

Weaving Perspectives into Practice

A Manifesto for Combining Epistemological and Dissemination Strategies

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ABSTRACT

This paper is an invitation to HCI designers and artist-researchers to weave together practice-based ways of knowing with others' experiences with their work, focused on understanding cognitive and aesthetic impressions garnered during exhibitions. It describes the first author's process for weaving together the warp (practice-based ways of knowing) and weft (interview-based insights into others' experiences) by leveraging the exhibition site as a place to generate knowledge with attendees experiencing their work. Understanding others' experiences informs the experimentation that practice-based knowledge generation is founded on, deepening and enriching the resulting work.

CCS CONCEPTS

• **Applied computing** → Arts and humanities; Fine arts; • **Human-centered computing** → Human computer interaction (HCI); HCI theory, concepts and models.

KEYWORDS

fine arts, methodology, emergent ontology, epistemology, practice-based research, qualitative research, dissemination, knowledge generation

ACM Reference Format:
Kathryn Blair, Pil Hansen, and Lora Oehlberg. 2024. Weaving Perspectives into Practice: A Manifesto for Combining Epistemological and Dissemination Strategies. In *Halfway to the Future (HTTF '24), October 21–23, 2024, Santa Cruz, CA, USA*. ACM, New York, NY, USA, 4 pages. https://doi.org/10.1145/3686169.3686205

1 INTRODUCTION

This paper discusses weaving practice-based knowledge generation with external perspectives from participants, in ways that merge knowledge generation and dissemination. As such, it is important to situate my perspective as the practitioner. For that reason, I (the first author) will use the first-person throughout this paper, though the ideas in this paper have been informed through in-depth conversations and consultation with my co-authors.

I have an MFA in Media Art and Technology, and am currently a PhD candidate in a transdisciplinary program that exists between, and creates space within, art and computer science. The intersection of these perspectives is a fruitful site of discourse within Human Computer Interaction (HCI), as evidenced by the work by Dourish and Höök that are the provocations for the *New Ways of Knowing* theme of this symposium [5, 8]. What I offer is a proposal for one way of weaving together different epistemological strategies in creative and technologically engaged work. My strategy leverages the exhibition – normally a site for research dissemination in the arts or design – as an opportunity to create knowledge with visitors who experience the work.

This paper looks to the future of weaving together knowledge-generation practices from different disciplines; specifically, Research Creation [10] or Research through Design [19] with rich semi-structured interviews with those who encounter a piece of art or design in exhibition. Herein, I propose that weaving these threads together allows the artist-researcher to incorporate a range of different experiences within a practice-based process. Furthermore, this practice merges research dissemination with knowledge generation, as knowledge is developed during exhibitions with the people who see the work. This approach enriches the knowledge that emerges from the artist/designer's work and honors the investment participants make in engaging with a creation.

My work is participatory in nature, which informs the need to include external perspectives in my practice. Participatory art relies on the action of a participant to exist [13]. As the "art" in conceptual art is the idea of the work itself [7], in participatory art, the artwork is the experience participants have. Thus, the "material" I work with is that experience, which includes both perceptual and cognitive components. To effectively work with this material, I must access not only my own perceptions of a work as I create it, but the experiences of those who engage with it. So, my epistemological strategies must include both engaging with my creative process and understanding the cognitive experiences of others. I do this by merging the dissemination and exhibition of my work with data collection and knowledge generation. Rather than looking at this phase of the work as collecting data from visitors, instead I regard it as an *exchange* of knowledge generation, where visitors create their own knowledge while interacting with my work, and then tell me about it during interviews. This perspective allows me to think about their active role in the experience, which aligns with its participatory form.

2 ACCESSING RICH PERSPECTIVES AND EXPERIENCES

My approach to weaving together epistemological strategies relies on bringing knowledge generation and dissemination together; this is the main way my methodological approach differs from the Research-Creation approach I pursued in my Master of Fine Arts work. Inspired by work like Miriam Sturdee's exploration of shape-changing interfaces conducted in a drop-in exhibition-like

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HTTF '24, October 21–23, 2024, Santa Cruz, CA, USA
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ACM ISBN 979-8-4007-1042-1/24/10
https://doi.org/10.1145/3686169.3686205

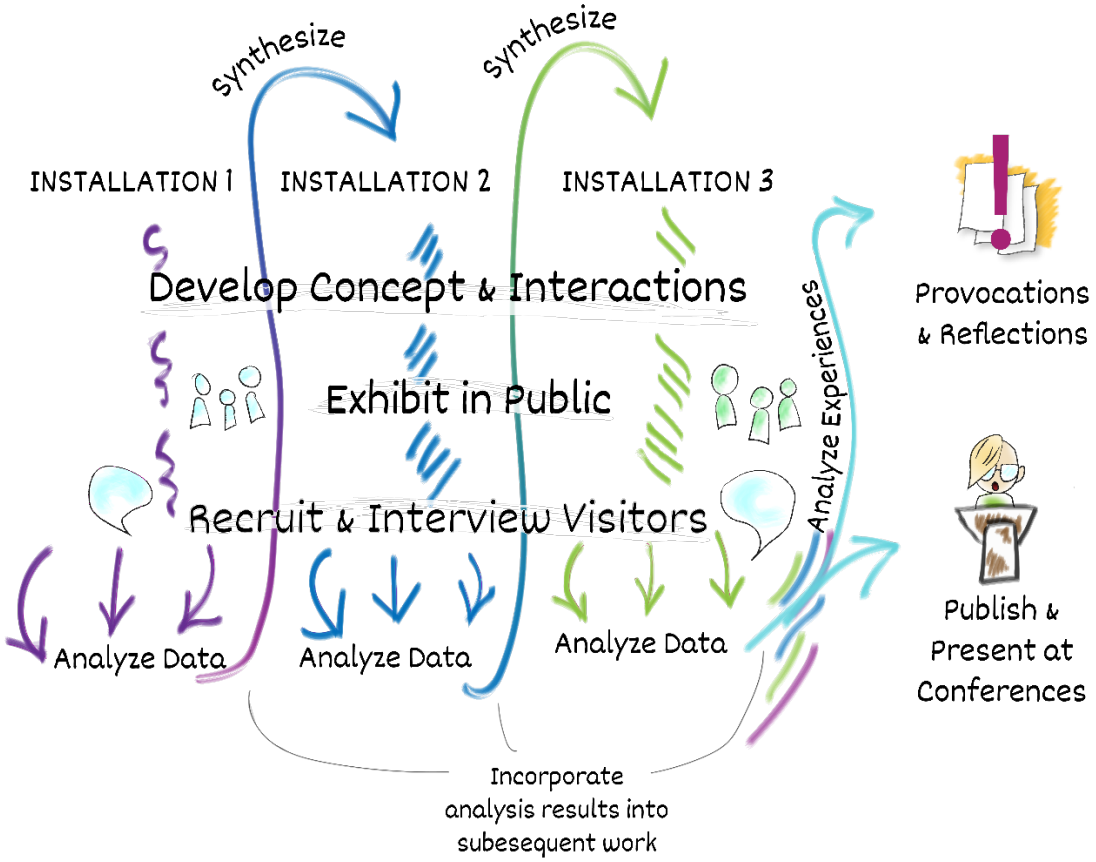


Figure 1: An illustration of the first author's research process

setting [16], I decided that instead of creating work, generating knowledge about how to do so and finally presenting the work, I would create work, exhibit it, and incorporate the exhibition as a site for knowledge generation.

My process involved four steps, done in three rounds (see Figure 1):

1. **Create a work** exploring the themes of technology that I am interested in, using a Research-Creation approach and relying on my own impressions and piloting to arrive at the form of the work
2. **Exhibit the work** in public and **conduct interviews** with visitors who have interacted with the work.
3. **Analyze the interviews** to better understand how the participant thought about the work as they experienced it, and how they made decisions about how to participate
4. The **interview-generated insights inform the research-creation** of subsequent installations.

For example, the first installation I completed for my PhD was *Algorithmic Rituals*, a collaborative movement piece about how technology changes our daily lives [2]. I presented it via Zoom, and asked people who wanted to participate in an interview to sign up after the session, resulting in seven interviews. A notable theme was that participants wanted to behave "correctly" which made some of them self-conscious or uncomfortable, even though the facilitator reassured attendees that there was no "right" way to participate. Knowing this, I adjusted my approaches for subsequent installations. In the game I developed for the next piece, *Entanglements* [4], I worked with the player's sense of "doing the right thing" into the game as part of the story.

The interviews that followed each piece were not about soliciting feedback or 'evaluating' the art, but instead focused on eliciting each participant's cognitive engagement with the artwork – what were they thinking about and feeling as they went through the experience. I used an explicitation interview technique to help re-situate participants in their experience [1]. In this technique, the interviewer prompts the participant to recall the specific date and time of the event, what their circumstances were that day, and how they were feeling physically [1]. This technique helps them re-enter their memory of the experience. Then, the interviewer asks the participant to discuss the cognitive, aesthetic, and emotional components of their interaction with the piece. Interviews could engage viewers in using other tools as appropriate to the work; if the work is somaesthetic in focus, incorporating a body map might would make sense [8].

After conducting interviews and using thematic analysis to get a sense of participants' experiences, I re-incorporate these insights into the practice of making art. As an artist or designer experiments with materials or phenomenological experience and refines their work based on the results of these experiments, I also incorporate the understanding gleaned from interviews with participants. The theme of wanting to participate "correctly" came up in all of the interviews. The level of agency participants had in each installation experience also contributed to their experience, but sometimes installations with more freedom didn't always lead to more reflections on the theme of technology and daily life.

My practice makes dissemination – through exhibition – a core part of the knowledge generation process of my work. Embracing dissemination as a part of an opportunity for knowledge generation has allowed me to appreciate how varied the responses to my work can be and embrace that as a core feature of my work. The different ways of engaging are fascinating and entirely valid ways to experience my work that are completely different to how I approach it myself, so it is impossible for me to get this perspective in other ways.

3 WHY WEAVE DISSEMINATION INTO PRACTICE

It is very challenging to choose epistemological strategies to combine different ways of knowing. The clash of epistemological strategies in participatory art within academic contexts in which research ethics structures exist complicates how artists engage with participants, and the ways in which they solicit understanding of visitors' experiences [3]. These frictions can waylay their attempts altogether. Conflicts arise from different assumptions about how to access knowledge most effectively, and how to ethically engage other people in that endeavour [3]. Examples include conflicts around consent and when data collection should take place. I avoid data collection during the art experience, which would necessitate a formal consent process for people to partake in the work at all. Doing so would materially change the art experience. One of the participants I interviewed in the course of my research noted how people who came into the art experience asking about compensation for later research activities disturbed their art experience and their conception of how the art and data collection activities intertwined.

The interviews encompass a variety of ways to experience work [11], and go into detail about how participants thought about the work. For example, some drew on past experience with improv to dive into the collaborative movement piece discussed earlier. In response to a work where visitors collaborated on a sculpture of a neural network, visitors felt ownership of the neuron they created, and the resulting image generated. The richness and diversity of these experiences is what makes them exciting to me. They allow me to become much more sensitive to the various ways people can engage with my work and what elements of the work they may be responding to. It also gives me a better sense of what creating work that is open to various interpretations means in practice.

Without speaking to participants about their engagement with my work, my practice lacks the depth and richness of others' experiences. Artists who wish to incorporate insights from others are often not interested in direct feedback on a piece, such as might be elicited by a usability study [3]. While usability is certainly important for any interactive or participatory work of art, whether it incorporates technology or not, art experiences can often also be confronting or challenging, so artists are often wary of soliciting direct feedback about how to change a work in case it detracts from any intentional frictions they devised. Other approaches offer different affordances. In an Autobiographical Design project, the insight of other people engaging with the work may not be of interest to the researchers [12]. In a Participatory Design[18] or co-design[14] project, the perspectives of the community collaborators are the primary perspectives that are relevant. Using a cultural probe or its variations can elicit responses to prompts over time, but is not paired with dissemination for a potential ongoing back and forth [6]. Creative workshops engage participants deeply with a research question, while often having a smaller overall audience that engages with the work [9].

The rich potential for dissemination as a site of knowledge generation with people external to the research team is applicable beyond other participatory art experiences. Participation is a core component of all HCI interactions. Experience is the "stuff" interactions are made of and are therefore the medium artists and designers work with.

4 CREATING SPACE FOR THE LOOM

Having discussed the importance of accessing and incorporating perspectives from others in my own participatory art practice, I turn to a call for the HCI research community to support practices which incorporate dissemination into the knowledge generation practice of works

In HCI, it is common for a project to be relatively linear in terms of its engagement with dissemination. Usually, researchers create their project by whichever method they choose – from research through design, to a design thinking process followed by a user study. Then, the research analyze the data, write a paper, and move to the next project. If we weave together dissemination and knowledge generation to enable a richer relationship between research, participant, and knowledge, alternative dissemination contexts are required that are currently not well-supported in HCI. Arts, Interactivity, and Demo tracks are offered at several conferences including CHI, TEI, and DIS; these tracks are similarly bounded and final as paper or pictorial presentations at conferences and do not provide much opportunity for knowledge generation. Alt tracks are a good venue for alternative approaches to research contributions and dissemination but are considered tangential to the main conference and may not have long-term continuing support at primary conference venues such as CHI. Workshops allow for more engagement with a specific topic, but position papers are often very exploratory or formative.

Practice-based, somatic, and tangible practices from across HCI can benefit from a focus on alternative methods of dissemination which recognise knowledge generation through experience rather than primarily through writing. Facilitated or embodied experiences are not best communicated through papers, and direct engagement with a material is the best way of passing along the knowledge embodied within it.

So, as a research community, how can we fold in experiential knowing, where dissemination is understood as a part of knowledge creation (whether that knowledge flows to the originating researcher or not), into HCI venues? Would leaning into "DIY demos" and giving readers the tools to experience the research directly be an opportunity, maybe in the form of an "interactive paper"? A hardware library where researchers can receive kits in the mail to have a research experience, becoming a fluxus art kit for research [15]? A travelling arts track on a longer scale, more akin to the format of Science Gallery shows [17]? How would we need to recalibrate expectations for how the research community validates and recognizes ideas, through peer-review, jury-review, or curation?

We certainly do not have a solution to this issue; but we hope that we have struck a nerve with the many other researchers in HCI whose work is experiential, and who would benefit from methods of dissemination that recognize the knowledge generation that happens in presentation contexts. We hope that recognizing that dissemination is a site for knowledge generation might help create space for alternative dissemination models within HCI.

ACKNOWLEDGMENTS

The authors would like to thank the National Sciences and Engineering Research Council of Canada, the Killam Foundation, and Alberta Innovates for their support. They would also like to thank Christina Li, Colin Au Yeung, and Jia Yi Ren for their help, and members of the Curio Lab assistance with piloting and ideation.

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