

Feminist Hackerspaces as Sites for Feminist Design

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ABSTRACT

This paper describes the work I have conducted with colleagues in and around feminist hackerspaces — workspaces that support the creative and professional pursuits of women. Through action research, interviews, and participant observation, I have explored the motivations, activities, and ideals of people organizing feminist hackerspaces. Additionally, I have begun to investigate what feminist design of technology might look like through the facilitation of a series of design workshops in two of these spaces. Through this work, I examine the feminist ideals that develop in these spaces as both discursive and material phenomena that shed new light on what counts as hacking, technology and collaboration.

Author Keywords

Hacking; making; craft, design; hackerspaces; feminism; STS.

ACM Classification Keywords

H.5.m. Information interfaces and presentation (e.g., HCI): Miscellaneous.

INTRODUCTION

Over eighteen months in Northern California and the Pacific Northwest, colleagues and I have pursued study of women-oriented and feminist hackerspaces — workspaces that support the creative and professional pursuits of women. These spaces developed in 2013, most prominently in the Pacific Northwestern United States, to make room for values, goals and practices that do not sit easily within existing sites of technical production. In designing how the spaces should look, feel, and run, members reframe activities seldom associated with technical work (e.g., weaving, identity workshops) as forms of hacking. Using interviews, design workshops, and participant observation, we trace how the reimagining of everyday space — how it might look, feel, and interact with society — became a

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means of grappling with the alignments and disconnects between familiar infrastructures and the unfamiliar symbolic work feminist hackers hope to engender [3].

OBSERVATIONS

Since their inception in 2012, feminist hackerspaces have offered local residents a place to gather, share ideas, learn creative techniques, and grow professional partnerships. Sophie Toupin, a feminist scholar and member of a feminist hackerspace in Montreal, describes these sites as the “spatial manifestation of the feminist hacker, maker and geek culture” [7]. Though all different in their implementations, these spaces share a core tenant that women and other marginalized people should be welcomed to perform technical practice without being subjected to discrimination or abuse. Liz Hendry, co-founder of Double Union in San Francisco, notes that feminist hackerspaces, like many other hackerspaces, focus not only on making, but also teaching and learning. Where they start to diverge is around the values they aim to uphold and the activities they serve to promote. Noting difference, Hendry adds, “[ours] is starting with a few extra values: intersectional feminism, support for feminist activism and strong respect for personal boundaries” [4]. As a safeguard against harassment, these spaces established codes of conduct intended to communicate institutional values. Without these codes, members might face the burden of having to continually explain their viewpoints. As Toupin notes, “When feminist and anti-oppression politics are not explicitly part of the ethos of a space whether virtual or physical, the burden of education will often be placed upon the people who are living these oppressions” [6].

At first glance, many tools within these sites seem at home in a conventional hackerspace. We observed resources for hardware hacking such as soldering irons, laptops, and what one member called a “documentation station,” a tripod-mounted webcam with a microscope and light positioned over an electronics workbench for digitally capturing and sharing video of microelectronics tinkering. Analogue tools sat next to these devices. For instance, during workshops in Seattle Attic we saw knitting and crocheting tools, a variety of looms, button making supplies, a 19th century, industrial sewing machine, and associated restoration materials. Such juxtapositions call into question the kinds of activity identified as ‘technology’ in line with common definitions of do-it-yourself culture that contest mainstream technology development. Through material and discursive engagement,

members of these spaces contest widely understood forms of hacking and technology development.

WORKSHOPS

During the first several months of research, our focus was on observational study of feminist hackerspaces in Seattle (Seattle Attic) and Portland (Flux). In preparation for a field visit to Double Union in San Francisco, one of the co-founders asked us to facilitate a design workshop in the space. In moving beyond a purely observational position, into one that might be more interventionist, we took the workshop event as an opportunity to speculate on the types of things that might inform and generate ideas for the participating members. We were particularly interested in a design agenda that could extend members' personal and collective concerns, recognizing their organization of the space as a productive act, enacting particular values and ideas in relation to a broader technology cultures. Our workshops used these concerns to investigate the shape and character of a feminist approach to design. Central in this project was an infrastructuring of design decisions: recognizing how inverting our perspective — highlighting the sociotechnical assemblages underlining our design projects — could offer possibilities for rethinking technology design.

Seeing the development of these spaces as instances of feminist activist work, we invited members to continue their intervention by interrogating other spaces they move through and tools they use regularly. For the first workshop, we built on Dunne and Raby's speculative approach by asking members to interpret values embedded in the built environment with an eye toward design potentials that might exist in the future or an alternative present [2]. Members individually engaged in a weeklong photo elicitation exercise prior to the meeting, which became the basis for the workshop's main activity of producing low-fidelity design proposals. In a later workshop, held at Seattle Attic, we asked both members and guests to consider how the infrastructure of their daily lives might have been designed with certain values in mind [1].

In each of the workshops, participating members and guests were asked to break out into groups of two or three to redesign a space or tool they found problematic in some way. In the first workshop, with space as the focus, members examined a corporate technology office, a shared kitchen in a cooperative house, a BART transit station, and Danielle Steele's mansion. In the second workshop, members and guests elected to reimagine Soylent (the food replacement startup), an accessible crosswalk, paywalls (mechanisms preventing users from accessing certain information without paying a fee), "dick pics" on Tinder, and a signup survey for a local bike sharing service.

Through these workshops, we saw that when design becomes part of emphasizing a feminist encounter with technology, it must confront the variety of feminisms at play. Entanglements of feminisms and design processes in

practice transformed people's ways of knowing and enacting their views. They revealed feminism and design as co-constitutive: transforming one another through their interaction.

CONCLUSION

In focusing on feminist forms of collaborative work in hackerspaces, this paper follows a renewed interest in the role feminist epistemologies and methods might play in research on social and collaborative systems. Stemming from the field of Science and Technology studies, a somewhat radical body of feminist scholarship has engaged with design and technology development through the lens of new materialism [5]. This work offers a critique of conventional technology and gender studies in which scholars treat technology as 'open to interpretation' but gender as stable. For example, Joanna Sefyrin explored the practices behind accounts of IT development, suggesting that women get systematically excluded from these accounts. By following women participating in an IT design project in a Swedish government agency, Sefyrin shows how the substantive contributions women make go unacknowledged. She notes, "[...] the question of whether women can be considered insiders or outsiders of IT design also has to do with how 'IT design' is defined" [5]. Perhaps one can see how questions like this start to complicate the story of 'access' as a means for 'getting more women into technology.' Much like this work, investigating the mutual-construction of gender and technology as an intervention into social studies of IT, I offer analysis of feminist hackerspaces as interventions into design and development methods.

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