More Samples of One: Weaving First-Person Perspectives into Mainstream HCI Research

Mafalda Gamboa
Interaction Design, Chalmers University of Technology
Sweden
mafalda.gamboa@chalmers.se

Claudia Núñez Pacheco
Department of Informatics, Umeå University
Sweden
claudia.nunez.pacheco@umu.se

Sarah Homewood
University of Copenhagen
Denmark
sfh@di.ku.dk

Andrés Lucero
Aalto University
Finland
lucero@acm.org

Janne Mascha Beuthel
University of Applied Science Salzburg
Austria
mascha.beuthel@fh-salzburg.ac.at

Audrey Desjardins
Art + Art History + Design, University of Washington
USA
adesjard@uw.edu

Karey Helms
Stockholm University
Sweden
kareyhelms@gmail.com

William Gaver
Interaction Research Studio, University of Northumbria
UK
w.gaver@northumbria.ac.uk

Kristina Höök
Royal Institute of Technology (KTH)
Sweden
khook@kth.se

Laura Forlano
College of Arts, Media, and Design, Northeastern University
USA
lef45@caa.columbia.edu

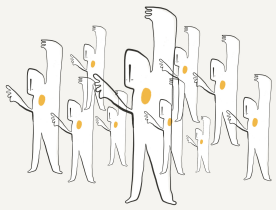

Figure 1: A workshop for exploring first-person perspectives.

ABSTRACT

Interactive systems have become an integral part of our daily lives, influencing how we communicate, work, and play. Understanding the intricate relationship between humans and technology is at the core of Human-Computer Interaction (HCI) research and design. Amid the array of methodological tools available, first-person research methods have emerged as powerful instruments that enable researchers to delve deeply into the human-technology experience. Five years after the first edition of the Designing Interactive Systems (DIS) workshop on first-person methods, this full day workshop invites HCI researchers, practitioners, and enthusiasts to embark on a journey of discovery of their sample of one. Drawing inspiration from the rich tradition of autoethnography, autobiographical design, embodied ideation, and more, we aim to explore the omnipresence of technology in our everyday lives while acknowledging our own subjectivity and positionality in research and design.

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CCS CONCEPTS

• **Human-centered computing → Human computer interaction (HCI)**.

KEYWORDS

first-person methods, autoethnography, autobiographical design

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PREAMBLE

At CHI 2023, I met Ting-Han Lin. He was presenting his paper but also a demo. Much in the style of AxLab, their presentation was impeccable and the demo well thought out and seamlessly executed. I sat in the audience observing how — as usual — his co-supervisor Ken Nakagaki, set up the cameras to record the presentation. His care transpires through the look on his face. It is not the first time I observed this, the same happened at the TEI conference with another student. Ting-Han's presentation started with a story of how COVID-19 became trouble in his juggling practice. His hands in the air, moving with the evident fluidity of someone who has repeated those gestures over and over again. I glanced quickly back to his co-supervisor, a smile on his face, a smile of somebody who has most certainly heard and witnessed Ting-Han's passion and practice. I was immediately intrigued. Later that day, I fought my way through the crowd to get to his demo. I approached Ting-Han and asked him if the paper included a description of his juggling practice and how it informed the design he was presenting. To my surprise, he said: *"That is not in the paper"*. I was heartbroken but also intrigued — what was hidden behind this omission of the researcher's practice into the research itself? How much knowledge was lost in the translation to fit the mould of accepted epistemology?

1 INTRODUCTION

Our historicity permeates our work; as design researchers, we carry personal experiences that implicitly influence the course of our research. This influence is not only epistemological but also material; it is not unusual to create and test prototypes ourselves before sharing them with others. Self-testing and judgement are widespread in design practice, yet the articulation of such practices into research is still contested. Even in evidence based design, the subjective positioning of the designer has a role in the decisions determining design solutions [24]. Yet, many researchers are unsure about the possibility of conducting first-person research rigorously enough for it to represent acceptable knowledge or research. In this workshop, we invite designers, practitioners and researchers curious about first-person research approaches to share what happens 'behind the scenes', while gaining a deep understanding of how these practices develop in contemporary HCI research. Alongside the array of methodological tools in Human-Computer Interaction (HCI), first-person research methods offer a unique chance for researchers to delve into the omnipresence of technology in everyday life while acknowledging their own positionality in research and design. Through past and current usage of first-person methods, we've seen how this shift in epistemological commitments can yield rich, honest, and authentic insights into our lives with technology. Examples include autoethnography, duoethnography, autobiographical design, micro-phenomenology, somaesthetics, embodied ideation, and more. While these examples contribute to a growing body of work, there's an increasing need to explore, define, and investigate the practices, techniques, tactics, and implications of first-person research within HCI.

However, these approaches also bring to the forefront a unique set of ethical considerations, particularly when it comes to the blurred boundary between the personal and the professional. One of the central ethical dilemmas in first-person research is the question of what can be shared and what should remain private. As researchers immerse themselves in their own experiences with technology, they often find themselves on a journey that unmakes the lines between their personal lives and their professional work. This effect can be both enriching and challenging. On one hand, it allows for a profound understanding of the subject matter, enabling researchers to explore their own lived experience of the technologies they research. On the other hand, it raises questions about privacy, consent, and the potential impact of sharing personal experiences.

2 BACKGROUND

2.1 First-person research approaches in HCI

Since the pandemic, the choice of first-person approaches has become increasingly popular in HCI, also motivated by the tendency to make political agendas more visible in research [10]. As first-person research foregrounds the reflective positionality of the researcher as the main analytical lens to explore the world, the use of these methodological epistemologies is inherently political. In this regard, it is important to consider that using the own stories as research carries a weight; this practice is not without a cost to the researchers themselves, both in their personal lives but potentially also in difficulties publishing [38].

Autoethnography is a methodology where the researcher uses their own experiences as a lens to examine the social, documenting the reflective tensions between being simultaneously an insider and outsider [9]. As an example, the autoethnographic work by Homewood et al., explores self tracking informed by entanglement theories, proposing both removal of technologies as a method [22] and *pacing technologies* to do less [21]. However, autoethnographic research is not new to the field. Earlier adoptions of this methodology touched upon a variety of themes exploring the aesthetics of technologies and interaction; for instance Ljungblad [26] was part of her own study alongside her participants in using a life-logging passive camera. Höök [23] offered an account of her own practice of horseback riding and how it developed into ideas for soma design. Lucero [28] challenged himself to live without a mobile phone, and through ethnography reports on a set of themes to be considered when designing mobile interactions.

Emerging directly from research through design, *autobiographical design* illustrates the journey of designers as being the users of the prototypes they create [30]. The reporting of self-use as research is intended to make evident a widespread practice in design, challenging ideas of objectivity imported from scientific research. As a result, autobiographical design reveals nuanced aspects of how technologies are designed and experienced, including the ethics and aesthetics of use. For example, Desjardins and Wakkary present a twenty-three month long project of converting a van into a camper van together with her partner [7], and Lockton et al. [27] develop

the notion of autoethnographic 'kits' through the work of undergraduates related to their sleep routines. Yang and Neustaedter [39] report on the use of a telepresence robot to support a long distance relationship during three months. Autobiographical design serves well as a method to surface insights in intimate contexts. Gaver and Gaver[16] investigated the use of a self-build communication devices together with his mother (who is, importantly, a co-author). Helms [17] uses the method to surface concerns on more-than-human agents and materials in breastfeeding. Framed by speculative ethics, she also presents notions on the emotional cost of this research with her own bodily fluids [18]. Designers have explored material ways of articulating knowledge about meaningful experiences such as death [3] emotion work [2], or epistemological tensions [12]. Devendorf et al. produce, as a community, a set of *design memoires* manifesting in wearable artefacts stories of their personal struggles with motherhood. These memoires *"can lean against emergent solutionist narratives about technology in early motherhood that I find inadequate for addressing the totality of a complex felt experience."*[8, p.2].

Desjardins and Ball [5] dedicate themselves to finding best practices for autobiographical design in HCI through the analysis of their own work. Naturally, the boundaries between work and private life become diluted, but *"part of the value of doing autobiographical design is to embrace these dual roles (researcher and everyday person) and to observe new types of reflections emerging from a convergence of thinking"* [5, p.760]. This type of work brings the need for making decisions for example on the use of voice (first person singular, plural, or third person), and what the consequences of that choice are to the written articles [5]. Finally, Desjardins and Ball suggest a set of recommendations for future autobiographical research: sincerity in the 'original stories' that led into the projects but also to intentionally design time into the process to allow for reflection and hindsight; transparency on who are the collaborating and authoritative actors of the research; and inventiveness in the approach to the method [5].

2.2 Motivation

Built on the work mentioned above, we aim through this workshop at detailing already existing recommendations for practice in first-person methods, informed by the stories of other researchers, such as the preamble to this document. Hence, the submissions to this workshop will be personal narratives that have traditionally been left out of mainstream publication.

Autoethnographic approaches have been explored within HCI, including a special issue on first-person methods [6] and a workshop at DIS'19 [29]. Since these two, first-person perspectives have multiplied. We face new implications for such research, hand-in-hand with recent theoretical advancements (e.g., more-than-human [17], entanglement theories [15], new materialism [14], feminist theories of care [32]) and the emergence of further ethical tensions (e.g.: who should be credited as authors and where do the limits of privacy go, or even is there risk of misrepresentation [35]). We see a need to openly discuss how first-person perspectives can continue to be supported as a valuable approach to design research. To this end, we propose a workshop where both those that have encountered the tensions themselves and those that are hesitant to engage with autoethnographic methods can come together to find a way forward.

2.3 About rigour in first-person research

Although standards for rigour in quantitative research are quite delimited [4], in qualitative research, the question of rigour is already complex, embodying different positions regarding the importance of generalisability as a desirable standard [34]. However, rigour and quality in first-person research are not assessed under the same parameters as in empirical studies involving participants [25]. In first-person research, generalisability is not relevant, focusing instead on the ability of the researcher to articulate and systematically communicate their experiences, leading to a shared understanding and communal knowledge [37]. First-person accounts should be not only candid and detailed but should also lead to rich interpretations, also known as *thick descriptions* [11]. The generation of rigorous first-person research naturally involves a close look at the positionality of the researcher, their changes in orientation [20], and a recognition of ethics in self-reporting our experiences around others [1]. In HCI, there are some examples of research explicitly rescuing these notions, such as the discussion of speculative ethics for the design with bodily fluids [19], felt ethics as a way of cultivating sensibility in design practice exemplified by design explorations in water consumption [15], a long-term study with children exploring the adoption of an indoor toy drone [13], and the reflection on how bodies are shaped by culture, technologies, and people derived from the design of an installation to evoke earthquakes [32].

Beyond the generation of textual knowledge, rigorous research applies tools and strategies that are relevant to the researcher's objectives and epistemological and ontological perspectives [25]. Within design, research relevance manifests through the notion of *generativity* [31, 36]. Generativity pertains to the ability to promote exploration and generate outcomes that contribute to research and practice, encompassing the acquisition of new knowledge and novel design concepts [33].

3 INTENDED OUTCOMES

Participants of the workshop can expect to: (a) become a part of a community of HCI researchers interested in improving and developing the value of first-methods in HCI, (b) explore their own understanding of positionality and the role of personal experience in design research, and (c) contribute to a discussion on rigour and ethics in first-person research. This will inform a future publication comprising a developed set of recommendations on how first-person experiences and narratives can be weaved into mainstream research.

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