

ALTERNATIVE TO THE WRITTEN WORD: DOCUMENTARY FILMMAKING AS DISSEMINATION

Submission to the Beyond Academic Publication:
Alternative Outcomes of HCI Research Workshop
at DIS 2023.

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STATEMENT (MANIFESTO)

We believe that the present-day magnitude of human-computer interactions makes HCI research a significant and practical importance to the majority of people on Earth.

- HCI researchers should be responsible for making research insights and discussions easy to access to any and all people affected by the course of their research.
- HCI Researchers should take care to explore alternative outcomes towards openly attainable and inclusive presentations of their findings, and discourage trickle-down insights, where findings are used, skewed, and politicized by various interests on the way to the general public.
- HCI researchers should designate research topics into hierarchies prioritizing access and inclusivity. Doing so will help researchers to navigate the impacts of methods leading to alternative outcomes.
- HCI research should be conducted in a more socially exciting manner by ensuring outcomes are more socially equitable and comprehensible to the general public.
- HCI researchers should create a system in which diverse publics (and counterpublics) are acknowledged as important recipients of research information by opening the conversation to people not involved in research.

This manifesto calls for strategy to contemporize the socially oriented roles HCI research plays in our present-day. We recognize that the above points represent a potential and idealized path towards more thoughtful outcomes with the aim of making human-computer interactions more equitable. The discussion presented herein demonstrates one small step towards that aim, but certainly doesn't achieve all that our manifesto proposes.

DOCUMENTARY OUTCOMES

In Design and HCI, alternative forms of research outcomes have included visual formats (pictorials) [1], artifacts (demos), tutorials [4][8], process oriented works [2], etc. Within this line of thinking, we are particularly interested in further discussing the evocative and synthetic qualities of documentary filmmaking as a tool for dissemination.

The academic journal article represents an institution dedicated to upholding the western ideals of rigor in the name of positivist philosophies of rationalism. The emphasis and fixation on the written word as the truest form of knowledge, and knowledge sharing, is reductive when it is applied to communicating qualitative design research and alternative HCI research topics outcomes. Especially to the public, where there exists a disproportionate amount of gatekeeping already. Documentary filmmaking techniques open the door to a portrayal of participant experience and design artifacts that are able to be disseminated more openly, and without the limitations of the traditional written article. The intersection of documentary filmmaking and HCI research has led to discussion on more open production structures [6], and more holistic interpretations of prototypes [5].

In this position paper, we offer our experience with the Inner Ear Shorts: a series of 12 short documentaries that present the experience of participants living with a research product called the Inner Ear [7]. The Inner Ear is a porcelain device that captures and physicalizes the vibrations of participants' homes. **Our study asks: What might our relationships with data look and feel like when we're in control of collecting it? How do data-collecting devices, and the presentation of the data contained in such devices (if any), influence our ways of being, and our thoughts about being, in and with our homes?**

KNOWING THE INNER EAR

Over the last 9 months, we have deployed the Inner Ear to six households. We visited each household four times, and on three occasions we asked to film our interactions. We generate 7-25 minutes of video footage and 30-120 minutes of audio recording per session, which we edit into three-minute videos. To edit, first, a separate team member conducted a form of open coding of the audio transcripts from the interviews. Then the editor used selected quotes, designated to be thematically relevant, to construct a representative narrative from the participant's audio transcript, adding video footage to the dialogue where applicable.

The Inner Ear was a new member in the home that required some degree of attention: *participants press the surface of the Ear to trigger a vibration (data) capture*. The Inner Ear momentarily shifts the ways of being of our participants, toward intentional perceptions of, and relationships to the literal and invisible vibes of their homes. Ultimately those vibes are translated into a data physicalization; augmenting the form of the original Inner Ear participants interacted with. For more detail see [3].

The visual nature of documentary is inherently rich in providing context regarding study participants' experiences. The documentary format retains a plurality of meanings for viewers to decode, and necessarily subsumes whatever insights are possible to analyze in a paper (or series of papers). Hearing or seeing participants speak about their experience, allows for a more whole depiction of qualitative research outcomes. As such, video and audio worked well to document participants' abstract experiences. These mediums also paired well with our methodology, which included preserving the element of surprise by keeping the final form of the Inner Ear a mystery to participants, until we brought back their physicalized data. We documented how the Ear moved through participants' spaces over time, as well as how their ideas changed alongside the literal transformation of the device. We believe the choice to present this information in video shorts will lead to better interpretation and discussion of insights.

The research team began to construct a semblance of what the Inner Ear *was* based on the embodied experiences of participants. With this understanding came a subtle prioritization of certain goals, such as clarity and composition in the recordings. The realization that we were assessing and prioritizing certain types of recordings described a limit, not only a limit influenced by our positionalities, but also by our ideas about usable and well composed video and audio recordings, which are deeply influenced by the media we've been exposed to.



Stills from Inner Ear Shorts

Our experience exploring documentary filmmaking as an alternative form of research analysis presents benefits and limitations worth broader discussion. We have submitted, as supplementary materials, a short summary video featuring a behind the scenes look at participants' reflections on the form, presence, and their interactions with the Inner Ear.

At the workshop, we are interested in discussing the creation of the shorts (including the filming, the interview guide, the editing, etc.), as well as our current plan for disseminating the shorts (a website).

We are animated by the following questions:

- What kind of research knowledge is shared via documentary filmmaking?
- What filming and editing techniques are valuable in making research insights accessible to a broader public?
- Where, and in what ways might research documentary films be shared to prioritize access, and amplify the implications of insights?
- In what ways can the Inner Ear shorts stand on their own? Do they have to be paired with other things for context?
- How might documentary filmmaking be employed to overcome language barriers? How might qualitative insights rely on Image rather than language to communicate meanings?



Stills from Inner Ear Shorts

About Us

Freesoul El Shabazz-Thompson

With a background in design engineering, Freesoul presently works as a design researcher + artist focused on artifacts that make power perceptible. Freesoul is currently pursuing an MFA in studio art at the University of Washington, and has been collaborating with Studio Tilt since the fall of 2022.

Wyatt Olson

Wyatt Olson is a Master of Design candidate at the University of Washington's School of Art + Art History + Design. Trained as an Interactive Media Designer, with a background in film production and documentary filmmaking, his current work focuses on the intersection of design, research, and filmmaking. He currently collaborates at the Makeability Lab and Studio Tilt.

Audrey Desjardins

Trained as an industrial designer and interaction design researcher, Audrey Desjardins designs interactive artifacts and systems that reimagine the familiar co-existence of humans and things (or data). Her work has explored alternative forms of dissemination via tutorials, pictorials, and video. Audrey is an Associate Professor of Interaction Design in the School of Art + Art History + Design at the University of Washington, where she also directs Studio Tilt, a design research studio.

References

- [1] Eli Blevins, Sabrina Hauser, and William Odom. 2015. Sharing the hidden treasure in pictorials. *interactions* 22, 3 (May - June 2015), 32–43. <https://doi.org/10.1145/2755534>
- [2] Audrey Desjardins and Cayla Key. 2020. Parallels, Tangents, and Loops: Reflections on the 'Through' Part of RtD. In *Proceedings of the 2020 ACM Designing Interactive Systems Conference (DIS '20)*. Association for Computing Machinery, New York, NY, USA, 2133–2147. <https://doi.org/10.1145/3357236.3395586>
- [3] Audrey Desjardins, Timea Tihanyi, Freesoul El Shabazz-Thompson, Brock Craft, and Julia R Saimo. 2023. The Inner Ear: Capturing and Physicalizing Home Vibrations. In *Proceedings of Designing Interactive Systems (DIS'23)*, ACM Press, New York. DOI:<https://doi.org/10.1145/3563657.3596070>
- [4] Audrey Desjardins, Ron Wakkary, Will Odom, Henry Lin, and Markus Lorenz Schilling. 2017. Exploring DIY tutorials as a way to disseminate research through design. *interactions* 24, 4 (July-August 2017), 78–82. <https://doi.org/10.1145/3098319>
- [5] William Gaver, Cultural commentators: Non-native interpretations as resources for polyphonic assessment, *International Journal of Human-Computer Studies*, Volume 65, Issue 4, 2007, Pages 292–305, ISSN 1071-5819, <https://doi.org/10.1016/j.ijhcs.2006.11.014>.
- [6] David Philip Green, Simon Bowen, Jonathan Hook, and Peter Wright. 2017. Enabling Polyvocality in Interactive Documentaries through "Structural Participation". In *Proceedings of the 2017 CHI Conference on Human Factors in Computing Systems (CHI '17)*. Association for Computing Machinery, New York, NY, USA, 6317–6329. <https://doi.org/10.1145/3025453.3025606>
- [7] Wyatt Olson, Freesoul El Shabazz-Thompson, Melanie Wells, Janey Yee, Julia R. Saimo, Bill Xiong, Brock Craft, Audrey Desjardins. 2023. Exposing Tensions in Documentary Filmmaking for Design Research: The Inner Ear Shorts. In *Designing Interactive Systems Conference (DIS Companion '23)*,
- [8] Ron Wakkary, Markus Lorenz Schilling, Matthew A. Dalton, Sabrina Hauser, Audrey Desjardins, Xiao Zhang, and Henry W.J. Lin. 2015. Tutorial Authorship and Hybrid Designers: The Joy (and Frustration) of DIY Tutorials. In *Proceedings of the 33rd Annual ACM Conference on Human Factors in Computing Systems (CHI '15)*. Association for Computing Machinery, New York, NY, USA, 609–618. <https://doi.org/10.1145/2702123.2702550>