
Intimate Design: Designing Intimacy As a Critical-Feminist Practice

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Abstract

Intimate aspects of everyday life are increasingly being connected to and interacted with through digital technologies; this impacts the ways of being in the world and how bodies come to matter. From an interdisciplinary perspective at the intersections of feminist HCI, art, and interaction design I examine how design can reflect on and critically discuss political and cultural issues of intimate technologies, such as gender and identity, embodied experiences, privacy, intimate data and sharing. In presenting my PhD project's background, research objectives, hypothesis and methodological approach, as well as its current and future state and research contributions, I discuss how it is possible to research design of intimate technologies from a critical-feminist perspective.

Author Keywords

Speculative design; feminist HCI; wearables; self-tracking; IoT; critical design; design fiction; research-through-design; intimacy.

ACM Classification Keywords

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

Introduction

While digital technologies are shrinking and getting more intimate, ubiquitous and connected to our bodies and intimate everyday life, there is a need to understand the implicit politics and logics they perform. It has become common practice to quantify daily activities of our everyday life, like running, sleeping, or eating, and optimize living with apps and smart devices. Wearables, such as smart watches, extend the logic of the quantified self and algorithms into everyday living. With Internet of Things (IoT) more and more artifacts are getting connected, such examples include hygiene products and sex toys.

The motivation of my research is to examine the underlying logics of the futures of intimate technologies by critically analyzing the present political and cultural issues of self-tracking, wearables, and IoT [5]. Furthermore, the motivation behind the project is to question and challenge these logics through a critical-feminist design practice where intimacy and bodies comes to matter. One such practice would e.g. challenge the logics of designing for a happier and easier life, by designing for (also) darker, more complex and tabooed areas of life, such as menstruation and sex and the complicated issues that arise in these situated, culture-sensitive and personal areas [5,7,14].

Research Objectives

The research objectives concern a critical-feminist practice of designing future intimate technologies in the intersection of HCI, art and design. The PhD project investigates three interrelated questions that examine intimacy and design by approaching design as a critical object, practice and method:

- 1) How does design as a critical *object* reflect intimacy in today's computational culture?
- 2) How can design as a critical *practice* intervene political and cultural issues of intimate technologies?
- 3) How can design as a critical *method* examine and produce knowledge on how intimacy and bodies comes to matter through technology?

Related Work

This research is situated within the expanding field of speculative and critical design (SCD) [1], and draws on feminist HCI [27] and feminist technoscience [6,16], critical theory and software studies [7]. The intersection of feminist theory, critical theory and software studies becomes the general theoretical framework for my design research's critical inquiry into values and norms of technologies, in its perception and performance of gender, subjectivity, interface, infrastructure and political systems.

In HCI, speculative and critical design is getting popular as a critical tool to reflect and speculate on the future of digital technologies, as an alternative to a merely problem-solving design approach [11,12,22,28]. Speculative design has been used to question the logics of self-tracking [28], drones [12], and more broadly Solutionist approaches to design [22]. Like design fiction [2,13,15], adversarial design [3], reflective design [25], and critical making [23], SCD proposes a critical approach to HCI based on critical thinking, problem-finding, critical alternatives, and a larger focus on the social, cultural and political role of technology [1].

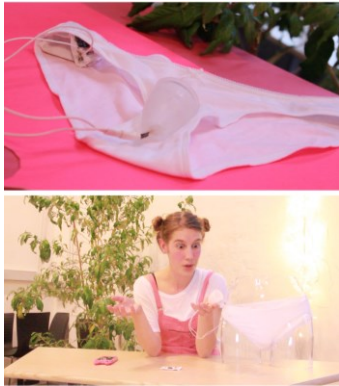


Figure 1. PeriodShare is a WiFi enabled menstrual cup that automatically tracks menstruation data directly from the blood, and share it directly on social networks.



Figure 2. Marcelle is a wearable sex toy garment that is activated as a response to WiFi-activity.

Generally speaking, HCI is opening up to more intimate ways of “thinking” and designing technologies. As a case of third wave HCI, there has been an increasing focus on subjectivity and sexuality in HCI [10,11], and feminist HCI has been proposed as an agenda for design [27]. Similarly, an agenda for woman’s health in HCI has been proposed [29,30], as well as investigations into the culture of feminist hacker spaces [26]. Within the field of SCD, the practice of feminist speculative design has argued for a greater focus on gender and gendered technology [17].

I situate my research within the growing body of work around SCD, feminist HCI and intimate care in HCI. From an experimental design approach I aim to bridge the critical design approach of SCD and the issues of gender, subjectivity and embodiment as explored in feminist HCI and intimate care in HCI.

Hypothesis

Focusing on wearables and IoT in intimate spheres of everyday life, such as menstruation-tracking apps and sex toys, my research hypothesis is that intimate technologies are inherently political and perform norms and values that reinforce particular logics of “the good life” by designing for ideal users and use cases.

With the methodology of design as a critical practice, the hypothesis is that design can provide a space for reflecting on the present politics and logics of intimate technologies, and speculation and critical discussion on possible futures of intimate technologies and their impact on computational culture.

Furthermore, my hypothesis is that to better understand and design *preferable* futures of intimate

technologies as part of our everyday lives, there is a need to consider the political and cultural issues of a technology to be an inherent part of designing. That is, questioning what intimacy even means in a political and cultural context, including aspects of gender, sexuality, and power.

Research Approach and Methods

My research methodology is research-through-design (RtD) and critical analysis from a speculative, critical, and feminist perspective. As both an object of study and design practice, SCD is used as a framework for critical inquiry into the research subject [1]. In HCI, much design research is carried out through practice under the term research-through-design [4,9], and SCD might be understood as a particular critical and speculative approach to RtD. In RtD, the design practice is a valid methodology of inquiry and knowledge production [4]. It has been argued that there is a need to understand how RtD projects contribute to knowledge, and that one way could be through aesthetics, or the critical analysis of aesthetic objects [11]. In that sense, my research methodology regards design as a practice *and* an object; that is, a verb *to design*, or *designing*, and a noun *a design* [31].

My research approach is to use RtD as a critical inquiry into the tacit, embodied, and affective understandings of intimacy, design and technologies. I approach RtD through a feminist perspective that acknowledges the design researcher’s ideological influence and responsibility in/of the project [6,17,27]. Through critical analysis of my own and other practitioner’s art and design objects, the aim is to uncover assumptions and values of a given design, and engage in discussions about how this political role of technology reflect

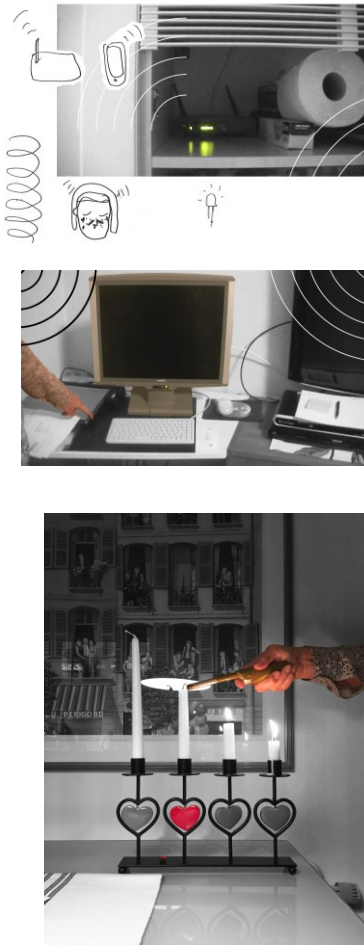


Figure 3. Documentation of a meeting with a woman living with electromagnetic hypersensitivity.

particular present issues of computational culture and particular future-makings more broadly.

Dissertation Status and Next Steps

In the initial two years of my research I have continuously sought to investigate and map out my research area. As experimental design research I have used experiments to both practice and reflect on how intimate technologies matter and how we might research it. The simultaneous practice of broadening and narrowing the research questions and goals have facilitated a research process that supports how design research focus on particularity and situated knowledge, as well as how a critical-humanist research perspective focus on knowledge production. In addition to a literature review of speculative and critical design and feminist HCI, I have engaged with my topic through planning and executing three experimental RtD projects (Figure 1-3) that I have also exhibited. For background, I have tested menstruation tracking apps from Apple's AppStore, and have made critical analyses of art and design objects, including the menstruation apps.

Design experiments are an important way of producing knowledge in my research. Two of the outcomes of my critical-feminist design practice are PeriodShare (Figure 1) and Marcelle (Figure 2). Both investigate aspects of intimate technologies and intimacy in more general terms. By focusing on menstruation and sex, respectively, they point to culturally tabooed areas of life in a provoking, absurd and humorous way: both take something private and transform it to a public context through a particular aesthetic and language. Both use electronics and physical computing as a feminist-political tool to discuss intimate data, sharing, IoT and wearables, and to questions more broadly how

(messy) bodies come to matter through digital technology.

The next steps of my research is to process auditory and visual material from my third design experiment, which is an interview with a person living with electromagnetic hypersensitivity (Figure 3), and to carry out a longer speculative design experiment with young girls and smart home devices.

Contributions

My PhD research will contribute with a critical-feminist investigation of intimate technologies, which offers a design approach to future intimate technologies that regards the understanding of cultural and political issues an inherent part of designing. Until now, I have researched areas of menstruation [19,21] and sex [20] and how these areas are interconnected with personal and social understandings of sexuality and gender, as well as the logics and politics of computational culture such as solutionism, quantification and algorithmic living. In addition, my PhD research will contribute with theoretic and methodological understandings of how we might combine SCD and critical analysis with feminist HCI, as well as with insights on the role of the cultural context of the designer and the design itself in critical design research.

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