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# Your Period Rules: Design Implications for Period-Positive Technologies

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## ABSTRACT

In this work, we address the challenges of designing interactive technologies that approach menstruation in a positive way. Building on a Research through Design approach, we underline the tensions emerging from first-hand experiences and reflections in a design workshop. In order to maintain a positive approach, rather than asking participants what problems they encountered while on their period, we asked them what *desires* they had, and what experiences might help them cope with it. The results of the workshop emphasized the need for reflecting critically on how we perceive menstruation when designing and how viewing menstruation as a problem might perpetuate taboos and distance women's experiences from their bodies. We aim to contribute to the ongoing discussion on designing for women's health in HCI by suggesting implications for researchers and practitioners.

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**KEYWORDS**

research through design; feminist HCI; menstruation; woman-centered design; design workshop

**INTRODUCTION**

Our work builds upon an ongoing discussion about "woman-centered design" as a novel form of inquiry in HCI design research [3]. "Woman-centered design" explores technologies, products, services, and concepts affecting women's bodies, from a critical-humanist and speculative perspective.

"Your Period Rules" is a direct response to the need for feminist interaction design instances, brought to light by Bardzell (2010), in an effort to collect and articulate a series of qualities a feminist interaction design should include [7]. In our work, we address feminist interaction designs concerning the intimate space of menstruation, and we attempt to make a generative contribution by suggesting implications to be considered when designing them.

Menstruation, as with other topics concerning intimate areas of women's bodies, has often been viewed as an isolated and taboo subject, where existing products and services often contribute to concealing the true nature of the period or they portray it in a negative way [1]. Technologies concerning menstruation have often featured symbols and icons such as locks or secret diaries, using passwords and features that help hide or encode the app's actual use [8]. Menstruation is a constant social stigma in popular culture, where advertisements have often used euphemisms such as "the blue liquid" and urged women to strive for a carefree and worry-less period, playing on their fears of embarrassment and shame [13]. We understand this approach as a means to design *against* menstruation, by perpetuating the cultural taboos and beliefs that it is impure, distasteful or even repulsive.

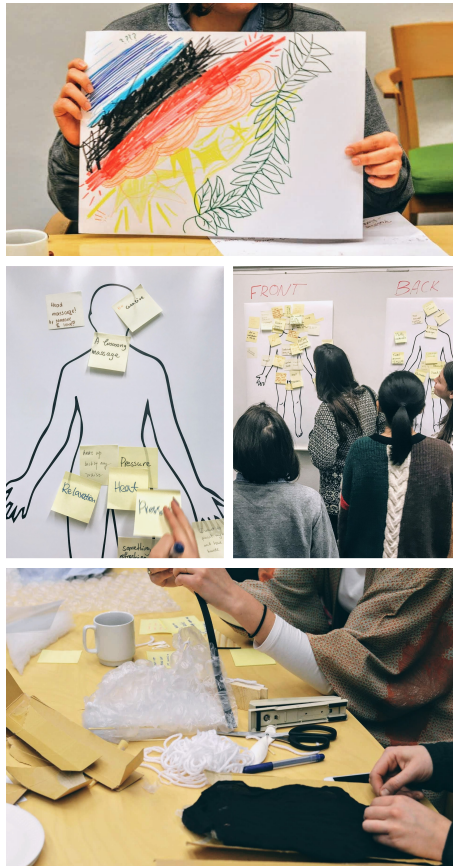
In our work, we outline the need for a menstruation-positive approach, designing *for* menstruation rather than *against* it. Rather than dismissing the trouble of menstruation, we design with and for it, an approach introduced by Søndergaard (2018), where "staying with the trouble" is central to designing critical feminist technologies [15].

**RELATED WORK**

Menstruation is scarcely featured in HCI work but has become of increasing interest in the past few years, under the topics of women's health and wellbeing, specifically women's intimate care [1, 2].

Research through Design (RtD) approaches have been sought, where contradictions and "immodest proposals" were suggested [6]. Exemplified by Sputniko!'s Menstruation Machine, a device and performance that simulates menstruation, primarily interpreted in a functional way, as a device that allows men to experience a period, a *problem-solving* design, but which, if analyzed further, can be interpreted as a series of critical proposals the author perhaps did not intend.

Similarly, feminist speculative design combined with humor has been used to overcome taboos surrounding the female body [16]. Several instances have explored social concerns of menstruation, where private data has been turned outwards and exhibited in a public setting, such as shared on



**Figure 1:** Our design workshop included three activities: *Draw your period*, *Body mapping desires* and *Making Magic Menstruation Machines*.

social media, or menstruation tracking and maintenance have been welcomed in the home or in public restrooms [10, 11, 16].

Other approaches deal with reviewing or rethinking current menstruation technologies, specifically, tracking applications, which have been examined critically or redesigned as a tangible artifact [8, 9]. When dealing with cross-cultural or inter-generational discussions on menstruation, efforts have been made to include concepts such as hacking, making or means of self-education [17, 18], designing Do-It-Yourself methods [14], and hacking sessions and workshops [5].

In our work, we follow a Research through Design approach by means of a design workshop. From the workshop findings, we have formulated design implications that shed light on the tensions that arise when designing menstrual technologies.

## METHOD

We conducted a design workshop with 12 people who menstruate, where participants volunteered by signing up through a form shared on social media. Participants ranged between their early twenties to early thirties and had diverse cultural backgrounds. We incorporated humor throughout the workshop as a way of navigating a taboo subject and ensuring participants' comfort in the design space [2].

The workshop began by asking participants to illustrate their period individually on an A3 paper. We then asked them to explain their drawings to each other in pairs, and later explain their pairs' drawings to the group. The exercise was a way to provide space and acknowledgment for the sometimes negative experiences participants had while menstruating.

For the second exercise, participants wrote words or short sentences on post-it notes, representing their menstrual *desires*. By using the term *desires* as a prompt for this exercise, as opposed to *problems* or *solutions*, we intended to steer the participant's responses away from a traditional problem-solving approach. The notes were then related to a part of the body by placing them on a poster of a human figure (see Figure 2). This body mapping exercise was drawn from methods of Somaesthetic Interaction Design [12], which involve attending to one's own body as part of the design process.

*Making Magic Menstruation Machines* is the third and final exercise. This exercise builds on the design method "Making Magic Machines" brought forth by Andersen [4]. Using neutral materials, we asked participants to create low-fidelity prototypes of an imaginary machine. Participants choose one or several post-it notes from the previous exercise as prompts to build their machine. At the end of the exercise, each participant presented their *Magic Menstruation Machine* to the group.

## FINDINGS

The concept of *desire* was chosen as a prompt in order to allow participants' designs to follow our approach of designing *for*, rather than *against* menstruation. The results, therefore, anticipated positive



**Figure 2: Making Magic Menstruation Machines: *The magical empowerment cape*, *Kinder: the kindness reminder*, *See my blood*, *The cocoon* and *Cloudy socks*.**

experiences that might help cope with menstrual experiences, for example, heat on the abdomen, rather than the negative issues or problems themselves, for example, menstrual cramps.

The workshop yielded common and shared perspectives when searching for these desired experiences. However, the framing of how the desires were addressed in the last activity provoked several interesting tensions we analyzed further.

### Design tensions

The body map prompted participants to connect a desire to a specific area of the body, therefore, many desires were related to physical sensations in specific locations. However, several holistic desires emerged and were clustered around the head, such as desired mental or emotional states.

The designed *Magic Menstruation Machines* addressed many of these holistic desires. *The magical empowerment cape* (see Figure 2) was a superhero cape only visible to its wearer, providing a sense of self-esteem and confidence. *Kinder, the kindness reminder*, was a machine that allowed kind conversations with a stranger, addressing a holistic desire to receive comfort from another person.

Several designs, like *Kinder*, depended on somebody else to use them or were meant to be shared with others, while others were completely individual and even meant to be hidden in a public setting, like *The magical empowerment cape*.

One design, *See my blood*, required menstrual blood to create kaleidoscope-like patterns that could be observed individually or in company. The remaining designs did not depend on the period and could be used whenever during the cycle, like *Cloudy socks* or *The cocoon*, which addressed the physical desire of warmth. We noted that not all designs had to be one of these things or the other, for example, *See my blood* had the ability to switch between a private or shared setting.

### DISCUSSION

In order to better grasp the tensions and how we might address them through technology, a sketch of a speculative scenario was created for two magic machines (see Figures 3 and 4). The detailed sketches provided a better understanding of how each machine would fit into a real-world situation, and what implications should be considered when imagining its existence.

### From magic to reality

The first sketched machine was a provocative device that magnified a drop of menstrual blood, creating visual patterns to observe by peeking into it or using the incorporated projector to share it with others (see Figure 3). With this design, menstruation could quickly go from a private to a shared experience, underlining that sharing the experience of menstruation can be desired. The sketch also reveals that designs may be seen as provocative and crude when involving direct interaction with a woman's body.



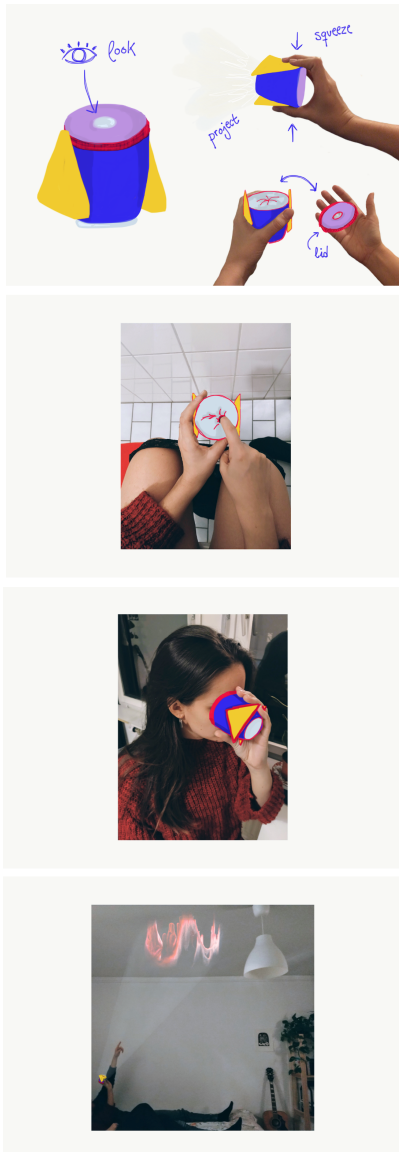


Figure 3: Sketches of *See my blood*.

In this case, she must retrieve a drop of blood and insert it into the device, so the device forces her to come in contact with her body and blood directly.

The second sketched experience consists of a bed one can lie in and be enveloped by soft materials shifting in temperature and applying pressure (see Figure 4). While this design addresses a desire present during menstruation, its heating and cooling sensations can also be desired during the rest of the menstrual cycle. This sketch contributes to the discussion by questioning whether designing for menstruation should focus on menstruation-specific phenomena, or can include desires that are not just wanted during those few days, but they are heightened and shouldn't be dismissed.

### Design implications

Our workshop aimed to highlight the challenges of creating interaction designs that communicate menstruation as a positive experience and not as a problem to be solved. We propose the use of *desires* as prompts in a design process as a way to open this design space.

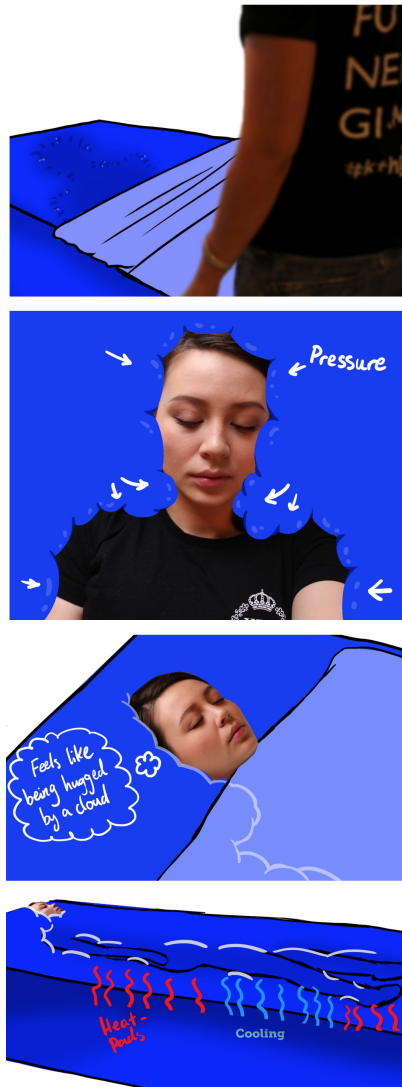
Matters of choice arise when designing, because, as occurs with all bodily experiences, experiences differ from body to body. Therefore, technologies should embed these choices, allowing, for example, to switch between one use and another, like sharing a menstrual experience or keeping it private.

Furthermore, when designing for bodies of people who menstruate, we argue that body-centric approaches should be sought, complemented by data-driven ones. If interactions take place in a hermeneutic way, such as reading your body's data through a mobile app, we risk decoupling our bodies from ourselves, as separate entities which should be monitored and interacted with through technology. While these approaches might encourage learning and understanding your body's data, they might imply that menstruation should be hidden behind the technology, therefore perpetuating stigmatization of menstruation. Akin to Höök's Somaesthetic Interaction Design, we argue that technology should be a means to support body appreciation, specifically, menstruating bodies [12].

### CONCLUSION AND FUTURE WORK

By building on the ongoing work on menstruation and women's health in the community, with this work, we suggest the first steps towards a novel approach to designing menstrual technologies. We make a call to search for *desires*, as a way to design *for* menstruation rather than *against* it, and to make use of Somaesthetic Interaction Design methods in order to support body appreciation.

We believe it's also important to highlight that a primary challenge of a positive framing on menstruation is designing for people who experience pain and trauma during menstruation, especially those with health issues such as endometriosis, and trans men and non-binary people. We argue that there should be further discussion about these challenges in HCI, and the CHI community and ourselves can benefit from sharing these initial findings, generating new collaborations.



**Figure 4: Sketches of the Magic Menstruation Machine The cocoon.**

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