

Unlocking embodied knowledge for better design: An introduction to co-generative mapping

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Bodies possess knowledge. They are disciplined and adored, deemed fit for public scrutiny or cast aside as failed and unworthy of love. We live through our bodies, discursively articulated markers of difference. They become the place from which our life stories flow, and where one's voice finds resonance. Thus embodied knowledge can lead to action: where self-identification, resistance and subversion might all be possible. In 2015, we embarked on a research project aimed at exploring embodied knowledge among plus-size women (size 22+); empowering participants to direct and shape decisions about what they wanted to wear, ultimately filling the gaps in plus-size fashion. How are these women able to challenge the dominant discourse that articulates them as 'failed' subjects? We questioned how clothing, a material extension of the body, might play a role in an alternate process of articulation.

Our principal aim was to capture, document and articulate the lived experience of women who self-identify as 'fat'. This term is used intentionally, as a sign of resistance, a re-articulation of a category of difference, marked by clinical discourses. Fat scholars do not use the term 'obese' because obesity is a medical term; it has recently been classified as a disease by the American Medical Association. Fatness is not simply about body size, it is fundamentally tied to discourses about which bodies are worthy and which bodies are not (McPhail, Chapman, & Beagan, 2011). Aesthetic objections to fat bodies manifest in the restriction of fat people's access to fashionable clothing. This research was guided by two central questions: How can we accurately capture the lived experience of women who self-identify as fat? What are the clothing needs of women with fat bodies?

Research has examined how clothing may be used to enhance well-being, particularly if it supports self-confidence and self-management (Lee 2011; Simpson & Littrell, 1984). Unfortunately, "the plus-size consumer lacks options in fashioning her self-identity" (Downing Peters 2014, p. 45). Function is typically prioritized over expressive and aesthetic preferences (Romeo & Lee, 2014), so even when fat consumers can find something that fits, it rarely aligns with the image of themselves they wish to present.

In preparing for this project, we developed a new methodology for translating embodied knowledge into action, called 'co-generative mapping.' In this methodology, participants are asked to complete three generative design activities as part of a four-hour co-design workshop. In the first activity, participants complete a body-map: a hand drawn tracing of their body. Next, they are asked to record body concerns on a "needs card". Finally, working in groups of three, participants complete a "solutions template" that asks them to choose three of their self-identified needs, and brainstorm clothing-oriented solutions. In taking an active role in the design process, participants create a space of resistance where dialogue between designers and non-designers can take place, and where participants can combine diverse sources of knowledge,

challenge assumptions, learn reciprocally, create new ideas through the co-creation and negotiation of identities, and engage in dialogue through and across difference (Muller, 2003). The workshop will be videotaped and transcribed, and the results will inform the development of a collection of apparel that addresses participants self-identified needs.

This approach brings our research in close proximity to social justice activism. The method combines literature from co-design (Sanders, & Stappers, 2014), which is concerned with instantiating ideas and thinking into material forms, with body-mapping (MacGregor, 2009), a set of practices well-suited for documenting embodied knowledge, and is guided by the principles of Lamb and Kallal's (1992) Functional/Expressive/Aesthetic (FEA) model. Co-generative mapping encourages participants to draw upon embodied knowledge as a source of inspiration in order to intervene in the world (e.g., designing clothes for those who are discursively articulated as Other). To date, no other scholarly project has used this participatory approach to examine the distinct challenges that fat women face when accessing beautiful, functional, and comfortable clothing.

Symbolically, this research pushes back on what constitutes a 'normal' body shape and size, as dictated by the fashion industry. This paper, as part of a larger research project, is the first step enabling the fashion industry to increase production of stylish, well-fitting apparel options for size 22+ consumers. The co-generative mapping method will be presented along with its theoretical underpinnings and potential uses for other special needs apparel design challenges. The results from this research will be applied to the next phases of the larger project, wherein a series of three-dimensional dress forms will be produced based on participants' body scans, and utilized in the production of better fitting and better designed plus-size clothing.

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