that participants are familiar with each other and to build community among all those present. A frame of the workshop's Miro board will be used for participants to add comments and/or questions parallel to the presentations.

Ethics and Feminisms (30 mins): The participants will then be asked to talk about their own definitions of feminism, ethics and feminist ethics, as well as how these shape their research. This activity will serve as the basis for the definitions used throughout the remainder of the workshop. The participants will each be provided with a space on the Miro board to add these definitions so that they can be collated post-workshop. This can be done asynchronously if online participants wish to take a break from their screens.

Break (30 mins): Break for Tea or Coffee

Hands-on Ideation (1h): Participants will be divided into groups of 3-5, depending on attendance, and assigned a breakout room for the duration of this activity. By leveraging the breakout room format, participants will have the opportunity for more focused discussions, allowing for a deeper exploration of key concepts.

- Part 1 Brainstorming (30 min): In their breakout rooms, participants will be invited to a brainstorming session and encouraged to contribute ideas for requirements related to a community-led ethics toolkit. Each group will have a dedicated frame of the workshop's Miro board to add all of their suggestions across various categories such as values, concepts, frameworks, etc. including a blank category. This initial phase will lay the groundwork for deeper discussion and analyses in subsequent activities.
- Part 2 Clustering (30min): Following the brainstorming session, each breakout room group will be clustering a different group's suggestions. Here, ideas generated during the brainstorming session will be organised and grouped into coherent themes or categories. Through collaborative dialogue and active engagement, participants will work together to refine and structure the collective pool of insights into meaningful clusters. This will serve to distil the wealth of ideas generated during the brainstorming session into actionable insights and frameworks that ought to be included in our collective meta-toolkit.

Lunch (1h30min): All participants will be invited to eat lunch together with the organisers to continue discussions and build rapport.

Reflection (1h): Participants will remain in their breakout rooms for the duration of this activity.

- Part 1 Challenges (30min): Participants will engage in a reflective, as well as reflexive, discussion centred around previous or potential conflicts that may arise from working in the context of community projects. This is intended to encourage an open dialogue where participants can share their experiences, challenges, and insights, facilitating a deeper understanding of common issues faced in community settings. Furthermore, participants are encouraged to explore real-life cases where the implementation of a toolkit could have potentially mitigated or resolved these challenges.
- Part 2 Requirements (30min): Participants will examine
 and draw connections between the outlined requirements
 for the toolkit in the *Ideation* section and the identified
 needs of the community from Part 1 of the Reflection section. This exercise is intended to prompt critical reflection
 on the adequacy of those requirements and potentially refine or alter them in retrospect.

Break (30min): Small coffee break for interaction before wrapping-

Group Reflection (45min): Each breakout room will be asked to summarise their key points and three most important features they believe should be incorporated into the toolkit. The participants will then be asked to share their main takeaways to the group, and rank the preferences of features as an overall group.

Wrap-up (15min): Final thoughts, invitations to collaborate and expand the network, and goodbyes.

4.3 Post-Workshop

Discord: The Discord will keep being managed as part of the effort toward community-building.

Continuous Discussion: All participants will be encouraged to

share their thoughts on the workshop via Discord and continue the discussions either on Discord/Email or anonymously through a Google doc that will be shared among all participants, embedded in the Discord, and maintained by the organisers. These discussions will be compiled with the permission of all those involved and analysed to determine whether major themes emerge as potential guidelines or heuristics for designing future community-led ethics toolkits.

Toolkit iteration and sharing: Based upon the feedback received throughout the workshop about the key components to be integrated into the meta-toolkit, the toolkit will be iterated and published onto the Miro board for participants to view, share, and iterate. The aim will be to then make this meta-toolkit open access and return to DIS 2025 to host a re-evaluation workshop a year on to see how participants have used it within their own research contexts throughout the year.

5 INTENDED AUDIENCE AND RECRUITMENT

We will gather 8-25 participants whose research interests align with the goals and questions we have outlined.

5.1 Intended Audience

- Researchers interested in community-led research and/or feminist HCI
- Researchers interested in Ethics for HCI projects
- Researchers interested in tools and methods for design practices

5.2 Recruitment

Drawing from the groundwork established in our prior research [1, 2, 5, 9, 12, 13, 16–18, 22, 23, 25, 28, 29] and ongoing contributions to the Horizon project [7], we have developed a diverse community of researchers, practitioners, community stakeholders, and policymakers who exhibit a collective interest in exploring the connections between community-led feminist ethics and digital civics. Likewise, this workshop presents an opportunity for us to engage with and grow this community. As such, organisers will promote the call through their own personal, professional and institutional networks, in addition to established mailing lists. We will also direct people to our website, where we will keep all the information centralised and kept regularly up to date.

Participants will be asked to submit a 1-2 page experience report (in a pdf format), or a 2 minute video recording (in mp4 format) that describes relevant personal, professional, and/or research practice. We invite participants to use the formats creatively and encourage submissions in alternative formats. All accepted papers, with the permission of the authors, will be shared among the participants and hosted on our website: dcitizens.eu. If at any point anyone wishes to remove their paper or withdraw from participation, we will promptly take it down.

5.3 Accessibility

The workshop will run as a hybrid event in an effort to increase accessibility, with each participant invited to submit a short bio and picture to be placed at the top of the Miro board to facilitate networking across participation formats. Activities will be provided

in asynchronous and synchronous formats to provide flexibility for participation. This way we can not only adapt to more timezones, but also provide more accommodations to our participants. Furthermore, each activity will be detailed throughout the Miro board to enable online participants to drop in and out of the call, participating in their preferred capacity. We are committed to providing a supportive and inclusive environment for participants with diverse needs and will ensure that everyone can fully engage with the content and discussions. Toward that goal, we will circulate a form prior to the workshop for everyone to specify their desired accommodations, which will be granted within our capabilities. Additionally, we will provide live captioning and in-person wheelchair accessibility, as per the DIS 2024 venue requirements.

6 WHY DIS 2024?

Given the intrinsic relationship between ethics, design, and the politics inherent therein, it is crucial that we reflect on the implications of how we approach our research. Considering design's ability to shape futural configurations of both the mediums and media through which we interact – with others, with the world, and even with our own selves – the act of designing becomes a vehicle for building tools collaboratively, thus fostering connections in community-led practices. This workshop contributes to DIS's ethos by strengthening the community-led approach in ethics, digital civics, and participatory design – highlighting the interactivity aspect of design, which we believe to be a key aspect of building any system geared toward community-led ethics.

7 ORGANISERS

The organisers of this workshop possess collective expertise in community-led research, feminist HCI, and policy-making. With experience across different institutions, industries, and disciplines, they have experience in designing, studying and publishing on ethical frameworks and digital civics spanning a wide range of geographical, institutional and social contexts. This positions us well to facilitate discussions across the themes of feminism, ethics, and embedded research. By fostering an environment where diverse insights converge, we aim to catalyze interdisciplinary dialogue and enrich the academic community's approach to ethics. Ultimately, the workshop seeks to cultivate a collaborative community committed to advancing ethical research within digital civics.

ACKNOWLEDGMENTS

We thank our funding bodies at the European Commission (101079116 Fostering Digital Civics Research and Innovation in Lisbon), EP-SRC (EP/T022582/1 Centre for Digital Citizens - Next Stage Digital Economy Centre), The British Academy Innovation Fellowship – Crafting Infrastructures of Inclusion (IF20044).

REFERENCES

- Shaowen Bardzell. 2010. Feminist HCI: Taking Stock and Outlining an Agenda for Design. In Proceedings of the SIGCHI Conference on Human Factors in Computing Systems. ACM, New York, NY, USA, 1301–1310. https://doi.org/10.1145/1753326.
- [2] Shaowen Bardzell and Jeffrey Bardzell. 2011. Towards a Feminist HCI Methodology: Social Science, Feminism, and HCI. In Proceedings of the SIGCHI Conference on Human Factors in Computing Systems. ACM, New York, NY, USA, 675–684. https://doi.org/10.1145/1978942.1979041

466

467

468

469

470

471

472

473

476

477

478

479

480

481

482

483

484

485

486

487

488

489

490

491

492

493

494

495

496

497

498

499

500

502

503

504

505

506

507

508

509

510

511

512

513

514

515

516

517

518

519

520

521 522 523

524

525

527

528

529

530

531

532

534

535

536

537

538

539

540

541

542

543

544

547

548

549

550

551

555

557

561

562

563

564

567

568

569

576

577

578

580

- María Puig De La Bellacasa. 2017. Matters of Care: Speculative Ethics in More than Human Worlds. University of Minnesota Press. http://www.jstor.org/stable/10. 5749/j.ctt1mmfspt
- [4] Barry Brown, Alexandra Weilenmann, Donald McMillan, and Airi Lampinen. 2016. Five Provocations for Ethical HCI Research. In Proceedings of the 2016 CHI Conference on Human Factors in Computing Systems (San Jose, California, USA) (CHI '16). Association for Computing Machinery, New York, NY, USA, 852–863. https://doi.org/10.1145/2858036.2858313
- [5] Anna R. L. Carter, Kyle Montague, Reem Talhouk, Shaun Lawson, Hugo Nicolau, Ana Cristina Pires, Markus Rohde, Alessio Del Bue, and Tiffany Knearem. 2024. DCitizens Roles Unveiled: SIG Navigating Identities in Digital Civics and the Spectrum of Societal Impact. In Proceedings of the SIGCHI Conference on Human Factors in Computing Systems (CHI '24'). Association for Computing Machinery, New York, NY, USA. https://doi.org/10.1145/3613905.3643981
- [6] Hilary Davis and Jenny Waycott. 2015. Ethical Encounters: HCI Research in Sensitive and Complex Settings. In Proceedings of the Annual Meeting of the Australian Special Interest Group for Computer Human Interaction (Parkville, VIC, Australia) (OzCHI '15). Association for Computing Machinery, New York, NY, USA, 667–669. https://doi.org/10.1145/2838739.2838834
- [7] DCitizens. 2022. Fostering Digital Civics Research and Innovation in Lisbon. https://doi.org/10.3030/101079116
- [8] Michel Foucault. 1980. Power/Knowledge: Selected Interviews and Other Writings 1972-1977. Vintage Books, London.
- [9] Eleonore Fournier-Tombs and Juliette McHardy. 2023. A Medical Ethics Framework for Conversational Artificial Intelligence. J Med Internet Res 25 (26 Jul 2023), e43068. https://doi.org/10.2196/43068
- [10] Nancy Fraser. 2009. Reimagining Political Space in a Globalizing World. Columbia University Press, New York, NY. http://www.jstor.org/stable/10.7312/fras14680
- [11] Christopher Frauenberger, Marjo Rauhala, and Geraldine Fitzpatrick. 2016. In-Action Ethics. Interacting with Computers 29, 2 (06 2016), 220–236. https://doi.org/10.1093/iwc/iww024 arXiv:https://academic.oup.com/iwc/article-pdf/29/2/220/10296473/iww024.pdf
- [12] C.M. Gray and E Boling. 2016. Inscribing ethics and values in designs for learning: a problematic. Education Tech Research Dev 64 (2016), 969–1001. https://doi.org/ 10.1007/s11423-016-9478-x
- [13] Colin M. Gray, Shruthi Sai Chivukula, Thomas V Carlock, Ziqing Li, and Ja-Nae Duane. 2023. Scaffolding Ethics-Focused Methods for Practice Resonance. In Proceedings of the 2023 ACM Designing Interactive Systems Conference (DIS '23). Association for Computing Machinery, New York, NY, USA, 2375–2391. https://doi.org/10.1145/3563657.3596111
- [14] Donna Haraway. 1988. Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective. Feminist Studies 14, 3 (1988), 575. https://doi.org/10.2307/3178066
- [15] Sandra Harding (Ed.). 2004. The Feminist Standpoint Theory Reader: Intellectual and Political Controversies. Routledge, New York, NY.
- [16] Ana O. Henriques. 2023. Designing Futures: How Can Ethics Shape Design Theory and Practice. Centro de Investigação e de Estudos em Belas Artes, Faculdade de Belas-Artes, Universidade de Lisboa.
- [17] Ana O. Henriques, Hugo Nicolau, and Kyle Montague. 2023. Frameworking for a Community-led Feminist Ethics.. In Proceedings of CSCW 2023 Workshop - A Toolbox for Feminist Wonder - Theories and Methods that can Make a Difference. (CSCW '23). Association for Computing Machinery, New York, NY, USA. web. tecnico.ulisboa.pt/hugo.nicolau/publications/2023/Henriques-CSCW-2023.pdf
- [18] Ana O. Henriques, Sónia Rafael, Victor M Almeida, and José Gomes Pinto. 2023. The problem with gender-blind design and how we might begin to address it. In Extended Abstracts of the 2023 CHI Conference on Human Factors in Computing Systems. ACM, New York, NY, USA, 1–12. https://doi.org/10.1145/3544549. 3582750
- [19] bell hooks. 1984. Feminist Theory: From Margin to Center. South End Press.
- [20] Paul A. Komesaroff. 1995. From Bioethics to Microethics: Ethical Debate and Clinical Medicine. In Troubled Bodies: Critical Perspectives on Postmodernism, Medical Ethics, and the Body, Paul A. Komesaroff (Ed.). Duke University Press, Durham, NC, 62–86. https://doi.org/10.1515/9780822379782-004
- [21] Richard A. Lynch. 2016. Foucault's Critical Ethics. Fordham University Press, New York, NY.
- [22] Cayley MacArthur, Caroline Wong, and Mark Hancock. 2019. Makers and Quilters: Investigating Opportunities for Improving Gender-Imbalanced Maker Groups. Proc. ACM Hum.-Comput. Interact. 3, CSCW, Article 29 (nov 2019), 24 pages. https://doi.org/10.1145/3359131
- [23] Janis Lena Meissner, Angelika Strohmayer, Peter Wright, and Geraldine Fitz-patrick. 2018. A Schnittmuster for Crafting Context-Sensitive Toolkits. In Proceedings of the 2018 CHI Conference on Human Factors in Computing Systems. ACM, New York, NY, USA, 1–13. https://doi.org/10.1145/3173574.3173725
- [24] Adrian Petterson, Keith Cheng, and Priyank Chandra. 2023. Playing with Power Tools: Design Toolkits and the Framing of Equity. In Proceedings of the 2023 CHI Conference on Human Factors in Computing Systems. ACM, New York, NY, USA, 1–24. https://doi.org/10.1145/3544548.3581490

- [25] Sarah Rüller, Konstantin Aal, Peter Tolmie, Andrea Hartmann, Markus Rohde, and Volker Wulf. 2022. Speculative Design as a Collaborative Practice: Ameliorating the Consequences of Illiteracy through Digital Touch. ACM Trans. Comput.-Hum. Interact. 29, 3, Article 23 (jan 2022), 58 pages. https://doi.org/10.1145/3487917
- [26] Elizabeth B.-N. Sanders and Pieter Jan Stappers. 2008. Co-creation and the new landscapes of design. CoDesign 4, 1 (3 2008), 5–18. https://doi.org/10.1080/ 15710880701875068
- [27] Amartya Sen. 2012. Values and justice. Journal of Economic Methodology 19, 2 (6 2012), 101–108. https://doi.org/10.1080/1350178X.2012.683601
- [28] Angelika Strohmayer, Jenn Clamen, and Mary Laing. 2019. Technologies for Social Justice: Lessons from Sex Workers on the Front Lines. In Proceedings of the 2019 CHI Conference on Human Factors in Computing Systems (Glasgow, Scotland Uk) (CHI '19). Association for Computing Machinery, New York, NY, USA, 1–14. https://doi.org/10.1145/3290605.3300882
- [29] Reem Talhouk, Madeline Balaam, Austin L. Toombs, Andrew Garbett, Chaza Akik, Hala Ghattas, Vera Araujo-Soares, Balsam Ahmad, and Kyle Montague. 2019. Involving Syrian Refugees in Design Research: Lessons Learnt from the Field. In Proceedings of the 2019 on Designing Interactive Systems Conference (DIS '19). Association for Computing Machinery, 1583–1594. https://doi.org/10.1145/ 3322276.3322335
- [30] Joan C. Tronto and Berenice Fisher. 1990. Toward a Feminist Theory of Caring. In Circles of Care: Work and Identity in Women's Lives, Margaret K. Nelson and Emily Abel (Eds.). SUNY Press, Albany, NY, 36–54.
- [31] Vasillis Vlachokyriakos, Clara Crivellaro, Christopher A. Le Dantec, Eric Gordon, Pete Wright, and Patrick Olivier. 2016. Digital Civics. In Proceedings of the 2016 CHI Conference Extended Abstracts on Human Factors in Computing Systems. ACM, New York, NY, USA, 1096–1099. https://doi.org/10.1145/2851581.2886436
- [32] Jenny Waycott, Cosmin Munteanu, Hilary Davis, Anja Thieme, Stacy Branham, Wendy Moncur, Roisin McNaney, and John Vines. 2017. Ethical Encounters in HCI: Implications for Research in Sensitive Settings. In Proceedings of the 2017 CHI Conference Extended Abstracts on Human Factors in Computing Systems (Denver, Colorado, USA) (CHI EA '17). Association for Computing Machinery, New York, NY, USA, 518–525. https://doi.org/10.1145/3027063.3027089