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Woman-Centred Design

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Figure 1 Design Toolkit (eTextiles & Pelvic Health); photo credits: Ko-Le Chen (currently: Women-centred design)

This Conversation seeks to examine woman-centred design as a novel form of inquiry in design research practice. Drawing on the ‘woman-centred approach’ put forward in (Almeida 2017), this Conversation contributes to discussions on the intersection of feminism(s), gender and design research. In the Conversation we will explore how design of technologies and interactions can act critically in the ways that they serve, refigure and redefine women’s bodies in light of what woman is. Through analysing design artefacts, we will discuss what impact the understandings of woman have in the design of technology and interventions. Through making as a catalyst for discussion, we will explore how these understandings can contribute to inform the design of technologies for women. As suggested by Judith Butler, “what’s



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a woman is a question that should remain open” (Kotz and Bankowsky 1992), and we aim to facilitate an open Conversation about the challenges and opportunities of designing for and with women, which will support the development of a conceptual framework for a woman-centred design methodology.

keywords; Women; gender; feminisms; technology design

1 Organising question(s) or provocation(s)

In the Conversation, we discussed how a woman-centred approach can support and enable bodily practices in women; as well as how it impacts other gender(s). To better understand this, we ask(ed): what impact does understandings of woman have in the design of technology and interventions? How can these understandings contribute to inform the design of technologies for women? What are the challenges and opportunities of designing for and with woman?

2 The DRS2018 Conversation session

2.1 Context

The approach of this Conversation is akin to those suggested in the Design, Research and Feminism(s) track new to DRS2018, inquired in past conversations (Forlano et al. 2016) and latest contributions to the DRS community (Homewood 2018). It is inspired by humanistic HCI as pioneered by Bardzell & Bardzell (2015) and draws on the ‘woman-centred approach’ put forward in (Almeida 2017).

We understand woman as an individual with specific attributes and requirements, which vary more between individuals than they do between genders (Ehrnberger 2012), and our starting point is that women are not a homogeneous group but have different needs and desires. Gender is not a given on the basis of a given anatomy rather it is culturally situated, and concepts of gender may be unstable but are entangled with notions of identity (Butler 2011). Historically, technology has long been defined in terms of male activities (Wajcman 2010, Prado de O. Martins 2014). Culturally, it has a profound effect on how we understand and relate to our body, and in turn how our relationship to our body shapes our place in society (Peer et al. 2013).

Our goal was to lead an engaging and fruitful hands-on Conversation that supports and expands on the existing conceptualisation of a woman-centred approach to create design-led interventions that can contribute to the design of interactions and practices for and with women. The Conversation draws on approaches that implicate women, their bodies and experiences, and technology design that may include a wide range of digital systems through materials and biotech experiments. Methods of a woman-centred approach could include critical and speculative design as seen in (Dunne and Raby 2013, Sputniko 2010), biohacking practices and critical storytelling as explored in (Tomasello 2016, Tsang 2017), or technology probes (Almeida et al. 2016, Homewood 2017, Søndergaard & Hansen 2018). Collectively, we explore i) the potential of novel and creative ways for design research to improve women’s experiences in bodily transactions, choices, and rights, and ii) the wider applicability of a woman-centred design methodological approach in, e.g. health, education, public policy, and, importantly, in practices of everyday life.

2.2 Physical set-up

The Conversation took place in a conference/classroom with the participants sitting in small groups of four to five people in designated tables placed around the room. During the session, participants had a variety of craft materials available to them if and when prototyping their ideas, and a series of designs (projects, products) as prompts for conversation.

2.3 Structure

The session was structured as follows:

2.3.1 Context introduction

We started by briefly introducing ourselves and inviting for participant presentation within the respective groups. Our introduction continued with an overall framing of the topic based on the context outlined above which included addressing concepts of woman within different disciplines, feminist theories of technology, and institutional policy that have informed ongoing research on woman-centred approaches to design. We continued by opening up the Conversation to actively include the participants, for which we asked and invited discussion around the theme “What’s a Woman?” and the potential challenges and opportunities of designing within this space.

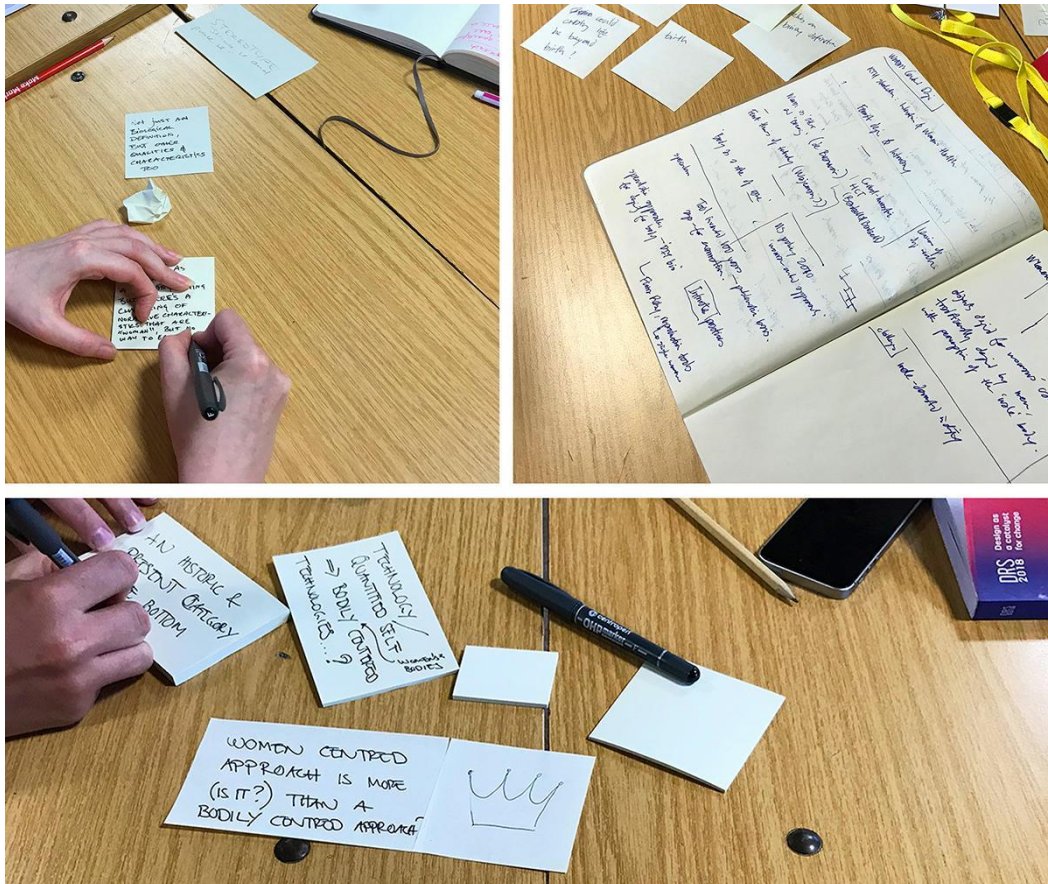


Figure 2 What's a Woman? Group conversations around the challenges and opportunities of designing for and with Woman

This was organised as follows. Conversations: i) Group Conversation and ii) Joint Conversation

i) Group Conversation

In previously established groups of four to five (per table) and a total of four groups, participants were asked to discuss among them and write down, on assorted post-it notes available to them, what these challenges and opportunities - associated with their own conceptualization of Woman - might be (figure 2). This was a 10 minute exercise that led to generating questions and reflect on the status quo regarding women (in rights and justice) and consequently ignite the Conversation. The purpose of writing down or sketch on post-it notes was to map out themes and identify shared topics to be presented in ii) as a collaborative thinking exercise and piece of documentation that would be possible to revisit throughout the session.

ii) Joint Conversation

During this part of the Conversation, participants shared the topics that surfaced during i) and within their specific groups.

Based on a 'blank canvas' and expanding on the ongoing question "What's a Woman" (challenges and opportunities), the different groups pursued the joint Conversation by having a representative to pin their co-written post-its and describe their produced outcomes to all participants and convenors in the session. This collection of posts resulted in a tangible, visual depiction of a series of concerns and thoughts on and around woman, bodies, and various technical and socio-political issues regarding health, care, gender, finance, and (invisible) labour that are real and ongoing challenges experienced by women. On the other hand, 'pushing back', role models, and empathy were added as potentially contributing to creating opportunities for positive change.

The collection of Post-it notes was kept on the wall/canvas throughout the session (figure 3) so participants and convenors could continue referring to these different topics that permeated the Conversation. Overall, the topics were pursued and continually discussed in parallel during the design exercise that would follow.



Figure 3 What's a Woman? Exploring the challenges and opportunities of designing for and with Woman in a joint Conversation

2.3.2 Design exercise

We next expanded on this conceptually-driven context to introduce a range of designs that are concerned with women and care (while highlighting the fact that this is the stream of research within which the convenors focus their current work on). Here we also introduced the ongoing online design repository on woman-centred design that we had started in support of this Conversation: <http://banhomaria.net/woman-centered-design/index.html>. Participants were invited to contribute with an entry at a later date (detailed instructions were to follow by email).

Following the group and joint conversations, plus a variety of examples on/off line, participants were asked to sketch and/or prototype concept designs that would contribute to the redesigning of a variety of possible experiences, systems, policy, etcetera that are centred on women. This activity brought them back to their original group of four or five people and had a duration of 40 minutes in total.

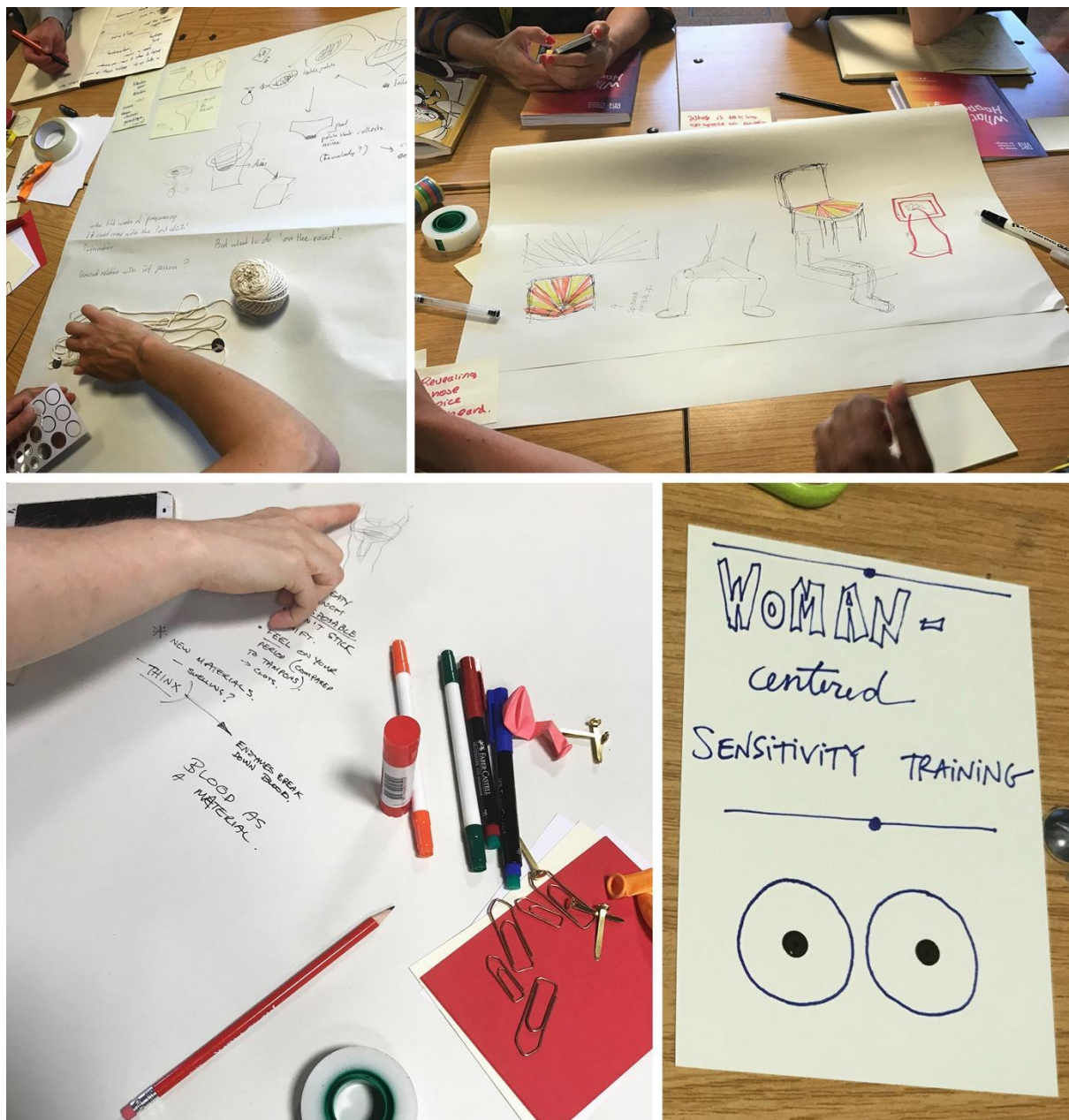


Figure 4 Sketching and illustrating ideas during the design exercise

2.3.3 Presentations

Participants presented what they had been discussing and prototyping in their groups. There were four project concepts total, and these included: 1) a woman-centred sensitivity training programme focused on industries that are male-led, through which training programmes would provide knowledge and promote empathy that men may require to support their (thoughtful) decision-making in relation to products that impact women's lives. The idea for a first product was inspired by the mammogram, in which a similar diagnostic system would apply for testicular exams (figure 5; left); 2) Power Positions (figure 5; right) is a play on invisible power and public space. It looks at the phenomenon of 'manspreading' to question power relations and speculate on visual displays that could highlight such practice as possibly inconvenient for some. The power at play (putting 'under the spot light' as a strategy to promote awareness) led to arguments within the group as they were both pro and con, but nonetheless were questioning gender-power dynamics.



Figure 5 Woman-centred sensitivity training (left); Power-Positions (right)

3) the project explored different concepts for redesigning existing biotechnologies that focus on extracting hormones from urine for women with fertility problems (figure 6; left). The group conceptualised a series of designs that could easily be integrated in daily life and intimate clothing e.g. an adjustment to the toilet at home or a textile patch embedded in the underwear that gathers and crystallises the urine, making it easier to collect and analyse. Lastly, 4) inquired how menstrual blood could be used as a material and resource, and challenged traditional products such as tampons and pads to explore sustainable approaches that would involve collecting blood in e.g. devices similar to menstrual cups that could be perceived as 'jewellery like objects'; blood contained could be used as iron fertiliser for plants (figure 6; right). The project reconceptualises collecting blood within hygiene products as messy, dirty, and waste into a renewed body of beauty and pride.

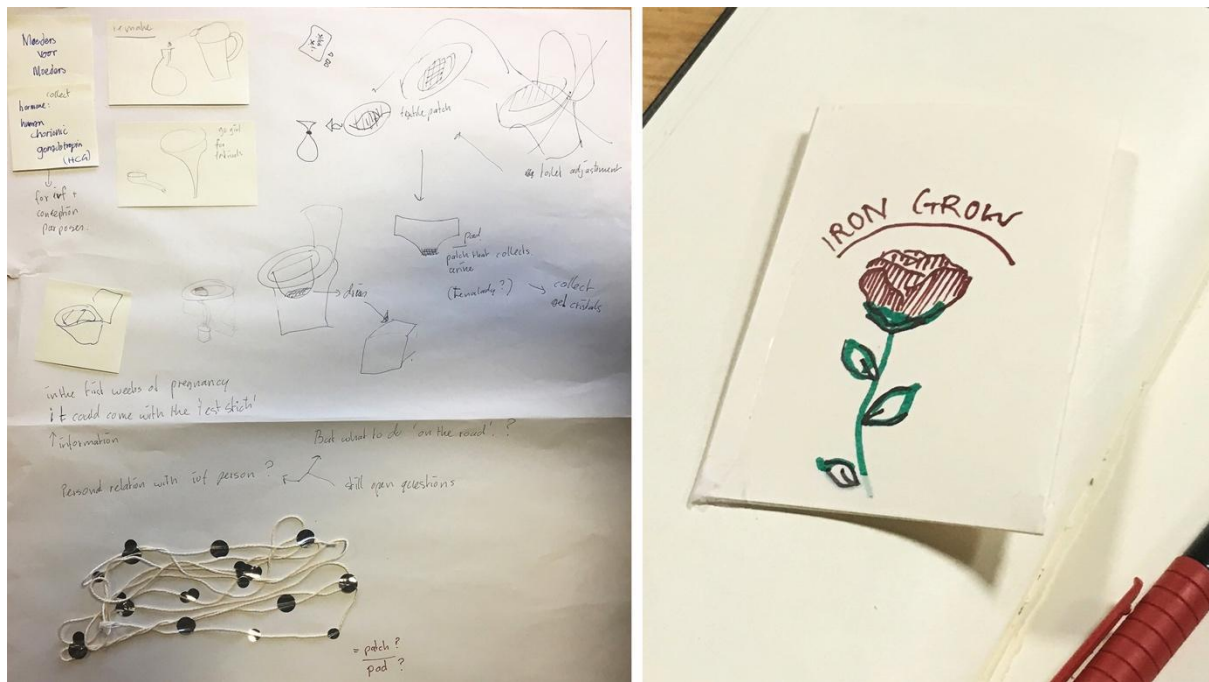


Figure 6 Everyday devices for extracting urine hormones (left); Iron grown (right)



3 Sum-up

We convenors aim to continue this Conversation and have invited all participants to doing so with us. While this Conversation has taken place within the DRS2018 programme, we aim to extend the invitation for future discussions to others whose research and/or practice may be intertwined with our quest(ions) to produce knowledge that enables a myriad of design approaches that serve as positive paradigms towards all women. We will continue adding to our website (<http://banhomaria.net/woman-centered-design/index.html>), which is intended to contribute to this ongoing Conversation while representing an archive of design and concepts that both challenge and promote knowledge and inquire women's advancements and restraints in (technology) design.

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