Bring Your Own Biodata (BYOB): Feminist, Corporeal and Collective Approaches to Datafied Bodies

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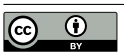
Abstract

Quantitative representations of the body have become increasingly commonplace, a requisite for many navigating complex health issues, yet also heavily scrutinized under feminist lenses for flattening embodied experiences and perpetuating norms. How might designers and researchers navigate this tension, engaging with quantified (bio)data in corporeal, sensory, collective, and anti-solutionist ways? This 1-day workshop will bring together HCI researchers, practitioners, and designers to solidify the role of design in shaping how we interact with, know, grasp, and enjoy our data, while staying true to critical feminist values. Attendees will be invited to Bring Your/their own (Bio)Datasets (BYOB) as well as any tools or data physicalization crafting techniques they want to employ. The intended outcome of this workshop is a plurality of datasets, data tools, and data representations that empower people to engage with their data in ways other than the ones afforded by screens and dashboards, emphasizing agency, embodiment, and community.

CCS Concepts

• **Human-centered computing** → **Interaction design**; **Interaction paradigms**.



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Keywords

Biodata; Personal Data; Data Feminism; Data Visualization; Data Physicalization;

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1 Background, and Motivation

Biodata comprises a wide range of data related to the human body, extending beyond traditional physiological metrics to include analog data (journaling, etc.), passive data collection (through wearable biosensors, e.g., smart rings), household activities (domestic data, Internet of Things data), environmental phenomena, and more-than-human entanglements [9, 13, 30, 32]. At its core, biodata refers to any form of data that provides insight into bodily states, functions, or interactions, including but not limited to heart rate, glucose levels, movement patterns, and hormonal changes [23, 25]. Biodata can also be understood through a more-than-human perspective, recognizing that bodies exist within interconnected systems of environmental, technological, and social relations [20]. This perspective highlights how biodata is shaped not only by internal biological processes but also by external conditions such as air quality, climate, and the presence of other bodies [33]. The concept

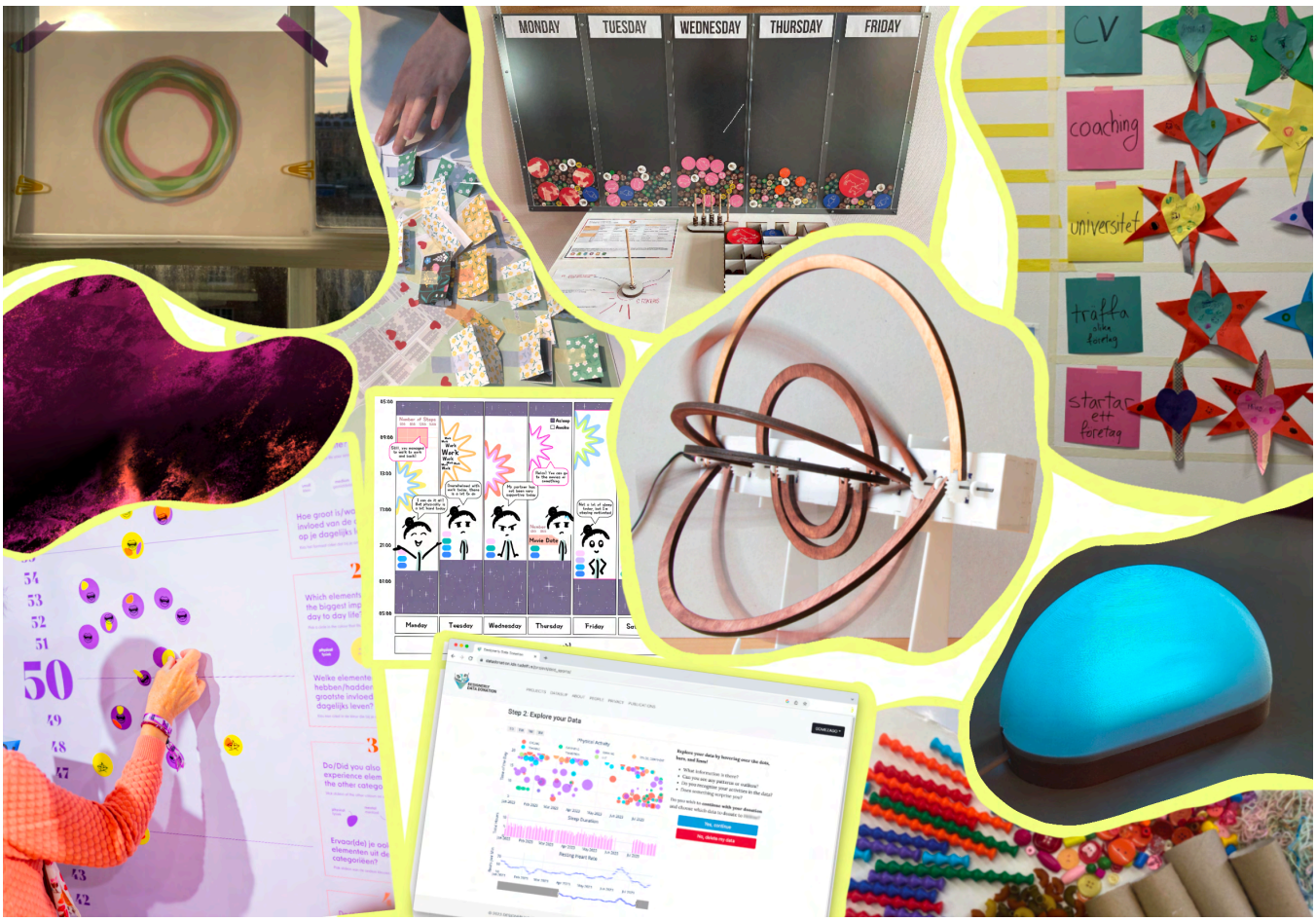

Figure 1: Selected examples from the diversity of physical and digital biodata representations and tools to collect and explore biodata designed by organizers.

of "somadata" further extends this idea, proposing that biodata is inherently relational, shaped through interactions with digital and material ecosystems rather than being a purely individual or isolated phenomenon [1, 11].

Biodata is often a simplified record of an event or experience, reduced to a numerical variable or a quality. The Quantified-Self movement and wearable self-tracking technologies have been widely studied, with scholars highlighting their risk in flattening human bodily experiences, reducing them to mere numerical values [6, 23]. Feminist critiques point out that digital technologies often neglect the corporealness of the body, the flesh, the skin, the insides, the *leaky* parts, the body's 'material,' with all its unstable and unruly imperfections [4, 6, 14]. Thus, the experience of self-tracking often creates a 'data double', an *"individuated, autonomous materialisation of digital data about an individual"* [24], that causes a distance between one's biodata and oneself. Furthermore, mismatches and errors occur and become frustrating when users expect a one-to-one match of their data to their bodies [7].

These critiques point to how datafication can abstract bodily experiences from their lived, embodied, and contextual realities. However, despite these concerns, many individuals find biodata tracking useful, empowering, and even necessary. Tracking bodily metrics can foster curiosity, enhance self-knowledge, and provide individuals with a sense of agency over their own health and well-being [21, 27, 34], and many data physicalization projects have explored ways to physicalize biodata beyond screens, elevating sensory and tactile experiences, using textiles, 3D-printed objects or sonification [15, 17, 19, 27, 31]. The negotiation between the quantifying (or not) the body is particularly salient for non-normative bodies, as seen in feminist and crip perspectives on biodata, such as diabetes monitoring or menstrual cycle tracking [4, 8, 12, 28]. In our workshop, we ask, **How could we integrate our embodied knowledge into our data? Including the corporeal, messy, imperfect, and fluctuating aspects of our bodies.**

Similarly, the increasing prevalence of biodata also raises critical questions about agency, control, (self)surveillance, and privacy [2, 9, 18]. In current fluctuating political climates, self-tracking biodata has been both a liberating path toward bodily autonomy and a rising privacy concern. Ownership and access to data are especially relevant for people tracking intimate data, as there are increased

risks, especially in contexts where reproductive rights are being restricted [5, 26]. Data feminism calls for deeper transparency and understanding of how data is created, represented, interpreted, and stored [6], which we consider during our workshop and ask: **How might we engage with our biodata in ways that challenge control and surveillance over our bodies?**

Furthermore, biodata is inherently situated and relational. Other people participate in our data and we participate in other people's data [9]. Moreover, often, it is desirable for other people to participate in generating and/or engaging with our data. For instance, when managing a chronic health condition such as type 1 diabetes, continuous glucose monitoring technologies allow people to share their blood sugar levels in real-time with caregivers or family members. This sharing frequently occurs without control over what is shared, how it is shared, or for how long it remains available. As Litchman et al. [22] highlight, this sharing of a person's bodily state as it is can lead to feelings of judgment regarding how individuals manage their condition, as well as frustration from both those sharing and those participating in the data. Nonetheless, the "personal" quality of data is often foregrounded. We ask, if we understand biodata as deeply intertwined with our bodies, what other bodies are intertwined with our data? **How should these other bodies participate in our data?** In addition, we propose the BYOB format, adjacent to DIY (Do-It-Yourself) and feminist hacker-maker cultures, as a way to probe our collective responsibilities as makers and users of these systems, shifting the focus away from an isolated and individual experience to a collective one.

Finally, the role of individuals in extractivist (bio)data collection practices is often passive. Yet, there is no data without people's actions and experiences. **What if we consider our role in data collection as active rather than passive? What do we bring to our data and what do we need to do so?** HCI researchers and designers have criticized how data is often "hidden" behind screens, dashboards, and files that are inaccessible and often opaque [3, 16]. They have proposed alternative ways for people to engage with their own biodata through physical artifacts, tangible representations, and participatory activities. For instance, Sauvé et al. [29] designed "LOOP", a physical representation of activity data that encourages a different way of reflecting on it and integrating it into everyday life. Gómez Ortega et al. [10] designed interactive tools for athletes to engage with their physical activity data and supported them in developing their own goals and questions. The BYOB ethos of this workshop underlines the opaque qualities of data and how individuals, as owners of our data, need to take action to render data accessible, graspable, enjoyable, and ultimately valuable to us – and not only to the product and service providers who disproportionally benefit from it.

2 Workshop Theme and Goals

The aim of this workshop is to bring together HCI researchers, practitioners, and designers working with biodata and tools or data physicalization crafting techniques to solidify the role of design in shaping how we interact with, know, grasp, and enjoy our data. More specifically, we are interested in discussing the questions posed above and exploring how to engage with biodata and quantified bodily technologies while staying true to critical feminist values. We will invite participants to Bring Your/their Own (Bio)datasets (BYOB), data representations, and tools, engaging collectively with them through reflection, discussion, and hands-on activities. We, as organizers, have experience engaging with our own biodata through various physical and digital means and materials and creating tools and artifacts for others to engage with their biodata (Fig. 1). We will bring them to the workshop as a starting point for critique, discussion, and exploration. During the workshop, we aim to explore new methods of biodata representation that resist extractive, individualizing, and normative tendencies while fostering care, interdependence, and agency. This includes examining questions of data privacy, ownership, and transparency, but also sharing our data with others (e.g., family members and friends). For instance, we will invite participants to reflect on the challenges and labor in accessing our own data and how to leverage our existing rights to access and engage with our biodata as we wish.

3 Anticipated Outcomes

- **Shared Knowledge Production**: We expect participants to have experience engaging with their own (bio)data or supporting people to engage with their (bio)data. Thus, this workshop presents a unique opportunity to share experiences, knowledge, and tools. We will invite participants to bring their own data, but also their own tools and allow others to explore them and use them to interrogate their data. We envision the workshop as an opportunity for collaboration and critique. Participants will critically engage with biodata through feminist and corporeal lenses, deepening our collective understanding of alternative approaches to self-tracking and data visualization.
- **Creative Explorations of Biodata Representation**: Participants will collaboratively craft visual, narrative, or material representations of their biodata that move beyond conventional quantified-self framing. Organizers have experience crafting artifacts and tools for people to explore data digitally and physically, for instance, expertise in drawing data, crafting with textiles, embroidery, the programming framework p5.js. We will leverage these tools and examples to create new data representations.
- **Discussion of Ethical and Political Implications**: We will identify challenges and opportunities for reclaiming agency over biodata, including privacy, ownership, and transparency concerns.
- **Potential Collaborations and Next Steps**: We aim to seed ongoing discussions and projects around feminist engagements with biodata, potentially leading to future publications, toolkits, or participatory design interventions.

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