



Feminisms Through Design

A Practical Guide to Implement and Extend Feminism

POSITION



Sai Shruthi Chivukula, Purdue University

This article represents my reflection on feminism and design. Its goal is to provoke your own feminist position on design and help you to navigate this space through understanding the feminist values embedded in design. Does writing this article mean that I am a feminist scholar? Could I come across as a “feminist killjoy”? Or a scholar in the process of “becoming”? Do I write it because I believe in everyday feminism? Or because I love to voice the power of design that embeds feminist values? The answer is, in part, all of these, but mostly the latter: I see the potential of design to change the face and use the ideals of feminism in daily design and research practices. This article has two main sections: First, I summarize how feminism has historically been represented in HCI research and design through the lens of citation patterns. Second, I present a practical proposal for *feminisms through design* (FtD) for various audiences.

HOW HAS FEMINISM HISTORICALLY BEEN REPRESENTED IN HCI RESEARCH?

To describe how feminist approaches have been represented in HCI research, our previous study [1] answered the following research questions through a citation analysis of Shaowen Bardzell’s seminal work [2]: *How is feminist theory cited in HCI scholarship? In what way(s) are HCI researchers citing Bardzell’s 2010 “Feminist HCI” paper? How might the study of citation functions inform the propagation of feminist theory in interdisciplinary HCI research?*

To summarize our previous study [1], we conducted a citation analysis of 70 published conference proceedings, including a total of 108 citation snippets that cited Bardzell’s 2010 paper [2], allowing us to describe the ways in which feminist theories are cited and utilized in HCI research. In addition to a citation analysis based on Nigel Harwood’s citation function typology [3],



	Scholars/Researchers	Educators	Practitioners/Students
Knowledge	Foregrounding hegemonic structures to be questioned.	Providing/educating about fundamental assumptions that exist about a construct.	Redesigning against fundamental assumptions that exist about a construct.
Methodology	Using low-theory techniques to bridge the gap between academic and practice communities.	Positioning failure as an emancipatory opportunity in design learning.	Presenting failure as a success story and reflecting this in portfolios.
Self/Community	Improving citational practices through <i>clear expression</i> .	Providing a safe space for students to become emancipated [9].	Reflecting about a sense of responsibility toward society through designs.
Artifact	Translating theory in practical ways by inscribing feminist values into design production.	Formulating feminist values as problem frames.	Considering and designing for critical alternatives.

Table 1. Mapping FtD across four angles for scholars, educators, and practitioners.

we also conducted a thematic analysis using two a priori frameworks—contribution criteria and feminist interaction design qualities—proposed in [2] to illustrate how Bardzell’s contributions have been extended or implemented in HCI research. Citation analysis is a research analysis method enabling the “qualitative and quantitative evaluation of scientists, publications, and scientific institutions” [4], which we used to study citation behaviors in the context of feminist theory in HCI. Our findings suggest that authors’ engagement with feminist concepts in HCI research has primarily been *one dimensional*. We provide evidence that HCI research has mostly signposted Bardzell’s work, giving her credit for the concept of feminist HCI. Quantitative results provide evidence that Bardzell’s frameworks are not currently extensively or directly used in published HCI research (nine of 108 citation snippets) and were primarily used only to signpost (n=43/108) or credit (n=63/108) the paper as pioneering work in the field that translated feminism into HCI. However, rare examples *did* use the framework in more substantial ways, demonstrating the utility of these frameworks in foregrounding the critical dimensions of HCI work, and elucidating what more direct engagement with feminist frameworks in HCI scholarship might look like. For example, papers extended Bardzell’s frameworks to design for women’s safety [5], change community values [6], and evaluate crowdsourced ideas to improve a community’s phase of life [7].

I will briefly present several examples that engaged *extensively* with Bardzell’s feminist frameworks. In the context of public health, following the methodology of *feminist reflexivity* proposed by one of Bardzell’s frameworks, and explicitly drawing from her feminist qualities of interaction design such as pluralism, participation, advocacy, and ecology, work done by Neha Kumar and Richard Anderson [8] uncovered the channels of agency women possess despite the patriarchal and oppressed front of their communities. In another example, Fiesler et al. [6] used Bardzell’s approach of *feminist commitment* and *reflexivity* as a theoretical framework to analyze the concealed structure embedded in the formation of a community called Archive of Our Own (AO3). Taking the feminist interaction design qualities as an *evaluation* framework, Fiesler and colleagues [6] have

captured the philosophy of AO3’s design embedded in core principles of feminist HCI. This work provides an example of how HCI researchers or designers can implement Bardzell’s frameworks to design for the empowerment of communities. Similarly, Naveena Karusala and Neha Kumar’s [5] work used Bardzell’s feminist interaction qualities framework to evaluate and propose design interventions for technology for women’s safety. These examples, all of which engaged extensively with Bardzell’s frameworks, exemplify an ethical focus that is pragmatic, forward looking, and change making, working to foresee and remediate the potential impact of technology on society and well-being.

Through these instances, we can see that the use of feminist theory in HCI design research—as exemplified by citations of Bardzell’s pioneering text—has the potential to identify and disrupt hegemonic structures, for example, by giving voice to users through participatory approaches and generating content on technology platforms that present their frame of thought in a way that is more public facing and liberating than before. The citation practices we have identified point toward several implications for future research and design practice. The goal in sharing this analysis is not to undermine critically focused research, but rather to highlight opportunities to more fully build upon feminist theories in order to advance HCI discourses for research, practice, and pedagogy. Acknowledging this growing body of impactful work by feminist design scholars, I intentionally build upon this work to propose other dimensions of engagement with feminism, pointing toward the concept of feminisms in design.

FEMINISMS THROUGH DESIGN (FTD)

In this section, I propose the use of feminism as design material, pointing toward the possibilities that feminisms can offer us across multiple roles for HCI and design *scholars, educators, and practitioners*. I present four angles of provocation for *feminisms through design* (FtD): *knowledge, methodology, self/community, and artifact*. I discuss each of these angles in the following sections, providing concrete means of implementation across multiple roles (Table 1).

Knowledge: Questioning fundamental assumptions. This angle focuses on either the knowledge that is produced through design in a feminist stance or how knowledge is

engaged with in the act of designing. FtD proposes a *clear expression* of the knowledge being produced, questioned, critiqued, propagated, or used through one's design work. I encourage building knowledge about *praxis* to present the theory of action on the ground. Think about this mode as a way to openly present the dilemmas that exist in design situations and structures. For example, if you are a feminist HCI practitioner, ask: *How am I building awareness with my team members about designing for users and stakeholders at the same time (e.g., plurality)?* FtD also highlights being mindful of how knowledge is selected and used by questioning the norms and fundamental assumptions that are embedded in everyday thinking. Think about this step as a defamiliarization activity where you question fundamental stereotypes or constructs evident in the situation at hand. For example, if you are a feminist HCI researcher, what are the hegemonic structures being questioned or critiqued through your research?

Methodology: Curating antidisiplinary forms of knowledge. This angle focuses on methodology that can be leveraged to build knowledge and instrumentalize feminism. FtD pushes the boundaries of accessibility of high forms of theory and risks going against traditional disciplinary norms. FtD proposes antidisiplinary forms of knowledge that can be curated through relatable artifacts, commonly not treated as acceptable forms of data. If you are a feminist educator, this brings opportunities to identify pedagogical practices that build sensitivity toward high-theory concepts such as feminist approaches for younger adults, in either classroom or theatrical spaces—expanding on the “antidisiplinary” of pedagogy [10]. FtD anticipates instrumentalizing feminism through a methodology that encourages sharing stories of failure and treating it as a potential learning avenue. For example, if you are a feminist student, present the failure in your design process as a means of building your sensibility toward your design practice in your portfolios.

Self/community: Empowering and creating self awareness. This angle focuses on the sense of self and community, both individually and co-relationally, during one's design practice and research. Bardzell has already theorized how we might give voice to users through participatory approaches and content generation on technology platforms, to present their frame of thought in a way that is more public facing and liberating than before. Beyond this, FtD focuses on a sense of *self*, embracing the fact that everyone is a master of their own experience and can have the intellectual humility to check their own privileges while designing. For example, as a feminist self, own your design story of artifact creation, acknowledging that knowledge creation is inherently situated and personal. FtD defines certain actions to support the academic and practice *community* by being mindful of our citational practices, in desired community-oriented patterns rather than age-old paths by presenting other's work and empowering fellow designers and researchers through design action or artifact. For example, if you are a feminist educator, start by identifying the sources of material given to your students and encourage readings from authors of every race, color, creed, and region. FtD encourages the interdependence of *active* stances taken by both self and community in their

practices, extending on the work of [11,12]. There is a sense of self that is created when a safe community exists and vice versa, which in the current state needs forms of activism to change fundamental assumptions and structures. This can be illustrated through the current social and political situation around Black Lives Matter, where we see a digital revolution that is oriented toward action, with an explicit goal of producing actual change for generations to come.

Artifact: Giving it a form in design(s) action. This angle focuses on giving a form to “feminist artifacts” through design action. FtD looks at the pragmatic means by which feminism can be translated into design artifacts, promoting feminism in the following ways: by encouraging critical alternatives, by considering affective dimensions, and by using feminist values as problem frames. FtD engages with arguments about “looking on the other side” or building on alternative forms of research rather than traditional forms. These alternatives allow critical thinking about other feminist concepts such as gender, inclusion, ethics, values, marginalization, and justice. In engaging with these critical alternatives, HCI researchers can critique hidden and unspoken values in artifacts. FtD states that providing critical alternatives is not only about questioning masculine bias or supporting women through design. It also raises feminist concepts such as gender construction and how technology can reinforce it. For example, if you are a feminist practitioner, start evaluating your artifacts through marginalized use cases, groups, people, and edge cases that are otherwise not considered to be recipients of HCI interventions. FtD may aid in building designers' sensitivity, empathy, and sense of social responsibility, leading to more ethical and emancipatory design practices. For example, if you are a feminist educator, critique your students' work to build the above affective dimensions through artifacts and allow them to see the power of an artifact beyond its usability. FtD suggests that designers engage in design work that foregrounds feminist values such as pluralism, advocacy, self-disclosure, participation [2], willfulness, queerness, and failure [10] as problem frames. For example, if you are a feminist design educator, formulate design briefs for students to begin with a feminist value as their problem frame rather than introducing value implementation in the solutions stage only.

CONCLUSION

In this article, I have offered a provocation of how we might meaningfully extend feminism in HCI and design, proposing a feminisms through design (FtD) framework to articulate these goals across a range of audiences and perspectives. Using this framework as a starting point, I call for more translational work in directly adopting current and past feminist literature through the proposed angles of feminisms in design. Bardzell and other authors who have built and extended feminist theories in the HCI research community have created a safe place and stage to have a dialogue about feminism, alongside a larger constellation of approaches inspired by critical theory. It is our time to expand and support this space through our design and research work by amplifying our voice and voices of fellow academic

community members to more fully bring feminism into our everyday practices.

ACKNOWLEDGMENTS

I would like to acknowledge Colin M. Gray for his authorship on our previous work [1] that contributed to the first section of this article and for his insightful feedback on this article.

ENDNOTES

1. Chivukula, S.S and Gray, C.M. Bardzell’s ‘feminist HCI’ legacy: Analyzing citational patterns. *Extended Abstracts of the 2020 CHI Conference on Human Factors in Computing Systems*. ACM, New York, 2020, 1–8.
2. Bardzell, S. Feminist HCI: Taking stock and outlining an agenda for design. *Proc. of the SIGCHI Conference on Human Factors in Computing Systems*. ACM, New York, 2010, 1301–1310.
3. Harwood, N. An interview-based study of the functions of citations in academic writing across two disciplines. *Journal of pragmatics* 41, 3 (2009), 497–518.
4. Nicolaisen, J. Citation analysis. *Annual Review of Information Science and Technology* 41, 1 (2007), 609–641.
5. Karusala, N. and Kumar, N. Women’s safety in public spaces: Examining the efficacy of panic buttons in New Delhi. In *Proc. of the 2017 CHI Conference on Human Factors in Computing Systems*. ACM, New York, 2017, 3340–3351.

6. Fiesler, C., Morrison, S., and Bruckman, A.S. An archive of their own: A case study of feminist HCI and values in design. *Proc. of the 2016 CHI Conference on Human Factors in Computing Systems*. ACM, New York, 2016, 2574–2585.
7. D’Ignazio, C., Hope, A., Michelson, B., Churchill, R., and Zuckerman, E. A feminist HCI approach to designing postpartum technologies: When I first saw a breast pump I was wondering if it was a joke. *Proc. of the 2016 CHI Conference on Human Factors in Computing Systems*. ACM, New York, 2016, 2612–2622.
8. Kumar, N. and Anderson, R.J. Mobile phones for maternal health in rural India. *Proc. of the 33rd Annual ACM Conference on Human Factors in Computing Systems*. ACM, New York, 2015, 427–436.
9. Gray, C.M., Parsons, P., Toombs, A.L., Rasche, N., and Vorvoreanu, M. Designing an aesthetic learner experience. *International Journal of Designs for Learning* 11, 1 (2020), 41–58.
10. Halberstam, J. *The Queer Art of Failure*. Duke Univ. Press, 2011; <https://doi.org/10.1215/9780822394358>
11. Costanza-Chock, S. *Design Justice: Community-Led Practices to Build the Worlds We Need*, 2020.
12. D’Ignazio, C. and Klein, L.F. *Data Feminism*. MIT Press, 2020.

👤 **Sai Shruthi Chivukula** is a Ph.D. candidate at Purdue University. Her research focuses on describing everyday ethics in sociotechnical practice, in particular ethics-focused methods to provide support and emancipate sociotechnical practitioners for ethical decision making. → cshruthi@purdue.edu

DOI:10.1145/3427338 © 2020 ACM 1072-5520/20/11 \$15.00

RESPONSE

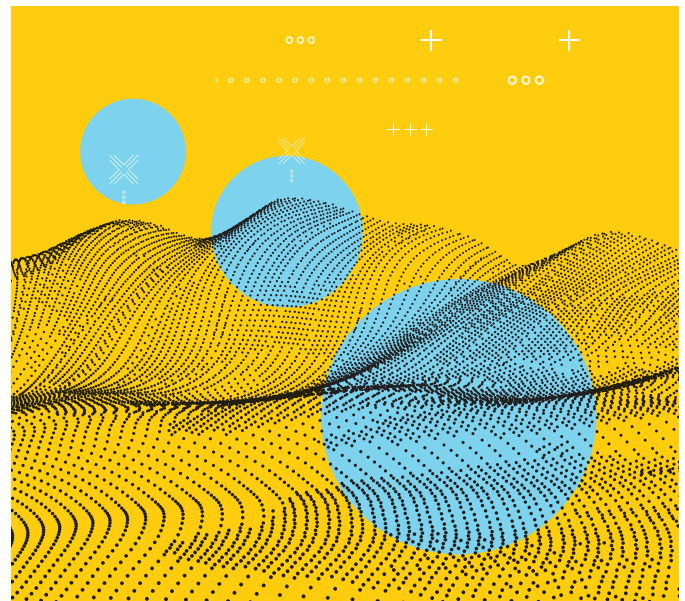
👤 **Shaowen Bardzell**, The Pennsylvania State University

I am delighted to offer a reaction to Sai Shruthi Chivukula’s piece, “Feminisms Through Design: A Practical Guide to Implement and Extend Feminism.”

Chivukula begins her article as a response to my 2010 paper “Feminist HCI: Taking Stock and Outlining and Agenda for Design,” including its citation history and some of its diverse impacts.

I’d like to begin by speaking more personally about that paper’s impacts on me. “Feminist HCI” was my first ever paper accepted to the CHI conference, following more failed attempts than I care to acknowledge here. Today it is my most cited work. To say that it changed my life is an understatement, having initially launched my research career, given me confidence to participate in this research community, and then over the years thrust me into roles that have helped me to appreciate how messy and difficult issues of emancipatory HCI truly are.

One of my intentions in that paper, which has continued on as a guiding value for me ever since, was to decenter myself. For example, in that work I offered a genealogy of feminist thinking as it had already influenced HCI—I was not trying to plant the flag, to introduce feminism to HCI. Rather, I was trying to give an honest name to an influence that was already in HCI. Even then, you could see it (if you looked for it) in the work of Lucy Suchman, Margaret Burnett, Elizabeth Churchill,



Susanne Bødker, and Jen Rode, among many others. And in developing the framework of five qualities of feminist HCI (i.e., pluralism, participation, advocacy, ecology, and reflexivity), I was not so much attempting to develop a novel theory as I was attempting to synthesize some of the distinguishing characteristics of feminist work—not just in HCI. It was never intended as a novel research contribution, but rather as an effort to capture what was already there. It is therefore not a problem or a disappointment for me that, as Chivukula’s research has shown, the majority of the research that cites the paper does not take up this framework in earnest.